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Отв. ред. А.А. Зарайский

Главный редактор:

Тягунова Людмила Анатольевна, кандидат философских наук

ОСНОВНОЙ РАЗДЕЛ

*Abbasova D.K.
associate professor
Faculty of Korean Studies
Department of Korean Philology*

THE COMPARATIVE STUDY OF KOREAN-EMBEDDED SENTENCES

Abstract. The main purpose of learning Korean is to communicate fluently in Korean. Therefore, the importance of grammar education in Korean language teaching is highlighted in this article. The relevance of the chosen topic is explained by the comparison of closed sentences on the basis of Uzbek and Korean language materials. The purpose of this article is to consider the units of the grammatical layer of the language in the example of two languages, as well as to master the closed sentences in Korean and Uzbek, to compare its linguistic essence, as well as to understand the subtleties of meaning by reading them in different texts.

Keywords: Korean closed sentence, Uzbek closed sentence, comparison, compound statement, closed sentence, noun clause, infinitive clause sentence, adverb clause, predicate clause, action name, adjective, adverb.

INTRODUCTION

A complex sentence in Korean "In the example of the concept of closed speech"

The relations of the Republic of Uzbekistan with the countries of the East in the economic, social, cultural, political and scientific spheres are strengthening year by year, including a new stage in the relations between Uzbekistan and Korea. The history of social, economic and cultural ties between Uzbekistan and Korea dates back thousands of years, and the roots of these ties go back to the history of the Great Silk Road.

Complexity is the pinnacle of syntactic integrity. In Korean, a compound word is called 복합문 [pokhapmun]. Complex sentences have two parts that are structurally different from each other. In terms of its structure, it is basically a simple sentence - 단순문 [tansunmun]. This balance is especially evident in the main sections. A compound sentence, the structure of which is relatively similar to a simple sentence, can include all the main parts, that is, subject and the participle. Accordingly, in Korean, a preposition is structurally equivalent to a simple sentence, and the prepositions are synonymous with the prepositions in a simple sentence. But in this case, the question naturally arises as to how a complex sentence differs from a simple sentence. In a simple sentence, the cut is affirmative, while in the main sentence, the cut is relative. From this we can

conclude that although the main sentence is considered to be structurally similar to a simple sentence, but it "needs" another sentence in order for it to complete its meaning. In Korean, sentence types are divided into singular sentences (short sentences) and adverbs (complex sentences), and adverbs are connected sentences and closed sentences. In addition, when communicating in Korean, more complex sentences are made than simple sentences, and complex sentences are formed through them. In Uzbek subject and main verb are important. If a sentence has one subject and one verb, it is called a simple sentence, a sentence that has two or more parts and a sentence is called a complex sentence. Because Korean and Uzbek are agglutination languages, the two languages have different propositions, and there are many additions at the core parts of verbs and adjectives. It will be easier to understand the meaning. However, due to the fact that there are more suffixes in Korean than in Uzbek, students of Uzbekistan studying Korean face great difficulties in composing Korean sentences. The word order is almost indistinguishable between Korean and Uzbek, but differs in closed sentences. In Uzbek, as in Korean, there is one more sentence in one sentence. In Korean, this grammatical type is called **내포문** (closed sentence), In Uzbek, such a complex sentence is considered a simple sentence or a complex sentence. This is because, unlike closed sentences in Korean, they are treated as short sentences rather than complex sentences. Therefore, it can be assumed that there will be difficulties for Uzbek students in creating inclusive speech. Therefore, in this chapter, we will look at the similarities and differences through the contrast of closed sentences in Korean and Uzbek, and consider the advantages and difficulties of Uzbek students in learning Korean sentences. Types of closed sentences in Korean and closed sentences in Uzbek (verb form): Closed sentences in Korean are divided into 명사절 [myongsajol], 관형절 [kvanhyonjol], 부사절 [pusajol], 인용절 [inyongjol], 서술절 [sosuljol]

1. 명사절- a sentence that acts as a closed sentence horse in this round.

Example:

철수가그어려운일을해냈음이분명하다.

It is clear that Cholsu worked hard.

2. 관형사절- a sentence that serves as an attribute of a closed sentence in this round. Example:

말하기대회에많은학생이왔다.

Many students came to the public speaking competition.

3. 부사절- a sentence that serves as a closed sentence in the following sentence in this round.

Example:

진달래가빛깔이곱게피었다

Azalea blooms beautifully.

4. 인용절- in this round a closed sentence is a sentence that serves as a portable speech.

Example:

철수는영희가참빠르다고말했다.

Chul-Su says Yong Xi is very fast.

5. 서술절- a sentence that acts as a closed sentence main verb in this round.

Example:

토끼는앞발이짧다.

The claws of rabbits are short.

The closed sentence in Uzbek is called a verb form, and the verb form is divided into action nouns, adjectives, and adverbs. • An action noun is a functional form of a verb that denotes only the noun of an action and has no meanings such as tense, person, number, or inclination. This form of the verb is formed by the affixes - (i) sh, - (u) v, moq; such as reading, writing, and saying. • Participle is one of the functional forms of the verb. Like adjectives, it is used to indicate the sign of an object and is called a participle, because of the same feature. The participle form is formed in modern Uzbek mainly by the affixes -gan, -vchi: the books which I read, the guys who wrestle. • The action-oriented form of the adverb is a special form of a verb for use in a adverb-specific function. The action-oriented form of the adverb is a sign of action, a feature of it. The action-oriented form of the adverb can be used with any verb to describe an action. They usually indicate the sign of the action, including the time, the purpose, the cause, and are the main verb in the sentence. There are several forms of the action-oriented form of the adverb in modern Uzbek, which are made with the help of the following suffixes: — (i)b — o‘qib, ko‘rib; — a, — y—kula-kula, yig‘lay-yig‘lay; — gach (—kach, — qach), —kelgach, tikkach, chiqqach; — gani (—kani, — qani) — ko‘ringani, to‘kkani, soqqani; — guncha (—kuncha, — quncha) — borguncha, cho‘kkuncha, taqquncha and others. The action-oriented form of the adverb's negative form — may, — masdan is made with additions: o‘qib— o‘qimay, o‘qimasdan. As mentioned above, the Uzbek language is considered a complex sentence only when there are two or more subjects and main verbs. In other words, another sentence that replaces one sentence is treated as a component that changes only one, regardless of whether it is a phrase or a sentence. This means that in Uzbek, most Korean complex sentences are considered short sentences. CONCLUSION 1. Several scientific studies have been conducted on analyzing sentences that are considered closed in Korean linguistics. In particular, Korean linguists such as Yu Hyun Gyeong, Han Chon, Hoyong, and Kim Pyong Il have

thought about closed speech in their scientific works. 2. There are five types of closed sentences in Korean.

3. Closed sentences in Uzbek are divided into three types, but we consider them simple sentences, not complex sentences in Uzbek.

4. Each type of closed sentence differs in its meaning and syntactic functions.

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THE MAIN CHARACTERISTICS OF THE DEVELOPMENT OF UZBEKISTAN INDUSTRY NETWORKS

Abstract. The role and role of industrial sectors in the development of the economy, features of territorial organization and economic aspects of the development of industrial sectors in the Republic of Uzbekistan are described in the article. The article also analyzes the factors affecting the development of industrial sectors in the country, inter-sectoral complexes, population employment in the industry, problems and prospective directions of regional development of the sector.

Key words: Economy, industry, heavy industry, light industry, metallurgy, mechanical engineering, fuel and energy, free economic zone.

Introduction. Along with its positive aspects, the rapid development of the globalization process in the world creates unique economic and social problems in the regions. In order to overcome these problems, international organizations, including the twelfth goal of the UN Sustainable Development Program until 2030, specifically set the task of "Ensuring the transition to sustainable consumption and production forms" [17]. These tasks, especially in the regions, require in-depth scientific research on the improvement of industrial sectors and their territorial structure, forecasting and targeted solutions to existing problems.

In the rapid development of the industrial sector in the Republic of Uzbekistan, taking into account the natural resource potential and local characteristics of the regions, a number of reforms are being implemented to place enterprises and improve its territorial structure. According to the 22nd priority direction of the development strategy of the Republic of Uzbekistan for the period of 2022-2026 "Rapid development of the national economy and ensuring high growth rates", it is necessary to ensure the stability of the national economy and the gross domestic continuing the industrial policy aimed at increasing the share of industry in the product, increasing the production volume of industrial products by 1.4 times, further liberalization of the leading sectors of the industry and the economy, and the issues of completing the transformation processes are defined [3]. In this regard, it is of particular importance to develop the scientific basis for the placement of industrial enterprises in Uzbekistan, which corresponds to the conditions of innovative development, and to improve the regional organization of industrial production. In particular, in the development of industrial production in the territories of the republic, there are problems that are waiting to be solved regarding the effective use of natural and labor resources. Scientific research based on complex economic, system-content, and generalization is of great importance.

Literature analysis and methodology. A number of studies have been conducted by scientists from far abroad, the CIS and Uzbekistan on the development of industrial sectors. In particular, W. Laungardt, A. Weber, A. Lesch, F. Perrou, W. Isard from distant foreign scientists [15, 16], as well as M. K. Bandman, N. N. Kolosovsky, I. M. from the CIS countries. In the scientific works of scientists such as Maergoyz, Yu.G.Saushkin, A.T.Khrushchev, the issues of development of industrial sectors and improvement of territorial structure were studied [7, 8, 10, 12].

With theoretical and practical issues of placement and development of industrial sectors in Uzbekistan Z.M. Akramov, S.K. Ziyodullaev, K.N. Bedrintsev, Sh.N. Zakirov, M.A. Abdusalomov, I.I. Iskanderov, T.M. Ahmedov, E.A. Ahmedov, R.Ya. Dosumov, Sh.B. Imomov, A.N. Ruziev, N.T. Tokhliyev, A.S. Soliyev, A.A. Kayumov, N.S. Sultanov, A.M. Sadikov, A.T. Yusupov and other scientists were involved. In the context of the transition of the economy to market relations, a number of works have been done on the problems of development and territorial organization of industrial enterprises [11, 13].

Special attention is paid to the stable and rapid development of the industry of the Republic and its regions. In particular, Decision PQ-3182 of the President of the Republic of Uzbekistan on the modernization of the economy and industry of the country's regions dated August 8, 2017 "On priority measures to ensure rapid socio-economic development of the regions" [1], Resolution PQ No. 9490 of April 30, 2019 "On measures to further improve the mechanisms of attracting foreign direct investment to the economy of the Republic" [2], April 4, 2022 "2022 Resolution No. 154 [4] of July 22, 2019, "On additional measures for comprehensive socio-economic development of the territories of Khorezm region and further improvement of the living standards of the population" in 2026, "Implementation of investment projects in Fergana region Resolution No. 617 "On Measures to Accelerate Growth and Industry Development" and "On the Program of Measures to Ensure Structural Change, Modernization and Diversification of Production in 2015-2019" of 2015 Decree No. PF-4707 of March 4 can be an example of this.

Results and discussion. In the period of transition to market relations, the regions should have their own and appropriate directions of development and separate programs that implement them on a scientific basis; social and economic development of one region depends more on labor reserves, in another this task can be performed on the basis of rich mineral raw material resources. Another region develops due to its favorable economic geographical location, while another develops based on the excellent infrastructure system created here. Consequently, the directions of development of the industry of the regions are completely different from each other [11, 13].

It is known that the regions of the republic do not have the same natural and economic potential. At the same time, under the influence of various historical, economic and social processes, they went through specific stages of development.

For example, until the 1950s, the Lower Amudarya economic region of the republic was not connected with the republic and other regions of the former Soviet Union by modern means of transport - railway. During the Second World War, until more than 200 heavy industrial enterprises were transferred to Uzbekistan in 1940-45, as the republic was transformed into the main cotton-growing region of the former Union, the basis of the republic's industry was light industry, mainly cotton ginning, partly textiles (Tashkent, Ferghana).

After the war, most of the machine-building enterprises diversified into peaceful production, and heavy industries such as agricultural machinery, aircraft engineering, and ferrous metallurgy emerged in the industry of Uzbekistan. In the 60s and 70s of the 20th century, the opening of huge gold and gas fields in Kyzylkum, and later in the Karshi deserts, increased the industrial potential of Bukhara, Navoi, and Kashkadarya regions. The opening of coal and copper mines in Tashkent region also caused the same situation as above. The transport isolation of Lower Amudarya until the middle of the last century had a negative impact on the exploitation of its natural resources and the development of industry. Bukhara, Kashkadarya and Tashkent regions formed the basic branches of industry.

As we have seen above, the negative situations that occurred as a result of the disintegration of the former Union, at the same time, the establishment of new large enterprises in the automotive, gas-chemical, and oil refining sectors have changed the share of the country's regions in industrial production to a certain extent. For example, in Andijan region, the establishment of a passenger car manufacturing enterprise in the city of Asaka (1996), and then the establishment of component supply enterprises on the basis of localization (localization) programs, almost doubled the region's share in the republic's industry (see Table 1).

The volume of industrial production in the republic has been growing steadily since 1996. In 2009, the annual volume of industrial production increased by 2.7 times compared to 1990, and by 3 times in 2010. Between 2010 and 2018, industrial production grew almost 1.6 times. Production modernization, technical and technological re-equipment measures were implemented in all sectors of the country's economy. The measures implemented in the republic are yielding their results [5, 6]. Analyzes show that industrial production in our republic is developing rapidly during the years of independence. In the last century, except for the beginning of the 90s, it grew by 7-8 percent every year compared to the previous year [14].

Table 1

**Territorial structure of industrial production of Uzbekistan
(as a percentage of the total)**

№	years administrative regions	1991 y.	1995 y.	2000 y.	2005 y.	2010 y.	2020 y.	2021 y	2022y	Compared to 1991, (+,-)
		1.	Karakalpakstan Republic	3,1	2,8	2,5	1,8	1,2	3,8	
2.	Andijan	6,4	5,4	7,7	10,9	12,3	9,9	7,9	9,8	+1,5
3.	Bukhara	5,3	4,1	6,4	4,8	4,4	4,8	4,6	4,9	-0,9
4.	Jizzakh	2,3	1,3	1,2	1,8	1,3	1,6	1,9	2,1	-0,9
5.	Navoi	8,8	8,0	11,8	15,9	9,9	17,7	16,1	15,3	+1,7
6.	Namangan	6,5	4,4	3,9	3,1	2,5	3,0	3,2	3,3	-0,5
7.	Samarkand	7,5	6,2	5,9	3,6	4,8	5,0	5,0	5,3	-0,7
8.	Syrdarya	2,8	2,9	3,3	2,8	1,3	2,2	2,2	2,2	-0,8
9.	Surkhandarya	3,4	2,3	2,4	2,0	1,8	1,4	1,5	1,3	-0,4
10.	Tashkent	14,5	19,2	16,1	16,7	12,7	17,9	18,3	17,0	+1,2
11.	Ferghana	13,1	16,4	12,1	9,6	8,3	5,9	6,1	5,5	-0,4
12.	Khorezm	3,6	3,8	2,8	1,9	1,6	2,6	3,0	3,3	-0,9
13.	Kashkadarya	6,4	5,5	7,2	13,4	10,3	4,0	4,1	4,1	-0,6
14.	Tashkent city	16,3	17,1	16,7	11,6	19,5	17,9	19,8	19,7	+1,2

The table was compiled based on the information of the State Statistics Committee of the Republic of Uzbekistan.

It is noteworthy that the growth indicators of the industry have been higher than the level of the gross domestic product in some years. In this period, in particular, mechanical engineering and metal processing, chemistry and petrochemicals were rapidly developed. In cooperation with foreign companies, the Bukhara Oil Refinery (Technip, France), Shu'rtan, Ustyurt gas-chemical complex (ABB, Korgaz), Kandim gas processing complex (Lukoil, Russia) were established, Fergana Oil Refinery was completely reconstructed. The establishment of the gas-chemical network made it possible to deepen the processing of natural gas and develop new production capacities in related industries. In the chemical industry, the Kungirov calcium soda plant was launched in 2006, and the Dehkanabad potash fertilizer plant was launched in 2010. As a result, the share of the republic's industry in the gross domestic product increased from 16.2 percent to 26.7 percent in the period 2000-2022. Metallurgy, which is one of the main branches of the republic's industry, has doubled its share in the industry, reaching 21.2 percent by 2021. The main facilities of the network are located in Tashkent and Navoi regions.

In 1991, the highest share of the republic's industrial production - 39.9 percent was light, 19.1 percent was food industry. Currently, these figures are 14.5 and 13.3 percent, respectively. Due to the one-sided development of the country's

industry during the former Union, the share of light industry was high, about 60% of its volume corresponded to the cotton ginning industry [9]. In recent years, the share of machine building, food and non-ferrous metallurgy industries in the country's industrial sectors is increasing. It can be concluded that the composition of industrial sectors is developing and diversifying (see Figure 1).

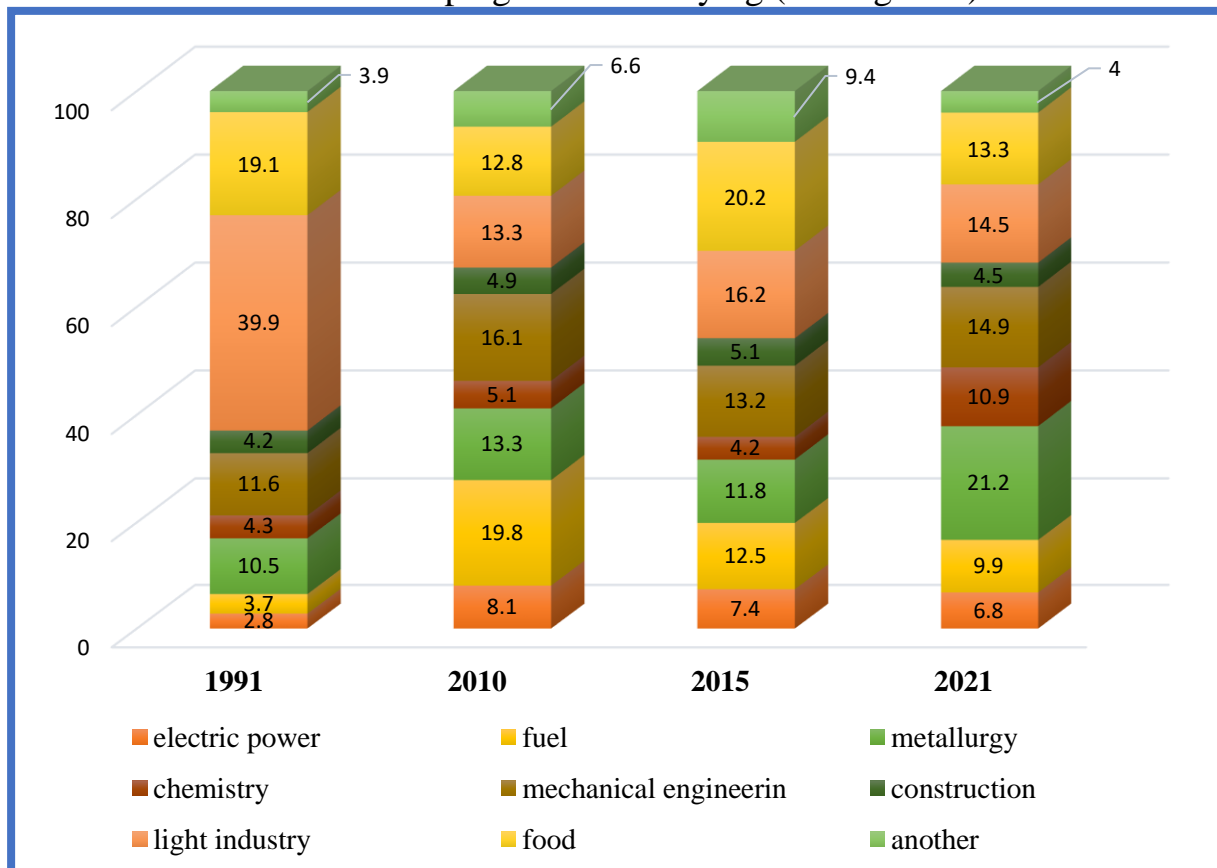


Figure 1. Composition of branches of the republic's industry (in percent).

The picture was compiled by the author based on the data of the Statistical Committee of the Republic of Uzbekistan.

At present, the largest share in the industrial production of the republic belongs to the Tashkent region. Together with the city of Tashkent, they account for 37-38 percent of the republic's gross industry (see Table 1). Restoration and modernization of old industrial facilities (coal industry, machinery industry, transformers, overhead crane production lines, television, electrical engineering (copper cable)) and establishment of thousands of new facilities in the small business sector led to the restoration of the previous potential of the Tashkent economic region. Tashkent city and region are ahead in terms of the number of industrial enterprises and the number of newly established enterprises every year.

Industry plays a very important role in the country's economy and employment. In order to create the necessary conditions for this industry, 19 free economic zones and more than 400 small industrial zones were established in recent years. Also, a large amount of financial resources have been allocated to

turn industries such as textiles, chemistry, building materials, leather, pharmaceuticals, electrical engineering into "drivers". In order to supply the industry with raw materials, geological exploration works were increased three times and more than 600 new mines were discovered.

As a result, in the last five years, the number of industrial enterprises has doubled to 100,000, and the production volume has increased by 1.4 times. This has a positive effect on the development of these regions. In particular, new sectors such as building materials, automobile industry, food industry, which did not exist before, have appeared in Jizzakh. 220 construction materials projects have been launched, and the share of this industry in the regional industry has exceeded 20 percent. 19 large metal processing projects have been implemented in Samarkand, Syrdarya, Namangan and other regions. In the last three years, the volume of production in the chemical industry has increased by 1.5 times, and exports by 2 times. At the same time, in some regions, the results are not at the level of potential. In particular, in 2022, the growth of industry in Navoi, Bukhara and Tashkent regions was average. In the Republic of Karakalpakstan, Jizzakh, Kashkadarya, Surkhandarya, Fergana and Khorezm, the level of yarn processing remains low. In Namangan, Samarkand and Navoi, the production potential of food, leather-shoes and furniture has not been sufficiently utilized.

CONCLUSION

In the territorial structure of Uzbekistan's industry, the industrial production of the Republic of Karakalpakstan, Khorezm, Surkhandarya, Syrdarya, Jizzakh regions is very low. Taking into account the internal capabilities of these regions, creating a favorable investment space, establishing joint ventures, and identifying growth points and centers is of great importance in the development of the country's industry. If we look at the area of industrial incorporation in the regions, the level of industrial incorporation is high in Andijan, Fergana, and Tashkent regions. In terms of industrial production per capita, Navoi region, Tashkent city, Tashkent region, Andijan region have a relatively high index.

It should be noted that there are enough opportunities for the development of various branches of industry in the republic. Therefore, it is appropriate to choose the strategic directions of industrial production based on the existing capabilities of the country. This serves as a basis for the full formation of the national economy. The level of economic development of regions cannot be seen in the development of only one branch of industry. Consequently, the distribution and diversification of regions by sectors is also reflected in their diversity.

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*Abdimominov I.B.
Jizzax politexnika instituti,
Iqtisodiyot va menejment kafedrası assistenti
Khurmatov B.
Abu ali Ibn Sino nomidagi Tojikiston Davlat
tibbiyot universiteti o‘qituvchisi*

RAQAMLI IQTISODIYOTNI KORXONALAR FAOLIYATIGA TA’SIRI HAMDA XORIJIY TAJRIBALAR

Annotatsiya: ushbu maqolada, raqamli iqtisodiyotni rivojlanishi hamda korxonalar faoliyatiga ta’sir darajasi, raqamli iqtisodiyotni rivojlantirishda xorijiy tajribalar o‘rni haqida ma’lumotlar keltirilgan.

Kalit so‘zlar: raqamli iqtisodiyot, Xalqaro telekommunikatsiya ittifoqi, yetakchi mamlakatlar, AKT bozori, YaIM.

*Abdimominov I.B.
assistant
Department of Economics and Management
Jizzakh Polytechnic Institute
Khurmatov B.
teacher
Tajik State Medical University named after Abu Ali Ibn Sina*

IMPACT OF THE DIGITAL ECONOMY ON THE ACTIVITY OF ENTERPRISES AND FOREIGN EXPERIENCES

Annotation: this article provides information on the development of the digital economy and the degree of impact on the activities of enterprises, the role of foreign experiences in the development of the digital economy.

Keywords: Digital Economy, International Telecommunication Union, leading countries, ICT market, GDP.

Xalqaro telekommunikatsiya ittifoqi (International Telecommunication Union, ITU)ning 2018-yildagi ma’lumotlariga ko‘ra, AKT sohasida eng rivojlangan davlatlarga Koreya Respublikasi, Yaponiya, Niderlandiya, Shvetsariya, Shvetsiya, Buyuk Britaniya, Daniya, Xitoy (Gonkong bilan birgalikda), Norvegiya va Islandiya davlatlari kiradi. AKT rivojlanish indeksiga ko‘ra mamlakatlar reytingida Janubiy Koreya 8-o‘rinni, Germaniya 13-o‘rinni, AQSh 14-o‘rinni, Rossiya esa 44-o‘rinni egallaydi.

Bugungi kunda “raqamli” yetakchi mamlakatlar – Norvegiya, Shvetsiya va Shvetsariyadir. 10 ta yetakchilik guruhi AQSh, Buyuk Britaniya, Daniya, Finlyandiya, Singapur, Janubiy Koreya va Gonkongni o‘z ichiga oladi. Shu bilan

birgalikda, Xitoy, Hindiston, Malayziya va Filippin bilan bir qatorda jahon raqamli iqtisodlar reytingida 39-o'rinni egalladi.

Raqamli va an'anaviy xizmatlar bozori o'sib bormoqda va juda tezlikda rivojlanmoqda, ammo ushbu bozor hajmini o'lchash munozarali muammo bo'lib qolmoqda. OECD ning 2017-yildagi ma'lumotlariga ko'ra, rivojlangan mamlakatlar AKT bozorining hajmi YaIMning 3% dan 6% gachani tashkil etadi: Shvetsiyada – 6,8%, Buyuk Britaniyada – 6,5%, Germaniyada – 5,2%. Raqamli sektorning umumiy hajmi global yalpi ichki mahsulotning 6% ini, ish bilan bandlikning 4% ini tashkil etishi mumkin. Bu taxminlar raqamli kompaniyalar ishchilari soni, tovar aylanmasining ulushi, shuningdek, an'anaviy kompaniyalarning raqamli bo'limlarida AKT bilan bog'liq ish o'rinlari sonining dinamikasiga asoslanadi.

Bugungi kunda dunyoning 15 dan ortiq mamlakatlari milliy raqamlashtirish dasturlarini amalga oshirib bormoqdalar: Daniya, Norvegiya, Buyuk Britaniya, Kanada, Germaniya, Saudiya Arabistoni, Hindiston, Rossiya, Xitoy, Janubiy Koreya, Malayziya, Singapur, Avstraliya, Yangi Zelandiya va Qozog'iston.

Xitoy, o'zining "Internet Plus" dasturida raqamli sanoatni an'anaviy tarmoqlar bilan birlashtirishni ko'zda tutadi. Singapur esa, "Aqlli iqtisodiyot" ni shakllantirmoqda, Kanada Torontoda drayveri AKTga asoslangan "AKT markazi"ni yaratmoqda. Janubiy Koreya "Kreativ iqtisodiyot" dasturida inson kapitalini rivojlantirishni, tadbirkorlik va AKT yutuqlarini targ'ib qilishni, Daniya esa Davlat sektorini raqamlashtirishga asosiy e'tiborini qaratgan.

Tahlillar raqamli tarmoqlar butun dunyo iqtisodiyotiga qaraganda ko'proq ish o'rinlarining o'sishiga xizmat qilayotganligini ko'rsatmoqda. Masalan, 2013-2018 yillar davomida Kanadada ushbu sohadagi xodimlarning yillik o'sishi umumiy o'sishga (umumiy o'sish 1,4 foiz) nisbatan juda yuqori bo'lgan, ya'ni 2,8 foizni tashkil etgan. AQSh, Buyuk Britaniya va Germaniya kabi mamlakatlarda raqamli iqtisodiyot bo'yicha hukumatning tashabbuslari va tahlillari ushbu sohada o'sib borayotgan talabni qondirish uchun yangi iste'dodlar zarurligini ta'kidlashmoqda. Dunyo va Yevropaning raqamli rivojlangan davlatlaridan biri bu Buyuk Britaniyadir. Buyuk Britaniya hukumati mamlakat iqtisodiyotini rivojlantirish uchun strategik ahamiyatga ega deb hisoblagan bir qator eng istiqbolli texnologiyalarni aniqlash va ushbu sohada yetakchi bo'lish niyatida ekanligini, ayniqsa, 5G kommunikatsiyalari va blokcheynni rivojlantirishni ta'kidlab kelishmoqda.

Bu sohada Yaponiya davlati ham eng ilg'or davlatlardan biri hisoblanadi, u yerda dunyo bo'yicha eng katta transport kompaniyasi JR East Group faoliyat ko'rsatadi. Bu kompaniya kuniga 17 million yo'lovchini tashiydi va sutkasiga 13 mingta poyezdning harakatini ta'minlab bera oladi. Elektron texnologiyalar ushbu kompaniyaga „temir yo'l vokzali-shahar“ loyihasini amalga oshirishga imkon berdi. Bunda Tokioning markaziy vokzali mehmonxonalar, biznes-ofislar, tijorat tashkilotlari hamda boshqa obyektlar bilan hamkorlikda ishlashga erishadi.

Yo'lovchi tashishdan tashqari, JR East Group kompaniyasi quyidagi faoliyat turlari bilan ham shug'ullanadi 1:

- Mehmonxonalar va ofislarning tijoriy ko'chmas mulkini boshqarish;
- Jamoa ovqatlanishi tarmoqlari va savdo faoliyati;
- Harakatchan sostav ishlab chiqarish;
- Avtobus xizmatlari;
- Monorels transporti;
- Avtomobillarni ijaraga berish;
- Elektron to'lovlar tizimi IT-Suica;
- Reklama biznesi;
- Fitnes-markazlar xizmati;
- Turistik servis va boshqalar.

IT-Suica deb nomlangan elektron to'lovlar tizimi JR East Group kompaniyasining eng katta foyda keltiradigan faoliyat turlaridan biri. 2001-yilda bozorga chiqarilgan Suica elektron to'lov kartalari hozirgi paytdagi soni 75 milliondan ortiqdir. Bu tizim elektron pullardan ham foydalanish imkoniyatini yaratgan.

Raqamlashtirish Internetning tarqalishi hamda mavjudligini rag'batlantiradi. 1990-yillarda Internet endigina rivojlana boshlagan bo'lsa, OECD mamlakatlari bugungi kunda aholisining 86 foizdan ko'prog'i Internetga ega, 77 foizi esa har kuni Internetdan foydalanishadi. Jahon bankining ma'lumotlariga ko'ra, bugungi vaqtda Internet tarmog'idan dunyo aholisining yarmidan ko'pi foydalanadi, ammo rivojlanishi past bo'lgan mamlakatlarda Internetdan foydalanish hali ham past darajada qolmoqda va aholining atigi 15 foizini tashkil qiladi. Internetning keng tarqalishiga eng katta to'siq bu obuna to'lovlarining yuqoriligidir.

Bundan keyin global jarayonlar va davlatlarning raqobatbardoshlik darajasi yangi zamonaviy raqamli texnologiyalar paydo bo'lishiga moslashuvchanligi va tezkorligi bilan ham belgilanadi. Yangi texnologiyalar bozor ishtirokchilari uchun imkoniyatlarni kengaytiradi, shuningdek, bir qator to'siqlarni ham keltirib chiqaradi. Raqamli iqtisodiyotning raqobat muhitiga va mehnat bozoriga ta'siri eng katta e'tiborni talab qiladi, chunki raqamli iqtisodiyot ish jarayonlarini avtomatlashtirishga olib keladi, bu esa yuqori va past malakali ish joylariga talabning oshishiga, o'rtacha malakaga ega bo'lgan ishchilar sonining esa aksincha kamayishiga olib keladi.

Firmalar xarajatlarni minimallashtirish va innovatsion mahsulotlarni yetkazib berish uchun outsorsingga suyanar ekan, kiber chidamlilik va uchinchi tomon outsorsingi bo'yicha tekshiruv kuchaymoqda, tartibga soluvchilar hamda innovatorlarni umumiy e'tibor bilan bir oqimga birlashtirish uchun turli konferensiyalar o'tkazilmoqda. Hozirgi vaqtda innovatsion startaplarni

1 R.H. Ayupov, G.R. Boltaboyeva "Raqamli iqtisodiyot asoslari". Darslik. T.: Moliya, 2020 y., 437-bet.

mahsulotlarni taklif qilish va tartibga solish o'rtasida shaffoflikni yaratishda ishtirok etishga undaydigan bir qator sandbox loyihalari mavjuddir.

Barcha rivojlanayotgan texnologiyalar hamda raqamlashtirishning asosini tashkil etuvchi asosiy qurilish bloklari infratuzilma va ma'lumotlardir. Firmalar o'zlarining ma'lumotlar bazalarini saqlash va tahlil qilish bo'yicha tajribaga ega bo'lishlarini hamda tegishli boshqaruv hamda nazoratni o'rnatishlarini ta'minlashlari kerakdir. Ular xizmatlarni chegaralar orqali yanada samaraliroq yetkazib berish bilan birgalikda, maxfiy mijozlar va bozor ma'lumotlarini himoya qilishlari kerak. Bu tartibga soluvchilar tomonidan munozarada davom etayotgan huquqiy muammolarni keltirib chiqaradi.

Shu bilan birgalikda, boshqaruvni raqamlashtirishning ta'siri quyidagi jihatlarda eng ko'p namoyon bo'ladi:

- o'zaro funksional ta'sirning kuchayishi;
- operatsiyalarning bajarish tezligi;
- operativ qarorlarning sifati;
- xarajatlarni kamaytirish;
- operatsion faoliyatning monitoringini real vaqtda olib borish imkoniyati;
- ishlab chiqarilayotgan tovarlar va xizmatlar sifatini oshirish.

Rivojlangan davlatlarda eksport-import operatsiyalarini amalga oshirishda onlayn platformalarda savdo maydonchalari tashkil qilingan. Ushbu savdo maydonchalari orqali bugungi kunda turli savdo operatsiyalari, kontragent shartnomalari blokcheyn modeli asosida amalga oshirilib borilmoqda.

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Abdugaffarov M.O.
student 202 - industrial pharmacy
ASMI
Rahimberdiyeva Sh.R.
assistant
ASMI

CHLORIDES ARE THE MOST IMPORTANT SUBSTANCES IN HUMAN LIFE

Abstract. This article discusses the chloride compound. Their role in human life, in medicine and in industrial pharmacy.

Key words: sodium chloride, calcium chloride, potassium chloride, magnesium chloride, ammonium chloride, chlorhexidine, chlorobutin, antibiotics, chemotherapy drugs.

Introduction. Chloride is a chlorine anion that is widely found in nature. It is a constituent of many minerals and is also found in seawater and fresh water. Chloride is also an essential nutrient for humans and animals.

Chloride is the starting material for the production of many chemicals such as chlorine, hydrogen chloride, sodium hypochlorite, zinc chloride, sodium chloride, copper chloride and others. Chlorine is used to produce organochlorine compounds, which are widely used in industry, agriculture and medicine.

Sodium chloride or table salt (NaCl). It is an important seasoning for food. It is also necessary for normal digestion, is involved in the transport of nutrients across cell membranes, in maintaining the acid-base balance in the body and in muscle function, including the heart muscle.

In pharmaceutical production it is one of the most common universal solvents, which is compatible with most medicinal substances. It is used to formulate various forms such as tablets, capsules, syrups and solutions and has antiseptic properties that help protect drugs from bacterial contamination.

For the preservation of drugs, sodium chloride prevents their spoilage by microorganisms. Creates an unfavorable environment for bacterial growth, which helps extend the shelf life of drugs.

Sodium chloride tablets are used to treat hypochloremia, a condition in which there is not enough chloride in the blood. Hypochloremia can be caused by various factors such as diarrhea, vomiting and kidney failure. The tablets help restore normal chloride levels in the blood.

To produce some vaccines, such as the flu and hepatitis B vaccines. These vaccines help protect people from contracting various diseases.

Topical products containing sodium chloride are used to treat skin conditions such as eczema and psoriasis, reduce inflammation and itching, and

cleanse the skin. Eczema and psoriasis are chronic skin diseases that are accompanied by inflammation and itching.

Antibiotics. For the production of certain antibiotics such as penicillins and cephalosporins. These antibiotics are effective against a wide range of bacteria.

Chemotherapy drugs. For the production of certain chemotherapy drugs such as cisplatin and doxorubicin. These drugs are used to treat cancer.

In medicine, sodium chloride solutions are used to treat dehydration, restore the body's water-salt balance, and also to wash wounds and other injuries. Isotonic sodium chloride solution (0.9%) is the standard solution for intravenous infusion.

In the food industry it is used as a preservative, to improve the taste and texture of products, food additives such as monosodium glutamate and ascorbic acid, and to give them the desired shape and weight.

The cosmetics industry includes the production of shampoos, soaps, creams and other cosmetics. Its role is to remove impurities, soften the skin and regulate pH.

Hydrogen chloride (HCl). Used in the production of hydrochloric acid, in the production of plastics, synthetic fibers, metal etching, cleaning the surface of vessels, wells from carbonates and other products.

Potassium chloride (KCl). It is an important nutrient for plants and animals. Potassium chloride is used as a fertilizer.

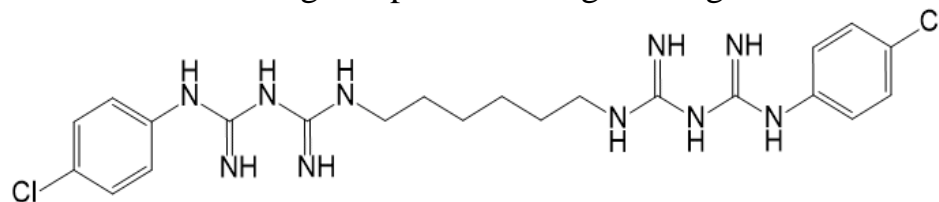
Calcium chloride (CaCl₂). It is an important nutrient for plants and animals. Calcium chloride is added to asphalt and various building materials.

Magnesium chloride (MgCl₂). It is an important nutrient for plants and animals. Magnesium chloride is used in cement production, as a fire retardant, and in other applications.

Ammonium chloride (NH₄Cl). This is a mineral fertilizer that is used in agriculture, as a stabilizer in food products and in the production of dyes.

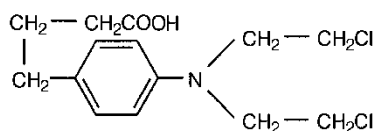
Zinc chloride (ZnCl₂). It is an antiseptic that regenerates and heals wounds and other injuries.

Chlorhexidine is one of the most active antiseptic agents that has a rapid, strong bactericidal effect on gram-positive and gram-negative bacteria.



Chlorhexidine is found in such medications as: Anzibel, Sebidine, Sibicort cream, Lizoplak gel, Vitabact eye drops.

Chlorbutin is used for chronic lymphocytic leukemia, lymphocytic and reticulosarcoma, lymphogranulomatosis, multiple myeloma, as well as for ovarian and breast cancer



Conclusion. Chlorides are salts containing chlorine ion. They play an important role in chemical processes, industry and biology. For example: imagine ordinary kitchen salt, which is important in human life. They can have both positive and negative effects depending on the context and specific compounds.

Thus, chloride is an important substance that is used in many areas of human life. It plays an important role in nutrition, medicine, chemical industry and other fields

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Abdullaev I.M.
O'zbekiston Davlat jismoniy tarbiya va sport universiteti Nukus filiali
Sport o'yinlari kafedrasida assistent o'qituvchisi

YOSH FUTBOLCHILARDA TEZLIK SIFATINI RIVOJLANTIRISH USLUBLARI

Annotatsiya. Futbol olamida tezlik o'yinchining o'yiniga sezilarli ta'sir ko'rsatadigan hal qiluvchi omil hisoblanadi. Yosh futbolchilarda tezlik sifatini rivojlantirish ularning umumiy o'sishi va sportdagi muvaffaqiyati uchun muhim ahamiyatga ega. Ushbu maqola yosh futbolchilarning tezligini oshirish uchun ishlatilishi mumkin bo'lgan turli usullarni o'rganishga qaratilgan.

Kalit so'zlar: jismoniy faoliyat, futbolchilar, o'quv kurslari, effektlar, innovatsion usullar, tezkor mashg'ulotlar.

Abdullaev I.M.
Uzbekistan State University of Physical Education and Sports
Nukus branch
assistant teacher
department of sports games

METHODS OF SPEED QUALITY DEVELOPMENT IN YOUNG FOOTBALL PLAYERS

Abstract. In the world of football, speed is a crucial factor that can significantly impact a player's performance. Developing speed quality in young football players is essential for their overall growth and success in the sport. This article aims to explore various methods that can be employed to enhance the speed quality of young football players.

Keywords: physical activities, football players, training courses, effects, innovative methods, speed training.

Kirish: Raqobatbardosh sport turlarining, xususan, futbolning ommaviyligi madaniy va iqtisodiy taraqqiyot bilan birga oshib bordi. Zamonaviy futbol o'zining tajovuzkor tabiati, katta hajmliligi, intensivligi, uzoq davom etishi, jismoniy va texnik talablarni talab qilishi bilan ajralib turadi. Ushbu sport turida muvaffaqiyat qozonish uchun futbolchilar jismoniy tayyorgarligi va moslashish qobiliyatini optimallashtirish uchun qattiq tayyorgarlikdan o'tishlari kerak. Futbolchining futbol maydonidagi o'yinini aniqlashda jismoniy tayyorgarligi hal qiluvchi rol o'ynaydi.

Biroq, O'zbekistonlik futbolchilar xalqaro hamkasblariga qaraganda umumiy jismoniy tayyorgarlik darajasi pastroq bo'ladi. Bu nomuvofiqlikni ilmiy tayyorgarlik rejalarining yo'qligi va Osiyo mamlakatlarida ko'proq tarqalgan

jismoniy sifatlarga emas, balki texnik jihatlarga e'tibor qaratish bilan bog'lash mumkin. O'zbekistonda yoshlarning jismoniy tayyorgarligi darajasining pasayishi tashvishli tendentsiya bo'lib, hukumatni umumiy aholi salomatligi va jismoniy tayyorgarligini yaxshilashga qaratilgan chora-tadbirlarni amalga oshirishga undaydi. Turli yosh guruhlariga ta'lim usullarini moslashtirish muhimdir.

Masalan, 7 yoshdan 9 yoshgacha bo'lgan bolalar jismoniy faoliyat orqali mushaklararo muvofiqlashtirishni yaxshilashga ustuvor ahamiyat berishlari kerak. 10 yoshdan 13 yoshgacha bo'lgan bolalar kuchni rivojlantirishga e'tibor qaratishlari kerak. Shuning uchun futbolchilar maksimal samaraga erishish uchun tegishli jismoniy tayyorgarlik usullarini talab qiladi. Virtual haqiqatga asoslangan immersiv ko'zoynak texnologiyasi ba'zi tadqiqotchilar tomonidan idrokni kuchaytirish va sportchilarning mashg'ulot natijalarini yaxshilash uchun ishlab chiqilgan. Ushbu texnologiya inson va kompyuter o'rtasidagi o'zaro ta'sir va virtual haqiqat kabi ilg'or axborot texnologiyalarini birlashtirib, yanada chuqurroq o'qitish tajribasini ta'minlaydi. Funktsional trening butun dunyo bo'ylab tadqiqotchilar tomonidan katta e'tiborga sazovor bo'ldi, ular uning ilmiy asoslari va samaradorligini o'rganish uchun keng qamrovli tadqiqotlar o'tkazdilar.

Mavjud tadqiqotlarga qaramay, funktsional tayyorgarlik va futbolchilar o'rtasidagi o'ziga xos munosabatlarni o'rganadigan tadqiqotlar kam. Mashinani o'rganish algoritmlari inson va sport harakatlarini tanib olish mahoratini namoyish etdi. Funktsional mashg'ulotlar sportchilarning kuchini oshirish imkoniyatlarini ko'rsatgan bo'lsa-da, funktsional mashg'ulotlarning futbolchilarning kuchiga ta'siriga qaratilgan cheklangan dalillar mavjud. Bundan tashqari, sportchilarning harakatlaridagi o'zgarishlar paytida xususiyatlarni ajratib olish uchun namuna ma'lumotlarining nomutanosibliigi tan olish vazifasida qiyinchilik tug'diradi. Funktsional mashg'ulotlarning futbolchilarning kuchi va ishlashiga ta'sirini har tomonlama tushunish uchun ushbu sohada qo'shimcha tadqiqotlar o'tkazish kerak.

Ushbu ishda futbolda kuch mashqlari samaradorligini tekshirish uchun mashina o'rganish texnikasi yordamida futbolchilarning harakatlari aniqlangan. 8 yoshdan 13 yoshgacha bo'lgan jami 116 nafar yosh ishtirokchilar futbol jamoasi mashg'ulotlari bilan shug'ullanib, tasodifiy tanlab olindi. Ikkala guruh ham 24 ta mashg'ulotdan o'tadilar, eksperimental guruh har bir mashg'ulotdan so'ng qo'shimcha 15-20 daqiqalik funktsional kuch mashqlarini oladi. Mashinani o'rganish algoritmlari mashg'ulotlar paytida futbolchilar tomonidan qabul qilingan aniq pozitsiyalarni aniqlash uchun qo'llaniladi.

Xususan, BPNN o'yinchilarning zarbalarini tahlil qilish uchun ishlatiladi. Kirish vektorlari sifatida tezlik, sezgirlik va kuch kabi omillarni o'z ichiga olgan BPNN yordamida o'yinchilarning harakatlari tasvirlarini solishtirish orqali chiqish natijasi o'yinchilarning tepish harakati va standart harakatlari o'rtasidagi o'xshashlikni o'lchaydi. Ushbu yondashuv ta'lim samaradorligini oshirishga qaratilgan. Keyinchalik, eksperimental va nazorat guruhlarini uchun

tepish harakatlarining eksperimental ballari standart harakatlar bilan taqqoslanadi. Ushbu ishning topilmalari mashg'ulotlar samaradorligi va umumiy ish faoliyatini oshirish potentsialiga ega bo'lgan futbolchilar uchun o'quv dasturlarini ishlab chiqish uchun qimmatli nazariy asos bo'lib xizmat qiladi.

Tadqiqot usullari.

1. Adabiyotlarni ko'rib chiqish: Ushbu ish boshqa olimlarning sportchilarning harakatlarini tanib olish uchun mashinani o'rganish bo'yicha istiqbollari haqida tushunchaga ega bo'lish uchun mavjud tadqiqotlarning keng qamrovli tahlilini o'z ichiga oladi. Oldingi tadqiqotlarni o'rganish orqali ushbu ish nazariy asosni yaratish va ushbu ishning ishonchliligi va asosliligini baholashga qaratilgan.

2. Mutaxassislar bilan suhbat: Talabalar kurslarini loyihalash ilmiy yondashuvga asoslanadi, u ham futbol murabbiylari, ham funktsional kuch tayyorlash bo'yicha mutaxassislarning fikrlarini o'z ichiga oladi. Ushbu mutaxassislarning bilim va tajribasini o'z ichiga olgan holda, kurs dizayni tanlangan ko'rsatkichlarning umumiy o'quv jarayonining vakili bo'lishini ta'minlaydi.

3. Tajriba: Eksperimental guruh ishtirokchilari har bir muntazam kursdan so'ng funktsional kuch mashg'ulotlarida qatnashadilar, nazorat guruhi esa bunday mashg'ulotlardan o'tmaydi. Ushbu eksperimental qurilma funktsional kuch mashqlari futbolchilarda tezlik va kuchning rivojlanishiga ijobiy ta'sir ko'rsatishini tekshirish imkonini beradi. Ikki guruh o'rtasidagi natijalarni taqqoslash orqali funktsional kuch mashqlarining afzalliklari haqida qimmatli ma'lumotlarni olish mumkin.

Funktsional kuch mashqlari - bu jismoniy shaxslarning o'ziga xos xususiyatlari va ehtiyojlarini hisobga olgan holda mushaklarning umumiy qisqarish kuchi va samaradorligini oshirishga qaratilgan mashg'ulot usuli. Muayyan harakatlar uchun mushaklarning alohida rivojlanishiga qaratilgan an'anaviy o'qitish usullaridan farqli o'laroq, funktsional kuch tayyorlash muvozanatli yondashuvni ta'kidlaydi. U surish va tortish kabi qarama-qarshi harakatlarga qaratilgan bir qator mashqlarni, shuningdek, son va tizzalar kabi tananing turli sohalariga qaratilgan mashqlarni o'z ichiga oladi.

Funktsional kuch mashqlarining asosiy maqsadi mushaklarning gipertrofiyasiga e'tibor berishdan ko'ra, ko'proq mushak tolalarini jalb qilish qobiliyatini oshirishdir. Ushbu yondashuv portlovchi quvvatni yaratish uchun tananing elastikligini oshiradi. Bir nechta mushak guruhlarini faollashtirish va asabiy muvofiqlashtirishni optimallashtirish orqali funktsional kuch mashqlari maksimal kuch va quvvat ishlab chiqarishni yaxshilashga yordam beradi. Funktsional tayyorgarlik kontseptsiyasi turli sport turlari bo'yicha sportchilarga foyda keltirishi mumkin bo'lgan standartlashtirilgan mashg'ulot usulini yaratishga intiladi. U tananing kinematik zanjirining ahamiyatini tan oladi va umumiy muvofiqlashtirish va funktsional samaradorlikni oshirishga qaratilgan. Funktsional kuch mashqlarini birlashtirish orqali odamlar o'zlarining

to'liq imkoniyatlarini ochib berishlari va sport va kundalik hayotning boshqa mashg'ulotlarida yaxshilangan jismoniy imkoniyatlarga erishishlari mumkin.

Bu yerda qo'llaniladigan funktsional kuch tayyorlash dasturi quyidagi mashqlarni o'z ichiga oladi:

1. Oyoqlar futbol to'pini qisish bilan yotgan oyoqni ko'tarish:

Ushbu mashq rektus abdominis va iliopsoas mushaklarini nishonga olish va kuchaytirishga qaratilgan. Ishtirokchilar chalqancha yotib, futbol to'pini dumalab ketmasligi uchun oyoqlari bilan ushlaydilar. Jismoniy mashqlar oyoqni tezda ko'tarish va sekin tushirishni o'z ichiga oladi, shu bilan birga qo'llar va boshni erdan ko'taradi. Har bir tur ikkita to'plamdan iborat bo'lib, har bir to'plam oyoqni ko'tarish va tushirishning o'nta takrorini o'z ichiga oladi.

2. To'pni tizzalar bilan qisgan holda yotgan sonni burish:

Ushbu mashq kestirib, fleksor va iliopsoas mushaklarini kuchaytirishga qaratilgan. Ishtirokchilar chalqancha yotib, qo'llarini yon tomonlarga cho'zadilar. Ular tizzalarini 90 graduslik burchakka egib, tizzalari orasidagi qattiq to'pni ushlab turadilar. Jismoniy mashqlar to'g'ridan-to'g'ri nafas olishni va qorin bo'shlig'i mushaklarini jalb qilishda kestirib, chapdan o'ngga burishni o'z ichiga oladi. Har bir ishtirokchi har bir harakat uchun 15 ta takroriy ikkita to'plamni bajaradi.

3. Bir tomonlama taxta:

Ushbu mashqning maqsadi bir nechta mushak guruhlarini, shu jumladan latissimus dorsi, erector spinae, gluteus maximus, deltoid mushak, to'g'ri qorin va qorin bo'shlig'i qiyshiq mushaklarini nishonga olishdir. Ishtirokchilar moyil holatda boshlashadi va tana vaznini qo'llab-quvvatlash uchun chap tirsak bo'g'inini egib, bir vaqtning o'zida o'ng qo'lini oldinga ko'taradilar. Trening davomida ishtirokchilar chap oyog'ini yerga qo'llab-quvvatlash uchun to'g'rilab, o'ng oyog'ining old qismini ko'taradilar. Butun mashg'ulot jarayonida barqaror nafas olishni ta'minlash, orqa tomonni qattiq ushlab turish va ko'tarilgan qo'l va oyoqning silkinishini oldini olish muhimdir. Har bir to'plam 15 ta takrordan iborat bo'lib, ishtirokchilar ikkita mashg'ulot to'plamini bajaradilar.

Chuqur o'rganish (DL) usuli mashinani o'rganish arxitekturasi sifatida xizmat qiluvchi sun'iy neyron tarmoq (ANN) tushunchasiga mos keladi. Algoritm sifatida ishlaydigan neyron tarmoq tarmoq ichidagi alohida birliklarni bog'laydigan og'irliklarni o'rgatadi. Inson miyasining ishlashidan ilhom olib, ANN algoritmlari o'rganish va yangi stsenariylarga moslashish qobiliyatiga ega. Inson miyasida kirish signallari asab tizimi orqali qabul qilinadi va qayta ishlanadi, tashqi ogohlantirishlar esa nerv uchlaridan elektr signallarini aylantiruvchi neyronlar orqali seziladi. DL-ga asoslangan neyron tarmoqlari inson miyasining neyron tizimini taqlid qiluvchi matematik modellardir. Ushbu tarmoqlar yuqori nosozliklarga chidamlilik, tez o'rganish va o'z-o'zini moslashtirish tezligi va chiziqli bo'lmagan funktsiyalarni taxmin qilish qobiliyatini namoyish etadi. Ular ikkilik tasvirni aniqlash, bashorat qilish va ikkilik tasvirlarni loyqa boshqarish kabi vazifalar uchun samarali qo'llanilishi

mumkin. BPNN - kirish, yashirin va chiqish qatlamlarini o'z ichiga olgan uch qatlamli oldinga o'tuvchi neyron tarmog'iga misol.

Xulosa

Xulosa qilib aytadigan bo'lsak, yosh futbolchilarning tez va sifatli rivojlanishi uchun ushbu usullarning kombinatsiyasini qo'llash juda muhimdir. To'g'ri isinish usullarini qo'llash, pliometrik va qarshilik mashqlarini o'z ichiga olgan holda, sprint va HIITga e'tibor qaratish, ovqatlanish va dam olishga e'tibor berish, sportga xos mashqlardan foydalanish va aqliy tayyorgarlikni rag'batlantirish orqali murabbiylar va murabbiylar yosh sportchilarning sezilarli o'sishiga yordam berishi mumkin. Doimiy baholash va fikr-mulohazalar o'quv dasturlarini individual ehtiyoj va maqsadlarga moslashtirishda hal qiluvchi rol o'ynaydi. Fidoyilik, izchillik va to'g'ri mashq qilish usullari bilan yosh futbolchilar o'zlarining tezligi va ishlash qobiliyatlarini sportda ustunlik qilishlari mumkin.

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*Abdullaev A.S.
assistant
Department of therapeutic science
Saydakhmedov Z.
assistant
Department of therapeutic science
Fergana Medical Institute of Public Health*

MODERN PRINCIPLES OF TREATMENT OF ARTERIAL HYPERTENSION

Abstract. The article presents data from domestic and foreign literature on the evolution of ideas about hypertension and the evolution of manifestations of the disease or its clinic. The concept of the mechanisms of development of arterial hypertension is presented in detail.

Keywords: arterial hypertension, historical aspects.

Before starting treatment of a patient with hypertension, every physician should be aware of when to start pharmacotherapy, what target values of BP should be achieved with its help, taking into account the different severity of cardiovascular risk, what should be the treatment tactics and choice of drugs. The goal of treatment of any patient with arterial hypertension is to maximally reduce the risk of cardiovascular complications and death from them. This is the strategy that determines the choice of drugs.

In the 2013 recommendations, the target BP is considered to be less than 140 and 90 mmHg, and less than 140 and 85 mmHg for patients with diabetes mellitus. All these indicators are justified by analysing the results of various clinical studies, both comparative and prospective, often involving meta-analyses [2, 3]. There are reliable data allowing to recommend to elderly and old age AH patients younger than 80 years old with CAD level of 160 mm Hg to reduce it to 140-150 mm Hg. It should be noted that in previous versions of the recommendations it was suggested to elderly people to reduce CAD to 130 mmHg and below, which caused protests from neurologists and geriatricians. At the same time, if an elderly patient well tolerates a decrease in BP below 140 mmHg, i.e. does not faint, does not experience dizziness, maintains good cognitive abilities, there is no need to artificially maintain BP at a higher level.

Treatment tactics for AH patients are determined individually and are aimed at improving the quality of life, elimination of symptoms of the disease. It should be noted that such therapeutic approach is currently used in the treatment of all cardiovascular diseases: strategy - improvement of survival and mortality, tactics - elimination of symptoms. An obligatory condition for management of a patient with any degree of risk is persistent and intensive non-medication correction of lifestyle and habits. If it is ineffective, it is necessary to eliminate

risk factors with the help of drugs. Hypotensive therapy is prescribed taking into account risk assessment, target organ damage, comorbidities, and usually includes two or three drugs. Particularly

This situation is very relevant for Russia, where patients come to the doctor late, and already at the first visits they have high risk, comorbidities and high BP level.

The effectiveness of therapy is monitored by regular BP measurement, which is taught to the patient. Treatment of a patient with arterial hypertension is carried out in several stages:

1. cardiovascular disease risk assessment.
2. Treatment until the target BP is less than 140/90 mmHg. or less than 140/85 mmHg:
 - lifestyle changes;
 - drug therapy.
3. ensuring that the doctor's recommendations are followed.

If this sequence is not followed, the effectiveness of the treatment is practically impossible to achieve impossible.

Lifestyle changes

Lifestyle modification consists of dietary measures, exercise, smoking cessation, normalisation of body weight and reduction of alcohol consumption to a safe level. The effectiveness of lifestyle modification is equated to that of drug monotherapy. However, it should be emphasised that waiting for results from these interventions should not be a reason to postpone the initiation of pharmacotherapy in high-risk patients; these measures should be implemented in parallel.

The efficacy of lifestyle modification as an essential component of hypotensive therapy is no longer in doubt. Numerous publications have confirmed this position. Thus, in one of the meta-analyses [9] it was shown that limitation of sodium intake by 100 mmol per day leads to a decrease in the on average by 5.8 mmHg of systolic and 2.5 mmHg of diastolic BP; decrease in body weight by 4.5 kg - by 7.2 mmHg systolic and 5.9 mmHg diastolic; limiting alcohol intake to 2.7 servings per day - by 4.6 mmHg systolic and 2.3 mmHg diastolic; increasing exercise to 3 workouts per week - by 7.3 mmHg systolic and 7.5 mmHg diastolic; and dietary adherence - by 10.3 mmHg systolic and 7.5 mmHg diastolic. diastolic; increasing exercise to 3 workouts per week - by 10.3 mm Hg systolic and 7.5 mm Hg diastolic, and dietary adherence - by 11.4 mm Hg systolic and 5.5 mm Hg diastolic. The Department of Family Medicine has similar experience. A series of measures (simple sessions of physical training, dietary correction) in patients with arterial hypertension carried out in 1998 in one of the districts of St. Petersburg made it possible to achieve an average decrease in BP by 11 and 7 mmHg, and the results were maintained for 2 years [6].

The diet and nutritional status of patients with AH should include two objectives: reduction of sodium intake and normalisation of body weight. The DASH study ("Dietary Approaches to the Treatment of AH") showed that a diet with reduced sodium intake, but rich in fruits and vegetables (sources of potassium), with a low fat content, but with a sufficient amount of lean dairy products (sources of calcium) led to a reduction in BP [10]. The patient should be advised to exclude canned food - pickles, pickles, canned meat, dry concentrates, including soups, bouillon cubes, factory-made seasonings, sausage products, even if they are of high quality, smoked meats, cheeses, and baked goods, as they contain soda (also sodium, only bicarbonate). To be well oriented in the quality of food, the patient should learn to read food labels, which indicate the composition of products, including the content of sodium. At the same time, it is necessary to increase the daily consumption of fresh fruits and vegetables, lean dairy products, cod, potatoes. Dietary measures to reduce body weight include limiting the total caloric content of food, as well as increasing the proportion of dietary fibre, grains, raw vegetables and fruits in the daily menu.

Smoking cessation has been shown to reduce fibrinogen levels in blood, improves endothelial function, and prevents platelet aggregation. These effects contribute to the prevention of strokes, so patients with AH should be advised to stop smoking. Smoking inhibits arterial relaxation, causes a powerful pressor effect and reduces the content of antioxidants in the blood [11]. Methods of smoking cessation have been described [6, 12]. It is important to provide the patient with support from family or health care providers, reassurance and prescription of nicotine replacement medication in accordance with current recommendations.

All patients, regardless of severity and risk level, are advised to reduce their body weight if they are overweight or obese and then maintain it at a normal level. It should be remembered that these measures should be followed for life, as obesity, like AH, is a chronic disease. Unfortunately, long-term weight loss programmes are not yet effective, and population-based programmes have failed in many countries. More effective approaches to this problem may be found in the future. In addition to the dietary measures already described, physical exercise can help to reduce body weight.

Prospective observational studies show that the risk of CVD and complications is 30% higher in those who were physically inactive in middle age. Even a single episode of exercise then leads to a reduction in BP over several hours [11]. The positive effect of exercise on the cardiovascular system is due to the peripheral vasodilating effect, the work of skeletal muscles, the production of active substances with protective properties for the cardiovascular system

system, improvement of lipid profile, reduction of insulin resistance. Absolutely,

The most important of the mechanisms is the cardiorespiratory training effect itself.

The antidepressant aspect of aerobic exercise also means a lot. Exercise should be constant, as the positive effects disappear when it stops. Aerobic exercise is used. It is safe to start at an intensity level where the heart rate at the height of exertion reaches 50 per cent of the maximum age-related rate, and then increase the intensity until the heart rate reaches 70-80 per cent of the maximum age-related rate. Training frequency

Sessions are 3-5 per week, increasing to 5-6 per week. The duration of training is 30 to 45 minutes, with 5 minutes for warming up and 5 minutes for cooling down. Walking or running is best for patients with arterial hypertension. If it is possible to exercise on an exercise bike, cycling training is prescribed for 16-18 weeks [13]. Swimming, skiing, dancing, skating, tennis are also possible. However, the most important principle is to start gradually and slowly increase the load.

Alcohol consumption increases BP after a few hours. In addition, the hypertensive effect persists over the next 24 hours. The relationship between alcohol consumption and BP is believed to be linear. Given the negative effects of alcohol and on other systems and organs, it is best to stop its consumption, in extreme cases - to reduce the amount to a relatively safe. It is known that 14 servings per week for men and 9 for women are considered relatively safe. One serving of alcohol is about 12 grams of pure alcohol.

Drug therapy for AH

Management of patients with AH requires two questions: when to start drug therapy and which drug(s) to choose. If we follow both national and European recommendations, the main indications for starting drug therapy are: 1) the severity of the risk of cardiovascular complications and 2) the degree of blood pressure elevation. The algorithms of the National Recommendations can be used for risk stratification [3].

Patients with high-risk AH of II-III degree should start drug therapy immediately. In AH I degree, drug therapy is started just as quickly if there is diabetes mellitus, target organ damage. The point of view has changed in relation to patients with high normal BP, AH I degree without risk of cardiovascular complications. According to the recommendations [2, 3], they do not need BP correction, but lifestyle changes should be carried out very persistently.

Currently, there are two approaches to initiating therapy: searching for the optimal drug for monotherapy and low-dose combination of two drugs. The advantage of monotherapy is minimisation of side effects, better adherence of the patient to treatment; however, this approach requires a very patient attitude on the part of both the physician and the patient. The long period of selection, change of medication, dose manipulation, careful BP monitoring all require understanding on the part of the patient, who must be an informed, trained ally, no less interested in the outcome than the physician. The combination of medications can help achieve target BP more quickly.

Modern medicine uses seven classes of hypotensive agents to treat patients with AH.

1. basic:

- diuretics;
- beta-adrenoblockers (BABs);
- slow calcium channel blockers (SCCBs);
- angiotensin-converting enzyme inhibitors (ACEIs);
- angiotensin II receptor blockers (ARBs).

2. Additional:

- imidazoline receptor agonists (IRA);
- central sympatholytic drugs.

There are several steps in choosing a drug: first, the class of drugs, then the drug within the class, then the choice of dosage form, and finally the specific drug given the manufacturer, i.e. generic or brand name.

First-line drugs are selected first. However, half of all patients with AH must take two drugs, and one third reach target BP with only three drugs [8, 14]. The following criteria can serve as a basis for decision making: what cardiovascular risk factors the patient has; what target organ lesions; clinical manifestations of CVD, kidney disease and diabetes; presence of comorbidities; interaction with other drugs; to what extent the risk of cardiovascular lesions will be reduced by using a drug of this class. When choosing a particular drug within the class of hypotensive drugs, it is necessary to take into account social and economic factors, variability of response to drugs in each patient, interaction with other drugs, the presence of comorbidities (contraindications).

The problem of choosing the dosage form (tablet, injection, prolonged or short-acting drug) is caused by the impact on the course of the disease and quality of life, and the manifestation of adverse effects. It is preferable to prescribe overnight agents, as they do not cause BP fluctuations associated with interval between doses.

The concentration of prolonged medication in the blood is kept stable. Patients also prefer to take the drug once, this preserves their quality of life, reduces the number of side effects, and therefore maintains their adherence to the doctor's recommendations.

If the course of the disease becomes threatening and emergency treatment is required, the medicine must work quickly. In this case, the short-acting dosage form is also suitable. Why do we have to take into account all these features? Because in practice the doctor is often confronted with

the patient is unable to buy a medicine that is recommended according to the evidence-based approach, or does not want to take the medicine because of side effects, or the target BP cannot be reached, the medicine is ineffective, or the side effects make it necessary to cancel the medicine. There is also the need to choose between the original drug and a generic. What is a generic? It is a drug with proven therapeutic interchangeability, produced after the patent for the

original (brand name) drug has expired by other companies. The formula and structure of the generic should be the same as the original, but the technology, excipients, equipment, purification, etc. are different. Unfortunately, there is almost no testing of generics, the therapeutic effect is not proved in clinical trials, it is believed that the testing of brands is enough. But the frequency of side effects of generics may be higher, and the effectiveness may be lower, due to the peculiarities of production. However, the economic situation in the country may turn out in favour of generics, as is happening now in Russia.

Diuretics

Of the three groups of diuretics (loop diuretics, thiazide diuretics, potassium-saving diuretics), thiazide and thiazide-like diuretics are the most commonly used for the treatment of hypertension because of their moderate intensity but longer duration of action. The thiazide group includes hydrochlorothiazide, chlorthalidone, bendroflumethiazide, polythiazide, cyclothiazide; the thiazide-like group includes metolazone, quinetasone, indapamide, clopamide, xipamide, mefrozide.

Diuretics are known for their ability to positively influence prognosis in patients with AH, are cheap and are often recommended as monotherapy, especially in elderly patients.

On the other hand, metabolic effects of diuretics (retention of uric acid, calcium, dyslipidaemia, decreased tissue sensitivity to insulin) restrained their widespread use in AH. However, the emergence of new-generation thiazide diuretics, which have virtually no adverse effect on metabolism, allowed the use of this class of drugs without restrictions. Before starting therapy with diuretics, it is necessary to determine the content of potassium, uric acid and creatinine in the blood, lipidogram, parameters of carbohydrate metabolism. If you tell the patient about potassium-rich foods and convince him to follow the recommendations, it is unlikely that he will develop clinically significant hypokalaemia. Nevertheless, when collecting anamnesis and examining the patient, ask if he has cramps, weakness in the calf muscles, check the rhythm and signs of electrolyte abnormalities on ECG.

β -Arenoblockers

In the last few years, drugs of this class are no longer prescribed as widely as they used to be. Hypotensive effect of drugs of this class is due to several mechanisms. Firstly, it is a decrease in cardiac output due to a decrease in sympathetic tone, which means that the frequency and strength of heart contractions decreases. In general, the work of the heart becomes less intense. Secondly, the release of renin and the formation of angiotensin II are blocked. Finally, action in the synaptic space inhibits the release of norepinephrine. A number of other mechanisms also account for the antianginal action, the prevention of arrhythmic complications and finally, it improves cardiac health and inhibits neurohormonal activation. According to

According to the recommendations of the European Society of Cardiology [15], the prescription of β -adrenoblockers to a patient with AH is primarily indicated both for BP control (class of recommendations I, level of evidence A) and especially after myocardial infarction, with concomitant CHD, tachyarrhythmia, and heart failure. At the same time, it is noticed that these drugs as monotherapy are not effective enough for elderly patients. When choosing a β -blocker, one should take into account the necessity of selective action on β 1 - adrenoreceptors, cardioprotective effect, which is more pronounced in lipo- and amphophilic drugs, and finally, retarded forms allowing to take the drug once. Today more than 40 molecules of β -blockers are known, but the most common are only about 10: selective - atenolol, betaxolol, bisoprolol, metoprolol, carvedilol, nebivolol, celiprolol; non-selective - propranolol, nadolol, oxprenolol, sotalol, timolol.

ACE inhibitors

These are the most common modern drugs, best suited for both mono- and combination therapy. The basis of their pharmacological mechanism is the blockade of the enzyme that promotes the conversion of the inactive form of angiotensin into the active form, angiotensin II. They attenuate the effects of activation of the renin-angiotensin system, including arterial vasoconstriction and aldosterone secretion, by reducing the formation of vasoconstrictors. Under the influence of long-term therapy with ACE inhibitors (iAPF) there is a reverse development of left ventricular and arterial wall hypertrophy. In addition, they have a number of properties that may be useful in patients with AH, in particular renoprotective, anti-ischaemic, anti-atherogenic.

The effect of ACE inhibitors for BP reduction and as the drug of choice in those cases where there is myocardial systolic dysfunction, myocardial infarction, congestive heart failure, diabetes mellitus, and, finally, for secondary prevention in patients at high risk of cardiovascular complications has been proven. Clinical trials analysed by the European Society of Cardiology [16] did not show advantages of these drugs over other classes when administered as 1st line monotherapy in other conditions.

Use of angiotensin receptor blockers

The conversion of angiotensin I to angiotensin II occurs not only by the so-called chymase pathway but also by other means. Consequently, IAPPs are not able to completely suppress the hypertensive action of the renin-angiotensin system. Therefore, since the late 80's, the search for drugs that could affect not the formation of the active form of angiotensin, but to disrupt its interaction with target organs has been underway. The first drug of this class was losartan, synthesised in 1988. There are two main types of angiotensin (AT) receptors - type I and type II, AT1 and AT2 (not to be confused with angiotensin I and angiotensin II). Accordingly, a distinction is made between non-selective and selective AT receptor blockers. In clinical practice, only selective angiotensin receptor blockers of type 1 are used. Type 2 receptor blockers are used only in

physiological studies. Several drugs of this class are known, tested in clinical trials and recommended for use. They are losartan, valsartan, irbesartan, candesartan, telmisartan and eprosartan.

In addition to excellent tolerability, sartans have high antihypertensive efficacy. In large studies as monotherapy, they caused sufficient antihypertensive effect (reduction of diastolic BP below 90 mmHg or at least by 10 mmHg) in 40-80% of patients with mild to moderate forms of essential hypertension. Thiazide diuretics and calcium antagonists not only enhance but also prolong the antihypertensive effect of these drugs. All known blockers of AT1-receptors at a single administration uniformly reduce BP during 24 h. Their maximum antihypertensive effect is achieved not earlier than 4-8 weeks after the start of therapy. Hypotension after the first dose is uncharacteristic for these drugs. Sudden cancellation of AT1-receptor blockers is not accompanied by the development of rebound hypertension [17].

AT1-receptor blockers cause reverse development of left ventricular hypertrophy in patients with AH during long-term use. This is a very important effect, since it is now proven that left ventricular hypertrophy is an independent, independent risk factor for the development of complications of CVD. Thus, they have the ability to prevent complications and fatal outcomes due to their effect on LVH. This is also an indication for prescription to patients with diastolic myocardial dysfunction. Another important factor is the ability to reduce proteinuria, i.e. these drugs are indicated for patients with nephropathy, including diabetic nephropathy.

Calcium channel blockers

From the pharmacological point of view this is a very heterogeneous group of drugs. It is allowed to remind that in the organism calcium plays very many roles in various processes, in all systems and organs. Therefore, calcium channels, necessary for the passage of calcium ions into and out of the cell, are also present in all systems and organs. Calcium antagonists are usually divided into three main groups depending on their chemical structure:

- 1) phenylalkylamine derivatives (verapamil, gallopamil, etc.);
- 2) benzothiazepine derivatives (diltiazem, clentiazem, etc.);
- 3) dihydropyridine derivatives (nifedipine, amlodipine, nisoldipine, nitrendipine, felodipine, etc.).

Verapamil and diltiazem have negative ino-, chrono- and dromotropic effects, i.e. they can reduce myocardial contractility, decrease HR and slow down atrial-ventricular conduction. Nifedipine and other dihydropyridine derivatives have more effect on blood vessels, practically not affecting the function of sinus node and atrial-ventricular conduction. The main mechanism of their action is the dilation of peripheral vessels. This reduces systemic resistance and decreases the volume of blood returning to the heart. That is why the reaction to the reception of dihydropyridine derivatives of calcium antagonists is tachycardia - it is a compensatory response of the heart to reduce blood volume. This group of

calcium antagonists is mainly used for the treatment of arterial hypertension. Preference should be given to long-acting (slow-release) dosage forms. Reducing the incidence of stroke, calcium antagonists at the same time are inferior to diuretics and β -blockers in their effect on the development of heart attacks, i.e. heart attacks or acute coronary syndrome. It is also established that their use is accompanied by regression of left ventricular hypertrophy.

Other drugs for the treatment of AH

Not all drugs for the treatment of AH are used as 1st-line agents. This is due, firstly, to the insufficient number of randomised controlled trials to assess their efficacy and safety; the availability of more effective and safer drugs of the main classes. Nevertheless, in certain clinical situations there is a need to prescribe additional drugs. Imidazoline receptor agonists (IRA), α -adrenoblockers (AB) and direct renin inhibitors (DRIs) may be used as additional classes for combination therapy. No large RCTs have been conducted to assess the effect of these drug classes on hard endpoints. These classes have been studied in observational studies where indications for their preferred prescribing have been established.

Imidazoline receptors are located in the central nervous system and in the periphery (kidneys, pancreas). Activation of central I₁ -receptors leads to a decrease in BP and heart rate due to the central suppressive effect on the peripheral sympathetic nervous system. Both types of receptors are involved in the central regulation of autonomic nervous system tone. Moxonidine improves parameters of carbohydrate metabolism, it can be especially recommended to patients with impaired glucose tolerance and diabetes mellitus. It is noted that moxonidine reduces the severity of proteinuria and slows down the rate of decline in the rate of glomerular filtration in diabetic nephropathy.

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*Abdullayev S.I.
dosent
Mukumova H.I.
o`qituvchi
Qarshi davlat universiteti*

GEOGRAFIYA FANLARINI TASNIFLANISHINING TARIXIY SHARHI

Annotatsiya. Maqola geografiya fanlarining tasnifiga bag`ishlangan bo`lib, unda olimlarning geografiya fanlarini tasnif qilishiga doir tadqiqotlari sharhlangan

Tayanch so`zlar: geografiya, klassifikasiya, geografiya fanlarining sistemasi, tabiiy – geografik fanlar, ijtimoiy – geografik fanlar, integral geografik fanlar, kartografiya.

*Abdullayev S.I.
associate professor
Mukumova H.I.
teacher
Karshi State University*

HISTORICAL OVERVIEW OF THE CLASSIFICATION OF GEOGRAPHICAL SCIENCES

Abstract. The article is devoted to the classification of geographical sciences. It provides an overview of the stages of number of scientists on the classification of geographical sciences.

Key words: geography, classification, system of geographical sciences, natural geographical sciences, social geographical sciences, integral geographical sciences, cartography.

Hozirgi paytda fan bevosita ishlab chiqarish kuchiga va jamiyat hayotiy faoliyatining barcha jabhalariga ta'sir ko'rsatadigan muhim sosial institutga aylangan. Hozir 15 mingdan ziyod fan mavjud [1]. Ilmiy bilimning yagona sistemasida alohida fanlar va ilmiy yo`nalishlar shakllanadi. Bu fanlar va ilmiy yo`nalishlar bir-birlari bilan chambarchas bo`g`liq. Ayni paytda har bir fan o`zining obyektiga taalluqli alohida, o`ziga xos vazifalarni umumilmiy va juz'iy–ilmiy metodlar yordamida yechadi. Hozirgi paytda barcha toifadagi fanlar va ularning metodlari tobora bir - biriga kirib bormoqda. Shu sababli fanlar orasidagi chegaralar ham keskin bo`lmaydi va muayyan darajada shartli bo`lib qolmoqda. Tasniflar umumiy holatda fanlarning nisbati to`g`risida taqribiy fikr yuritishga imkon beradi va ilmiy yo`nalishlar to`g`risidagi tasavvurlarni tizimlashtirish maqsadiga xizmat qiladi. Geografiya fanlari rivojlanish jarayonida uzoq vaqt

davomida Yerni o`rganadigan asosiy va yagona fan sifatida tabiiy fanlar jumlasiga mansub bo`lib keldi. XX asrda geografiya yagona fan doirasidan chiqib bir – biri bilan bog`liq va hatto bir – biriga kirib turadigan fanlarning o`ziga xos sistemasiga aylandi. Ilgari turli mamlakatlarning tabiati, aholisi va xo`jaligi to`g`risidagi bilimlarning qomusiy to`plami bo`lgan geografiya hozirgi davrda bitta fan emas, balki o`zaro bog`liq bo`lgan tabiiy va ijtimoiy fanlarning bir butun sistemasi yoki kompleksidir. Geografiya fanining juda murakkabligi e`tiborga olingan holda geografik fanlar sistemasi deyiladi. Chunki, tabiat rivojlanishining ayrim qonuniyatlarini o`rganadigan tabiiy geografik fanlar sistemasi va jamiyat rivojlanishining ayrim qonuniyatlarini o`rganadigan ijtimoiy geografik fanlar sistemasi birgalikda yanada murakkabroq bo`lgan geografik fanlar sistemasini hosil qiladi. Geografiy fanlari sistemasiga mansub bo`lgan barcha fanlarning birligi ularning vujudga kelishiga ko`ra umumiylikida, tadqiqot ob`yektlarining mujassam bog`liqligida hamda maqsadining umumiylikida namoyon bo`ladi. Chunki bu fanlarning barchasi geografiya rivojlanishining turli bosqichlarida uning bagrida bujudga kelgan va hozirgi paytda ularning umumiy tadqiqot ob`yektini geografik qobiq tashkil etadi. Geografiya fanlarini tasnif qilishga doir jahonning juda ko`plab nufuzli geograflari o`zlarining fikrlarini bildirganlar. Geografiya fanlarini tasniflash bilan turli paytlarda B.Varenius (1650), I.Kant (1788), G.Gerland (1888), Y.Chijov (1896), A.Hettner (1905, 1930), L.S.Berg (1915), N.D.Lukashevich (1917), V.P.Semyonov-Tyan-Shanskiy (1928) va boshqa ko`plab olimlar maxsus shug`ullanishgan. XX asrning 30-yillariga qadar bajarilgan tasniflarda geografiya asosan bir butun fan sifatida qaraladi. Geografiya ichki tuzilmasi to`g`risidagi tasavvur antik davrdayoq ishlab chiqilgan fikrlardan iborat edi. Masalan, Strabon va Ptolomey geografiyani umumiy va juz`iy geografiyaga ajratishgan. B.Varenius XVII asrning o`rtasida tadqiqot vazifasiga bog`liq holda geografiyani umuman Yerni o`rganadigan “umumiy” va Yerning ayrim regionlarini o`rganadigan “juz`iy” geografiyaga ajratgan. “Juz`iy” geografiya doirasida u Yerning yirik hududlarini tasvirlaydigan “xorografiya”ni va kichik hududlarini tasvirlaydigan “topografiya”ni ajratgan. Geografiya to`g`risidagi bunday tasavur XVIII asrda V.N.Tatishchev tomonidan chuqurlashtirilgan. U geografiyani “umumiy (general)”, “juz`iy” (mamlakatshunoslik) va “topografiya”ga (o`lkashunoslikka) ajratishni tadqiqot vaqtiga bog`liq bo`lgan (“qadimiy geografiya”, “o`rta geografiya”, “hozirgi geografiya”) tasnif bilan to`ldirgan. Geografiyaning hududiylik jihatining ahamiyatini geograf sifatida emas, balki ko`proq faylasuf sifatida tanilgan I.Kant ham ta`kidlagan edi. Geografiyaning mustaqil fan sifatida mavjudligini asoslash va uning fanlar tizimidagi o`rnini aniqlash maqsadida I.Kant o`z tasnifini taklif qilgan. U geografiyani tabiiy, kommersiya (iqtisodiy), urf-odatlar (madaniy) va siyosiy geografiyaga ajratgan edi va geografiyaning hozirgi asosiy yo`nalishlarini belgilagan edi [19]. F.Engels o`zining “Tabiat dialektikasi” asarida geografiyani insonni o`rab turadigan tabiat, doimiy harakatdagi materiya to`g`risidagi bilimlar sistemasi sifatida ta`riflagan. U o`zining fanlar fanlarni tabiatda kechadigan

jarayonlarga bogʻliq tartibda joylashtirgan va geografiya uchun kimyo va biologiya oraliqdagi oʻrinni belgilagan. A.N.Krasnov tabiiy geografiyani umumiy va juzʻiy Yer bilimiga (mamlakatshunoslikka) ajratadi. U umumiy Yer bilimini butun sayyoramizni, uning yuzasining umumiy qonuniyatlarini, juziy Yer bilimi yoki mamlakatshunoslik esa bu qonuniyatlarni alohida materiklar va mamlakatlarni oʻrganishini taʼkidlaydi. XIX asrning oʻrtasida P.P.Semyonov-Tyanshanskiy keng va tor mazmundagi geografiyani farqlaydi. Uning firicha, keng mazmundagi geografiya tadqiqot predmetining oʻxshashligi bilan oʻzaro bogʻliq boʻlgan fanlarning butun tabiiy guruhidir. Keng mazmunda geografiya deb, u toʻppta mustaqil fandan: matematik geografiya, tabiiy geografiya, etnografiya va statistikdan iborat boʻlgan sistemani tushungan. Taʼkidlash joizki, u paytda statistika deb iqtisodiy geografiya tushunilgan, chunki “iqtisodiy geografiya” termini XIX asrning oxiridagina keng tarqaladi, etnografiya esa uzoq vaqt davomida geografiya va tarix tutashuvida mamlakatshunoslik ishlarining anʼanaviy qismi boʻlgan. P.P.Semyonov-Tyan-Shanskiyning fikricha, tor mazmundagi geografiya Yer yuzasining fiziografiyasini, yaʼni uning doimiy, asrlar davomida tabiatning oʻzi tomonidan belgilangan oʻchmaydigan tuzulishini ham, inson qoʻli bilan yaratilgan oʻzgaruvchan, oʻchadigan tuzilishini ham tasvirlashdir. Geografiya sintezlovchi fanlar guruhining yorqin misoli boʻlib, u bir butunlik va komplekslik xossalariga ega. XX asrning boshidayoq V.P. Semenov-Tyan-Shanskiy geografiyani fizika-matematika va gumanitar fanlar bloki orasiga joylashtiradi va uni falsafa bilan bir qatorda sintetik fan, deb ataydi.

D.N. Anuchin geografiyani umumiy geografiyaga (Yer bilimiga) va mamlakatshunoslikka ajratadi. Uning fikricha, Yer bilimining oʻrganish obyektini butun Yer va uning yuzasi tashkil etadi, mamlakatshunoslik bu yuzaning insonni ham oʻz ichiga oladigan kattaroq komplekslarni - alohida qismlarini, mamlakatlarni, oblastlarni oʻrganadi. L.S.Berg mamlakatshunoslik – landshaftshunoslik sifatida tushuniladigan geografiyada juzʻiy geografiyani (anʼanaviy mamlakatshunoslikni) va Yerning butun yuzasidagi predmetlar va hodisalarning taqsimlanishini oʻrganadigan umumiy geografiyani ajratish lozimligini taʼkidlaydi. I.D.Lukashevich geografiyani oʻz davri uchun juda original holda tasnif qilgan edi. U geografiyani umumiy Yer bilimi, juzʻiy Yer bilimi va ilk bor paleogeografiyaga ajratadi. Umumiy Yer bilimi tarkibiga tabiiy geografiya (tabiiy dengizshunoslik bilan) va biologik geografiya kiradi. Biologik geografiya oʻz navbatida oʻsimliklar geografiyasi va odam geografiyasi (antropogeografiya)ga boʻlinadi. Juzʻiy umumiy Yer bilimi esa quruqlik geografiyasi (yoki mamlakatshunoslik) hamda dengiz geografiyasi (yoki tasviriy okeanografiya) dan iborat [9, 19]. XX asrning ikkinchi yarmida geografiya fanlarini tasnif qilish muammosiga eʼtibor kuchaydi. Bu masala va uning ayrim jihatlari bilan S.V.Kalesnik (1959, 1961, 1970, 1972), Y.K. Yefremov (1950, 1963, 1964), Y.G. Saushkin (1958), V.A.Anuchin (1960), A.M.Kolotiyevskiy (1961), A.G.Doskach (1964), V.B.Sochava (1970), B.N.Semevskiy (1972), V.S.Lyamin (1978), F.N.Milkov (1990), A.G.Isachenko (2004), Y.V.Porosenkov

(2005), I.Nazarov (2013) A.N.Novikov (2014) va boshqa tadqiqotchilar shug`ullanishganlar. Geografiyani tasniflash bilan shug`illangan olimlar tasniflashga turli xil maqsadli ko`rsatmalarni va yondashuvlarni asos qilib olganlar.Shuningdek I.M.Zabelin (1952,1959), A.G.Isachenko (1953), K.K.Markov (1951,1960, 1973), P.S.Kuznetsov (1967,1970), F.N.Milkov (1967), A.A.Grigoryev (1970), V.M. Goxman (1984), A.H. Нигматов (2018), X.R.Toshov (2021) va boshqa olimlar geografiyaning ikki asosiy tarmog`i – tabiiy va ijtimoiy geografiyaning geografiya fanlari tasnifida tutgan o`rnini belgilashga harakat qilganlar.Fanlar tasnifi bo`yicha mashhur tadqiqotchi B.M.Kedrov fikricha, geografiya ikki guruhdan - tabiiy fanlar guruhiga kiradigan tabiiy geografiya va sotsial fanlarga mansub bo`lgan iqtisodiy geografiyadan iborat.S.V.Kalesnik 1959-yilda birinchi bor geografiyaga moslab “fanlar sistemasi” terminini qo`llagan va geografiya fanlarining tasnifini taklif qilgan. Bu tasnif 1972-yilda aniqlashtirildi. S.V.Kalesnik geografiya fanlarini tasniflashda geografik fanlarning o`rganish predmeti va bu predmetga xos bo`lgan qonunlardagi farqlarni asos qilib olib. Shu asosda S.V.Kalesnik geografiya fanlari sistemasini 4 ta guruhga (tabiiy-geografik fanlar, ijtimoiy-geografik fanlar, kartografiya barcha bo`linmalari bilan va birikma (sintetik) geografik fanlar) ajratgan edi.S.V. Kalesnik fikricha, geografiya fanlarining har biri o`zining nazariy, regional va amaliy qismlariga ega. Geografiya fanlarining amaliy bo`limlari ba`zan amaliy geografiya degan umumiy nom bilan birlashtiriladi, ammo bu amaliy bo`limlar mustaqil fanlarni hosil qilmaydi [10]. Y.K.Yefrimov (1964) geografiyani tasniflashda uning predmeti bo`lgan Yer landshaft sferasining xususiyatlarini e`tiborga oladi. U barcha geografiya fanlarini tabiiy geografiya va tabiiy-geografik fanlarga, sotsiogeografiya va sotsiogeografik fanlarga hamda umumgeografik fanlarga ajratadi [6].B.N.Semevskiy (1976) geografiya fanlarining prinsipial tarhini asosladi. U barcha geografiya fanlarini sistemaga birlashtiradi va bu sistemani 4 ta kichik sistemaga (tabiiy fanlar, ijtimoiy fanlar, sintetik geografik fanlar va katografiya va uning bo`linmalari) ajratgan [20]. Y.G.Saushkin (1980) geografiya fanlarining murakkabroq ichki tuzilmasini ochib berdi. F.Engelsning tasnifiy tarhini rivojlanirgan holda u barcha fanlarni fundamental, sintezlovchi va birlashtiruvchi guruhlarga ajratgan va geografiya fanlarini ikki xil tasniflaydi: materiya harakati shakllarining xususiyatlariga ko`ra geografiya fanlarining uch guruhini: tabiiy-geografik, sotsial-iqtisodiy va umumgeografik hamda tadqiqot ob`yektlarining murakkabligiga bog`liq holda bir komponentli, ko`p komponentli, sintetik va tatbiqiy geografik fanlarni ajratgan [19].V.B. Sochava geografiya fanlarining tasnifini tizimli yondashuv asosida amalga oshirgan. Uning tasnifi geografiya fanlari assosiativiyasining umumiy tuzilmasida geosistemalar to`g`risidagi ta`limotning o`rni nuqtai nazaridan amalga oshirilgan va bu tuzilmaning turli ilmiy geografik yo`nalishlarning eng samarali o`zaro ta`siriga imkon beradi. U barcha geografiya fanlarini tektologiya (geografiya fanlarining tuzilmasi, metodlari va o`zaro aloqalarini o`rganadigan metanazariya); makoniy sistemalar

(tabiiy, hududiy – ishlab chiqarish va aholi sistemalari, va, shuningdek, mamlakatshunoslik-kompleks regional geografik axborot) va juz'iy ilmiy yo`nalishlarga (inson ekologiyasi, geobotanika, tuproqlar geografiyasi, geomorfologiya va b.) ajratgan [21]. V.S.Lyamin (1978) geografiya fanlari tasnifini tuzishda materiya harakati geografik shaklining in'ikosi prinsipiga amal qiladi va geografiya fanlari sistemasida uch guruhni ajratadi: 1) umumiy tabiiy geografiya (umumiy Yer bilimi), 2) iqlimshunoslik, quruqlik hidrologiyasi, glyasiologiya, geokriologiya va okeanologiya va 3) biogeografiya, tuproqlar geografiyasi, geomorfologiya, iqtisodiy geografiya va b. [11]. N.K.Mukitanov (1979) faoliyat konsepsiyasi asosida geografik bilimlar sistemasini taklif etgan. U jamiyat va tabiat o`zaro ta`siri nazaryasi, geografik muhit nazaryasi, tabiiy – geografik fanlar, ijtimoiy – geografik fanlar va umumgeografik fanlarni ajratadi. O`z navbatida keyingi uch guruhdagi fanlardan har biri juz'iy (landshaftshunoslik, geomorfologiya, tabiatdan foydalanish, aholi geografiyasi va b.) fanlarga bo`linadi [14]. E.B.Alayev (1983) butun geografiyani fanlar sistemasi, uning ikki asosiy bo`limini (tabiatshunoslik va jamiyatshunoslik geografiyasini) fanlar oilasi, o`zaro bog`liq bo`lgan fanlarning yirik majmualarini (tabiiy dissiplinalar) fanlar kompleksi, fanlar kompleksining alohida yirik elementlarini (zoogeografiya, aholi geografiyasi va b) soha (tarmoq) va fanlarning navbatdagi iyerarxik qatorini bo`lim yoki yo`nalish (qishloq aholisi geografiyasi – aholi geografiyasining bo`limi) deb ataydi. U geografiyani tabiatshunoslik, jamiyatshunoslik, nazariy va yordamchi fanlarning “oilalari”dan iborat bo`lgan fanlar sistemasi sifatida qaraydi [1]. V.S.Jekulin (1989) fikricha, geografiya tabiiy-ilmiy (umumiy tabiiy geografiya, landshaftshunoslik, paleogeografiya, geomorfologiya, iqlimshunoslik, hidrologiya, tuproqshunoslik, biogeografiya, landshaft geokimyosi, landshaft geofizikasi), sotsial-iqtisodiy (sotsial iqtisodiy geografiya, sanoat geografiyasi, qishloq xo`jaligi geografiyasi, transport geografiyasi, aholi geografiyasi, o`lkashunoslik, siyosiy geografiya) va tabiiy-ijtimoiy (geoekologiya, tabiiy resurslar geografiyasi, tarixiy geografiya, tibbiy geografiya, okean geografiyasi) blok (kichik sistema)lardan iborat. Bundan tashqari, u mufassal (skvoznoy) fanlarni (kartografiya, geografiya tarixi va metageografiya) ham ajratadi [7]. F.N. Milkov (1990) fanlar tasnifining 4 darajasini (taksonomik birligini) – sikl, oila, turkum va turini ajratish maqsadga muvofiq, deb hisoblaydi Geografiya biologiya, geologiya, geofizika, geokimyo bilan birgalikda Yer to`grisidagi fanlar sikliga kiradi. Bu fanlarning o`rganish predmeti yagona bo`lib, uni Yer tashkil etadi, ammo ayni paytda bu fanlardan har birining o`rganish predmeti mavjud. Geografiyaning o`rganish predmetini esa barcha davrlarda vujudga kelishiga ko`ra tabiiy va sotsial ajralmas kompleks sifatidagi Yer yuzasi (geografik qobiq) tashkil etgan. Tasnifning sikl darajasidagi geografiya – bo`linmagan, yaxlit geografiya bo`lib, barcha boshqa geografiya fanlarining tarkib topishida asos bo`lgan. Shu sababli geografiya eng umumiy qonuniyatlarni o`rganadi va uning xulosalari geografiya fanlarining barcha bo`linmalariga taalluqlidir [13]. Y. Jupanskiyning (1997) fikricha, sistema

sifatidagi hozirgi geografiya ko'pgina tarmoq geografik fanlardan (dissiplinalardan) iborat. Ularni tabiiy (tabiiy-geografik), ijtimoiy (iqtisodiy-) geografik, tabiiy - sotsial, mufassal (skvoznoy) geografik fanlar bloklariga birlashtirish mumkin [8]. V.P. Maksakovskiy (1998) shartli ravishda geografiya fanlarining "bino" sida 4 ta qavatni ajratadi: - "birinchi qavat" – geografiyaning nazariy yadrosi bo'lib, unga nazariy geografiya va tarixiy geografiya kiradi; - "ikkinchi qavat" "daraxt tanalari" hisoblanadigan fanlardan: tabiiy geografiya, sotsial – iqtisodiy geografiya, kartografiya va mamlakatshunoslikdan iborat; - "uchinchi qavat"ni "daraxt tanasining butalari" – geografiyaning tarmoq, juz'iy va kenja fanlari band etadi; - "to'rtinchi qavat" tutash va yaqin (geokimyo, geofizika, tibbiyot geografiyasi va b.) fanlarga ajratilgan [12]. Y.V. Porosenkov (2005) fikricha, geografiya sistemali yondashuv nuqtai nazaridan fanlarning murakkab iyerarxik sistemasidan iborat, ya'ni geografiya fanlarning birinchi qatori sistemasini sifatida ikkinchi qator kichik sistemalaridan, ular esa uchinchi qator sistemalaridan iborat. Birinchi qator fanlari sistemasini sifatidagi geografiya nazariy (geografiya nazariyasi va metodologiyasi, nazariy geografiya, metageografiya, matematik geografiya), analitik (tabiiy geografiya, sotsial-iqtisodiy geografiya, geokologiya, tabiatdan foydalanish), sintetik (global geografiya, regional geografiya - mamlakatshunoslik, o'lkashunoslik, kartografiya), va tatbiqiy (konstruktiv geografiya, geografik bashoratlashtirish, geografik baho) fanlardan iborat [22]. I. Nazarov (2013) geografiya fanlarini bo'limlariga birlashtiradi. Tabiiy geografik fanlarga umumiy Yer bilimi (umumiy tabiiy geografiya), landshaftshunoslik, paleogeografiya, iqlimshunoslik, geomorfologiya, hidrologiya (quruqlik hidrologiyasi, okeanologiya), tuproqlar, o'simliklar va hayvonot geografiyasi kabilar kiradi. Iqtisodiy-ijtimoiy geografiya bo'limiga ham bir qancha fanlar (umumiy iqtisodiy geografiya, aholi geografiyasi, sotsial geografiya va b.) kiradi. Geografiyaning har ikkala qanotiga tegishli va umumgeografik mazmunga ega bo'lgan fanlar (turizm va dam olish geografiyasi, tibbiyot geografiyasi, geokologiya va b.) oraliq fanlar guruhiga kiradi [15]. Geografiya fanlari sistemasining so'ngi tasniflaridan biri rossiyalik geograf A.N. Novikov (2014) tomonidan taklif qilingan. Uning fikricha, geografiya fanlarining tasnifi trinitar yondashuv asosida ham bo'lishi mumkin. Bu yondashuvning fraktalligi dastlabki triadani navbatdagi triadalarga ajratishdan iborat. U geografiya fanlari sistemasini uch qismli yondashuv asosida gorizontal (tabiiy, ijtimoiy va ekologik geografiya), vertikal (geoglobalistika, mamlakatshunoslik va regionshunoslik) va funksional (tasviriy, nazariy va amaliy geografiya, konstruktiv geografiya) guruhlarga ajratadi [17].

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*Abdullayeva U.T.
associate professor
Department of Languages
Tashkent State Agrarian University*

MODERN METHODS IN LEARNING FOREIGN LANGUAGES

Abstract. Over the past few decades, there have been significant advances in technology that have transformed the way people learn foreign languages. Traditional classroom-based instruction utilizing textbooks, workbooks, and lectures have given way to new digital tools and online platforms that make language learning more engaging, accessible, and effective. This article will explore some of the most impactful modern methods now available for studying foreign languages and their advantages over older approaches.

Keywords: technologies, benefits, learning process, teachers, courses, benefits.

Introduction: In today's globalized world, the ability to communicate in more than one language is becoming increasingly important both professionally and personally. As borders between countries continue to dissolve through advances in technology and transportation, cultural exchange is at an all-time high. The workforce is also becoming more international, with many jobs requiring interaction with colleagues and clients from diverse linguistic backgrounds. For these reasons, learning additional foreign languages can open up a wealth of opportunities and bring many benefits to individuals in their careers and daily lives.

From an economic perspective, becoming multilingual vastly increases one's career prospects and mobility. Many companies now conduct business worldwide and require employees who can navigate cross-cultural interactions. Having foreign language skills demonstrates to potential employers that one is globally-minded and culturally sensitive - qualities that are highly valued in the modern workplace. It also allows individuals to qualify for a wider range of international jobs that may involve travel, expatriation, or managing global teams and partnerships. Learning another major world language like Spanish, Mandarin, or Arabic can qualify one for jobs in fields like translation, interpretation, diplomacy, international trade and more.

In addition to career advantages, being able to communicate in a foreign tongue brings personal enrichment through cultural exposure and understanding. It opens doors to truly experiencing other societies from the inside out by interacting directly with local people. One gains a deeper appreciation for foreign cultures, customs and mindsets by learning the language they are expressed through. It allows for immersive travel without barriers when visiting foreign countries. The ability to converse with locals makes destinations come alive

through meaningful human connections instead of superficial tourism. Mastering a new language also provides cognitive benefits by flexing areas of the brain related to memory, reasoning and multitasking. Various studies have linked bilingualism to reduced risks of dementia and Alzheimer's disease as we age.

With today's information age, acquiring foreign language skills is easier and more accessible than ever before. Technological tools from smartphone apps to online language exchange platforms and video lessons have made learning new tongues convenient regardless of one's geographic location or budget. Many higher education institutions now offer degree programs fully or partially taught in foreign languages to immerse students from an early stage. Exchange programs, study abroad semesters and volunteer opportunities are excellent ways for students to learn while experiencing another culture firsthand. For working professionals, part-time language classes are commonly available in major cities worldwide to fit busy schedules.

Language learning techniques can be an incredible assistance while learning another dialect. A language learning system is a way to deal with discovering that is intended to make learning simpler and more fruitful. A procedure is similar to a guide — it gives guidance and help to assist with directing you on your excursion. Here, we will discuss techniques that you can use to assist you with dominating another dialect. We'll likewise investigate how to think up language learning techniques that best accommodated your needs. It's dependably essential to have a positive objective as a primary concern while learning a language. Putting forth objectives explains what you want to chip away at and where you really want to start your excursion.

To sort out what your language realizing objectives are, you may initially need to ask yourself what rouses you to concentrate on the language. Might it be said that you are learning French to watch another Network program you saw as on the web? Perhaps you need to have the option to chime in to that new Spanish tune on the radio? Research has shown us that putting forth objectives in light of your inspiration significantly influences achievement. Not certain where to begin with objective setting? Mango takes care of you! Bounce over to our post on putting forth great language learning objectives, or hop directly to our objective setting worksheet.

Another dialect learning technique is to set to the side your review directs and drench yourself in the experience of learning a language. Rather than poring over endlessly pages of sentence structure rules, attempt to make your objective language an ordinary piece of your day to day existence. Sit in front of the Programs, pay attention to digital broadcasts, read recipes, compose journal sections, or converse with yourself without holding back. Despite the fact that you will not be expressly zeroing in on learning (perhaps you're attempting to unwind or prepare supper), you'll in any case get on your language behind the scenes.

Paying attention to your new dialect consistently is a decent system for working on your general capability. This is on the grounds that when you stand

by listening to something in your objective language, you get input. Yet, what's the significance here?

Input is the language (words, phrases, inflection, sounds, and so on) that we are presented to when we read or pay attention to something. Dialects are best realized when we are presented to enter that is generally intelligible, yet that contains some language we don't yet have the foggiest idea (e.g., new words, sentence structure, and so on.).

Divided redundancy is one of the best procedures for further developing your jargon abilities. Divided redundancy alludes to the method involved with separating, or scattering, survey meetings as opposed to concentrating on everything simultaneously. Separated reiteration can likewise assist you with recollecting words better in the long haul. This is the carefully guarded secret. Begin by learning a couple of new words every evening (make cheat sheets and test yourself, for instance) and halting there. The following day, perceive the number of words you that recollect! When you can get them generally right after a short-term break, you can build how much time between learning meetings with those specific words. Before long, you'll find that your cerebrum has learned even the trickiest words and can recollect them even weeks (and months!) subsequent to learning them. Continue to add new words to your psychological (or genuine) cheat sheet deck, and rehash the interaction.

As unusual as it might at first appear, thinking in the language you're learning is a successful method for building your familiarity. A typical entanglement for language students is to consider what they need to say (or write) in their most memorable language, and afterward make an interpretation of it into their subsequent language. However, language learning includes significantly more than interpretation, and there are numerous ideas and expressions that can't be deciphered. For instance, envision you might want to utilize the colloquialism, "It's coming down like a hurricane!" in Spanish. The exacting interpretation (está lloviendo gatos y perros) doesn't seem OK in Spanish. The same Spanish expression is llueve a cántaros, which makes an interpretation of in a real sense to "it's coming down (or its downpours) pitchers!"

One of the most incredible ways of learning another dialect (or learn anything, truly) is to commit a great deal of errors. Try not to feign exacerbation presently! Really disappointing, they truly furnish us with extraordinary chances to learn - whenever they are remedied, obviously. Restorative criticism is a type of info your mind can use to assist you with trying not to commit the error a subsequent time. In any case, regardless of whether you mess up the same way once more, sit back and relax! Committing errors can proof of learn. You heard that right! During the time spent learning a language, there is a phase (in any event, when kids become familiar with their most memorable dialects) where we make orderly, designed blunders.

These blunders frequently come about in light of the fact that we over apply a standard we have assimilated. For instance, an English student might realize that

you add "s" to a thing to make it plural, and that implies they could say "mouses" rather than "mice." While this is in fact an error, it's likewise proof that the student has taken in the overall pluralization rule — presently they simply have to discover that "mouse" is an exemption.

One more key methodology for your language learning venture is to peruse however much you can in your objective language. Like tuning in, perusing furnishes us with input which our minds use to learn. Input is fundamental for getting on new jargon and syntactic designs. So, the more you read in the language you're attempting to learn, the more you'll learn!

Perusing in your objective language could appear to be truly overwhelming right away. Yet, I guarantee it's not quite so unnerving as it appears! Begin little: have a go at perusing street signs, menus, verses, or even straightforward virtual entertainment posts. You could change the settings on your telephone or PC to an alternate language. This is perfect for understanding practice! (Simply ensure you know how to change it back!)

Like perusing and tuning in, you ought to likewise compose however much you can in your objective language. Composing sharpens your useful abilities, meaning you get to work on delivering the language yourself. You want to reinforce your useful abilities to completely dominate the language you're learning.

For a great deal of students, writing in their objective language is truly frightening. Understudies frequently partner composing with long examination papers and cruel criticism on spelling and language structure.

Conclusion

In summary, modern methods leveraging digital tools and online platforms have made foreign language learning far more accessible, engaging, and effective compared to traditional classroom-only approaches. Technologies like mobile apps, immersive education models, AI-powered adaptive systems, and new ways to interact with native speakers represent significant improvements over older textbook-based methods. As these innovative techniques become more advanced and widely adopted, they are revolutionizing how people learn languages globally. The future of language education is highly promising as new technologies continue transforming this important field.

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*Abdurakhmanova Ch.B.
department of pre-school, primary education
and technological education Independent researcher
Faculty of Pedagogical Education
assistant
Samarkand state university named after Sharof Rashidov*

APPROACHES TO THE ORGANIZATION OF INDEPENDENT WORK BASED ON THE REQUIREMENTS OF THE PIRLS ASSESSMENT PROGRAM

Abstract. In this article, it is necessary to know the requirements of the evaluation program, plan and analyze its processes, how to competently implement one's plan, connect theory and practice, pay attention to the change that occurred in the group in the process, change the various components of the process according to the situation, overcome excessive anxiety, cultivate objective self-evaluation; development of the will: formation of a desire for a goal, overcoming the tension of nerves and muscles, initiative, trusting in one's own strength, self-control.

Keywords: theory, coping with anxiety, nerves and muscles, pedagogical skills, processes, planning, analysis, analysis, components, change, intellectual, memory, attention, formation.

Organize independent work based on the requirements of the PIRLS assessment program achievement requires great pedagogical skill from the primary school teacher. In doing so, they pay special attention to knowing the requirements of the PIRLS evaluation program, planning and analyzing their processes, how competently they implement their plan, connecting theory and practice, focusing on the change that occurred in the group during the process, and changing the various components of the process depending on the situation.

The organization of independent work of students in primary grades based on the requirements and criteria of the PIRLS evaluation program is aimed at the following goals:

- development of students' intellectual abilities: development of their thinking (knowledge, creativity), memory, attention, mental qualities (depth, flexibility, thrift, independence), thinking skills (such as separation, analysis), learning knowledge, formation of science-related knowledge, training and skills;
- development of motivation to know: formation of needs for intellectual knowledge, understanding of nature, independent thinking and laws of knowledge;
- development of emotional ability: formation of the necessary skills to manage one's own emotions and mental states, overcome excessive anxiety, cultivate objective self-evaluation; develop the will:

- forming a desire for a goal, overcoming the tension of nerves and muscles, taking initiative, believing in one's own strength, developing self-control, teaching knowledge - how to perform activities, how to plan activities, how to implement and control them;

- integral formation of educational activity and its main parts: managing students' attention, explaining to them the work to be done, activating the necessary need-motivational conditions, helping the activity, making corrections, evaluating the process and the result of the students' educational activity.

Let's look at the standard parameters used in the analysis of the organization of independent work: the intended goal, educational material, form, method, structure, connection between stages. Now we add educational content to these parameters in accordance with the competence approach and determine the level indicators that determine the teaching activity of the teacher. It is up to the teacher to form a person who is eager to know, curious, able to organize his personal activities, who listens carefully to his interlocutor and acts independently and is responsible for his actions. Standard requirements and methodological recommendations were taken into account in the development of the target-result model of the formation of independent work in the process of independent work based on the requirements of the PIRLS evaluation program. In the implementation of the target-result model of the formation of educational and cognitive competencies in primary school students based on the requirements and criteria of the PIRLS evaluation program in the process of independent work, the following should be considered: completing the primary education program with the help of the curriculum and independent work; depending on the independent work plan, creating conditions for the development of the needs and individual characteristics of students in terms of its organization; in accordance with the independent work plan, determine in advance the composition of the course, its structure, forms of transfer, the number of independent works; carrying out independent work in accordance with the values, goals, principles given within the programs of primary general education; It is necessary to pay attention to the organization of the process of independent work based on the requirements and criteria of the PIRLS evaluation program, and the fact that educational institutions show independence in choosing the models and forms of independent work of students. We relied on the main characteristics of the innovative-educational model using the design activity, what it illuminates: requirements for primary school students according to international standards during the educational process, as well as primary general educational competencies; the content of the process of formation of students' educational-cognitive competencies in independent work; stages of independent work; the main indicators and criteria of the levels of formation of components of educational and cognitive competences.

Applying an anthropological approach to conducting independent work reveals the importance of primary school students' personal, activity awareness, independence, ability to overcome non-standard situations. In this, the teacher

participates as an independent organizer of activities and as a guide to effectively form the educational and cognitive competencies of students based on the requirements of the PIRLS evaluation program.

Systematic and active person-oriented approaches, closely related to each other, offer a great future to pedagogical education, only for its implementation it is necessary to modernize the content-technological basis of education: to determine the new content of education and the principles of systematization of educational material, the subject position of the teacher and modern requires the identification of new pedagogical technologies for the development of pedagogical requirements.

Let's consider the main principles of systematic and active person-oriented approaches:

1) the active principle is determined by the fact that students do not find knowledge in a ready-made way, but find it on their own, understanding the content of the activity being carried out, actively participate in its improvement, all this in the education of a competitive student personality in accordance with the requirements of the PIRLS assessment program, as well as having a universal, conscious activity, helps to demonstrate abilities, positive development of general education skills;

2) the principle of continuity is that it represents a consistent connection between the stages of education, taking into account the young psychological characteristics of the development of students;

3) the principle of integrity implies the formation of a systematic understanding of the environment in students;

4) the principle of maximax is that students are given the maximum opportunity to master the educational content;

5) the principle of psychological comfort is important for eliminating stressful factors in the educational process, supporting a positive environment, and forming cooperation skills;

6) the principle of variability allows students to choose the correct, adequate solution options in different situations;

7) the principle of creativity allows students to master creative activities based on initial maximum creativity during the educational process.

When choosing systematic and active approaches, we relied on the opinion of G. N. Serikov, who believes that all pedagogical phenomena should be considered as an educational system [1].

The application of the competence-based approach to the formation of learning-cognitive competencies of students in primary education in independent activities is based on the following principles and based on the recommendations of O.E. Lebedev [2]: development of independent problem-solving abilities of students in various types of activities in primary education; understand the content of the educational process while solving different situations;

creating conditions for students to develop communicative, cognitive, moral and independent decision-making skills for other problems; evaluation of educational results based on the analysis of the degree of formation of learning-cognitive competencies achieved by students at a specific stage of education based on the requirements and criteria of the PIRLS evaluation program.

The content and specific features of the organization of the modeled process reveal the development of educational-management, educational-informational, educational-logical activities of students, pedagogical conditions aimed at forming the learning-cognitive competencies of students based on the requirements of the PIRLS evaluation program [3].

Educational-management activities mean the following: planning (determining goals and means of achieving them); organization (establishing and improving interaction between managed and management systems for the implementation of plans); control (gathering information about the process of established plans); regulation (adjustment) (correction of plans and the process of their implementation); analysis (studying and evaluating the work of both oneself and classmates); comparing the obtained results with the action plan.

Educational and informational activity involves working with oral and written texts, being able to work with real objects as a source of information, transferring information to symbolic modeling.

Educational and logical activity consists of analysis, synthesis, comparison, establishment of cause-and-effect relationships, generalization and classification, identification of concepts and analogues, proof and falsification.

The basis of the educational-logical component is represented by the sum of the characteristics of educational-cognitive competences: motivational, cognitive, operational-technological, reflexive-evaluation. This component includes training on the author's program "We strive to get regular knowledge" aimed at forming the educational and cognitive competencies of students based on the requirements of the PIRLS evaluation program in independent work, and includes "Intellect-marathon", "Important date of my school", "School museum", Refers to projects such as "My Grandmother's Games".

The author's program is the product of collective or individual creative work, which includes the presentation of a holistic view in the study of objects and real environmental phenomena, their modern state and development.

In the science of pedagogy, the terms "form of teaching" and "form of organization of teaching" are distinguished: the first case is collective, frontal or individual work of students in any classes; secondly, some training (lecture, seminar, practical, debate, science club) [4, p.25].

In our research, the form of teaching organization is interpreted as organizing, organizing, systematizing the interaction of students and the teacher in working with a specific content of the material. Therefore, independent work activity within our model was determined by its specific features, including exhibitions, recommendations, discussions, aimed at the formation of learning-

cognitive competencies based on the requirements of the PIRLS assessment program.

Analyzing various approaches to the structure of learning-cognitive competencies based on the requirements of the PIRLS evaluation program, we can show the content of these competencies in the most general form as a number of components: motivational, cognitive, operational-technological, reflexive-evaluation. The following functions of the reflexive-evaluation component can be distinguished: establishment of thinking - fixation, understanding of the scientific and operational means of solving tasks, evaluation of solving the problematic part of tasks, methods of solving, solving as a whole, the function of motivation to work [5].

The above-mentioned approach and principles clarify the complex pedagogical conditions that affect the effective formation of learning-cognitive competencies of students in their independent work. Conditions are the environment in which a phenomenon occurs, exists and develops.

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TEXNIK SHARTLAR, STANDARTLARNI JORIY QILISH MUDDATI VA ASOSIY TAMOYILLARI

Annotatsiya: Standartlashtirish doimo muhim amaliy vazifalarni hal qilishga yo'naltiriladi va ilmiy texnik taraqqiyotga xizmat qiladi. Yuqorida aytganimizdek, yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish.

Kalit so'zlar: Chegaraviy, standartlar, kvalitet, xatolik, st'byudent, ishonchlilik, taqqoslash, parametr, kvadrat, o'lchamlar.

*Abdurakhmanov A.A.
associate professor
Jizzakh Polytechnic Institute*

IMPLEMENTATION OF TECHNICAL CONDITIONS, STANDARDS TERM AND BASIC PRINCIPLES

Abstract. Standardization is always aimed at solving important practical tasks and serves scientific and technical progress. As we said above, development of new types of state standards and revision of existing ones.

O'zbekiston Respublikasi standartlari va texnikaviy shartlarini ishlab chikish, odatda xar bir manfaatdor korxon va tashkilotning muxtor vakili bulgan mutaxassislardan tashkil topgan texnikaviy kumitalar (TK) kuchi bilan yoki standartlash buyicha tayanch tashkilotlar tomonidan amalga oshiriladi [1].

Standartlashtirish doimo muhim amaliy vazifalarni hal qilishga yo'naltiriladi va ilmiy texnik taraqqiyotga xizmat qiladi. Yuqorida aytganimizdek, yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish har yili shakllantiriladigan "Yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish bo'yicha respublika standartlashtirish rejasi"ga asosan amalga oshiriladi. U muayyan tamoyillarga amal qilgan holda o'tkaziladi [2].

Tizimlilik tamoyili. Texnik rivojlanish va mahsulot sifatini oshirish ishlab chiqarish jarayoniga, jumladan standartlashtirishni o'tkazishga tizimli yondashuvni talab qiladi. Hozirgi paytda standartlashtirish ishlab chiqarishning xom ashyo, materiallar, butlovchi buyumlar va tayyor mahsulotdan foydalanishning barcha bosqichlarini qamrab olgan bo'lishi, shuningdek barcha turdagi mahsulotlar sifatiga o'zaro aloqadorlikdagi talablar o'rnatishi kerak. Kompleks va oldinda boruvchi standartlashtirishni amalga oshirish, mahsulot

sifatini nazorat qilishning kompleks tizimlarini joriy etish tizimlik tamoyiliga asoslanadi [3].

Qulaylik tamoyili. Sanoat va ishlab chiqarishning ko'p tarmoqlarida qo'llaniladigan buyumlarga standartlar belgilanadi. Ular parametrlarning katta diapozonida tarqaladi va shuning uchun standartlar ishlab chiqishda qulaylik tamoyilini qo'llashadi. Bu esa bir nomdagi turli buyumlar turkumlari va nomenklaturasini cheklashni, bir nomdagi buyumlar ayrim turkumlarining ishlatilish sohalari kengayishini yoki o'zaro almashinuvchanlik darajasi o'sishini ta'minlaydi, korxonalarni ixtisoslashtirish va kooperatsiyalashga, seriyali ishlab chiqarishni rivojlantirishga va mahsulotning arzolashishiga olib keladi [4].

Standartlarning ilg'orlik va maqbullik tamoyili standartlashtirishning mohiyati hisoblanadi va standartlarning qabul qilingan ta'riflarida o'z aksini topadi. Yangi standartlar fan va texnikaning zamonaviy talablariga javob berishi kerak. Yangi standartlar joriy etish minimal xarajatlar sarf etilib, maksimal mumkin iqtisodiy samara olishni ta'minlashi kerak [1].

Funksionnal o'zaro almashinuvchanlik tamoyili standart buyumlarning ishchi ko'rsatgichlari bo'yicha o'zaro almashinuvchanligini ta'minlaydi va shuning uchun kompleks va oldinda boruvchi standartlashtirishning asosiy tamoyili hisoblanadi [2]. Standartlarni o'zaro bog'lash tamoyili. Bu tamoyilni amalga oshirmay turib, yangi umumtexnik va tarmoqlararo standartlarni ishlab chiqish, kompleks hamda standartlashtirishni rivojlantirish mumkin emas [1]. Ilmiy-tadqiqot tamoyili. Barcha turdagi standartlarni ishlab chiqish zaruriy ilmiy tadqiqot ishlari o'tkazish bilan birgalikda olib borilishi kerak [4]. Materiallar nisbiy sarfining minimallik tamoyili. Sanotda va qurilishda tayyor mahsulot qiymatining katta qismini xom ashyo, materiallar va yarim fabrikatlar narxi tashkil etadi. Ishlab chiqarish hajmini e'tiborga oladigan bo'lsak, materiallarga ketadigan xarajatlarni 1% ga kamaytirish ham juda katta iqtisodiy samara beradi. Shuning uchun standartlar ishlab chiqishda detallarning ratsional tuzilmalarini tanlash, hisoblashning yangi uslublarini ishlatish, ilg'or texnologik jarayonlardan foydalanish kerak [5].

Standartlarning patent tozaligi tamoyili. Yangi mashinalar, mexanizmlar, asboblarni loyihalash, tayyorlashda va boshqa vaziyatlarda, boshqa mamlakatlar tomonidan patentlangan original tuzilmalar, texnologik jarayonlar, sinash va o'lchash uslublari va boshqa ob'ektlardan foydalanishga yo'l qo'yib bo'lmaydi. Bu qoidani buzish, patent qonunchiligi nuqtai nazaridan, xalqaro jazo sanksiyalarining qo'llanilishiga olib keladi. Standartlar, texnik shartlar va rahbariy hujjatlarning amal qilish muddati ularning kafolatlash muddatini ham belgilaydi [1].

Turli xil sanoat qurilmalari va texnologik jarayonlarni samarali va ishonchli avtomatik boshqarish tizimlari (ACS) faqat samarali va ishonchli avtomatlashtirish vositalari asosida yaratilishi mumkin, ular orasida ushbu jarayonlarning turli parametrlarining konvertorlari birinchi o'rinda turadi. Zamonaviy jamiyatda axborotlashtirish jarayonlari axborot-kommunikatsiya

texnologiyalarini (AKT) takomillashtirish va global tarqatish bilan tavsiflanadi [6,7].

Natijada magnetoelastiklarni ishlab chiqarishga joriy etish va magnetoanizotropik mexanik kuchlanish konvertorlari yaxshilangan metrologik xususiyatlar bilan u strukturani "erta" ta'mirlash bo'yicha noto'g'ri qarorlardan qochishga imkon beradi, hatto ma'lum ultratovush, rentgen va boshqa qurilmalar strukturaning mavjudligiga tahdid soladigan holatlarda ham xavfli joyni o'tkazib yuborishga imkon bermaydi [8].

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RUXSAT ETILGAN O`LCHASH VOSITASINING XATOLIK CHEGARASI VA O`LCHOV VOSTASINI TANLASH QOIDASI

Annotatsiya: o`lchash natijalari va o`lchanayotgan kattalikning haqiqiy iqdori qanchalik yaqinligini ko`rsatuvchi sifat darajasiga o`lchashlar aniqligi deyiladi. O`lchashlar xatoliklarini hosil bo`lish sabablariga va turiga qarab tasniflashadi.

Kalit so`zlar: chegaraviy, standartlar, kvalitet, xatolik, st`yudent, ishonchlilik, taqqoslash, parametr, kvadrat, o`lchamlar, miqdor.

*Abdurakhmanov A.A.
associate professor
Jizzakh Polytechnic Institute*

THE ERROR LIMIT OF THE PERMITTED MEASURING TOOL AND THE RULE FOR CHOOSING THE MEASURING TOOL

Abstract. Measurement accuracy is a quality level that shows how close the measurement results are to the actual value of the measured value. Measurement errors are classified according to their causes and types.

O`lchashlar natijalarini tahlil qilishda fizik kattaliklarning haqiqiy miqdorlari o`lchash natijalari bilan taqqoslanadi [1,2]. O`lchash natijasi (X) bilan o`lchanayotgan kattalikning haqiqiy miqdori (Q) o`rtasidagi farq Δ o`lchash xatoligi deyiladi.

$$\Delta = X - Q \quad (1)$$

O`lchash natijalari va o`lchanayotgan kattalikning haqiqiy miqdori qanchalik yaqinligini ko`rsatuvchi sifat darajasiga o`lchashlar aniqligi deyiladi. O`lchashlar xatoliklarini hosil bo`lish sabablariga va turiga qarab tasniflashadi. Hosil bo`lish sabablari bo`yicha o`lchamlar xatoliklari quyidagi tarkiblarga ajratiladi. Uslub xatoligi o`lchash uslubining mukammal emasligi natijasi. Uslub xatoligi ham tarkibiy bo`lib, ayrim tashkil etuvchilar: asbobning ko`rsatish xatoligi, harorat sharoitlari o`zgarishlari bilan bog`liq xatolik kabi bir qator xatolar to`plamidan tarkib topadi [3,4].

Sanoq xatoligi o`lchash natijalaridan yetarlicha aniq sanoq olinmasligi natijasida paydo bo`lib, sanoq oluvchining shaxsiy xususiyatlariga bog`liqdir. Asbob xatoligi qo`llanilgan o`lchov vositasi xatoligi. O`lchash vositalari xatoligi asosiy va qo`shimcha xatoliklarga bo`linadi. Asosiy xatolik sifatida normal (me`yoriy) sharoitda ishlatilgan o`lchash vositalariga xos xatoliklar qabul

qilinadi. Qo`shimcha xatolik esa o`lchash almashtirgichlari xatoligidan va me`yoriy sharoitlardan chetlanishlar keltirib chiqargan xatolikdan tashkil topadi. Ruxsat etilgan xatolik chegarasini belgilash bilan o`lchash vositalarining xatoliklari me`yorlanadi. O`lchash vositasining chegaraviy ruxsat etilgan xatoligii o`lchash vositasi yaroqli hisoblanib, ishlatishga ruxsat berilishi mumkin bo`lgan eng katta xatolikdir. O`lchash vositalarini tanlashda quyidagi qoidalarga amal qilinadi: O`lchash vositasining aniqligi parametri o`lchanayotgan buyumning tayyorlanish aniqligidan yetarlicha yuqori bo`lishi kerak. O`lchashlarning mehnat talabligi va tannarxi, imkoni boricha yuqori ish unumdorligini hamda tejamkorlikni ta`minlaydigan darajada oz bo`lishi kerak. O`lchashlarning yetarli darajada aniq bo`lmasligi yaroqli mahsulotning bir qismini nuqsonga chiqarishga, ayni shu paytda nuqsонni yaroqli mahsulot sifatida qabul qilishga olib keladi. O`lchashlarning ortiqcha aniqligi, odatda, mehnat talablik va mahsulot sifatini nazorat qilishga ketadigan harajatlarning haddan ziyod ortib ketishiga sabab bo`ladi.

O`lchash vositalarini tanlashda nazorat yoki o`lchash jarayonining amalga oshirishning tashkiliy, texnik sharoitlari, nazorat qilinuvchi detallarning tizimdagi o`ziga xos jihatlari, tayyorlanish aniqligi shuningdek, o`lchash vositalaridan foydalanish samaradorligi va metrologik ko`rsatgichlariga ta`sir etuvchi boshqa bir qator omillar e`tiborga olinadi. O`lchash vositalarini tanlashda rioya qilinadigan asosiy omillar:

- ishlab chiqarish turi;
- nazorat qilinadigan detallarning tuzilmaviy xususiyatlari va o`lchamlari;
- o`lchashlarning standartlar bilan ruxsat etilgan xatoligi.

O`lchash vositalarini tanlashda eng asosiy omil bo`lib o`lchashning ruxsat etilgan xatoligi Δ_{met} xizmat qiladi. Δ_{met} miqdori detalning tayyorlash qo`yimi T ga bog`liq, u o`z navbatida nominal o`lcham va kvalitet bilan bog`liqdir. Ruxsat etilgan o`lchash xatoligi Δ_{met} t buyumning nazorat qilinadigan qo`yimi T ga qaraganda kichik bo`lishi kerak. O`lchash vositalarini tanlashning asosiy tamoyili o`lchamning chegaraviy (eng katta ehtimoliy) xatoligi (Δ_{lim}) bilan ruxsat etilgan o`lchash xatoligi (Δ_{met}) ni o`zaro taqqoslashga asoslangan. Ko`pincha ruxsat etilgan o`lchash xatoligi (Δ_{met}) detalning tayyorlash qo`yimi (T) ga nisbatan quyidagi formula orqali topiladi:

$$\Delta_{met} = (0,2 - 0,35)T \quad (2)$$

Shunday qilib, o`lchash vositasi (asbobi) ni tanlashda uning chegaraviy xatoligi ($\pm\Delta_{lim}$) bilan ruxsat etilgan o`lchash xatoligi (Δ_{met}) taqqoslanadi. Bunda quyidagi munosabatning bajarilishi tekshiriladi:

$$\Delta_{lim} \leq \Delta_{met} \quad (3)$$

O`lchash xatoliklari evaziga alohida o`lchangan x o`lcham umumiy holda mazkur kattalikning haqiqiy miqdori hisoblanmaydi. O`lchash aniqligini baholash va o`lchanayotgan kattalikning muayyan ehtimollikdagi miqdorini aniqlash uchun bir necha marta o`lchashlar o`tkazish zarur. Bunda o`lchanayotgan x kattalikning haqiqiy

miqdori o'rtacha arifmetik miqdori \bar{x} qabul qilinadi:

$$\bar{x} = \frac{1}{N} \sum_{i=1}^N x_i \quad (4)$$

bu yerda N - o'lchashlar soni; x_i - alohida o'lchash natijasi: Shunday qilib $x \approx \bar{x}$ taqribiy tenglikka ega bo'lamiz, uning aniqligini baholash uchun ehtimoliy xatoligi ε_β ni bilishimiz kerak, ya'ni $x - y_{\varepsilon_\beta} < x < x + y_{\varepsilon_\beta}$ Student taqsimotidan foydalanib, berilgan ehtimoliy xatolik miqdori ε_β orqali ishonchlilikni baholash mumkin yoki aksincha, natijaning berilgan ishonchliligi β orqali ehtimoliy xatolik ε_β ni topish mumkin:

$$y_{\varepsilon_\beta} = \text{tg}\beta S / \sqrt{N} \quad (5)$$

bu yerda: $\text{tg}\beta$ - Student koeffitsiyenti u ishonchlilik ehtimolligi β va erkinlik darajasi bog'liq; S - o'lchanayotgan kattalik x ning o'rtacha arifmetik chetlanishi qiymati [5]:

$$S = \sqrt{\sum_{i=1}^N (x_i - \bar{x})^2 / (N-1)} \quad (6)$$

Erkinlik darajasi (K) sifatida kuzatishlar soni (N) ning aniqlanayotgan tafsilotlar(1) soniga teng miqdorga kamaytirilgan miqdori qabul qilinadi ($K=N-1$). Muayyan erkinlik darajasida K da, ishonchlilik β orqali Student koeffitsiyentini topiladi:

$$\text{tg}\beta = y_{\varepsilon_\beta} / \sigma_x = y_{\varepsilon_\beta} \sqrt{N} / \sigma, \quad (7)$$

bu yerda $\sigma_x = \sigma / \sqrt{N}$ ta o'rtacha \square x_i miqdorlardan iborat to'plam uchun o'rtacha kvadrat xatolik ($\sigma_x = \sigma / \sqrt{N}$). Agar $\text{tg}\beta$ va σ_x qiymatlari ma'lum bo'lsa, $y_{\varepsilon_\beta} = \text{tg}\beta \cdot \sigma_x$ ni, shuningdek, x kattalik uchun ishonchlilik oralig'ini aniqlash mumkin. U holda o'lchash natijasini quyidagi ko'rinishda yozish mumkin [6]:

$$x = \bar{x} \pm y_{\varepsilon_\beta}. \quad (8)$$

Zamonaviy jamiyatda axborotlashtirish jarayonlari axborot-kommunikatsiya texnologiyalarini (AKT) takomillashtirish va global tarqatish bilan tavsiflanadi. Ushbu jarayonning o'ziga xos xususiyati zamonaviy kompyuter texnologiyalaridan foydalangan holda takrorlanadigan ma'lumotlarni to'plash, saqlash, ishlatish, uzatishdir. Umumlashtirilgan texnikalarning tasnifini tahlil qilish shuni ko'rsatadiki, konstruktsiyalarni takomillashtirishning eng ko'p umumlashtirilgan usullari havo bo'shlig'i tufayli yuzaga keladigan xatoni kamaytirish uchun ishlab chiqilgan, chunki bu xato eng katta va asosan mexanik kuchlanish transformatorlarining umumiy xatosining qiymatini aniqlaydi. [7,8].

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*Abduvaliyev X.A.
Farg‘ona davlat universiteti geografiya kafedrası dotsenti v.b., PhD.
Nu‘monov Sh.Sh.
Farg‘ona davlat universiteti Geografiya (o‘rganish obyekti bo‘yicha)
mutaxassisligi II kurs magistranti*

GEOMORFOLOGIK OMILNING AHOLI JOYLASHUVIGA TA’SIRI

Annotatsiya. Ushbu maqolada Farg‘ona viloyati aholisini joylashuviga geomorfologik omillarning ta’siri va balandlik mintaqalari bo‘yicha aholining tarqalganligi o‘rganilgan. Hamda, asosli statistik ma’lumotlar asosida Farg‘ona viloyatidagi tumanlaridagi aholi joylashuvi tahlil etilgan.

Kalit so‘zlar: aholi, hudud, tumanlar, geomorfologiya, aholi joylashuvi.

*Abduvaliyev Kh.A., PhD.
associate professor
Geography Department
Fergana State University
Numanov Sh.Sh.
2nd year magistrate student
majoring in Geography
Fergana State University*

EFFECT OF GEOMORPHOLOGICAL FACTOR ON POPULATION LOCATION

Abstract. In this article, the influence of geomorphological factors on the location of the population of Fergana region and the distribution of the population by altitude regions were studied. Also, on the basis of valid statistical data, the location of the population in the districts of Fergana region was analyzed.

Key words: population, territory, districts, geomorphology, population location.

Kirish. Yer yuzida aholining joylashuviga eng ko‘p ta’sir etuvchi omillardan biri bu geomorfologik omil ekanligi barchaga ma’lum. Aynan yer usti tuzilishi aholi va aholi punktlarining joylashuvini belgilovchi omil bo‘lishi bilan birga, hududlarning iqtisodiy-ijtimoiy rivojlanishida ham o‘z o‘rniga ega. Shu maqsadda, aholi joylashuvini tadqiq etishda geomorfologik omilning roliga baho berish muhim ilmiy-amaliy ahamiyat kasb etadi. Mazkur maqolada respublikamizning o‘ziga xos tabiiy-geografik sharoiti hamda aholi eng ko‘p to‘plangan Farg‘ona vodiysida aholi joylashuvining geomorfologik omillari tahlil qilinadi.

Muhokama va natijalar. Farg‘ona vodiysi hududida Sirdaryo va uning qayir usti terrasalari vodiyning eng past hududi hisoblanadi. Norin va Qoradaryoning qo‘shilishi joyida mutlaq balandlik 393 m ga teng. Qiyalik Sirdaryoning oqimi bo‘ylab pasayib borib vodiyaning chiqish joyida 330 m ni tashkil etadi. Bu hududlar hozirda Qoraqalpoq, Markaziy Farg‘ona cho‘llari rayonini hamda chap qirg‘oq Sirdaryo terrasalarini tashkil etadi. Bu landshaft zonasida joylashgan aholi maskanlarining GIS usulida aniqlangan balandliklari Ulug‘norda 408 m, Yozyovonda 430, Bo‘stonda 433 m, Baliqchida 414 m, Oltinko‘lda 445 m ni tashkil etadi. Bu hududlarda relyefning aholi manzilgohlarini tashkil etilishiga u qadar salbiy ta‘sir ko‘rsatmasa-da, qumli barxanlar va ularning gorizontal parchalanganligi, pastqam va botiq joylar aholi maskanlarini tashkil etishda hamda u hududlardan ho‘jalikda foydalanish uchun ma‘lum cheklovlarni keltirib chiqarishini Qizilqum cho‘llari misolida ko‘rib chiqilgan (3; 17-b.). Relyefda nishablik, qiyalikning yo‘qligi ham u qadar qulay hisoblanmaydi, aholi va ishlab chiqarishni, ayniqsa, qishloq xo‘jaligini rivojlantirishda ma‘lum muammolarni keltirib chiqaradi.

Vodiy ma‘muriy tumanlarining 23 tasi 400-500 m oralig‘idagi hududlarga mos kelishi 1-ilova ma‘lumotlaridan ko‘rinadi. Shuningdek, aholisi 100 ming kishidan ortiq bo‘lgan vodiydagi 5 shaharning (Namangan, Andijon, Qo‘qon, Marg‘ilon, Farg‘ona) 4 tasi shu balandlikda joylashgan. Vodiy maydonining qariyb, 56 foizini 400-500 m li hududlar tashkil etadi (1-jadval).

1-jadval

Farg‘ona vodiysi viloyatlari ma‘muriy tumanlari markazlarining va shaharlarining dengiz sathidan balandliklari

Balandlik	Qishloq ma‘muriy tumanlari	Qishloq ma‘muriy tumanlari markazi	Dengiz sathidan balandligi
350-400 m	Mingbuloq	Jumasho‘y sh-cha	388 m
	Buvayda	Yangiqo‘rg‘on sh-cha	390 m
	Beshariq	Beshariq sh.	392 m
	Dang‘ara	Dang‘ara sh-cha	393 m
	Furqat	Navbahor sh-cha	400 m
400-450 m	Ulug‘nor	Oqoltin sh-cha	410 m
	Namangan	Toshbuloq sh-cha	410 m
	Marhamat	Marhamat sh.	412 m
	Uchko‘prik	Uchko‘prik sh.	413 m
	Qo‘qon shahri	Qo‘qon shahri	416 m
	Bag‘dod	Bag‘dod sh-cha	420 m
	Baliqchi	Baliqchi sh - cha	427 m
	Yozyovon	Yozyovon sh-cha	428 m
	Bo‘ston	Bo‘ston sh-cha	433 m
	Norin	Haqqulobod sh-cha	436 m
	Pop	Pop sh.	442 m
	O‘zbekiston	Yaypan sh.	445 m
	Namangan shahri	Namangan shahri	445 m

	Oltinko'l	Oltinko'l sh - cha	447 m
	Qo'shtepa	Langar sh-cha	447 m
450-500 m	Shahrixon	Shahrixon sh.	452 m
	Andijon	Kuyganyor sh - cha	460 m
	Izboskan	Poytug' sh.	461 m
	Oltiariq	Oltiariq sh-cha	463 m
	Uychi	Uychi sh-cha	470 m
	Rishton	Rishton sh.	477 m
	Toshloq	Toshloq sh-cha	484 m
	Andijon shahri	Andijon shahri	490 m
	Marg'ilon shahri	Marg'ilon shahri	495 m
	Asaka	Asaka sh.	500 m
	Uchqo'rg'on	Uchqo'rg'on sh.	500 m
	Quva	Quva sh.	500 m
500-550 m	Paxtaobod	Paxtaobod sh.	515 m
550-600 m	To'raqo'rg'on	To'raqo'rg'on sh.	554 m
	Farg'ona shahri	Farg'ona shahri	578 m
600-650 m	Buloqboshi	Buloqboshi sh-cha	648 m
650-700 m	Chust	Chust sh.	670 m
	Xo'jaobod	Xo'jaobod sh.	674 m
	Jalaquduq	Oxunboboyev sh.	681 m
700-750 m	Qo'rg'ontepa	Qo'rg'ontepa sh.	708 m
	Chortoq	Chortoq sh.	736 m
750-800 m	Yangiqo'rg'on	Yangiqo'rg'on sh-cha	752 m
	Quvasoy shahri	Quvasoy shahri	828 m
800 m dan baland	Kosonsoy	Kosonsoy sh.	896 m
	Farg'ona	Vodil sh-cha	905 m
	So'x	Ravon sh-cha	1167 m

Jadval www.google.earth.com sayti ma'lumotlari asosida muallif tomonidan tuzilgan [4].

A.Maqsudovning (1990) ma'lumotlariga ko'ra bu hududda voha landshaftlari shakllanib, tuproqning eng unumdor qoplamlari vujudga keladi. Agroiirrigatsion qatlamning qalinligi mazkur hududlarda aholi yashashi va ishlab chiqarishni rivojlantirishda eng yuqori ball bilan baholanadi. Mazkur hududning quyi chegarasidagi aholi maskanlarining dengiz sathidan balandligi 350-400 m ni (Beshariq 392 m, Navbahor 400 m., Dang'ara 394 m., Buvayda, Bachqir, G'urumsaroy, Jumashuy 388 m.) tashkil etib, mintaqaning yuqori qismidagi shaharlarda dengiz sathidan balandligi 400-650 m. ni (Uchko'prikda 413 m., Bag'dodda 420 m., Yaypanda 445 m., Marg'ilonda 495 m., Asakada 500 m., Uchqo'rg'onda 500 m., Paxtaobodda 515 m., Izboskanda 630 m.) tashkil etadi. Hudud relyefi aholi maskanlari va xo'jalik yuritish uchun qulay bo'lib, yer osti va yer usti oqar suvlarining harakatiga, transport va qurilish sohasini rivojlantirishga eng qulay hisoblanadi. Farg'ona vodiysidagi dastlabki temir yo'lining o'tkazilishi, yirik shaharlarning shu hududda vujudga kelishi hududning eng yuqori ko'rsatkichga ega ekanligini anglatadi.

Navbatdagi adir landshaftlari mintaqasi P.Baratovning (1996) ta'rifi bo'yicha mutlaq balandligi 400-500 m dan 1200 m gacha, ayrim joylarda esa 1500 m gacha bo'lgan, o'ziga xos gipsometrik hududlar bo'lib, hosil bo'lishi jihatdan yosh relyef shakllari hisoblanadi. Hududiy joylanishi jihatdan Farg'ona vodiysining adirlari vodiyni o'rab olgan tog'lardan keyin ikkinchi halqani hosil qiladi. Hudud relyefining Markaziy Farg'onaga nisbatan balandligi tufayli yog'in miqdori ortadi, yozgi harorat cho'lga nisbatan pastroq bo'lib, tipik va to'q bo'z tuproqlar tarqalgan. Bular esa o'simliklarni zich va baland o'sishiga sabab bo'ladi [1].

Adirlarni aholi maskanlarini qurish va yashash nuqtai-nazaridan baholaganda K.Boymirzayevning tasnifi bo'yicha ularni 2 turga bo'lib o'rganish maqsadga muvofiq. Birinchi tur past adirlar 500-800 m, ikkinchi tur yuqori adirlar 900-1200 m gacha ajratadi [2; 8-b.]. Albatta past adirlar relyefi tekis qirlardan iborat bo'lib aholi manzillari tashkil etish uchun qulaydir. Adirlar mintaqasida aholi maskanlari u qadar ko'p bo'lmas-da, biroq tabiiy resurslardan foydalanishni (neft-gaz va mineral suvlar) kengayishi bilan bu hududda yirik aholi maskanlari vujudga kelgan. Sho'rsuv, Chimyon, Mindon, Arsif, Polvontosh, Janubiy Olamushuk, Chust, Pop, Kosonsoy, Uychi, Chortoq kabilar shular jumlasidandir. Bu mintaqadagi relyefning parchalanganligi va qiyaligi aholi hamda xo'jalikning joylanishiga salbiy ta'sir etuvchi omildir.

Farg'ona vodiysini adirlari va past tog'lari oralig'ida faqatgina ushbu hudud uchun xos bo'lgan adir orti va adir oralig'i botiqlari landshafti joylashgan. Bu hududlarga Oyim-Xo'jaobod-Marhamat botig'i va Shimoliy Farg'onadagi adir oralig' botiqlarini kiritish mumkin. Relyefning qulayligi adir oldi tekisliklariga o'xshab ketadi. Biroq, yer osti suvlarining to'planib qolishi bu hududlar uchun muammolarni keltirib chiqaradi. Vodiyning bu hududini 4 ta qismga ajratish mumkin. Bular Olmos-Chust-Varzak adir orti cho'kmasi, Kosonsoy adir orti cho'kmasi, Iskovot-Zarkent-Peshqo'rg'on adir orti cho'kmasi va Oyim-Xo'jaobod-Marhamat adir orti cho'kmasi (2; 8-b.). Mazkur hududlarda Marhamat, Buloqboshi, Kulla, Avval, Log'on, Sufon, Axcha, Olmos, Varzik, Karnon kabi yirik aholi punktlari mavjud.

Past tog'lar mintaqasi bevosita tog' oldi tekisliklari va adir oralig'i botiqlariga ulanib ketadi. Bu zona Farg'ona vodiysining Turkiston, Oloy, Farg'ona, Qurama, Chotqol tizmalarining etaklarini tashkil etib, uncha katta bo'lmagan kengliklarda joylashgan. Ayniqsa, vodiyning janubiy qismidagi tog' oldi zonasi 30-40 km ni tashkil etadi. Shimoliy va shimoli-sharqiy hududlarda esa 30-50 km gacha masofalarni egallaydi. Hudud relyefida kuchli parchalanganlik, yonbag'ir yemirilish jarayonlarining faolligi, ularning etaklarida esa yemirilgan yirik va dag'al jinslarning tartibsiz joylashganligi kuzatiladi.

Xulosa. Bu mintaqa aholining yashashi va xo'jalik yuritishi uchun noqulay. Tik relyef shakllari, jarlik va parchalanishlar bu hududda ko'p qiyinchiliklarni tug'diradi. Biroq, daryo vodiylarida yashash uchun qulay sharoitlar vujudga

kelgan. Bunday daralarda So‘x, Shohimardon, Obshir ota, Vodil, Nanay, Chodak, Kosonsoy, Chorkesar kabi aholi punktlari shakllangan.

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*Abduvaliyev A.A.
TATU Qarshi filiali Katta o'qituvchisi
Sunatov J.T.
Iqtisodiyot va pedagogika universiteti NTM
Stajyor-o'qituvchi*

IQTISODIYOTNI RAQAMLASHTIRISHDA TREND MEZONIDAN FOYDALANISHNING NAZARIY ASOSLARI

Annotatsiya. Ushbu maqola iqtisodiyotni raqamlashtirishda trend mezonidan foydalanish nazariy asoslariga bag'ishlangan. Trend mezoni yaratishda Excel dasturidan foydalangan holda grafiklari ishlab chiqilgan.

Kalit so'zlar: Iqtisodiyotni raqamlashtirish, tren mezon, nazariy asoslar, grafiklarni tuzish, ko'rsatgichlar, excel dasturi, model.

*Abduvaliyev A.A.
senior teacher
TUIT Karshi branch
Sunatov J.T.
Trainee-teacher
University of Economics and Pedagogy NTM*

THEORETICAL BASICS OF USING THE TREND CRITERIA IN DIGITALIZATION OF THE ECONOMY

Abstract. This article is devoted to the theoretical basis of using the trend criterion in the digitization of the economy. Graphs were developed using Excel to create trend criteria.

Key words: Digitization of the economy, trend criterion, theoretical foundations, graphing, indicators, Excel program, model.

Trend mezonidan foydalanish mumkin bo'lgan ko'plab sohalar mavjud. Lekin ularning eng ommaboplari avvalo, moliyaviy bozorlardir. Biznesda ham u tez-tez kompaniyalar, korxonalar, firmalar hamda tashkilotlarning loyiha hisobotlarni tuzish yoki umuman rivojlantirish istiqbollarini prognoz qilish uchun ishlatiladi. Shuningdek, u inson faoliyati sohalarida statistik ma'lumotlarga asoslangan prognozlar qilish mumkin bo'lgan foydali vosita bo'ladi. Bugungi kunda bunday sohalar bir qarashda ko'rinadiganidan ko'p. Xususan, bularga turizm, sotsiologiya, psixologiya, dasturlash (matematik modellardan foydalanish, prognoz qilish jarayonini avtomatlashtirish imkonini beradi) va boshqalar kiradi. Bu ayniqsa, katta hajmdagi axborotlarni sifatli tahlil qilish bilan birgalikda foydalidir. Katta hajmdagi ma'lumotga ega bo'lgan deyarli har qanday grafikdagi asosiy muammo shundaki, dinamik o'zgarishlar juda o'zgaruvchan.

Shu sababli, ushbu sohada kuzatilayotgan tendentsiya nima ekanligini tushunishni qiyinlashtiradigan katta hajmdagi ma'lumotlar bo'lishi mumkin. Trend mezonini klassik statistik vosita bo'lib, ko'p tajribaga ega bo'lmasdan, maqsadli indikator bir muncha vaqt o'tgach, qaysi yo'nalishda harakatlanish trektoriyasini va qaysi nuqtada bo'lishini taxmin qilish imkonini beradi. Shuningdek, bu tendentsiyaning shakllanishiga ta'sir qiluvchi omillarni bilvosita aniqlash imkonini beradi. To'g'ri, buni faqat statistik usullar bilan amalga oshirish mumkin emas, siz tendentsiyaning shakllanishiga ta'sir qiluvchi asosiy qonuniyatlarni tushunishingiz kerak. Trend mezonini ma'lum bir ko'rsatkichning joriy tendentsiyalarini tushunishga imkon beradi. Ammo buning o'zi etarli emas va hozirda prognozlar sifatini sezilarli darajada yaxshilaydigan ko'proq yangi texnik ko'rsatkichlar ishlab chiqilmoqda. Shuningdek, tendentsiyaning o'zgarishini to'g'ridan-to'g'ri taxmin qilish imkonini beruvchi ko'rsatkichlarning alohida toifasi mavjud. Shu bilan birga, trend mezonini faqat joriy narx yo'nalishini ko'rsatishga imkon beradi. Shuning uchun, osilatorlar bilan birgalikda trend mezonidan foydalanish tavsiya etiladi. Bu texnik ko'rsatkichlar toifasi bo'lib, trend mezonini paydo bo'lishidan oldin trend o'zgarishini payqash vaqti bor. Standart Excel vositalari yordamida trend mezonini yaratish mumkin. U hali ham faol foydalanilmoqda, shuning uchun uni qurish imkoniyatiga ega bo'lishingiz kerak. Trend mezonini ishlab chiqish jarayoni muvaffaqiyatli bo'lishi uchun diagramma matematik funktsiyaga mos kelishi kerak. Grafik yaratish uchun quyidagi algoritmlarga amal qilish kerak:

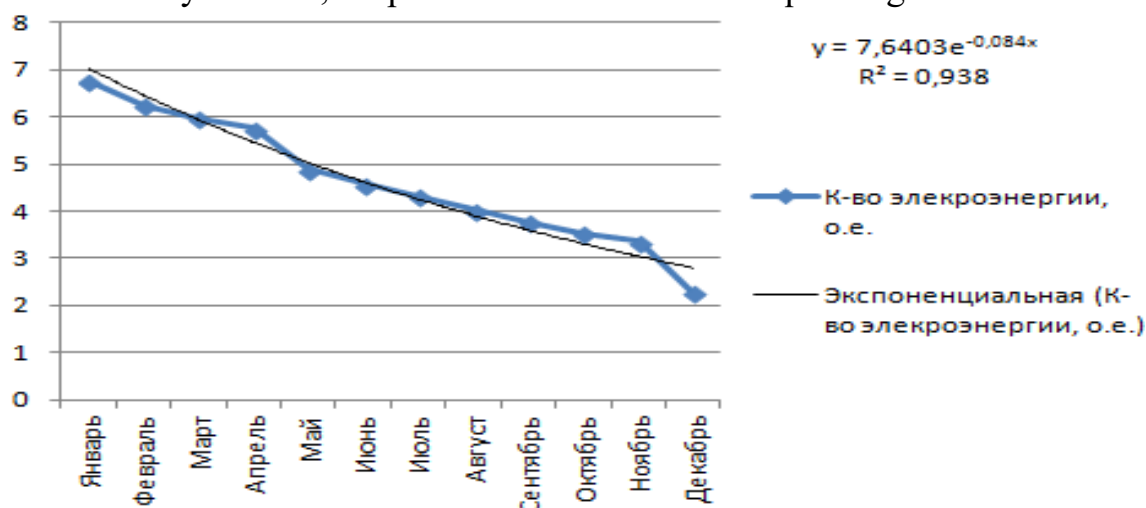
1. Masala to'plamini tanlang.
2. Asboblarni panelga (yoki ular tez-tez aytganidek, lenta) "Uy" yorlig'iga o'ting va u yerda "Charts" tugmasini toping.
3. Keyin siz "Nuqtali" ni, so'ngra "Tek chiziq va markerlar bilan nuqta" ni tanlashingiz kerak.

Foydalanuvchi grafikni bosgandan so'ng, u boshqa paneldan foydalanishi mumkin bo'ladi, u orqali trend mezonini grafikaga qo'shiladi. Shunday qilib, Diagramma asboblari panelga o'tamiz. Grafikga trend mezonini qo'shiladigan "Layout" yorlig'i mavjud. Xuddi shu nomdagi tugmani bosganimizdan so'ng, yondashuv usulini tanlash mumkin bo'ladi. Siz chiziqli turni tanlashingiz kerak. Keyin qora chiziq paydo bo'ladi, u joriy tendentsiyani ifodalaydi. **Ba'zi turdagi grafiklar trend mezonini qo'llab-quvvatlamasligini tushunish muhimdir.**

Shuning uchun eng standartlaridan foydalanish tavsiya etiladi. Boshqa barcha turdagi diagrammalar ularga trend mezonini qo'shish imkonini beradi. Keyingi qadam - sozlash. Avval siz grafikaga tenglama qo'shishingiz kerak. Bu diagrammada sichqonchani chap tugmachasini ikki marta bosish orqali amalga oshiriladi. Keyin foydalanuvchi "Diagrammada tenglamani ko'rsatish" opsiyasini tanlashi kerak. **Agar diagrammada bir nechta grafik mavjud bo'lsa, unda siz prognoz qilish uchun eng mosini tanlashingiz kerak.** Agar siz trend mezonining ma'lum parametrlarini sozlashingiz kerak.

	А	В
1	Месяц	К-во электроэнергии, о.е.
2	Январь	6,75
3	Февраль	6,24
4	Март	5,98
5	Апрель	5,76
6	Май	4,9
7	Июнь	4,57
8	Июль	4,32
9	Август	4,02
10	Сентябрь	3,78
11	Октябрь	3,54
12	Ноябрь	3,36
13	Декабрь	2,28

Endi ushbu ma'lumotlarga asoslanib, biz grafikni qurishni amalga oshiramiz. Keyinchalik, eksponensial trend mezonini qo'shing.

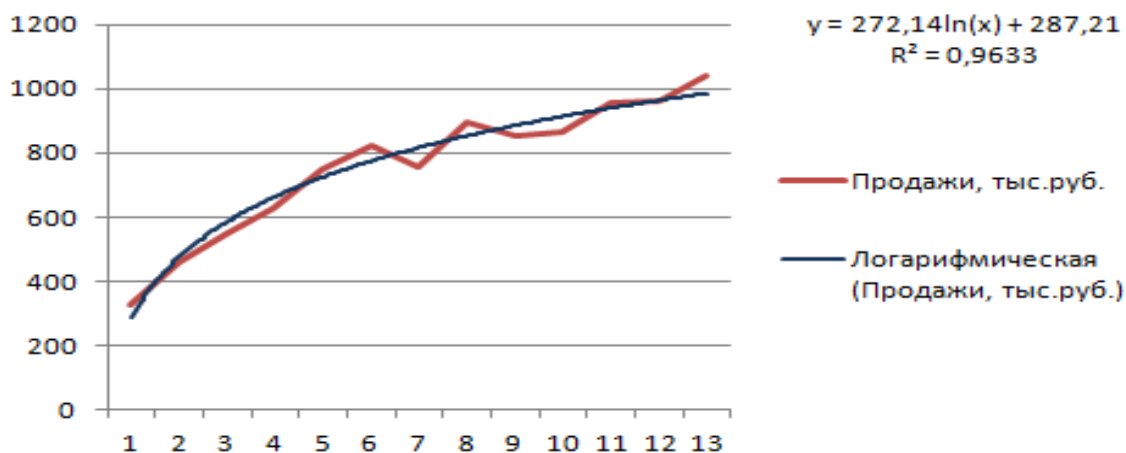


Bizning misolimizda trend mezonining ishonchi 0,938 ni tashkil qiladi, bu xato ehtimoli juda past ekanligini anglatadi. Shuning uchun prognozlarga ishonish mumkin.

U ko'rsatkichlar keskin o'zgarishi mumkin bo'lgan holatlarda qo'llaniladi. Misol uchun, dastlab tez o'sish kuzatiladi, undan keyin barqarorlik davri keladi. Logarifmik trend mezonidan foydalanib, siz hozirgina paydo bo'lgan mahsulotni sotish qanchalik muvaffaqiyatli bo'lishini taxmin qilishga harakat qilishingiz mumkin.

Birinchidan, kompaniya yangi mijozlarni jalb qilishi kerak. Shunday qilib, o'sish tez bo'ladi. Bundan tashqari, ishonch, birinchi navbatda, allaqachon o'ziga jalb qilingan kishilarni o'ziga sodiq qilishga qaratilgan. Shunday qilib, sa'y-harakatlarni qo'llash nuqtasi o'zgaradi va shunga mos ravishda mijozlar bazasining o'sishi moslashtiriladi.

Keling, ushbu misol uchun shunday grafik tuzamiz.



Bunday holda, taxminiy xato ham minimaldir, shuning uchun olingan ma'lumotlarga ishonish mumkin. Endi keling, kelajakda savdo qanchalik qizg'in bo'lishini taxmin qilishga harakat qilaylik. Buning uchun tegishli davr sonini x o'zgaruvchining qiymatiga almashtirish kerak.

Shu bilan bir qatorda, bashoratli quyidagi jadval mumkin.

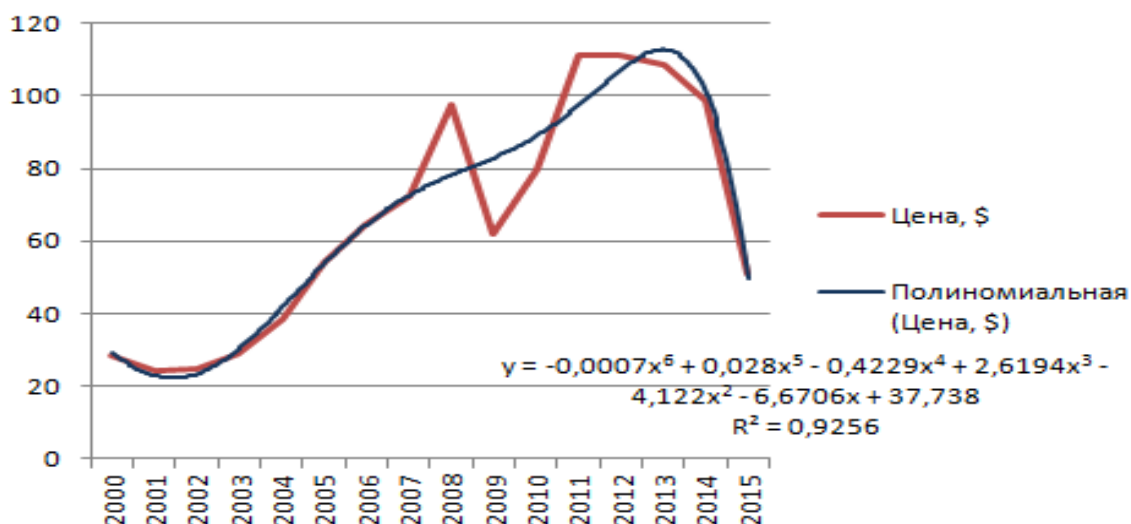
Период	14	15	16	17	18	19	20
Прогноз	1005,4	1024,18	1041,74	1058,24	1073,8	1088,51	1102,47

Bizning holatda, mahsulotlar kelajakda qanday sotilishini taxminiy tushunish uchun quyidagi formula qo'llaniladi: $=272,14 * \ln(B 18) + 287,21$. Bu erda B18 - davr raqami.

Ushbu tendentsiya mezoni o'zgaruvchan (o'zgaruvchan) ko'rsatkichlar uchun xosdir. Uni kriptoalyutalar yoki boshqa yuqori xavfli aktivlar bilan savdo qilish uchun ishlatish juda yaxshi.

Ushbu turdagi trend mezoni juda keng diapazonda ko'rsatkichlarning o'sishi yoki kamayishi bilan tavsiflanadi. Uning ishlatilishi miqdoriy turdagi katta hajmdagi ma'lumotlarni qayta ishlash uchun ham mumkin. Ayniqsa, ushbu tendentsiya mezoni ko'pincha diagrammada juda ko'p ekstremallar mavjud bo'lganda qo'llaniladi (ya'ni, past va yuqori).

Turizm tur paketlari narxlari jadvali ushbu model qanday ishlashini ko'rsatishning eng qulay usuli hisoblanadi. Ishonchlilik qiymati birga yaqin bo'lishi uchun oltinchi darajani belgilash kerak edi. Ammo bunday tendentsiya mezoni juda aniq prognozlar qilish imkonini beradi.



Trend mezonini juda oddiy protsedura. Ammo undan foydalanish bilan ma'lumotlarni tahlil qilish allaqachon qiyinroq vazifadir. Ammo o'rnatilgan Excel vositalari yordamida siz turli sohalardan ko'plab ko'rsatkichlarni ishlab chiqish uchun samarali prognozlar qilishingiz mumkin. Zamonaviy dasturlarda trend mezonidan foydalanish asosan avtomatlashtirilgan bo'lsa-da, ba'zida bu maqsadda Exceldan foydalanish kerak bo'lishi mumkin.

Umuman olganda, samarali prognozlar qilish uchun bitta trend mezonini etarli emas. Bu panatseya emas va bunday elementar matematik model mo'jizalar yaratishiga umid qilmaslik kerak. Biroq, bu statistik tahlilning eng oddiy elementlaridan biridir. Va endi siz uni haqiqiy ishda qanday ishlatishni bilasiz.

Foydalanilgan adabiyotlar ro'yxati:

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2. X.S.Egamberdiyev, A.A.Abduvaliyev, O.CH.Pardayev "Raqamlashtirish sharoitida o'zbekiston turistik geoportal tizimining tashkiliy arxitekturasi"
3. Abduvaliyev Asror Abdusoliyevich, Jumanazarov Javlon Shoxnazar o'g'li "GAT texnologiyalari asosida qashqadaryo viloyatining turistik-rekreasion obyektlarining elektron xaritasini shakllantirish"

*Agafonov A.A.
Head department higher mathematics and mathematical modeling
Kazan (Volga Region) Federal University*

*Mustafoyev A.
assistant
Department of Radioelectronics
Jizzakh Polytechnic Institute*

OPTICAL PROPERTIES OF POROUS NANO-SIZED GAAS

Abstract. Optical properties of a porous GaAs obtained electro-chemically on n- and p-type GaAs(100) plates have been studied. The GaAs wafer doping type considerably affect nanocrystal shape, nanocrystal average diameter and chemical surface states. Comparing the reflectivity spectra of a porous GaAs with the ones of a GaAs crystal, the changes in the spectral dependences of the reflectance within the phonon resonance region may be seen. The surface morphology of porous GaAs prepared on the substrate of an n-type GaAs has been studied using the atomic-force microscopy. A nanosized contour of the porous GaAs surface was watched. Estimations of the size of nanocrystals in a porous GaAs both by the Raman and infrared spectroscopy as well as the photoluminescence and atomic-force microscopy agree well.

Key words: Raman spectroscopy, thermal oxidation, nanophases, nanofilms, plasma oscillation, surface roughness, optical-phonon mode, island growth.

Introduction

Reduced-dimensional GaAs structures, such as quantum wires and quantum dots, are attracting increasing interest both as objects of fundamental research [1, 2] and as promising materials for creating devices based on them with new operational capabilities that are impossible obtained using traditional semiconductor materials [3]. For example, the use of porous GaAs (por-GaAs) as a substrate material when growing epitaxial GaN layers by molecular beam epitaxy made it possible to obtain continuous layers of cubic GaN modification [4]. Using gas-phase epitaxy from metal-organic compounds, single-crystal layers of GaAs, AlGaAs and InGaAs were obtained on por-GaAs substrates [5]. It seems very promising to obtain various porous semiconductor materials using the method of electrochemical etching. This method is quite simple and its implementation does not require large expenses. In case of a positive result

It will be possible to expand the spectral range of luminescent electronics, as well as create new types of LEDs. In addition, the use of porous materials as intermediate layers will make it possible to obtain new types of heterojunctions. Attempts made in this direction have shown that this problem can be successfully

solved [4,6,7]. Currently, not many works are devoted to the issue of obtaining nanosized porous GaAs [2,5,8]. The information presented in them is sometimes contradictory and there is practically no information about the lattice dynamics of nanocrystals (NCs) forming a layer of porous GaAs.

Samples and experimental procedure

Raman scattering

When interpreting the Raman spectra of por-GaAs samples, it is extremely important to have information about the chemical composition of the surface of the nanocrystals. Based on the research results obtained using the X-ray photoelectron spectroscopy (XPS) method, it was concluded that in the studied samples the Ga: As ratio was ~ 1 , i.e., the stoichiometry of the material was preserved. In addition, chlorine was present on the surface, but its amount did not exceed 3 at%.

As a result of the electrochemical etching reaction on the surface of GaAs NCs, chemical compounds such as Ga_2O_3 , GaCl_3 , AsCl_3 , and As_2O_3 can be formed. A comprehensive analysis of XPS data, laser mass analysis and surface morphology (according to the results obtained using scanning electron microscopy) allowed us to conclude that, of the entire set of listed compounds, As_2O_3 crystallites with diamond-like shape.

In the Raman spectra of a number of samples fabricated on n-type substrates, intense narrow peaks located almost equidistantly were observed.

For example in Figure 1 shows the Raman spectra of three porous n-GaAs samples. Peaks 3 and 4 present in the spectra correspond to the frequencies of transverse (ωTO) and longitudinal (ωLO) GaAs optical phonons, which are active in the Raman spectra of both crystalline and porous modifications of gallium arsenide. In the first case, these vibration modes should be located at frequencies of 268.5 cm^{-1} (TO) and 292.3 cm^{-1} (LO). In the case of por-GaAs, the Raman phonon lines are broadened and shifted to the low-frequency region of the spectrum compared to the case of a crystalline material. The authors of [1] examined the Raman spectra of the chemical compounds As_2O_3 and Ga_2O_3 in order to identify the remaining peaks numbered 1, 2, 5–7. They noticed that As_2O_3 and Ga_2O_3 did not exhibit photoluminescent properties, and in the Raman spectra of the first of them intense peaks were observed at frequencies of 85, 183, 268, 369, 414, 471 and 560 cm^{-1} . In the second case (Ga_2O_3), peaks occurred at frequencies of 201, 418, and 769 cm^{-1} . As can be seen in Fig. 1, in our case, in the spectra of a number of n-type porous GaAs samples, resonance vibrations corresponding to the As_2O_3 material are observed. No traces of Ga_2O_3 were found. From the same figure one can see that in the spectrum of sample 4-2 there is an increase in the radiation intensity at frequencies above 200 cm^{-1} . This effect is associated with the appearance of a photoluminescence (PL) signal from this sample [10]. Since no additional peaks appeared in this case, which indicates that the physicochemical state of the surface of the nanocrystals remained the same, we can conclude that the decisive role played by size quantization effects in the

process of the appearance of the PL signal in the visible wavelength range in this sample. During its manufacture, the current density value was 20% higher than during the manufacture of sample 4. If we further increase the current passing through the sample during the electrochemical etching reaction, then the electropolishing mode quickly sets in, which in turn leads to a sharp decrease in the thickness of the porous film and to its complete disappearance. For p-type samples, as shown by XPS, spectrometric and SEM analysis data, the formation of As_2O_3 crystallites on the pore surface is not observed, as was the case for some porous samples.

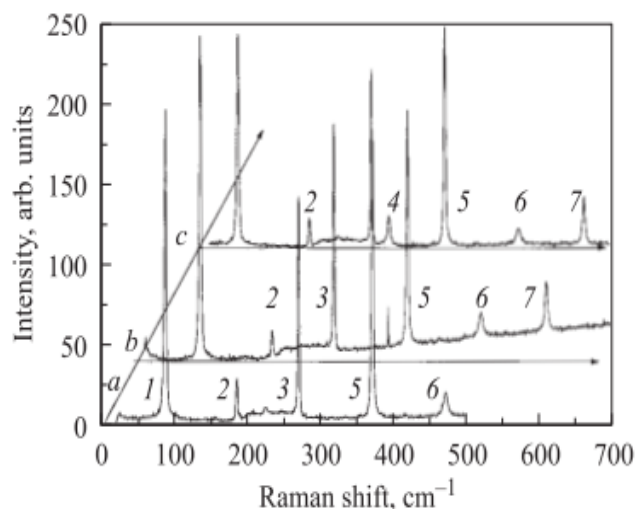


Fig. 1. Raman spectra of porous n-GaAs samples. Sample numbers: a - 2, b - 4-2, c - 4.

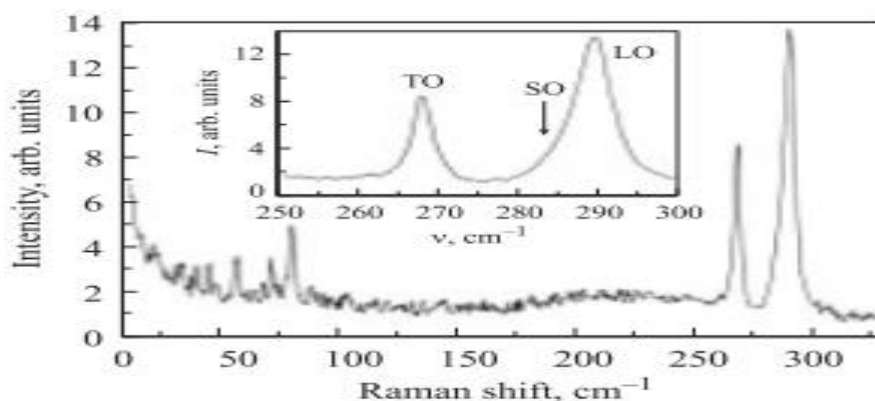


Fig. 2. Raman spectrum of the por-GaAsHsii sample. The inset shows the spectral region in which TO and LO phonons appear. The arrow indicates the position of the surface optical (SO) phonon mode.

n-GaAs. At the same time, the total number of oxygen atoms involved in the formation of oxide bonds on the surface of nanocrystals turned out to be

almost equal. It should be emphasized that the PL intensity in porous p-GaAs samples is significantly lower than in porous n-GaAs samples, and the position of the PL peak itself is shifted to the red region of the spectrum [11].

The porous p-GaAs layer is less homogeneous; the NC sizes range from 10 nm to tenths of a micron. In the case of n-GaAs, the sizes of nanocrystals are smaller, as well as the dispersion of their average diameter, which was determined from the position of the PL peak maximum (E_{\max}), for which the approach outlined in [2] was used. The PL maximum in n-type por-GaAs samples was located at energies of 1.85–2.52 eV, which corresponds to NC sizes from 5 to 8 nm. Along with this, similar estimates were made based on the shift of the main optical phonons in the Raman spectra of por-GaAs, as well as using atomic force microscopy (AFM) methods. So, for example, from Fig. 2, which shows the Raman spectrum of n-type por-GaAs free of As_2O_3 , one can see that the peak corresponding to the scattering of light quanta on longitudinal optical phonons in por-GaAs is shifted by $1\omega \approx 1.6 \text{ cm}^{-1}$ to the low-frequency region of the spectrum along compared with the case of bulk gallium arsenide. Knowing the value of 1ω , one can estimate the average diameter of the nanocrystals forming the n-por-GaAs layer in this sample. As a result, the NC diameter $d \approx 5.9 \text{ nm}$ was obtained, which is consistent with

estimate made for the same sample based on PL results ($d \approx 6.3 \text{ nm}$, $E_{\max} = 2.12 \text{ eV}$). In the Raman spectra of por-GaAs samples, along with optical phonons localized in the bulk of the NC, surface optical (SO) phonon modes were detected. In order to estimate the frequencies of SO-phonon modes, a calculation was carried out within the framework of the approach described in [10]. In particular, the following relations were used to find the required frequencies:

$$\omega_{SO}^2 = \omega_{TO}^2 + \omega_p^2 \frac{\epsilon_{\infty}}{\epsilon_{\infty} + \eta_m(r)},$$

$$\eta_m(r) = -\frac{I'_m(r)K_m(r)}{I_m(r)K'_m(r)}.$$

Here r is the radius of the nanocrystal, $I_m(r)$ is the cylindrical function, ω_p is the plasma frequency, ϵ_{∞} is the high-frequency dielectric constant. For the por-GaAs sample, the Raman spectrum of which is presented in

Fig. 2, the frequency of the surface phonon mode turned out to be equal to $\omega_{SO} = 284 \text{ cm}^{-1}$ (the SO mode is marked in the inset with an arrow). This value was obtained using the procedure of decomposing the LO peak into its constituent Gaussians. For the calculation, the following values of the GaAs material parameters were used: $\epsilon_{\infty} = 11.2$, $\omega_{TO} = 268.5 \text{ cm}^{-1}$ [11], $d \approx 6 \text{ nm}$. The theoretical estimate for ω_{SO} practically coincides with the found value.

Conclusion

The paper describes the process of obtaining layers of porous GaAs using the electrochemical etching method and presents the results of studies of their optical and structural properties. It has been shown that the morphology of the por-GaAs layer, the surface states and the size of the nanocrystals that make up

the porous layer significantly depend on the type of conductivity of the initial single-crystal GaAs. In the infrared optical spectra and Raman spectra, both a shift in the peaks of the main optical phonons and the appearance of vibrational modes localized in the bulk of the NC, as well as surface phonons, were detected. An explanation is given for the complex structure of the FTIR spectra of por-GaAs. It is shown that in n-type por-GaAs samples the appearance of a PL signal in the visible region of the spectrum is due to quantum-size effects. Using AFM and XPS methods, studies of the morphology of por-GaAs and the chemical composition of nanocrystals were carried out. It was found that the stoichiometry of the NC composition is preserved, and there is also a uniform nanorelief of por-GaAs surfaces obtained on n-type gallium arsenide substrates, which may be important for their further use as a substrate material for obtaining GaAs epitaxial layers with improved structural properties. Based on the results of Raman spectroscopy, it is possible to monitor the presence of As₂O₃ and Ga₂O₃ oxides on the NC surface [12]. The values of the average diameter of GaAs nanocrystals forming the por-GaAs layer, obtained from the results of Raman spectroscopy, FTIR, PL and AFM, are in good agreement with each other.

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COMPARATIVE EVALUATION OF H.PYLORI ERADICATION EFFICACY IN PATIENTS WITH ORGANIC AND FUNCTIONAL DYSPEPSIA

Abstract. This article presents the results of evaluating the efficacy of eradication of Helicobacter infection in patients with chronic inflammatory diseases of the upper gastrointestinal tract. The association with H.rulori was confirmed by serbolgic examination of blood Helicobacter antigen and immunochromatographic examination of fecal specimens. According to the results of the serbologic examination of the HP antigen in the blood and the immunochromatographic examination of fecal specimens, eradication was achieved in 83% of the patients, which proves the effectiveness of the treatment.

Key words: Helicobacter pylori, diagnosis, H. Pylori-antigen in fecal specimens, eradication, clarithromycin, omeprazole, amoxicillin.

Helicobacter pylori (H. pylori) is currently one of the most common infections of mankind. The etiological role of H. pylori in the development of chronic inflammatory-destructive processes of the gastroduodenal zone has been proved by many scientific studies [2].

H. pylori is a bacterium that affects different parts of the stomach and duodenum, causing changes in the mucosa, leading to the development of gastritis, ulceration, cancer. It has been established that 89% of noncardiac gastric cancer cases are caused by a long-term course of H. pylori infection. In addition, the development of MALT gastric lymphoma, dyspepsia, idiopathic thrombocytopenic purpura, unexplained iron deficiency anemia, and vitamin B12 deficiency are associated with this infection.

The International Agency for Research on Cancer has classified H. pylori as a Class I carcinogen for gastric cancer [1].

H. pylori is not the only etiologic factor in gastric cancer, but plays a causal role in the chain of events leading to its development.

In patients with atrophy and intestinal metaplasia, eradication of H. pylori infection reduces severity of gastritis symptoms, however, it does not fully stop the progression of precancerous changes of the gastric mucosa to adenocarcinoma, therefore it is reasonable to treat H. pylori infection before development of atrophic gastritis and intestinal metaplasia.

According to the international consensus Maastricht V (2015), Kyoto Consensus (2015), recommendations of the Russian Gastroenterological Association on the diagnosis and treatment of *H. pylori* in adults [4].

In recent years, a new method of determining *H. pylori* antigens in feces has been developed [5]. This method is reliable not only for primary diagnosis of *H. pylori*, but also for treatment monitoring and therefore is recommended by international consensus Maastricht V (2015) to evaluate the effectiveness of eradication therapy.

The aim of the study - was to investigate the efficacy of three-component therapy in patients with chronic HP-associated diseases according to the results of *H. pylori* antigen determination in feces.

Material and methods. 48 *H. pylori* positive patients with organic and functional dyspepsia were investigated. General clinical, laboratory (clinical and biochemical blood tests, general urinalysis), instrumental methods (esophagogastroduodenoscopy, ultrasound of abdominal cavity organs), definition of *H.pylori* antigen in stool samples by immunochromatography.

Result. Exclusion criteria: intake of antibiotics, drugs that suppress secretion (proton pump inhibitors, antacids, bismuth preparations) 4 weeks before the study, allergy to one of the used drugs, severe liver and kidney diseases, diarrhea.

Determination of *H. pylori* antigen in fecal samples was performed using immunochromatographic analysis (ICA).

The study included 48 patients with confirmed HP infection, i.e. *H.pylori*-antigen in blood and feces was detected in all the examinees as a result of serological study. By the results of endoscopic research of upper sections of gastro-intestinal tract in 10 (21%) patients no pathological changes in the mucous coat of stomach were revealed, in 5 (10%) patients chronic gastritis was diagnosed, in 19 (40%) - duodenal ulcer, in 5 (10%) - gastric ulcer.

The duration of the disease in all patients exceeded 1 year. Patients received a 10-day regimen of eradication therapy including: omeprazole, clarithromycin, amoxicillin. The drugs were taken twice a day. The choice of the therapy regimen was justified in accordance with the Maastricht V recommendations for the diagnosis and treatment of *H.pylori* infection. Informed consent was obtained from the patients.

Immunochromatographic test was also used to evaluate the effectiveness of *H. pylori* eradication in these patients. Stool samples were collected 3 days after endoscopy before the start of therapy and 4 weeks after the end of treatment.

Statistical processing of the obtained data included determining the reliability of differences in the mean values of quantitative data using Student's test.

Positive dynamics of the main clinical symptoms was observed against the background of the therapy.

In 4 weeks after the end of treatment we repeatedly tested for Helicobacter antigen in blood and feces. Eradication was successful in 40 of 48 patients and was 83% according to fecal ICA results and in 47 (98%) of 48 patients according to blood serology tests, i.e. the antigen was still present after treatment despite the complete disappearance of the disease symptoms.

This implies that fecal antigen testing is reliable, since Helicobacter antigen in blood persists despite eradication of the infection, while it is not detected in the feces after eradication.

Due to the simplicity of the IHA test with its high sensitivity, it has undoubted advantages over other tests.

Using a simple non-invasive method allows not only to diagnose Helicobacter infection in a short time, but also to control eradication to determine the effectiveness of the treatment regimen used. High sensitivity and specificity of immunochromatographic test for detection of HP antigen in fecal samples allow to recommend it as a noninvasive method of diagnostics of Helicobacter infection and evaluation of therapy efficiency.

Conclusions. Thus, the scheme on the basis of clarithromycin in combination with proton pump inhibitor and amoxicillin is effective and safe for eradication of H. pylori infection.

Non-invasive immunochromatographic rapid test for HP antigen determination in fecal samples may be used for diagnosis of H. pylori infection and evaluation of therapy efficacy.

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COGNITIVE LINGUISTICS AND ITS REFLECTION IN LANGUAGE

Annotation. This article describes the function, content and essence of cognitive linguistics, the introduction of this term to linguistics, the field of study, the relationship and application of linguistics departments and other fields of science.

Key words: linguistics, innovation, artificial intelligence, thinking, consciousness.

Between the XIX and XX centuries, unprecedented changes took place in the fields of technology, economy, science and education. Also, science did not stop at one point. It has also been thoroughly studied by those who are interested in science and scientists. In particular, linguistics is not exempt from this. News and research were conducted in unexplored areas of linguistics. As a result, a literal "renaissance" of completely new directions in linguistics coincided with the second half of the 20th century.

In general, a certain factor or a set of factors affects the development or crisis of each field of science. The growth or collapse of science is related to a law in physics, that is, "things that exist do not disappear by themselves, and things that do not exist do not exist by themselves. not allowed".

The application of new methods, new trends, new theories in theoretical linguistics was greatly influenced by the continuous development of information technologies. That is, human tools related to "artificial intelligence" (intellect-English knowledge): smart phones, in the process of working with computers with new intellectual potential, required a new look and approach to the language system.

Until that time, all areas of linguistics: language system, speech activity and its product text, text construction, other components of the text (sentence, phrase, word) were analyzed only from a philological point of view. However, the answers to many questions, such as how language occurs, what is related to its emergence, and whether language activity is related to thinking activity, were not satisfied by existing analyses. As a result, "artificial intelligence" asks science researchers and scientists to look at science with "new eyes", "to give up the laws that are becoming old fashioned when the time comes, to perceive, know, understand, which is a product of human consciousness and its required to find answers to existing questions by conducting new studies related to mental processes such as analysis, reasoning and expression. This increased the need for cooperation of linguistics with such sciences as psychology, logic, sociology (the science of communication and relationships of people in society). As a result of this, a new field in linguistics - cognitive linguistics emerged at the junction of

linguistics with human consciousness, its working conditions, and the theory of cognition. The original content of cognitive linguistics (cognitive (adjective) related to knowledge) shows that it is a field related to human cognitive activity. The emergence of cognitive linguistics is associated with a symposium held at the Massachusetts Institute of Technology in 1956. At the end of the symposium, in the lecture "Logic Theory Machine" ("Logic Theory Machine" - R.N, "Logic controller" - Sh. Safarov), artificial intelligence expert Allen Newell, Nobel laureate, economist Herbert Simonlar presented cognitive research as a unique suggests that the fields of learning within science, educational psychology, theoretical linguistics, and cognitive process computer programming should be studied as a single whole, they should be brought together under a single umbrella. Many people approve of this idea, and psychologist George Miller, who devoted himself to the development of this field, writes: there was also confidence in mutual coordination. For 20 years I have been striving towards the formation of this science..." (J. Miller, 1964)

Cognitive linguistics is the study of cognitive activities, information reception, processing, and creation of mind-related actions, taking food from linguistic reserves, directly or indirectly in contact with language, connecting the human mind and its language. It has been studied as a branch of linguistics since September 11, 1956 (cognitive linguistics was founded on this day).

But the emergence of cognitive linguistics as the "other side of the coin" did not solve all problems. As new hypotheses are put forward, the task of proving them increases. In order that such ideas do not remain mere hypotheses, studies have been conducted in various scientific centers in recent years, and scientific and practical literature has been published as a result of these studies.

I would like to give an example of the above-mentioned hypotheses: Linguistic relativity and its alternative, linguistic determinism, that is, there is a view that thinking activity is related to language as a result of requiring each other. So, are language and thinking really related to each other, does language create thinking activity or vice versa, which one is primary in this area (language or thinking), which one affects the other (consciousness or personality activity)?! Such questions have not yet found a clear solution. This is an example of an ocean that is difficult for scientists to cross. It was noted above that cognitive linguistics is a science that studies the connection between language and consciousness. Therefore, I think that it is a bit wrong to weigh language and thinking on two sides of the scale in relation to each other. The reason is that without thinking, without consciousness (note: not without a brain, because the brain is present in all animals, but language is alien to them), a person cannot create linguistic activity by himself. However, it is wrong to say that thinking itself is responsible for the development of language. Interpersonal activity and the events taking place in the environment of the person also have an effect on the emergence of language. As an example, let's take an experiment: Two individuals (not formed as individuals) add a human child to two different groups of people. The members

of the first group have the ability to speak, and the members of the second group are conscious but without language. Over time, as the children develop, the baby in the first group begins to speak, but the mind of the baby in the second group develops and cannot produce language. The reason is that the environment and the activities of individuals prevent the development of language. Through this proven experience, it can be seen that language does not depend only on a person, his consciousness or genes. So, language and thinking, mind and personality are inextricably linked, in my opinion, it is not correct to put them opposite to each other. After all, as Professor Shakhriyor Safarov pointed out: "...the connection between language and thought should be seen at the level of equal cooperation" (Sh. Safarov, 2006). In short, the main task of cognitive linguistics is to study the mental processes that take place in the human mind in connection with linguistic activity. Of course, these studies are perfected with unprecedented hypotheses and studies, theorems (rules that require proof), axioms (laws that do not require proof). As the great German thinker Johann Getfried Herder said: "The language is the seal of our consciousness, thanks to it consciousness is created and passed from generation to generation." That is why linguistics is constantly enriched with new scientific researches and the development of new fields as it creates the imprint of people's minds.

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*Alimova D.T.
Guliston davlat universiteti tayanch doktoranti
Karimqulov J.I.
Iqtisodiyot fanlari doktori, TMI professori*

INVESTITSIYALARNING TURLARI TASNIFI, TAVSIFI VA O‘ZIGA XOS XUSUSIYATLARI

Annotatsiya. Ushbu maqolada investitsiyalarning tasniflanishi bo‘yicha turli xil iqtisodchi olimlarning fikrlari keltirib o‘tiladi. Ularning bir-biriga o‘xshash va farqli jihatlari muhokama qilinadi. Har bir investitsiya turning o‘ziga xos xususiyatlari ko‘rib chiqiladi. Mualliflar tomonidan mavzu yuzasidan takliflar va tavsiyalar beriladi.

Kalit so‘zlar: investitsiyalar, mahalliy investitsiyalar, xorijiy investitsiyalar, investitsion jozibadorlik, investorlarning investitsiya “kayfiyati”, davlatning investitsiya siyosati.

*Alimova D.T.
doctoral student
Gulistan State University
Karimkulov J.I., doctor of economic sciences
professor
TMI*

CLASSIFICATION, DESCRIPTION AND SPECIFIC CHARACTERISTICS OF INVESTMENT TYPES

Abstract. This article presents the opinions of various economists on the classification of investments. Their similarities and differences are discussed. Specific characteristics of each type of investment are considered. Suggestions and recommendations are given by the authors.

Key words: investments, domestic investments, foreign investments, investment attractiveness, investment "mood" of investors, state investment policy.

Kirish

When determining ways to attract more investments to the region, it is important to analyze the current state of investment activity, to study the structure of investments, to study the aspects that encourage the increase in the flow of investments or various factors that prevent it. According to these aspects, the state determines the directions of its future investment policy, and the future investor

chooses the directions of activity that are acceptable for him. The issue of categorization of investments will be studied below.

Literature analysis and level of study. Scientists from different countries expressed different opinions on the problem of investment classification. Conditionally, we will consider these scientists into 3 groups: CIS scientists, scientists of foreign countries and our compatriot scientists. As for the economists of the CIS countries, M.I. Lisitsa² divides investments according to different features such as the purpose of directing investments (direct, portfolio), the region of origin (national, foreign, foreign, offshore), the economic effect (social, commercial), the form of ownership (private, municipal, state and international), the type of economic activity (construction, financial, educational, production), participation in the main production (net investments, gross investments), the investment period (long-term and short-term).

L.I. Yuzvovich, S.A. Degtyarev, E.G. Knyazeva classified investments according to the object of placement of funds (real and financial investments), according to the investor's participation in the investment process (direct investments and indirect investments), according to the investment period (short-term, medium-term and long-term), investment resources according to the form of ownership (state investments, private investments, joint investments and foreign investments), according to the chronological sign (initial and current investments), according to the purpose of investment (to invest in fixed capital, to expand production, to buy securities of other enterprises, innovative investments for the purchase of technologies), according to the level of investment risk (low-risk investments, medium-risk investments and high-risk investments), according to the nature of capital participation in investment activities (primary investments, reinvestments and disinvestments), according to the level of investment attractiveness (investments with low attractiveness, medium attractive investments and high attractive investments), according to the methods of attracting investments (investments in special economic zones, investments in concessions and investments in international leasing, investments in joint ventures)³.

In this regard, foreign scientists express a somewhat simpler opinion. In particular, Zvie Body divides investments into 2 groups: real (land, buildings, equipment, creation of goods and services) and financial (stocks and bonds) investments⁴.

W. Sharp, Gordon D. Alexander, Jeffrey W. Bailey in their "Investments" textbook also mentioned that investments are divided into real and financial investments, that financial investments make up a large part of total investments

2 М.И.Лисица Инвестиции. Учебник. СПб.: Издательство Университет при МПА ЕврАзЭС, 2017. 462 с. – (Серия «Учебники Университета при МПА ЕврАзЭС»). - 9 с.

3 Л.И.Юзвович, С.А.Дегтярев, Е.Г.Князева. Учебник для ВУЗов. Екатеринбург, 2016. – с.71

4 Investments / Zvi Bodie, Boston University, Alex Kane, University of California, San Diego, Alan J. Marcus, Boston College.—10th Edition. p:2

in the modern economy, and the movement of financial investments leads to the emergence of real investments⁵.

According to our local scientists Sh.Shodmonov, M.Rakhmatov, investments are divided into two types: nominal and real investments⁶. Investments in the form of money are called nominal investments, and investment resources that can be purchased with these funds are called real investments⁷.

H.H.Imamov divides investments into personal investments (individuals, legal entities, and the state in activities not prohibited by law), according to the nature of participation in investment (direct and portfolio investments), according to the investment period (short-term and long-term investments), according to the form of ownership (private, state, joint and foreign investments), are divided into types according to their territorial location (domestic and foreign investments), according to the level of risk (high-risk investments and low-risk investments)⁸.

Analysis and results. Analyzing the investment activities carried out in our country today, we can see that the investments include almost all types of investments. In particular, we can see the change in the composition of capital investments as below (Table 1).

Table 1
Distribution of capitalized investments by funds (in billion soums)⁹

Basic funds	2020	2021	2022	In percentage compared to the base year
Total	210195.1	239552.6	266240,0	126,66
Residential buildings	23200,8	29851,0	30184,2	130,1
Non-residential buildings	38172,7	50894,5	58225,1	152,53
Other structures	27039,0	30290,6	43393,4	160,48
Land improvement	285,9	277,1	257,1	89,927
Machinery and equipment, total	110493,8	113863,9	115040,0	104,11
Transport equipment	12415,2	14574,5	10718,7	86,335
Information, computer and telecommunication (ICT) equipment	7347,0	5325,6	5199,7	70,773
Other machinery and equipment	90731,6	93963,8	99164,6	109,29
Multiple yielder, animal resources	2843,0	3656,8	3847,8	135,34
Trees that produce several times, agricultural crops	880,7	838,6	783,8	88,997
Costs associated with transfer of ownership rights to others	225,0	138,2	365,8	162,58

5 Шарп У., Александр Г., Бейли Дж. Инвестиции. Пер. с. англ. – М.: «Инфра-М», 1997. – С. 1, 979.

6 Sh.Shodmonov, M.Rahmatov Iqtisodiyot nazariyasi. Darslik. Toshkent – 2021. 509-bet

7 Alimova, D., & Kurbanova, S. (2023). LEGAL REGULATION OF INVESTMENT ACTIVITIES IN THE REPUBLIC OF UZBEKISTAN. *Science and innovation*, 2(C12), 98-103.

8 H.H.Imomov Investitsiyalarni tashkil etish va moliyalashtirish. O'quv qo'llanma. Toshkent "Iqtisod-Moliya" – 2010. B.14-15

9 www.stat.uz ma'lumotlari asosida muallif tomonidan tayyorlandi. URL: <https://stat.uz/uz/rasmiy-statistika/investments>

Computer software and databases	25,2	98,6	154,9	614,68
Original copies of entertainment, literary and artistic works	1,6	0,8	26,0	1625
Scientific research and development	86,5	30,8	210,7	243,58
Exploration and evaluation of mineral reserves	26,7	96,4	203,6	762,55
Other intellectual property products	229,0	292,3	1169,0	510,48

According to the data, the main part of the investments is directed to the purchase of machines and equipment, their share amounted 52.5% of the total investments in 2020, 47.5% in 2021, and 43.2% in 2022.

Real estate objects (residential, non-residential and other buildings and structures) took the next place in attracting investments, their share was 42% of total investments in 2020, 46% in 2021, 49.5% in 2022 organized.

In addition, statistics show that investors are increasingly interested in copyright, computer software and databases, scientific research, and other intellectual property products.

Table 2 provides information on foreign direct investment in regions within the framework of regional investment projects in 2022-2023.

Table 2

Information on foreign investments and loans made within the framework of regional investment projects in 2022-2023¹⁰

By regions	2022	2023	in percent compared to 2022
Tashkent	1238,5	1591,1	128,4699
Tashkent region	482,4	912	189,0547
Khorezm region	190,2	390,7	205,4154
Ferghana region	719,9	974,9	135,4216
Syrdarya region	285,0	516,7	181,2982
Surkhandarya region	250,2	460,1	183,8929
Samarkand region	514,2	612,4	119,0976
Namangan region	379,0	705,9	186,2533
Navoi region	246,2	475	192,9326
Kashkadarya region	226,6	345,8	152,6037
Jizzakh region	399,2	680,5	170,4659
Bukhara region	317,1	569,8	179,6909
Andijon region	428,5	800,2	186,7445
Republic of Karakalpakstan	40,5	109,1	269,3827

Based on the information in the table, it can be concluded that the investments attracted in 2023 in the regions of the Republic showed an increase compared to 2022. Looking at regions, the number of foreign investors which are

¹⁰ O‘zbekiston Respublikasi Investitsiyalar, sanoat va savdo vazirligi rasmiy ma’lumotlari. URL: <https://miit.uz/oz/investment-statistics>

interested in such regions as Tashkent region (90% increase), Navoi region (93% increase), Syrdarya region (81% increase), Namangan region (86% increase), Andijan region (87% increase) increased. We can say that various factors (the establishment of free economic and industrial zones, the implementation of special tax regimes, and the granting of other legally defined benefits) have influenced the increase of investors' interest in these regions.

Conclusion and suggestions. In conclusion, we can say that the more comprehensive the state's investment policy is and the more it is used in different sectors of the economy, the more investment types we will be able to meet and analyze. We can see that the possibility of attracting investments in various sectors and at all stages of the production process will benefit our country both economically and socially.

As a suggestion, one more feature among the types of investments: we can show the division into free and targeted investments, according to which the investor is given the opportunity to choose the direction of the project. Free investments are invested in the desired field or sector according to the investor's wishes, the field of targeting of targeted investments is determined in advance based on the programs. It is thought that there is no mistake if we take as a basis the development of investment policy and investment attraction programs in our Republic.

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3. Investments / Zvi Bodie, Boston University, Alex Kane, University of California, San Diego, Alan J. Marcus, Boston College. —10th Edition. p:2
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PAXTANI TOZALASH USKUNALARIDA PAXTANI QIZDIRISH ORQALI TOZALASH SAMARADORLIGINI OSHIRISH

Annotatsiya: maqolada paxta tolasini qizdirish evaziga tozalash samaradorligini oshirish bo'yicha bajarilgan ishlar taxlili va issiq xavoning tezligini paxta tolasining xaroratini va namligini o'zgarishiga ta'sirini aniqlash bo'yicha tajriba natijalari keltirilgan. Natijada II-sanoat navli paxtalarning harorati 700S bo'lganida namlikning o'zgarishi 0,6 % dan 1,4 % gacha, IV-sanoat navida esa 1,8% dan 2,2 % gacha bo'lishi aniqlandi.

Kalit so'zlar: tozalash, qizish, harorat, sanoat navli, mayda iflosliklar, namlik, tolaning harorati.

*Altmishev B.S.
assistant
Jizzakh Polytechnic Institute*

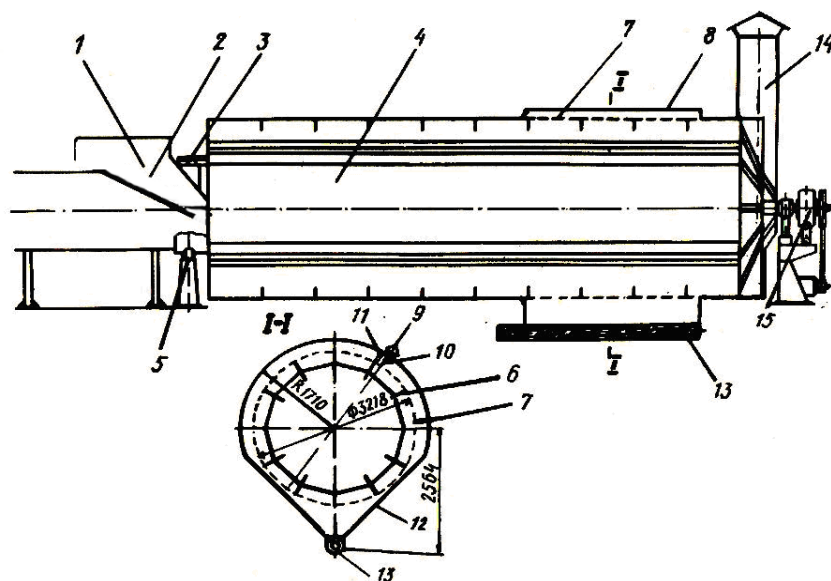
INCREASING CLEANING EFFICIENCY BY HEATING COTTON IN COTTON CLEANING EQUIPMENT

Annotation: the article presents the results of the experimental work carried out to improve the efficiency of cleaning cotton fiber with heating discharge and to determine the effect of the speed of hot air on changes in the quality and humidity of cotton fiber. As a result, it was determined that the temperature of II-industrial varieties of cotton was from 700s, the humidity change was from 0,6% to 1,4%, and IV-Industrial varieties from 1,8% to 2,2%.

Keywords: cleaning, heating, temperature, industrial grade, fine impurities, humidity, fiber temperature.

Kirish: Paxtani qizdirishning tola yuzalarida yopishib yotgan mayda iflosliklarning ajralishini yaxshilanishi bo'yicha ko'pgina olimlarimizning tajribalaridan xulosa qilingan.

Buning asosida paxta tozalash zavodlarida tozalash qismiga ega bo'lgan SBO barabanli quritgich ishlab chiqildi (1-rasm), uni ommaviy joriy etishga tavsiya etilgan. SBO quritgichining ko'rinishi jihatidan 2SB-10 quritgichga o'xshaydi va quritish barabani uzunligi 3 m bo'lgan kamera bilan yopilgan, qalinligi 2 mm bo'lgan po'latdan yasalib, paxta barabandan chiqadigan joydan 1 m masofa ichkarida joylashgan tozalash bo'limiga ega.



1- rasm. SBO quritgich sxemasi

1,2- ta'minlagich; 3- sapfa; 4- baraban; 5- roliklar; 6- kuraklar;
7- to'rli yuza; 8- qobiq; 9- quvur; 10- soplo; 11- metall cho'tka; 12- bunker; 13- shnek; 14- quvur; 15- reduktor.

Ajratilgan mayda iflosliklarni olib ketish uchun baraban tozalash bo'limi tagida ifloslik konveyeri o'rnatilgan. Tozalash bo'limining ustki qismida barabanni tozalash uchun quritish agenti yuboriladigan soploli quvur o'rnatilgan. Quritish kamerasi, baraban tozalash bo'limi to'rli sirtini tozalash uchun metall cho'tka bilan ta'minlangan. Quritgich ichida balandligi 0,5 m dan bo'lgan 12 ta radius bo'yicha yo'naltirilgan kurakchalar bor. Barabanda mayda iflosliklar bo'yicha tozalash samarasini ko'tarish mumkin, lekin quritish agentining sarfi oshishiga olib keladi.

Paxtani qizdirish jarayonida asosan tolaning fizik-mexanik xususiyatlarini o'zgarishiga ta'sir etishi mumkin, bu esa quritish jarayonining davomiyligiga, haroratiga va paxta qatlamiga ham bog'liqdir.

Paxtani qizdirish bilan uni qayta ishlash qadim zamonlardan insonlar tomonidan qo'llanilib kelingan, bunda paxtalarni qo'lda tolasini ajratishda listlar ustida qizdirish samara bergan.

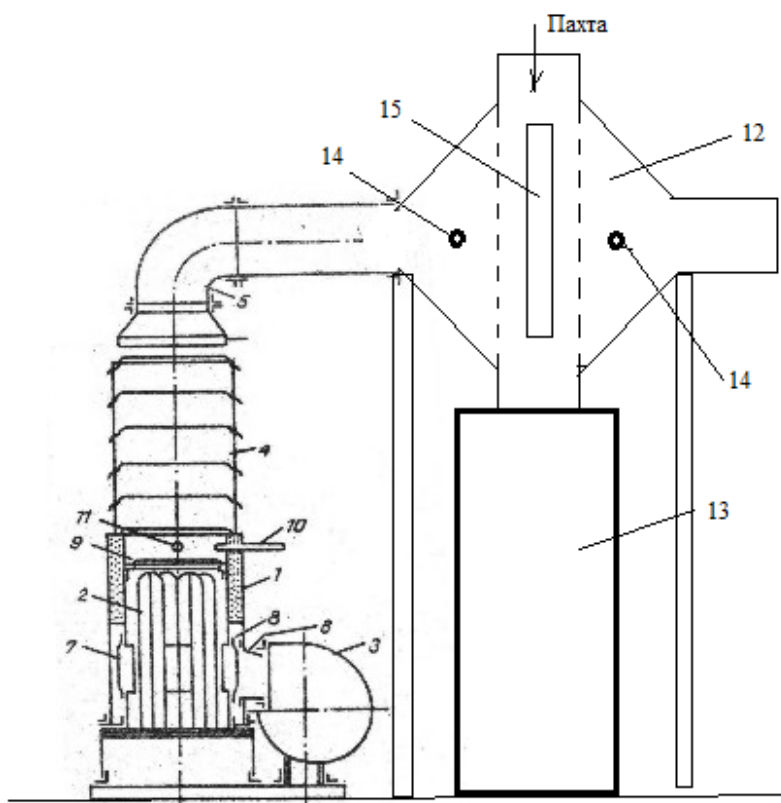
Adabiyotlar taxlili: Paxtani quritish jarayonida tolasining qizdirilishi uni tozalash jarayoniga borgunga qadar issiqligi pasayib, 25-300S dan oshmagan [1], tadqiqotda aniqlanishicha tolaning bikrlilik koeffitsienti tola harorati oshgani sari oshib boradi. Bu xolatda tozalagichning barabanlarini qoziqchalari tomonidan tolaga berilgan zarbani mayda iflosliklarga o'tkazishi oshadi, tozalash samaradorlik esa zarba kuchining tolaga uzatilishiga to'g'ri proporsional bo'ladi [2]. Sadikov M tadqiqotlarida [3] quritish jarayonida tolaning optimal haroratini 65-700S gacha bo'lishi aniqlangan va tolaning tashqi ko'rinishining o'zgarishiga ta'siri o'rganilgan.

Rozmetov R.I tadqiqotlarida [2] tajriba asosida paxta tolasini xaroratining o'zgarishini quritish agentining tezligiga, paxtani uskunada bo'lish vaqtiga ta'sirini o'rganish natijasida issiq havoning tezligini 4,0; 5,5; 7,0 m/s gacha oshirganida o'z navbatida 30; 28; 20 sekund vaqtda paxta tolasining haroratini 48-500S gacha ko'tarilishi aniqlangan. Tozalash samaradorliklari o'z navbatida 42,9-54,4% ni tashkil etib, issiq havo tezligini 2,5 m/s dan 7,0 m/s gacha ortishi paxta tarkibidagi namlikni bug'latish jarayonini jadallashtirishini aniqlagan.

Madumarov I.D tadqiqotlarida [4] tolaning harorati 65-700S, namligi esa 5,5-6,0% bo'lganda uskunaning tozalash samarasi eng yuqori bo'lishini aniqlagan, lekin ko'pgina olimlarning xulasalari bo'yicha arrali jinlash uchun namlik 7-8 % bo'lishi samaralidir [5, 6, 7]. Madumarov I.D ning keyingi tadqiqotlarida [8] paxtani tozalash texnologik jarayonida paxta tolasining harorati 45-500S tavsiya etilgan, bu xolatda paxtaning namligi jinlash jarayoni uchun maqbul bo'lishi ko'zda tutilgan.

Yuqoridagi barcha tadqiqotlarda paxtani qizdirishda uning qatlamining ta'siri etarlicha o'rganilmagan, bizning xolatimizda paxta ta'minlagich shaxtasidan uzatilishini inobatga olinsa shaxtaning kengligi bo'yicha paxta qatlamda joylashadi va qisman zichlashishi mumkin.

Paxtani qizdirish haroratining tozalash iflosligiga va tola ko'rsatkichlariga ta'sirini o'rganish uchun LKM tozalagich ustiga ishlab chiqarishdagiga o'xshab ta'minlagich tayyorlandi va ta'minlagichni issiq havo bilan ta'minlash uchun SXL-3 quritgichga ulandi 2-rasm.



2-rasm. Laboratoriya stendi sxemasi.

1 – SXL-3 quritgichi; 2 – trubasimon elektr qizitkichlar elementlari NB6 1,2/1,0; 3 - 2VR-2 ventilyatori; 4 - paxta xomashyosi namunalarini solish uchun kassetalar; 5 - so‘rish qurilmasi; 6 - ventilyatordan chiqqan diffuzor; - ichki silindr; 8 - tirqishlar; 9 - ikki tomonlama ekransimon panjara; 10- simobli termoo‘lchagich; 11 - bimetall issiqlik relesi; 12-ta‘minlagich, 13-LKM laboratoriya tozalagichi; 14-simobli termoo‘lchagich; 15-kuzatuv tuynigi.

Tajribalarni o‘tkazish metodi: Tajribalarni o‘tkazishda paxta xom ashyosining dastlabki taxlillari o‘tkazildi, bunda paxtaning namligi va iflosligi aniqlanadi. Kerakli rejimni o‘rnatgandan so‘ng, aniqlik darajasi 0,01 g bo‘lgan elektron torozida paxta tortilib, ja‘mi 6 kg paxta namunasi olindi. Olingan namuna LKM qurilmasi ustiga o‘rnatilgan ta‘minlagich shaxtasini to‘lib turishini ta‘minladi. Ta‘minlagichga namuna solishdan avval issiqlikni belgilangan miqdoriga keltirib, rele vaqt qo‘rsatkichi qayid etiladi.

SXL-3 quritish uskunasi issiqlik ishlab chiqarish quvvatini oshirish uchun qo‘shimcha avtomat o‘rnatildi va havo haroratini o‘lchash uchun simobli termoo‘lchagichidan foydalanildi. Ta‘minlagichga issiq havo uzatish va chiqishdagi quvurida havo harorati o‘lchab turildi.

Qizdirish vaqti tugashi bilan issiq havo berilishi to‘xtatilib, shaxtaning kuzatuv tuynigini ochib uchta joyidan kantaktsiz termoo‘lchagichi orqali qizish harorati o‘lchandi va shaxtadan namlikni aniqlash uchun namuna olindi. Tajribalar uch qaytarilishda o‘tkazildi. Tajribalarni o‘tkazishda havo tezligining ta‘sirini o‘rganish uchun uzatilayotgan havoning tezligi belgilangan miqdorda o‘zgartirib borildi.

Tajribalarni havo tezligini 2,5 m/s dan 6,5 m/s gacha o‘zgartirib, haroratini esa 700S dan 1300S gacha va paxtani uskunada bo‘lish vaqtini esa uskunaning ish unumdorligiga bog‘liq xolda o‘rnatildi. Tajriba vaqtida Bux-102 seleksiya navli, II- sanoat nav dastlabki namligi 9,6 %, iflosligi 8,2 % li va IV-sanoat nav dastlabki namligi 14,6 %, iflosligi 12,6 % li paxtalardan foydalanildi. Tajribalar 2-rasmda keltirilgan laboratoriya stendida amalga oshirildi. Tajriba natijalari 1-jadvalda keltirilgan.

1-jadvaldan ko‘rinadiki, issiq havoning tezligi 2,5 m/sek bo‘lganida II-sanoat navli paxtalarda havo haroratining 700S dan 1300S gacha o‘zgarishida tolaning haroratini o‘lchanganida 240S dan 530S gacha, IV-sanoat navida esa tolaning harorati 220S dan 550S gacha o‘zgarishini ko‘rishimiz mumkin.

1-jadval

Havo tezligini va haroratini o‘zgarishi paxta tolasining haroratiga ta‘siri

№	Issiq havo tezligi, m/s	Aloqa vaqti, sek	Havo xarorati, °C	Paxta tolasining qizishi harorati, 0C		Paxtaning namligi, %	
				Sanoat nav		Sanoat nav	
				II	IV	II	IV
1	2,5	11	70	24	22	9,0	12,8
			90	38	39	8,8	12,4

			110	45	43	8,1	12,0
			130	53	55	7,8	11,8
2	4,5	11	70	25	28	8,8	12,6
			90	44	42	8,1	12,2
			110	53	55	7,8	11,8
			130	56	58	7,2	11,6
3	6,5	11	70	28	26	8,2	12,4
			90	44	45	7,8	12,0
			110	56	55	7,2	11,6
			130	60	58	6,8	11,4

Xulosa: Issiq havoning tezligini 2,5 m/sekdan 6,5 m/sek gacha oshirganimizda va haroratning 110-1300S da tolaning harorati 56-600S ga etganini ko'rishimiz mumkin. Paxta namligi esa issiq xavoning tezligiga bog'liq xolda o'zgarishini ko'rishimiz mumkin, bunda II-sanoat navli paxtalarining harorati 700S bo'lganida namlikning o'zgarishi 0,6 % dan 1,4 % gacha, IV-sanoat navida esa 1,8% dan 2,2 % gacha bo'lishi aniqlandi.

Bundan shunday xulosa qilishimiz mumkinki, issiq havoni paxta qatlamidan o'tish tezligini ortishi paxta tarkibidan namlikni olishni yaxshilanishiga va tolaning qizishiga olib keladi. Lekin shuni takidlash kerakki issiq xavoning tezligini xaddan tashqari oshirilishi paxtaning harakatiga ta'sir etishi mumkin. Tajribalarni davom ettirib, paxta bilan aloqa vaqtini, havoning tezligini va paxta qatlamining qalinligini, tolani qizishga, namlikni olishga va tozalash samaradorlikka bog'liqliklari o'rganiladi.

Mexanik kuchlanish transformatorlarining turli xil konstruktsiyalarini, shuningdek topogrammalarni yaratish masalalariga bag'ishlangan patent-texnik adabiyotlarni tahlil qilish shuni ko'rsatadiki, magnit elastik effekt yordamida konvertorlarni yaratish uchun ko'plab dizayn variantlari mavjud. Ma'lumotlarning katta hajmi ko'pincha konvertorni qurish uchun maqbul sxemani to'g'ri tanlashni qiyinlashtiradi. Shuning uchun hozirgi vaqtda elektron kompyuterlar (kompyuterlar) yordamida strukturaviy sxemalar darajasida konvertorlarni loyihalash usullari tobora keng tarqalmoqda [7,8].

Umumlashtirilgan texnikalarning tasnifini tahlil qilishda shuni ko'rsatadiki, konstruktsiyalarni takomillashtirishning eng ko'p umumlashtirilgan usullari havo bo'shlig'i tufayli yuzaga keladigan xatoni kamaytirish uchun ishlab chiqilgan, chunki bu xato eng katta va asosan mexanik kuchlanish transformatorlarining umumiy xatosining qiymatini aniqlaydi. Shu bilan birga, asosiy sa'y-harakatlar elektromagnit konvertorlarning havo bo'shlig'ining beqarorligidan xatosini kamaytirishning samarali usulini ishlab chiqishga qaratilgan. Transduserning statik xususiyatlarini o'rganayotganda, vaqt o'tishi bilan kvadratik ravishda o'zgarib turadigan oqim bilan ishlaydigan ish paytida, qisqa tutashgan boshqaruv sargilarining samaradorligi vaqt o'tishi bilan o'zgarishi aniqlandi. [9,10].

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*Amanov A.K.
Urganch davlat universiteti
"Geografiya" kafedrasida o'qituvchisi
Nazarov D.M.
Urganch davlat universiteti
Geografiya yo'nalishi 1-kurs talabasi*

QUYI AMUDARYO IQTISODIY RAYONIDAGI ERKIN IQTISODIY ZONALARI VA ULARNING RIVOJLANISH TENDENSIYALARI

Anotatsiya. Ushbu maqolada Quyi Amudaryo iqtisodiy rayonidagi erkin iqtisodiy zona (keyingi orinlarda EIZ)lari va ularning rivojlanishi tendensiyalari haqida fikr yuritiladi. Iqtisodiy rayondagi EIZlarning rivojlanish tendensiyalarini iqtisodiy-geografik tahlil va iqtisodiy-statistik usullari yordamida ochib berildi. Shuningdek, Quyi Amudaryo iqtisodiy rayoni iqtisodiyotining kelajagi sanalayotgan EIZlarning rivojlantirish istiqbollari hamda, bu borada bajarilishi lozim bo'lgan chora-tadbirlar haqidagi taklif va tavsiyalar berilgan.

Kalit so'zlar: agro-erkin iqtisodiy zona, eksport, erkin iqtisodiy zona, import, investitsiya.

*Amanov A.K.
teacher
"Geography" department
Urganch State University
Nazarov D.M.
Geography 1st year student
Urganch State University*

FREE ECONOMIC ZONES IN LOWER AMUDARYA ECONOMIC REGION AND THEIR DEVELOPMENT TENDENCIES

Abstract. This article discusses free economic zones (hereinafter SEZs) in the Lower Amudarya Economic Region and their development trends. Development trends of SEZs in the economic region were revealed using economic-geographical analysis and economic-statistical methods. Also, proposals and recommendations about the development prospects of the SEZs, which are considered the future of the economy of the Lower Amudarya economic region, as well as the measures to be implemented in this regard, were given.

Key words: agro-free economic zone, export, free economic zone, import, investment.

Kirish. EIZlar odatda mamlakatning ma'lum hududi iqtisodiyotini yuksaltirish maqsadida, mahalliy va xorijiy investorlar investitsiyalari evaziga, asosan ishlab chiqaradigan mahsulotlari eksportbop hamda import o'rnini bosuvchi yuqori texnologiyali korxonalarni o'zida jamlovchi, o'ziga xos bojxona va soliq imtiyozlariga ega alohida hududlar sanaladi.

Quyida Amudaryo iqtisodiy rayonida EIZlarni tashkil qilish masalasi XX asrning oxiriga borib taqaladi, aniqrog'i Qoraqalpog'iston Respublikasi poytaxti sanalmish Nukus shahrida 1998-yildayoq "Nukus" EIZ shakllantirildi. Ammo mazkur EIZ ham o'sha paytlari tashkil qilingan "Jizzax" (1996 y.) va "Samarqand" (1997 y.) EIZlari kabi qisqa davrda o'z faoliyatini yakunladi.

Ushbu muammolarni yuzaga kelishiga sabab esa, ekspertiza instituti imkoniyatlaridan foydalanib oldinni ko'ra bilish, prognozlashtirish, ekspertlarning muammoni o'rganib, yuzaga kelishi mumkin bo'lgan salbiy holatlar o'rganilmaganligi sabablidir [5].

Mazkur kamchiliklarni bartaraf qilingandan keyin, 2008 yilda "Navoiy" erkin industrial iqtisodiy zonasi, 2012 yilda "Angren" maxsus sanoat zonasi va 2013 yilda "Jizzax" maxsus sanoat zonasi tashkil qilindi. Keyinchalik, Quyida Amudaryo iqtisodiy rayonida ham, 2017 yilda "Hazorasp" EIZ, 2019 yilda "Nukus" EIZ va 2020 yilda "Qoraqalpoq-agro" EIZlari bunyod qilindi.

Adabiyotlar tahlili. Mazkur mavzuni o'rganish doirasida iqtisodiy rayondagi EIZlarni tashkil qilish to'g'risidagi bir qator hukumat qarorlari va ko'pgina mualliflarning [1, 2, 3, 4, 5] ishlari o'rganildi.

O'zbekiston Respublikasi Prezidentining 2017 yil 12 yanvardagi PF-4931-sonli farmoniga ko'ra tashqi bozorlarda talab yuqori va raqobatbardosh mahsulotlar ishlab chiqarishni ta'minlaydigan mineral-xom ashyo va qishloq xo'jaligi resurslarini chuqur qayta ishlash bo'yicha zamonaviy ishlab chiqarishlarni tashkil etishga xorijiy va mahalliy investitsiyalarni jalb etish uchun qulay sharoitlarni yaratish, shuningdek, Xorazm viloyatining ishlab chiqarish hamda resurs salohiyatidan kompleks va samarali foydalanish, shu asosda yangi ish o'rinlari tashkil etish hamda aholi daromadlarini oshirish maqsadida: O'zbekiston Respublikasi Iqtisodiyot vazirligi, Tashqi iqtisodiy aloqalar, investitsiyalar va savdo vazirligi, Moliya vazirligi, hamda Xorazm viloyati hokimlikining Xorazm viloyati Hazorasp tumanida - "Hazorasp" erkin iqtisodiy zonalarini tashkil etish to'g'risidagi taklifi qabul qilindi [2].

Tadqiqot metodologiyasi. Quyida Amudaryo iqtisodiy rayonida jami 3 ta, jumladan Qoraqalpog'iston Respublikasida 2 ta "Nukus" va "Qoraqalpoq-agro" EIZlari, hamda Xorazm viloyatida "Hazorasp" EIZsi shakllantirilgan bo'lib ulardagi jami filiallar soni 18 tani, ularning umumiy maydoni esa, mos ravishda 262,29 ga, 875,4 ga va 414 ga ni tashkil qiladi (1-jadvalga qarang).

Quyi Amudaryo iqtisodiy rayonida tashkil qilingan EIZlar

T/r	EIZ nomi	Umumiy maydoni	EIZ filiallarining soni	EIZ tashkil qilingan sana
1.	“Hazorasp” EIZ	414 ga	3 ta	2017-yil 12-yanvar
2.	“Nukus” EIZ*	262.29 ga	3 ta	2019-yil 4-sentyabr
3.	“Qoraqalpoq-agro” EIZ	875,4 ga	12 ta	2020-yil 11-noyabr

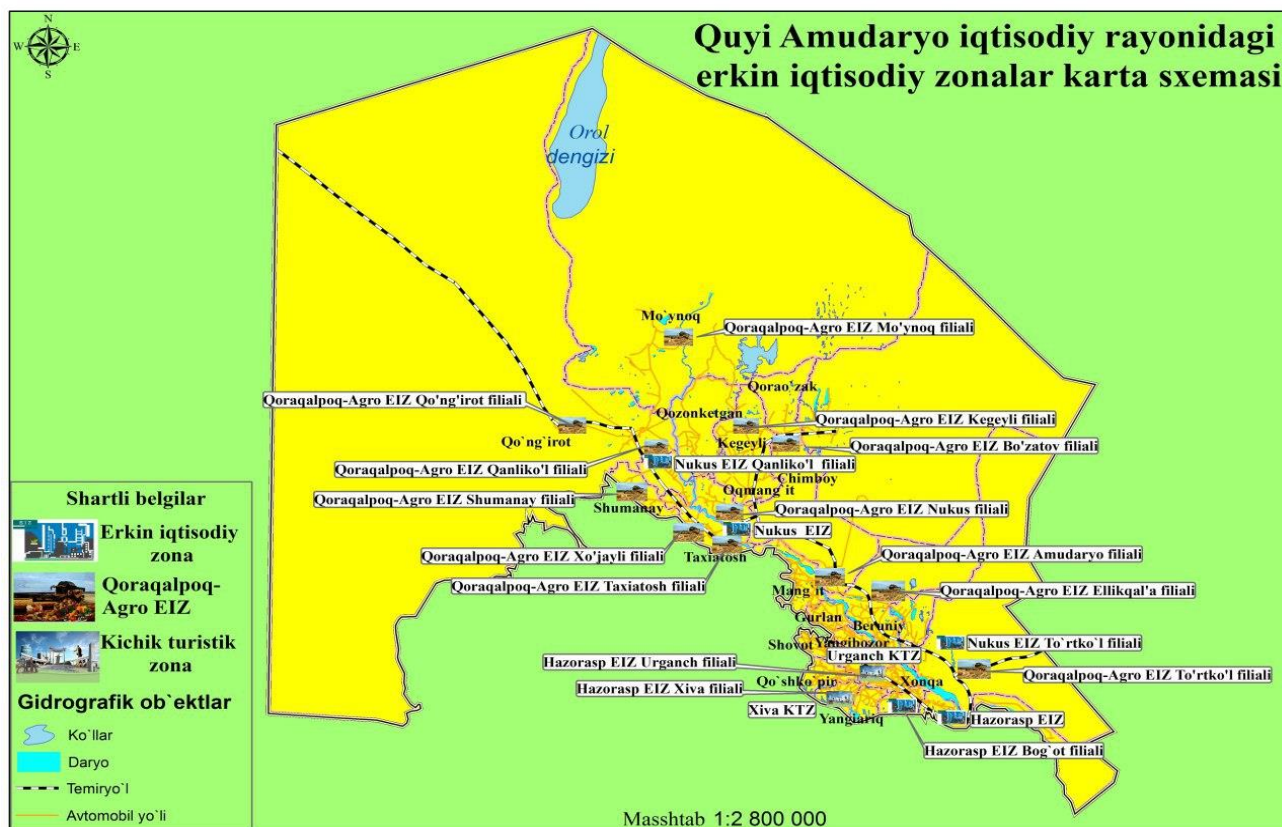
**2017 yilda tashkil qilingan “Nukus-farm” EIZsi hozirda “Nukus” EIZsiga aylantirilgan*

Jadval O‘zbekiston statistika qo‘mitasi hamda internet saytlari ma‘lumotlari asosida mualliflar tomonidan tayyorlandi.

Quyi Amudaryo iqtisodiy rayonida hozirda faoliyat yuritayotgan birinchi EIZ “Hazorasp” EIZsidir.

Mazkur EIZ Xorazm viloyati sanoatini lokomotivga aylandi va oz muddatda 19 ta loyiha amalga oshirildi. Bu amalga oshirilgan loyihalarning eng asosiysi bu "UzAuto Motors" AJ ning Pitnak filiali hisoblanadi. Ushbu zavodda Chevrolet brendi ostida Chevrolet Orlando, Chevrolet Labo, Damas avtomobillari ishlab chiqariladi. Erkin iqtisodiy zonada undan tashqari yana ko‘plab yirik korxonalar faoliyat ko‘rsatmoqda bu korxonalar tufayli nafaqat Hazorasp tumani aholisi balki butun Xorazm viloyati va Respublikamizning turli viloyatlaridan hamda xorijiy davlatlardan kishilar mehnat qilishadi [4].

O‘zbekiston Respublikasi Prezidenti Sh.M. Mirziyoevning qarorlari bilan Nukus tumanida «Nukus-farm» EIZ nomi bilan tashkil qilingan va hozirda “Nukus” EIZ deb yuritilayotgan iqtisodiy hudud 2019 yilda qayta shakllantirildi. Bugungi kunda EIZsining Tortko‘l, Kegeyli va Nukus tumanlarida yangi filiallarida maishiy buyumlar va shisha sanoati korxonalari faoliyat yurutmoqda.



1-rasm. Quyi Amudaryo iqtisodiy rayonidagi EIZlar karta sxemasi. [3]

2020-yilning oxirida tashkil qilingan “Qoraqalpoq-agro” EIZsining rivojlanishida hududdagi mavjud infratuzilma, arzon ishchi kuchi, hamda muhim iste'mol bozorlari yaqinligining muhim ahamiyat kasb qiladi. Umumiy maydoni salkam 900ga yaqin 12 filialga ega mazkur EIZ kelajakda mintaqa aholisi va yaqin qo'shni mamlakatlarni zarur qishloq xo'jaligi mahsulotlari bilan ta'minlash maqsad qilingan.

XULOSA. Xulosa o'rnida, Quyi Amudaryo iqtisodiy rayoni siqtisodiyotini jadal rivojlantirishda:

- Qoraqalpoq'iston Respublikasi va Xorazm viloyatidagi EIZlarining yanada jozibadorligini oshirish va bu orqali ko'proq investorlarni jalb qilish;
- zamonaviy ishlab chiqarish texnologiyalari asosida EIZlardagi korxonalarini modernizatsiyalash va diversifikatsiyalash bilan mahsulot hajmi va turlarni ko'paytirish;
- mavjud resurs va xomashyolarni chuqur qayta ishlash oqrali sanoat va qishloq xo'jaligi tarmoqlarida yangi mahalliy brend mahsulotlar ishlab chiqarishni joriy etish maqsadga muvofiq.

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*Amanov A.K.
Urganch davlat universiteti
"Geografiya" kafedrasida o'qituvchisi
Nazarov D.M.
Urganch davlat universiteti
Geografiya yo'nalishi 1-kurs talabasi*

QUYI AMUDARYO IQTISODIY RAYONIDAGI MAXSUS IQTISODIY ZONA, KICHIK SANOAT ZONASI, TEXNOPARK VA KLASTERLARNING IQTISODIY GEOGRAFIK XUSUSIYATLARI

Anotatsiya. Ushbu maqolada Quyil Amudaryo iqtisodiy rayonidagi maxsus iqtisodiy zonalari (keyingi orinlarda MIZ), kichik sanoat zonalari (keyingi orinlarda KSZ), texnoparklar va klasterlarning rivojlanishidagi o'ziga xos iqtisodiy geografik xususiyatlari haqida fikr yuritiladi. Keyingi yillarda iqtisodiy rayon iqtisodiyotida muhim sanalgan MIZ, KSZ, texnoparklar va klasterlar, hamda ularning o'ziga xos jihatlari iqtisodiy-statistik va iqtisodiy-geografik tahlil usullar yordamida ochib berildi. Shu bilan birga Quyil Amudaryo iqtisodiy rayoni sanoatining kelajakdagi istiqbollari haqidagi taklif va tavsiya ishlab chiqildi.

Kalit so'zlar: eksport, import, investitsiya, kichik sanoat zona, klaster, maxsus iqtisodiy zona, sanoat, texnopark.

*Amanov A.K.
teacher
Urganch State University
"Geography" department
Nazarov D.M.
Geography 1st year student
Urganch State University*

ECONOMIC GEOGRAPHICAL CHARACTERISTICS OF SPECIAL ECONOMIC ZONE, SMALL INDUSTRIAL ZONE, TECHNOPARK AND CLUSTER IN LOWER AMUDARYA ECONOMIC DISTRICT

Abstract. In this article, special economic zones (hereinafter referred to as MIZ), small industrial zones (hereinafter referred to as KSZ), technoparks and clusters in the development of special economic zones in the Lower Amudarya economic region are discussed. In the following years, MIZ, KSZ, technological parks and clusters, which were considered important in the economy of the economic region, and their specific aspects were revealed using economic-statistical and economic-geographical analysis methods. At the same time, a

proposal and recommendation about the future prospects of the industry of the Lower Amudarya Economic Region was developed.

Key words: export, import, investment, small industrial zone, cluster, special economic zone, industry, technological park.

Kirish. Mintaqalar iqtisodiyotining rivojlanishi u yerdagi tabiiy va ekologik sharoit, resurslar bilan ta'minlanganlik darajasi, tarixiy rivojlanganlik, hukumatning olib borayotgan to'g'ri islohatlari kabi bir qator omillar ta'sirida bo'ladi. Qachon-ki yuqoridagi omillar bir-biriga uyg'un holatda bog'liqligi amalga ohsa, ushbu hududda kompleks ijtimoiy-iqtisodiy yuksalish kuzatiladi. Bu borada iqtisodiyotning har bir jabhasiga turtki bo'ladigan, hukumat islohotlarining ahamiyati beqiyosdir. 2017-2021 yillarga va keyinchalik 2021-2026 yillarga mo'jallangan "Harakatlar strategiyasi" davlat dasturlarida bunday islohotlarini amalga oshirish, ayniqsa o'z ifodasini topgan.

Adabiyotlar tahlili. Davlat dasturlarida quyidagilarga alohida e'tibor qaratilgan.

Viloyat, tuman va shaharlarni, kompleks va mutanosib ijtimoiy-iqtisodiy rivojlantirish, ularning mavjud salohiyatidansamaarali va optimal foydalanish:

-ijtimoiy-iqtisodiy rivojlanishni jadallashtirish, xalqning turmush darajasi va daromadlarini oshirish uchun har bir hududning tabiiy, mineral-xomashyo, sanoat, qishloq xo'jaligi turistik va mehnat salohiyatidan kompleks va samarali foydalanishni ta'minlash;

-hududlar iqtisodiyotini moderinizatsiyaa va diversifikatsiya qiish ko'lamini kengaytirish, rivojlanish darajasi nisbatan past bo'lgan tuman va shaharlarni, eng avvalo, sanoat va eksport salohiyatini oshirish yo'li bilan jadal rivojlantirish hisobiga mintaqalar ijtimoiy-iqtisodiy rivojlanishdarajasidagi farqlarni kamaytirish;

-yangi sanoat korxonalarini va servis markazlarini tashkil etish, kichik sanoat zonalarini tashkil qilish, yirik xo'jalik birlashmalarining mablag'larini, banklarning kreditlari va xususiy xorijiy investitsiyalarni jalb qilish hisobiga kichik shaharlar va shaharchalarni jadal rivojlantirish;[1].

Ushbu farmon ijrosi doirasida Quyi Amudaryo iqtisodiy rayon hududida amalga oshirilgan ishlar mintaqani kompleks rivojlanishidajuda muhim rol o'ynadi. Misol tariqasida, Pitnak sanoat qutbi va Mo'ynoq turistik markazi ko'rsatish mumkin. Bu borada MIZ, KSZ, texnopark va klasterlarning o'rni beqiyosdir.

Mamlakatimizda 2022- yilning 1- iyul holatiga ko'ra jami 20 ta MIZ, 116 ta KSZ, 12 ta texnopark va 467 ta klasterlar mavjud bo'lib, ularning tarkibidagi korxonalar soni 2864 tani tashkil etgan [2].

Tadqiqot metodologiyasi. Jumladan Qorqalpog'iston Respublikasida 2 ta "Nukus" va "Qoraqalpoq-agro" erkin iqtisodiy zonalarini, hamda Xorazm viloyatida "Hazorasp" erkin iqtisodiy zonasi bunyod qilingan.

Quyi Amudaryo iqtisodiy rayonidagi MIZ, KSZ, texnopark va klasterlar soni

Iqtisodiy rayon tarkibidagi ma'muriy birliklar	Jami	Shu jumladan			
		MIZlar soni	KSZlar soni	Texnoparklar soni	Klasterlar soni
Qoraqalpog'iston Respublikasi	90	2	11	-	77
Xorazm viloyati	63	1	11	7	44
Quyi Amudaryo iqtisodiy rayoni	153	3	22	7	121

Jadval O'zbekiston statistika qo'mitasi hamda internet saytlari ma'lumotlari asosida mualliflar tomonidan tayyorlandi.

Mintaqda KSZlarining umumiy soni 22 tani tashkil qilib, har ikki ma'muriy birlikka 11 tadan to'g'ri keladi, hamda ular mintaqa sanoati rivojida keyingi yillarda muhim o'rin egallaydi.

Texnopark, bu — hududiy, ilmiy, texnologik va innovatsion loyihalarni amaliyotga tadbiiq etuvchi texnologik baza hisoblanadi. Texnopark — mulk kompleksi bo'lib, u ilmiy-tadqiqot institutlari, sanoat obyektlari, biznes markazlari, ko'rgazma maydonlari, ta'lim muassasalari, va shuningdek, xizmat ko'rsatish obyektlari: transport vositalari, o'tish yo'llari, aholi yashaydigan qishloqlar va qo'riqlash xizmatini o'z ichiga oladi [4].

Quyi Amudaryo iqtisodiy rayonining Xorazm viloyatida 7ta texnopark tashkil qilingan, bu butun mamlakatimizdagi texnoparklarning yarmidan ko'pi demakdir. Ammo ularning aksariyati o'z faoliyatini endi boshlagan sanaladi.

Klasterlarni rivojlantirish mintaqalarda iqtisodiy o'sishni rivojlantirish vositasi sifatida hukumatning kun tartibiga kiritilgan [3], va Quyi Amudaryo iqtisodiy rayonida turli sohalarda 121 ta klaster tashkil qilingan.

XULOSA. Quyi Amudaryo iqtisodiy rayonida yo'qilg'i-energetika, kimyo, qurilish resurslari va arzon ishchi kuchining, shuningdek qishloq xo'jaligi ekinlari hosili(xususan, paxta tolasi, bog'dorchilik va uzumchilik, sabzavot hamda poliz ekinlari)ni qayta ishlash imkoniyatlarining mavjudligi va kabi boshqa omillar kelajakda xorijiy va mahalliy investorlarning ishonch bilan investitsiya kiritishi bilan sanoat tarmog'ining rivojlantirish asos bo'ladi.

Xulosa o'rnida, Quyi Amudaryo iqtisodiy rayoni sanoat tarmoqlarining jadal rivojlantirishda:

- Qoraqalpog'iston Respublikasi va Xorazm viloyatidagi MIZlari, KSZlari, texnoparklar va sanoat klasterlarining yanada jozibadorligini oshirish va bu orqali ko'proq investorlarni jalb qilish;

- zamonaviy ishlab chiqarish texnologiyalari asosida mavjud ishlab chiqarish quvvatlarini modernizatsiyalash va diversifikatsiyalash;

- mahalliy xomashyo va resurslarni chuqur qayta ishlash asosida xorijiy va mahalliy sarmoyadorlar mablag'larini jalb qilgan holda, sanoat va qishloq xo'jaligi mahsulotlarini qayta ishlash orqali yangi mahalliy brend mahsulotlar ishlab chiqarishni joriy etish maqsadga muvofiq.

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*Aminov B.
teacher
history and geography department
Urganch State Pedagogical Institute
Kuvvatova K.
1st-level student of geography and economic knowledge
Urganch State Pedagogical Institute
Razzakov Sh.
1st stage student
majoring in the basics of geography and economic knowledge
Urganch State Pedagogical Institute*

GEOECOLOGICAL FACTORS AND THEIR IMPACT ON THE POPULATION

Abstract. Geoecological factors play a significant role in shaping the distribution, health, and livelihoods of human populations. This article explores the impact of key geoecological factors, including climate, terrain, soil quality, and water availability, on population dynamics. It discusses how these factors influence population distribution, health outcomes, and economic activities. Understanding the interactions between geoecological factors and human populations is crucial for sustainable development and effective policy-making.

Key words: Population, geoecological culture, migration, flood, "Ozone hole".

The population is one of the most important anthropogenic factors in the development of the geographical crust, especially in the formation and development of geoecological problems, along with scientific and technical progress and production. Population is the total number of people living in a certain area, of different racial-ethnic, age and gender composition. The population is a consumer of food and resources necessary for the development of industry, agriculture, transport, construction and other areas of economic activity. To date, the main indicators characterizing the population as a geoecological factor are: 1) population size, 2) population density, 3) population migration.

Population determines the total needs of the society for basic housing, food, clothing and other types of various resources. At the same time, the population directly creates a significant anthropogenic burden on both natural and socio-productive systems, resulting in geoecological problems.

Pollution of the natural environment can occur due to natural factors and human activities. The main sources of natural pollution occur as a result of natural processes such as volcanic eruptions, earthquakes, floods, fires, landslides, floods, and strong winds. This type of pollution is directly related to natural processes and does not involve human intervention.

All pollution associated with human economic activity is sometimes called anthropogenic pollution. Anthropogenic pollution consists of such groups as natural components: water, air and soil pollution, as well as geosystem pollution. According to the duration of anthropogenic pollution: temporary and permanent; divided into global, regional and local groups according to the scale of distribution.

As a result of human work, various types of waste are released into the environment. In particular, according to the accounting books of researchers, in the late 1970s, as a result of human economic activity, 23-40 bln. If waste was created, this indicator will reach 105 billion by this time. It was reported that it reached t. Part of the waste accumulates in the air, the other in the water, soil, flora and fauna. The results of the research show that the amount of waste released by the population on the earth is increasing more and more and causing real geocological problems. Among these geo-ecological problems, we can point out the following as examples of the major environmental problems that seriously threaten humanity today: "Greenhouse effect", "Ozone hole", and "Desertification" processes.

The lower layer of the atmosphere, the troposphere, has an average thickness of 10-12 km and contains 80% of the air mass. The average temperature of the earth's atmosphere is determined by the amount of solar radiation, the albedo of the earth, that is, the amount of radiation returned from the earth's surface. At the same time, the "greenhouse" effect is determined by the amount or quantity of various substances present in the troposphere. According to the data, the average temperature of the air in the lower part of the atmosphere is 15°C. Without the greenhouse effect, the temperature could be -30°C. According to American expert R. Pomeran, the average temperature on the earth is increasing by 0.2-0.5°C every 10-15 years. If the amount of Freon gases released into the atmosphere remains unchanged, it may cause serious geo-ecological problems on earth.

Another global geocological problem is the expansion of desert areas. The main reason for the sharp expansion of the desert area in the dry climate region since the 1960s is the continuous increase in the number of people in developing countries, as a result of which the unreasonable use of agricultural land. According to YNEP data, 95% of arid and low-rainfall climate regions are on the verge of desertification.

Types of environmental pollution. As we mentioned above, pollution of the natural environment mainly occurs as a result of human economic activity. All anthropogenic pollution is divided into physical, chemical, physicochemical, biological and mechanical types.

Physical pollution is related to changes in the natural parameters of the environment, and the following types are distinguished: heat, light, noise, electromagnetic, radiation, etc. Thermal pollution causes the air temperature to rise. This is due to the release of hot water or smoky gas flow into the

environment. As a result of pouring hot water from industrial enterprises into water basins, it leads to a change in the type of organism and the formation of a group of algae. Industrial enterprises, transport, construction, drilling, quarry sites generate noise at different levels. This has a strong effect on human health, especially on the nerves.

Chemical pollution is related to changes in the chemical properties of the natural environment, which is characterized by the introduction of various chemical substances into the area and the excess of the average Clark. For example, the accumulation of heavy metals, pesticides, detergents, organic substances affects the pollution of the environment. Heavy metal pollution is caused by the accumulation of lead, mercury, cadmium, etc. in metal parts, corrosion, internal combustion engine emissions, oil burning, accidents.

Biological pollution is explained by the increase in the area of biomaterials that are harmful to the human body. The introduction of microorganisms into the used geosystem is called bacteriological contamination. Biological pollution of the environment consists of biogenic and microbiological groups.

To sum up, as a result of the increase in population, huge geocological problems are arising in the regions. A large amount of heavy metals released into the environment leads to atmospheric air pollution.

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Azamatova G.B.
teacher
“Social Sciences” department
Jizzakh Polytechnic Institute

CHARACTERISTICS OF DEVELOPMENT OF POPULATION MIGRATION IN INDEPENDENT UZBEKISTAN

Abstract. The article describes population migration, stages of development, current dynamics of migration processes in Uzbekistan. In addition, internal migration processes in our republic are analyzed and recommendations are made regarding its legal improvement.

Key words: migration, migration flow, migrant, population migration, internal migration, external migration, illegal migration, remittances.

The issue of migration is becoming increasingly important in today's globalization process. During the entire development of mankind, migration processes have had an impact on the formation of the demographic landscape of the world. A certain part of the world's population changes the place of work and residence as a result of various influences. This factor is called migration, and it is simultaneously social, economic, political, religious and ecological. Migration (lat. Migratio- I move, I change my place) means the movement of the population from one place to another [1]. According to the analysis, the migration process has a tendency to increase and decrease at certain times, and has a positive, negative, if necessary political effect on the social life of a certain region, country, region.

In the 21st century, the greatest wealth of the society is recognized as “man”, and the goal of its development is to ensure that citizens can freely choose their place of residence and lifestyle. The socio-economic changes that have taken place in the life of society in recent years show how important and urgent it is to study many practical and theoretical problems, including the development of population migration on a scientific basis. The main reason for this is that the mass migration of the population has become the most characteristic situation of the life of the world community in the second half of the 20th century. In today's globalized era, population migration processes are of great importance.

Population migration is one of the important problems of the population, and it is considered as a complex social process. Population migration is related to population settlement, economic exploitation of land, development of productive forces, emergence and mixing of races, languages and peoples. Changes in the location of production directly lead to the need for territorial redistribution of labor resources, which is achieved by migration. According to the direction, external population migration and internal population migration are distinguished. External population migration is leaving the country, and internal

population migration is a change of place of residence within the country, between regions and districts [2]. People who participate in migration are called migrants. In the World Migration Pact, it is emphasized that migrants should be accepted as human beings, not as a means of economic development, and attention should be paid to the protection of their rights and ensuring their safety. However, governments of developing countries are often interested in the acceleration of migration processes. Because the acute socio-economic and demographic problems are somewhat mitigated by means of migration, and remittances sent by migrants to their families become an additional factor in the development of the national economy. Today, due to migration, people come into unexpected contact with representatives of different nationalities, people who speak different languages, people with different customs, religions and ways of life. At the beginning of the 21st century, 175 million people on our planet moved from their places of birth to other countries. This is 3% of the total world population [3].

Based on the information given above, it is worth noting that the constantly growing population migration is a process with national, territorial, regional and global characteristics. How is the migration process going in Uzbekistan and what changes will occur after it? It is appropriate to study the participation of the population in migration processes, to analyze the migration occurring in our republic.

The determination of market relations as the way of future development in Uzbekistan with the honor of independence has caused unique changes in the processes of population migration. Previously, the causes of population migration were in the form of economic, social, political and environmental reasons, but after 1991, the emergence of these reasons changed over the years. It is known that on the eve of the disintegration of the former union, the process of migration of many nationalities living in Uzbekistan to their historical homelands began to intensify. During the first decade of independence, ethnic migration processes developed in Uzbekistan, which was limited to internal migration processes over the years. Emigration of ethnic groups who were eager to return to their homeland (Russians 45-48%, Tatars 16-17%, Ukrainians 5-6%, Jews 5-9%, Germans 2-3%) was observed [4]. High migration rate occurred throughout the republic during 1991-1994. Also, during this period, there were many immigrants and emigrants to Uzbekistan. During 1991-1994, around 600,000 people changed their place of residence in our country every year.

The analysis of the population migration situation in Uzbekistan shows that the changes in recent years, since 2008, the number of emigrants (both the number of immigrants and the number of emigrants) has been decreasing year by year. In 2013, compared to 2012, the number of emigrants decreased by 21,000 people, and the number of emigrants decreased by 14,700 people. There were also changes in the balance of migration, from 101,600 people in 2005 to 33,800 people in 2013 [5]. Migration or emigration of the population to a certain area affects the dynamics of population growth and the level of employment of the

population. At the same time, the socio-economic conditions of the regions are considered to be one of the factors determining the indicators of population migration.

As we observe that the number of people participating in world migration is increasing sharply, in 2018 our compatriots mostly traveled to neighboring Kazakhstan (in 53.4 percent of cases). Kyrgyzstan (22.2 percent), Tajikistan (11.6 percent) and Russia (8.2 percent). Of the 10.8 million horses, 1.3 percent went to Turkey, 0.6 percent to South Korea, and 0.3 percent to the United Arab Emirates.

Currently, the main factors behind the increase in population migration to many foreign countries - Kazakhstan, Kyrgyzstan, Tajikistan, Russia, South Korea, and the United Arab Emirates - are the high demand for labor resources in these countries, the availability of relatively high wages, especially the influence of historical factors and the development of stable interstate relations. In addition, the existence of skills of spiritual closeness among their peoples, the absence of language problems is also the reason will be In addition, the desire of the citizens of our country to work abroad is of great importance, and the illegal migration of the republic's population to Russia and Kazakhstan is a proof of this. In addition, migration is sometimes observed in the case of shuttle commuters, such as tourism, going to a resort, and pilgrimage.

Based on the above, it can be concluded that in the growth of the population migration of Uzbekistan, its demographic indicators - the rapid growth of the population, the high percentage of not only men, but also women in the total number of labor resources, on the one hand, and their hard work and high level of education, on the other hand, stand out. Today, with the increasing economic globalization, the forms and directions of the movement of human resources, in other words, the flow of migration, are becoming more and more intense. Of course, someone goes abroad to acquire modern knowledge and treatment. Someone else is trying to get a good job, even if he travels abroad to improve his living conditions. As a full-fledged member of the international labor market, Uzbekistan is not left out of the migration process.

Population migration has a great contribution to the economy of our country, as well as to the development of the countries where they currently work. In turn, priority is given to protecting the rights and legal interests of our compatriots working in foreign countries. Currently, the legal framework in this field is being improved with the active participation of the Agency for Foreign Labor Migration. Taking into account the rights and interests of the citizens of the Republic of Uzbekistan, specific measures have been determined by our state to ensure an effective system of foreign labor migration in the following years. On November 27, 2018, the Republic of Uzbekistan became a member of the International Organization for Migration. The creation of such opportunities aimed at regulating the issues of population migration, further improving the legal framework of the sector, eliminating existing problems, ensuring the rights and social guarantees of our citizens who are working abroad, and creating an

opportunity to improve the professional skills of our compatriots before going abroad, in a word, It creates grounds for ensuring the rights and legal interests of the citizens of the Republic of Uzbekistan, establishing an effective legal system of foreign labor migration.

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*Azimov Q.
Rahimov B.Sh.
Jizzax politexnika instituti*

RISK SHAROITIDA YECHIM QABUL QILISH

Annotatsiya. Deyarli barcha moliyaviy operatsiyalar noaniqlik sharoitida amalga oshiriladi. Shu sababli ularning natijalarini oldindan aniq aytib bo'lmaydi. Demak jarayon riskli bo'lsa, u holda ularni baholash masalasini hal qilish kerak bo'ladi. Bu yerda anashunday mazmundagi masala qaraladi.

Kalit so'zlar: Qaror qabul qilish, risk, daromad, ehtimollik, moliyaviy operatsiya, natija, gipoteza.

*Azimov Q.
Rahimov B.Sh.
Jizzakh Polytechnic Institute*

DECISION-MAKING UNDER RISK CONDITIONS

Abstract. Almost all financial transactions are carried out under conditions of uncertainty. Therefore, their results cannot be predicted. So, if the process is risky, then it is necessary to solve the issue of their assessment. Here, a similar issue is considered.

Keywords: Decision-making, risk, income, probability, financial operation, result, hypothesis.

Qaror qabul qilishning boshqa har qanday sohasi singari, moliyaviy qarorlar ham ikki yoki undan ortiq harakat yo'nalishini tanlashni o'z ichiga oladi. Agar faqat bitta mumkin bo'lgan yo'nalish bo'lsa, qaror qabul qilish kerak emas. Ko'pincha mavjud variantlardan biri qaror qabul qilinishidan oldin mavjud bo'lgan vaziyatni saqlab qolishdir.

Risk - bu yo'qotishning mumkin bo'lgan xavfi. Iqtisodiy kategoriya sifatida tavakkalchilik sodir bo'lishi yoki bo'lmasligi mumkin bo'lgan hodisadir. Agar bunday hodisa ro'y bersa, uchta iqtisodiy natija mumkin:

- salbiy (yo'qotish, zarar, chiqim); - nol; - ijobiy (daromad, foyda, kirim). Xavf sharoitida qarorni to'g'ri tanlash uchun, agar voqealarning yakuniy natijalari ma'lum bo'lsa, eng yaxshi natijani maksimal kutishni oqlaydigan harakat varianti aniqlanadi. Buning uchun standart matematik kutish formulasidan foydalaning (faqat diskret holat quyida ko'rib chiqiladi).

Masalan, 3 xil Q_1, Q_2, Q_3 moliyaviy operatsiyalar berilgan bo'lib, ular 2 xil A va B natijalarga olib kelsin.

Operatsiyalar	Natijalar	A	B
Q_1		-10	20
Q_2		-12	45
Q_3		15	20

Jadvalda keltirilgan operatsiyalar, 2 xil natijaga olib kelganligi sababli, riskli bo‘ladi. Masalan, Q_1 va Q_2 operatsiyalar natijasida olinadigan o‘rtacha daromad manfiy ishorali bo‘lishi, ya’ni ular ma’lum darajada yo‘qotishga olib kelishi mumkin, lekin Q_3 operatsiya riskli ekanligini ko‘ramiz. Chunki ushbu operatsiya natijasi A va B holatlarning ikkalasida ham musbat. Bunda risk 20 birlik daromad olish mumkin bo‘lgan holda 15 birlik daromad olgani uchun 5 birlik yo‘qotish (risk)ga yo‘l qo‘yadi.

Kutilayotgan natija(amal)=

$$\sum_{\text{gipotezalar}} \text{natija}(\text{amal}, \text{gipoteza}) \cdot \text{ehtimollik}(\text{gipoteza})$$

Biroq, natijalar har doim ham umidlarni oqlamasligi va ijobiy bo‘lishi mumkin: bu holda ular salbiy natijaning minimaliga erishadigan variantni tanlashadi.

Masala. “Baraka” yakka tartibdagi tadbirkorning egasi har kunning boshida sotish uchun yangi sut mahsulotini bir birlik uchun 40 so‘mdan sotib oladi. Sut mahsulotining sotish narxi bir birlik uchun 60 so‘mni tashkil qiladi. Kuzatishlardan ma’lumki, bu mahsulotga kuniga talab 1,2,3 yoki 4 birlikka teng bo‘lishi mumkin. Ma’lumki, amalda 1-talab 10 marta, 2-talab 20 marta, 3-talab 30 marta, 4-talab 15 marta kuzatilgan. Agar sut mahsuloti kun davomida sotilmasa, kunning oxirida u har doim birlik uchun 20 so‘mdan sotib olinadi. Do‘kon egasi uni sotishdan maksimal foyda olish uchun har kuni ushbu mahsulotdan qancha dona sotib olishi kerak?

Yechish. Ushbu muammoni yechish jadvalini tuzamiz (1-jadval). U to‘rt qatorga ega bo‘ladi, chunki do‘kon egasi harakatning to‘rtta variantidan (1,2,3 yoki 4 birlik mahsulot sotib olish) va to‘rtta ustunni tanlashi mumkin, chunki qarorning oqibatlari to‘rttadan qaysi biri tomonidan aniqlanadi. mumkin bo‘lgan gipotezalar voqealarga aylanadi (talab 1,2,3 yoki 4 birlik mahsulot bo‘ladi). Jadvalning kataklarida biz har xil gipotezalarni amalga oshirish sharoitida (do‘kon egasining foydasi) har bir yechim variantining moliyaviy oqibatlarini ko‘rsatamiz. Ushbu oqibatlarni (natijalarni) formuladan foydalanib hisoblaymiz:

(sotilgan mahsulotlar soni·sotish narxi)—

—(sotib olingan mahsulotlar soni·sotib olish narxi).

Masalan, 3 dona sotib olinganda va 2 dona talab bo‘lsa, foyda $2 \cdot 60 + 1 \cdot 20 - 3 \cdot 40 = 20$ bo‘ladi (ikkita mahsulot 60 so‘m/dona narxda sotiladi, bittasi. birlik 20 so‘m / dona narxda sotiladi., jami 140 so‘mni tashkil etadi va sotib olishga 120 so‘m sarflangan)

jadval.1.

Sotib olish hajmi, mahsulot birligi/kun	Kun davomida talab, mahsulot birligi/kun			
	1	2	3	4
1	20	20	20	20
2	0	40	40	40
3	-20	20	60	60
4	-40	0	40	80

Muammo matnida ma'lum bir gipoteza (talab) necha marta kuzatilganligi haqidagi ma'lumotlar mavjud va shundan ularning har biri amalga oshirilishining nisbiy chastotasini hisoblash va shu bilan har bir gipotezaning ehtimolligini empirik baholash mumkin, $p(j)$, $j = \overline{1,4}$:

$$p(1) = \frac{10}{10 + 20 + 30 + 15} = 0,13;$$

$$p(2) = \frac{20}{10 + 20 + 30 + 15} = 0,27;$$

$$p(3) = \frac{30}{10 + 20 + 30 + 15} = 0,4;$$

$$p(4) = \frac{15}{10 + 20 + 30 + 15} = 0,2.$$

Endi, matematik kutish formulasidan foydalanib, biz har bir mumkin bo'lgan yechim uchun kutilayotgan foydani hisoblaymiz (2-jadvalda hisob-kitoblarni umumlashtiramiz).

Jadval. 2

	Natija, x	Ehtimollik, p	$x \cdot p$
Mumkin bo'lgan yechim 1	20	0,13	2,6
	20	0,27	5,4
	20	0,4	8
	20	0,2	4
	Jami:	1,00	20
Mumkin bo'lgan yechim 2	0	0,13	0
	40	0,27	10,8
	40	0,4	16
	40	0,2	8
	Jami:	1,00	34,8
Mumkin bo'lgan yechim 3	-20	0,13	-2,6
	20	0,27	5,4
	60	0,4	24
	60	0,2	12
	Jami:	1,00	38,8
	-40	0,13	-5,2
	0	0,27	0
	40	0,4	16

Mumkin bo'lgan yechim 4	80	0,2	16
	Jami:	1,00	26,8

Biz matematik taxminlar orasidan maksimalni tanlaymiz: $\max(20; 34,8; 38,8; 26,8) = 38,8$ Uchinchi yechim varianti natijasida erishiladi. Shuning uchun optimal yechim sut mahsulotining uchta birligini sotib olishdir.

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COMPARISON OF ONLINE AND OFFLINE QUESTIONNAIRES FOR CONDUCTING PSYCHOLOGICAL RESEARCH IN THE MODERN EDUCATIONAL ENVIRONMENT

Annotation. The uploading, exchanging, and gathering of data for research and data pertaining to psychology can be done effectively on the Internet. A new area of study in the social and behavioral sciences may be opened up by the relative affordability and convenience of building and maintaining Web-based apps, along with the ease of use offered by form-based surveys' graphical user interfaces. This study compared Web-based assessment methods with conventional paper-based methods of various measures of Internet attitudes and behaviors in an Uzbek population in order to investigate the potential use of Internet tools in psychological research. To find variations between the two samples as well as between the psychometric properties of the questionnaires, the collected data were evaluated. Even while we discovered substantial changes in the attitudes and behaviors on the Internet between the two populations, there were no discernible variations in the psychometric characteristics of the various questionnaires. Given the lack of control over the features of the online sample, this result, which is similar to those previously observed in Web-based assessments of personality traits, is even more intriguing. These results show that Internet-based questionnaires may be a suitable substitute for more conventional paper-based measurements if sampling control and validity assessment are included.

Key words: Internet, online, offline, data, psychology.

INTRODUCTION

Many researchers suggest that the Internet can be a useful medium for the gathering and exchange of information in research and data pertaining to psychology. Because of the benefits it can provide to experimental psychology, the Web approach is generating a lot of interest in the scientific community. In a recent study, Musch and Reips spoke with psychologists who had previously participated in Internet studies in an effort to determine the potential benefits of this strategy. The following are the key benefits cited:

- the vast population access, which allows for easier generalization of the results and a higher level of external validity;
- less expensive experimental expenditures and the potential to eliminate all the annoyances associated with using laboratories, such as scheduling, space restrictions, sharing equipment, and so forth;

- the potential to make the tools available 24/7, without any time restrictions;

- involvement that is entirely optional, which typically increases responders' motivation.

The Web may prove superior to paper, as Miller and colleagues recently noted, because it "potentially provides increased accessibility; capability for dynamic and interactive forms, which eliminates the viewing of irrelevant questions and customized feedback tailored to the content of the responses." The ability to access a sizable global pool of participants at any time makes the Internet particularly appealing for psychological research. The Web provides both a vast demographic range for conducting experiments and the potential to reach a specific sample with a particular set of characteristics. Since 1997, an increasing number of authors have made an effort to pinpoint and clarify the methodological steps necessary to create a reliable experimental design.

Using a within-subjects approach, John Krantz and colleagues' online study on the factors influencing female beauty got underway. The first psychology Web study to be published in a scholarly journal was this one. However, there are distinct drawbacks to conducting research online:

- Web users have a variety of hardware, software, and Internet connections, it is challenging to regulate the learning environment. There is no way to guarantee that each person taking part in the experiment will be exposed to the identical sounds, colors, or time cues;

- Study participants are frequently not watched, the researcher cannot be certain of the data gathered. Members of online groups frequently change their gender or create phony "nickname" identities and publicly accept them in others;

- Online experiment participants are self-selected and in no way random samples of the overall population. They tend to be more concentrated towards the upper end of the social and educational spectrum, in particular;

- For a psychologist, developing a Web-based assessment tool is not a simple undertaking. Typically, it involves managing the database where the answers are recorded as well as creating various Web sites.

As Buchanan emphasized, "There are undoubtedly a number of practical concerns that should be taken into account by anyone wishing to use online examinations, as well as significant theoretical issues that should be answered. Online clinical examinations are both desirable and risky, to sum up. There is undoubtedly a lot of potential, but much work remains before this potential can be realized. Whether these instruments will be beneficial in behavioral telehealth scenarios is something that only time and in-depth research will be able to answer. The biggest issue facing Internet researchers right now is how to define fundamental methodological concepts so as to have more control over the internal and statistical validity of experiments.

This study compared Web-based assessment techniques with traditional paper-based methods of different measures of Internet attitude in a sample of

Uzbek students in order to investigate the potential use of Internet tools in psychological research. On one side, we gave a sample of college students a paper-and-pencil questionnaire; on the other, we created an HTML page and an online database and posted the same questionnaire on the Web. We specifically sought to determine:

- any variation in the responses gathered;
- any variations in the evaluation tools' psychometric characteristics.

METHOD AND MATERIALS

All who participated in the digital version

Online questionnaires totaling 233 were finished. 100 participants were male (51.2%), and 99 were female (48.8%). The sample's age ranged from 16 to 41 years, with a mean age of 23.8 (SD = 4.095). All of the participants were found through postings on search engines, newsgroups, and emails.

All who took part in the offline variant

202 undergraduate students who attended a major Uzbek university were recruited for the study using fliers and presentations made during various classes. The sample's age ranged from 21 to 28 years, with an average age of 22.96 (SD = 1.57). 128 men (63.4%) and 74 women (36.6%) made up the sample.

Survey questions

The survey's questionnaire is divided into three sections.

1. The first section concentrated on traditional demographic factors (age, sex, education level) as well as indicators of computer and Internet use.
2. The Computer Use Survey by Pratarelli et al. made up part two. This tool consists of 74 true/false questions covering a wide spectrum of online social and personal activities as well as testing potential problematic habits.
3. The Internet Attitudes Survey by Weiser, which consists of 20 items with Likert scales about personal and professional Internet use, makes up the final section.

Processes

Entire classes received the paper-based survey at once during the day. The experimenter gave each participant a packet of paper-based self-report tests. All of the participants were instructed to complete the questionnaire completely, honestly as they could, and without discussing their answers with anybody nearby. Each time they finished; they dropped their finished packet in a safe drop box that was under the experimenter's control. By visiting a certain Web site, participants finished the online survey. The Ms FrontPage 2000 editor was used to create the HTML for this website, which is hosted on a Microsoft NT server with FrontPage extensions. Participants were encouraged to submit their data after completing the survey.

Participants were encouraged to submit their data after completing the survey. The information was automatically saved in a file with a tab-delimited format after submission and was taken away from participants. Participants were reminded that both versions were entirely anonymous and that their answers were

to be treated as confidential. For the statistical analyses, SPSS 10.1 for Windows was used.

RESULTS

Online usage

The two samples were initially examined with regard to the characteristics related to Internet use. The choices for both samples were generally similar: the most popular Internet tools are e-mail and Web browsing, followed distantly by chats and Usenet, MUDs (Multi User Dungeons), and FTP (File Transfer Protocol). These decisions highlighted a distinct preference for tools catered to information research and interpersonal communication (Tables 1-3). The data also revealed that our samples do not frequently utilize systems like MUDs or FTP, which have a sizable user base in other nations, like the United States and northern Europe (see Tables 2 and 3). We used chi-square analysis to compare the two samples. Both the use of email (Chi-square = 18.1, d.f. = 4, p 0.001) and web browsing (Chi-square = 13.7, d.f. = 4, p 0.008) showed significant differences. We have a stronger use of the two tools and nearly no subjects have ever used them in the sample we recruited online, in particular. Instead, 14 to 16% of the offline sample have never used an Internet tool before.

TABLE 1. TIME SPENT EACH WEEK ON E-MAIL, NEWSGROUPS, WEB SURFING

<i>Time</i>	<i>Subjects (%)</i>					
	<i>E-mail</i>		<i>Newsgroups</i>		<i>Web surfing</i>	
	<i>On-line</i>	<i>Off-line</i>	<i>On-line</i>	<i>Off-line</i>	<i>On-line</i>	<i>Off-line</i>
Never use	1	13.9	82.8	86.6	2.5	16.3
1-2 hrs	42.9	33.7	13.8	9.4	37.4	26.7
3-5 hrs	25.1	31.2	3.4	2	28.6	35.6
6-9 hrs	21.7	19.8		2	24.6	18.3
More than 10 hrs	9.4	1.5			6.9	3

TABLE 2. TIME SPENT EACH WEEK ON MUDS

Time	Subjects (%)	
	Online	Offline
Never use	90.1	72.3
1–2 hrs	2.5	9.9
3–5 hrs	4.9	8.4
6–10 hrs	2.5	5.9
11–15 hrs		1.5

TABLE 3. TIME SPENT EACH WEEK ON CHAT ROOMS AND FTP

Time	Subjects (%)			
	Chat Rooms		FTP	
	On-line	Off-line	On-line	Off-line
Never use	42.4	36.1	55.5	57.9
1–2 hrs	28.6	33.2	36.5	36.6
2–5 hrs	22.7	23.8	6.4	4.5
5–15 hrs	5.9	6.4	0.5	0.5
More than 15 hrs	0.5	0.5	1.5	0.5

Examination of the psychometric traits

If the factor structures of the Web-based and paper-based surveys were the same, various exploratory factor analyses were carried out. The results of the Computer Use Survey and the Internet Attitudes Survey were applied independently to both samples as the main components of factor analyses using Varimax rotation (factor loadings cut-off: 0.25) Six factors that were similar in both samples were found through the four studies.

The Computer Use Survey's P1, P2, P3, and P4 categories, which account for 31.69% of the overall variance in the online sample and 31.92% in the offline sample, are as follows:

- SUBSCALE P1—Internet Abuse (Items 3, 5, 6, 7, 9, 12, 20, 24, 25, 38, 41, 42, 43, 44, 55, 65, 66, 67, 68, and 70; in both samples, all of these items have a factor loading > 0.25) This subscale included questions about medical illnesses brought on by heavy Internet use, underlying related dietary changes, fewer hours of sleep due to being online at night, arriving late for appointments, and disregarding one's social and family life.

- Interpersonal conflicts SUBSCALE P2 (items included 27, 35, 40, 45, 46, 47, 48, 63; in both samples, all of these items had a factor loading > 0.25) This

subscale highlighted the existence of significant interpersonal disputes. Along with the inevitable decision to structure the entirety of social life in accordance with the Internet, a propensity for developing virtual connections frequently manifests itself.

- SUBSCALE P3—Introversion/Extroversion (Items included 8, 12, 13, 15, 21, 27, 43, 54, 58, and 72; in both samples, all of these items had a factor loading greater than 0.25) Items pertaining to the introversion/extroversion axis were collected for this subscale. It concentrated in particular on how the individual interacted with others online.

- SUBSCALE P4 — Uncomplicated Internet Use (Items 1, 2, 6, 10, 16, 18, 28, 49, 53, 61, 62, 64, 70, 71; in both samples, all of these items have a factor loading > 0.25): This subscale, which had multiple questions referring to both professional and instrumental net use, isolated an apparent absence of difficulties with Internet use.

The Internet Attitudes Survey's W1 and W2 categories, which account for 38.53% of the overall variance in the online sample and 41.93% in the offline sample, are as follows:

- SUBSCALE W1—Virtual relationship: Using the Internet as an alternative communication medium, virtual relationships are created with the goal of having fun.

- SUBSCALE W2—Professional Internet Use: It portrays the concept of a practical Internet use, emphasizing online purchasing and information searches.

Despite the fact that the six-factor structure was clearly visible in both samples, four of the six online subscales had item loadings that were different from those found in the corresponding offline structure. This implies that the structures are not identical, despite being highly similar. The level of internal reliability of the two questionnaires and the six subscales was then examined using Cronbach's Alpha. In both samples, the two tests yielded satisfactory Alpha levels, with slightly lower results for the online sample:

- Online sample an of the Computer Use Survey was 0.75 while offline sample a was 0.83

- The Internet Attitudes Survey was 0.74 while offline sample a was 0.84.

With levels of Alpha always higher than 0.5 in both samples, we discovered the same trend in the subscale analyses:

- P1, on-line sample a = 0.88; off-line sample a = 0.90;
- P2, on-line sample a = 0.6; off-line sample a = 0.75;
- P3, on-line sample a = 0.56; off-line sample a = 0.59;
- P4, on-line sample a = 0.51; off-line sample a = 0.59;
- W1, on-line sample a = 0.85; off-line sample a = 0.87;
- W2, on-line sample a = 0.88; off-line sample a = 0.90.

The frequency of pathological actions

Finally, we made an effort to confirm the prevalence of two samples of harmful Internet-related behaviors using the questionnaire data. Unfortunately, the two questionnaires' creators failed to provide a cut-off value in their publications. Given the lack of agreement over the "Internet addiction" phenomenon and the variations in Web usage we discovered amongst the samples, we conducted a traditional psychometric analysis of the data using z-scores. Z-scores measure the position of each point in a normal distribution in terms of its distance above and below the mean in units of standard deviations. They are derived by subtracting the mean from the subject's score and dividing that result by the standard deviation.

We specifically determined cut-off levels for each sample using one ($z = 1$) and two ($z = 2$) standard deviations over the mean of the totals for the corresponding group:

- Unproblematic Internet behavior (Level 1) was defined as behavior that was less problematic than 1,
- At risk Internet behavior (Level 2) was defined as behavior that was problematic but not at risk,
- Problematic Internet behavior (Level 3) was defined as behavior that was problematic but not at risk.

TABLE 4. INCIDENCE OF RISK LEVEL IN EACH SUBSCALE

Subscale	Risk level	Online			Offline		
		Men	Women	n	Men	Women	n
P1	3	5	6	11 (5.4%)	10	5	15 (7.4%)
	2	5	5	10	16	4	20
P2	1	89	93	182	102	65	167
	3	1	3	4 (2%)	7	0	9 (4.25%)
P3	2	14	15	29	121	2	123
	1	84	86	170	0	72	72
P4	3	5	1	6 (3%)	4	2	6 (3%)
	2	7	9	16	19	11	30
W1	1	87	94	183	105	61	166
	3	9	3	12 (5.9%)	9	1	10 (5%)
W2	2	16	7	23	13	3	16
	1	74	94	168	106	70	176
W1	3	8	0	8 (3.9%)	0	0	0
	2	21	9	30 (14.8%)	23	11	34 (16.8%)
W2	1	70	95	165	105	63	168
	3	3	1	4 (2%)	0	0	0
W1	2	17	4	21 (10.3%)	22	15	37 (18.3%)
	1	79	99	178	106	59	165

Table 4 illustrates the distribution of the three levels within the subscales for the two samples.

First, we checked to see if there were any gender disparities within the levels of the subscales in each sample. In the online sample, we didn't see any differences. The sole significant difference in the offline sample was identified in

subscale P2 (Chi-square: 18.42, d.f. = 2, p 0.0001), which shows that there are more interpersonal conflicts in the male group.

Then, we looked for any discrepancies between the two samples. The P2 (Chi-square = 28.22, d.f. = 2, p 0.00001), W1 (Chi-square = 8.27, d.f. = 2, p 0.016), and W2 (Chi-square = 8.9, d.f. = 2, p 0.012) subscales of the data revealed significant differences between the two samples.

Even while the offline group exhibits a higher percentage of at-risk behaviors, we only discovered a small percentage (2-4%) of problematic behaviors in the online sample for the W1 and W2 subscales—more virtual relationships linked to a professional Internet use. In the offline sample, we discovered more risky and problematic behaviors associated with interpersonal disputes in relation to subscale P2. Finally, we looked for interactions between gender and samples using log-linear analysis. No notable findings were made.

DISCUSSION

In this work, we compared web-based evaluation approaches with conventional paper-based procedures to examine the potential use of Internet technologies in psychological research. We specifically contrasted the outcomes of a paper-and-pencil survey administered to a sample of college students with the outcomes we discovered after publishing the same survey online. We conducted a two-level analysis. By contrasting the online assessment tools with their paper-based counterpart, we first confirmed the validity of the online assessment tools. In fact, multiple researchers found a variety of possible issues with the validity of online assessments, including:

- language and cultural barriers,
- a lack of control over the testing environment,
- the probability of unforeseen or transient factors influencing results,
- the possibility of interactions between the constructs being tested and the features of the testing medium.

Our results demonstrated that completing two attitudes and behavior questionnaires online had no effect on the participants' psychometric traits. Internal reliability and the factorial structure did not show any appreciable differences. We specifically discovered the following six subscales in both samples:

- SUBSCALE P1 - Internet abuse;
- SUBSCALE P2 - Interpersonal disputes;
- SUBSCALE P3 - Introversion and extroversion;
- SUBSCALE P4 - Problem-free usage of the Internet.
- SUBSCALE W1 - Online dating;
- SUBSCALE W2 - Business Internet use.

However, some online subscales loaded on items other than those present in the equivalent offline ones if the same structure was clearly discernible in both datasets. This implies that the structures are not identical, despite being highly

similar. These results demonstrate that Web-based data collecting is a reasonable substitute for more conventional techniques and does not statistically improve or decrease response consistency or jeopardize the validity of the test. Given the absence of control over the features of the online sample, this result, which is similar to those observed in Web-based assessments of personality traits and alcohol use, is even more intriguing. The statistics do, however, also show that online and offline versions of the same test can be equal, though they are not always the same. Because of this, it is probably preferable to reevaluate the reliability of a traditional assessment tool before using it online.

Additionally, we contrasted the outcomes of the two samples in an effort to find any appreciable variations. In earlier investigations, other researchers discovered that risk disclosure rates were higher when evaluation techniques that used audio, computers, and videos. The findings of our study, however, do not support this trend. Even though the online sample revealed more risky and problematic interpersonal conflict-related behaviors, it also revealed more problematic virtual connections connected to professional Internet use.

A further explanation for the outcomes of the online sample may be the interaction between the variables being evaluated and the medium utilized to measure them, given that the two questionnaires' topics are Internet attitudes and behavior. Even though the online sample was not controlled, we generally did not detect significant variations between the response sets of online participants and those of people who completed a paper survey.

CONCLUSION

In conclusion, our research indicates that Internet-based testing may be a viable substitute for more conventional paper-based tests. However, psychologists who are interested in conducting online tests should take into account a variety of practical concerns, mostly with sampling control and validity testing.

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Azizov S.V.
Ilmiy rahbar: Oripov A.
Namangan davlat pedagogika instituti dotsenti, p.f.n.
Namangan davlat universiteti 1-bosqich magistri

YOSH SPINTERLARNI SARALAB OLIHNING O'ZIGA HOS JIHATLARI

Annotatsiya. Maqolada yosh sprinterlarni saralab olishning ba'zi bir jihatlari to'g'risida fikr yuritiladi. Xozirgi kunning raqobatbardosh sprinterlarini tayyorlash uchun avvalo ularni saralab olish mehanizmini ilmiy asosda yo'lga qo'yish maqsadga muvofiq bo'ladi. Yengil atletika murabbiylari faoliyati asosini sportchilarni saralash va tarbiyalash tashkil etadi. Soha bo'yicha uning bilimi va malakasining yuqoriligi bu vazifalarni amalga oshirish omili bo'lib xizmat qiladi.

Kalit so'zlar: murabbiy, saralash, raqobat, tarbiya, mahorat, sprinter, malaka, ilmiy.

Azizov S.V.
1st stage master's degree
Scientific supervisor: Oripov A., Ph.D.
associate professor
Namangan State Pedagogical Institute
Namangan State University

FEAUTURES OF SELECTION OF YOUNG SPINTERERS

Annotation. The article discusses some aspects of the selection of young sprinters. To prepare modern competitive sprinters, it would be advisable to first create a mechanism for their selection on a scientific basis. The activities of athletics coaches are based on the selection and preparation of athletes. The high level of his knowledge and skills in this area serves as a factor in the implementation of these tasks.

Key words: coach, selection, competition, training, skill, sprinter, skill, scientific.

Mavzuning dolzarbligi. Bugungi kunda sportning barcha turlariga innovatsion texnologiyalarni keng ko'lamda kirib kelishi va qo'llanilishi, murabbiylar faoliyatida keskin burilishlar paydo bo'lishini taqazo qilmoqda. Ayniqsa yengil atletikada yosh sprinterlarni saralab olish va tarbiyalash dunyo olimlari xamda mutaxassislarining asosiy tadqiqot obyektlariga aylanmoqda. Chunki jahon sportining shiddat bilan rivojlanishi, raqobatning keskin kuchayishi, xar-bir sport turini zamonaviy innovatsion texnologiyalarsiz tasavvur qilib bo'lmasligini taqazo qilmoqda. Ayniqsa sprinterlarni saralash, mashg'ulotlarni

metodik jihatdan to'g'ri tashkil qilish, sog'lom ovqatlanish, xar-bir sprinterga tayyorgarlikni barcha turlarida individual yondashish maqsadga muvofiq bo'ladi.

Tadqiqot maqsadi;

-yosh sprinterlarni saralab olish bo'yicha mamlakatimiz va chet el olimlarining ilmiy-uslubiy ishlarini o'rganish va taxlil qilish;

- soha mutaxassislarini sprinterlarni saralab olishdagi amaliy tajribalarini o'rganish;

-yosh mutaxassis murabbiylar uchun sprinterlarni saralab olish bo'yicha uslubiy ko'rsatma tayyorlash.

Tadqiqot materiallari - sprinterlarni saralab olish va tarbiyalash sohasida juda ko'p olimlar ilmiy tadqiqot ishlarini olib borishgan;

E.S. Ozolinning fikricha: Qisqa masofaga yuguruvchilarni, ya'ni sprinterlarni tanlab olishning boshlang'ich davrlarida, ularning tana va oyoq qismlariga e'tibor qaratish kerak. Ko'p holatlarda yaxshi natija ko'rsatayotgan sprinterning son va pastki oyoq qismlari uzun bo'ladi. (1)

Birinchi bo'lib sportchilarning jismoniy imkoniyatlariga, ularning tana tuzilishiga, jismoniy sifatlar rivojlanishi va koordinatsiyasiga e'tibor qaratish zarur. Men, endigina yugurishni boshlagan sprinterning, ritmni xis qilayotganligiga nazar solaman. Ba'zida masofaning o'rtalarida sprinter, yugurish ritmini, o'zining past darajadagi koordinatsiyasi tufayli yo'qotadi va to'g'ri yugurish modeliga rioya qilolmaydi.

Chempionlikka bo'lgan barcha da'vogarlarni sinchkovlik bilan kuzatish kerak. Ba'zida, sinovlar paytida biz mag'lub bo'lgan sportchiga e'tibor qaratmaymiz, lekin hech kim ta'kidlamaydiki, o'sha sportchi masofaning uchdan birida birinchi bo'lganini. Bundan tashqari, shunday bo'lishi ham mumkinki, hech qanday jismoniy mashqlar bilan shug'ullanmagan, endigina sportni boshlagan sportchi, o'zining bir yil mobaynida shug'ullanib kelayotgan tengdoshlariga mag'lub bo'lishi, buni ham hisobga olish kerak. Balki, keyinchalik aynan shu sportchi chempion bo'lar.

Ikkinchi faktor shuki, yosh atletning qanday qilib yerdan depsinishi. Agarda u oyoqlarini tovon qismida qo'ymasa va depsinishni tez yakunlasa, ushbu atletning juda ham yaxshi sprinter bo'lishiga imkonlari katta. Keyinchalik e'tibor qaratishimiz lozim bo'lgan jihat, atlet o'zining harakatlarida qay darajada agressiyaga ega – bu jihat ham kelajakdagi muvaffaqiyatlar ko'rsatkichidir. (1)

B.I. Tabachnik bu masalada shunday fikr bildiradi: eng yaxshi sprinterlarning antropometrik xususiyatlarini taqqoslash, olimlarni - bo'y, vazn, oyoq-qo'l uzunligi va boshqalar kabi ko'rsatkichlar yuqori sport natijalariga erishishga sezilarli ta'sir ko'rsatmasligiga ishoniradi.

Shuni ta'kidlash kerakki, aksariyat olimlar antropometrik ma'lumotlar va 100 metrga yugurishdagi natija o'rtasidagi munosabatni integral ko'rsatkich sifatida o'rgandilar. Ko'pgina olimlar – bo'yi, qollari, pastki oyoq qismlarining uzunligi va vazni 100 metrga yugurish natijasiga sezilarli ta'sir ko'rsatmaydi,

degan xulosaga kelishdi, ammo qisqa vaqt ichida tezlik, kuch sifatlarini namoyon eta olish, hal qiluvchi ahamiyatga ega ekanligiga iqrar bo'lishdi. (2)

Sprinterning muvaffaqiyat darajasi odatda belgilangan maqsadni erishilgan natija bilan solishtirish orqali aniqlanadi. Shunday ekan, murabbiyning noreal va murakkab munosabatlari sportchini ruhiy tushkunligiga, murabbiyga bo'lgan ishonchning yo'qolishiga olib kelishi mumkin. Shuning uchun murabbiy sprinterni saralshga juda ehtiyotkorlik bilan yondashishi zarur. (5-6)

Boshlang'ich saralashlarda e'tiborni sportchining psixologik tomonlariga qaratish ham kerak. Bunda uning nerv tizim barqarorligi, karakterining ayrim jihatlarini hisobga olish kerak. Eng asosiysi, bo'lajak sprinterlarning musobaqaga bo'lgan ishtiyoqini, ya'ni raqobatlashish hissini doimo yuqori darajada bo'lishi, kelgusida katta-katta natijalarga zamin yaratadi.

Saralashning boshlang'ich davrlarida, sprinterlarning nerv sistemasini zo'riqtirib qo'yimaslik uchun ularga mashg'ulot jarayonini o'yin tarzida va shu o'yin tarkibida yugurishning ko'plab turlariga aloqador elementlar bilan o'tkazish eng samarador yo'ldir. Masalan: Yugurish paytida yo'lakchalarda katta bo'lmagan to'siqlardan sakrab o'tish, nishon belgilab nayza, toshlar, yengil bo'lgan uloqtiriluvchi sport anjomlari bilan nishonga tekkizish va shunga o'xshash uslublarini qo'llash, bo'lajak sprinterlarda barcha besh sifatlarni shakllanishi va rivojlanishi yuqori darajada bo'ladi.

Hozirgi kunda ko'plab zamonaviy video-tasvirga tushiruvchi, oluvchi moslamalar ko'paygani bois, mashg'ulot jarayonining har birida video-tasvirga tushirish tavsiya etiladi. Bu orqali, murabbiylar to'g'ri olingan rakurs yordamida, bo'lajak sprinterlarning yugurish jarayonidagi hato va kamchiliklarini oson topishlari mumkin. Masalan: Sprinterning qaysi bir oyog'i yoki qaysi qo'li ikkinchisiga qaraganda kattaroq yoki kichikroq amplitudada harakatlanishi, start va yugurish holatlarida tananing noto'g'ri tomonga og'ishi, to'g'ri gradusda startdan chiqmasligi, qadamlar aynan qaysi qismi bilan yerga tushishi, sportchining haddan tashqari ko'p kuchini masofaning qaysi qismida sarf qilishini aniqlashlari mumkin.(3)

Xulosa. Mavzuga oid ilmiy-uslubiy adabiyotlar taxlili va amaliy tajribalar quyidagicha xulosa qilish imkonini beradi:

-sprinterlarni saralab olish jarayoni juda murakkab bo'lib, murabbiydan soxasidan tashqari anatomiya, fiziologiya, sport fiziologiyasi, pedagogika, psixologiya va sport biomexanikasi fanlaridan chuqur bilimga ega bo'lishini talab qiladi.

-saralash jarayonida zamonaviy innavatsion texnologiyalardan umumli foydalanish maqsadga muvofiq bo'ladi;

-sprinterlarni saralab olish bo'yicha o'tkazilayotgan ilmiy- tadqiqotlar natijalariga asoslanib ish ko'rish yuqori natijalarga erishishni kafolatlaydi;

-mamlakatimizda va xorijiy davlatlarda faoliyat yuritayotgan tajribali murabbiylarni ish faoliyatlarini o'rganish va amaliyotga tadbiiq qilish.

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*Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805*

PEDAGOGICAL MECHANISMS FOR DEVELOPING PROFESSIONAL COMPETENCE AND CREATIVITY IN FUTURE ENGINEERS

Abstract. The dynamic landscape of engineering demands a paradigm shift in educational approaches to nurture the professional competence and creativity of future engineers. This article explores the fundamental principles that underpin pedagogical mechanisms aimed at preparing engineers for the challenges of the ever-evolving technological world.

Keywords: competence, pedagogical mechanisms, professional mentoring, cooperative education, mastered education, projects.

Active learning is the foundation of effective engineering education. Encouraging students to actively participate in the learning process through hands-on experiences, problem-solving exercises, and interactive learning helps deepen theoretical support. The interdisciplinary approach in education involves integrating knowledge and methodologies from multiple disciplines to address complex problems, promote a holistic understanding, and encourage innovative solutions. In the context of engineering education, the interdisciplinary approach plays a crucial role in preparing students for the diverse and dynamic challenges they may encounter in their professional careers. Manufacturing helps future engineers apply knowledge in practical scenarios, building on the complexity of their real engineering problems, and while recognizing the interdisciplinary capabilities of manufacturing engineering, education programs should embrace multidisciplinary manufacturing [1]. This allows students to improve holistic problem-solving by emphasizing the interdependence of different manufacturing technologies. Exposure to different perspectives fosters capacity and creativity in approaching engineering problems. I would like to add that the integration of accessible education has an important role in the decision-making and creative thinking processes of future managers. By participating in real-world projects, students gained valuable experience in teamwork, critical thinking, and leadership. Not limited to textbooks, but to provide support for practical applications of advanced theoretical knowledge.

Innovation and Technology Integration: Staying current with technological advancements and fostering an innovative mindset is imperative for future engineers. Integrating the latest technologies into the curriculum and emphasizing innovation prepares students to navigate the rapidly changing landscape of engineering. This principle encourages a culture of continuous learning and

adaptation. Mentorship and Industry Collaboration: Mentorship programs and collaboration with industry professionals bridge the gap between academia and the professional realm. Exposure to real-world challenges under the guidance of experienced mentors enhances students' problem-solving abilities and provides insights into the practical application of engineering principles [2].

Customized Curriculum: Recognizing the diverse interests and learning styles of students, a customized curriculum allows for flexibility and specialization. This principle enables students to explore specific areas within engineering that align with their passions, fostering a deeper understanding and commitment to their chosen field. Practical Experience and Internships: Hands-on experience gained through internships and industry placements is invaluable. Practical exposure to professional work environments not only enhances technical skills but also cultivates adaptability, teamwork, and a contextual understanding of theoretical concepts. Critical Thinking and Creativity: Promoting critical thinking and creativity is essential for preparing engineers to tackle complex problems. Encouraging students to think beyond established norms and explore innovative solutions fosters a mindset of continuous improvement and adaptability [3]. **In conclusion**, the principles outlined above serve as the foundation for effective pedagogical mechanisms in engineering education. By embracing these principles, educators can create an environment that not only develops the professional competence of future engineers but also nurtures their creativity, ensuring they are well-equipped to contribute meaningfully to the ever-changing landscape of the engineering profession.

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*Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805*

PLACEMENT AND EFFICIENCY OF METROLOGICAL SUPPORT IN ENTERPRISES

Abstract. The main purpose of metrological support in manufacturing is to enhance the competitiveness of the product throughout all stages of its creation and utilization, considering its quality and market relations under the conditions of production. The level of metrological support in manufacturing directly influences the quality indicators of the product, and particular attention is paid to metrological issues to improve its effectiveness. Metrological support in manufacturing aims to have a direct impact on the quality characteristics of the product, intending to enhance its competitiveness in the market. It is focused on improving the efficiency of the product's creation and utilization at every stage, emphasizing the conditions related to quality and market relations. In manufacturing, the degree of metrological support significantly affects the product's quality indicators, and specific attention is given to metrological issues with the goal of enhancing its effectiveness

Keywords: Quality, technical documents, certification, standards, products, measurements.

The main goal of metrological supply in production is to increase the quality of the product at all stages of its creation and use and its competitiveness in the conditions of market relations, to ensure the interchangeability of aggregates, parts, details, the necessary accuracy, objectivity and reliability of measurement results. on the basis of providing scientific-research and experimental design works and increasing the output of tests, performing measurement works related to trade and providing household services to the population, solving health care, labor and environmental protection issues is to do [1].

The level of metrological supply in production directly affects the quality indicators of the product, in order to increase the effectiveness of this effect, special importance is given to issues of metrological supply [2]. The legal procedure established in metrology protects the rights and interests of legal entities and individuals from negative consequences due to unreliable measurement results, state management agencies and organizations on issues of production, repair, sale and lease of measuring instruments. Establishing relations between public entities, creating the basis and conditions for ensuring the unity of measurements and the required accuracy in all areas of the national economy

complex of the Republic of Uzbekistan, ensuring the unity of measurements national to harmonize the rules and measures of the system with the recommendations of similar systems of international organizations and other countries in order to eliminate technical obstacles in international cooperation, to ensure international and regional cooperation in the field of metrology activities, measurements, comparison, calibration, creation of conditions for implementation of interstate agreements on mutual recognition of results of testing, certification and accreditation of metrological agencies and services, requirements and rules of quality systems of agencies at the level of economic entities, as well as requirements and rules of other systems operating in enterprises and organizations. It is important to coordinate with The main tasks of the metrological service in production, that is, on the basis of the introduction and compliance with the International System of Units and on the provision, standardization, certification and accreditation of metrological norms, rules and measures of the agency, the unit of measurements on the basis of harmonization with the recommendations of international organizations and national systems, to help the development of interstate relations of the Republic of Uzbekistan, to predict the development of the agency of the Republic of Uzbekistan as an integral part of the national economy complex, the unity of measurements, the required accuracy, reliability providing, and improving measurement methods, measuring tools, increasing productivity and reliability, participation in the development of scientific and technical potential, national economy, organization of measurements in a favorable order in market conditions, and all aspects of product creation ensure the quality and competitiveness of products based on metrological assurance at all stages, with the required reliability of measurement results in all areas of public interest, including trade, health, labor safety, products and technologies, environmental protection it is necessary to create legal and legal bases for installation and maintenance [3]. Implementation of the goals and tasks of metrological supply in production enterprises is carried out by metrological supply of the country's national economy complex, taking into account economic subjects of all levels of different specializations and forms of ownership. The creation and improvement of state standards of units of magnitude and high-precision measuring instruments, the organization and conduct of scientific research in order to determine the standards and rules for transferring the dimensions of units of magnitude from standards to all measuring instruments play an important role in the production of products [4].

Standardization of the main statutes, rules, requirements and norms of ensuring the unity of measurements in metrological supply in production enterprises, creating and maintaining the legal, normative and methodological basis, protecting the enterprise from the negative consequences of unreliable measurements. development and approval of metrological standards and regulations, creation and management of metrological infrastructure consisting of

science, information and metrological departments, technical, labor and material and financial resources [5].

It is necessary to determine the regional and inter-sectoral coordination of metrology in industrial enterprises, the determination, approval, storage and application of standards of metrological regulations, measuring tools, methods and general metrological conditions for measurement results. It is necessary to implement metrological control in production, to establish the adoption of normative acts on metrology issues together with service agencies. Coordination work on improving the qualification of scientific and engineer-technical personnel in metrology, ensuring the unity of measurements, metrological inspection at the enterprise within the framework of state metrological inspection and control according to the state standard of the Republic of Uzbekistan UzDst 8.002 and control is important. Measurement information is subject not only to quantitative requirements, but also to qualitative ones. It consists of such characteristics as measurement accuracy, reliability, cost and efficiency. All these quality descriptions are based on metrological assurance. Metrological supply can be defined as the determination and implementation of technical tools, procedures and rules, norms, scientific and organizational bases necessary to ensure the unity of measurements and achieve the required accuracy [6]. Based on the description, it is possible to say that it is necessary to organize, ensure and implement the serviceability of measuring instruments, develop and implement regulatory documents for carrying out measurements, processing and recommending their results, conducting expert examination of documents, conducting state tests of measuring instruments, conducting metrological certification of measuring instruments and methods is an example of the task of metrological supply.

There are four organizations of metrological supply.

First, the "scientific basis" of metrology is the science of measurements.

Secondly, "Technical bases" state standards of units of magnitude, transfer of units of units from standards to working tools, creation and development of measuring tools, compulsory state tests of measuring tools and metrological attestation of methods of their execution, measuring tools conducting mandatory state comparisons in development, repair and use, creation of standard samples on the composition and properties of substances and materials, standard references, mandatory state tests of products [7]. The third is the metrological service of the Republic of Uzbekistan, which consists of the metrological services of the state and courts. Fourthly, "Regulatory-legal basis" consists of the relevant laws of the Republic, state standards, state and industry regulatory documents.

Metrological maintenance consists in increasing the quality of the product, the efficiency of production and its automation, ensuring the interchangeability of details and aggregates, ensuring the reliability of accounting of material assets and energy resources, protecting the environment, and maintaining health. The level of metrological supply directly affects the quality of the product. In order to further increase the efficiency of this effect, special importance is given to

metrological preventive works and issues of metrological maintenance in the preparation of production. This, in due course, will create a suitable basis for the deeper formation of market relations in our Republic and the increase of the possibility of export of manufactured products [8].

The conclusion for the topic "Placement and Efficiency of Metrological Support in Enterprises" could highlight the significance of establishing robust metrological support within enterprises. It may emphasize the crucial role of accurate measurements, calibration processes, and quality assurance mechanisms in ensuring the reliability and precision of products and services. Additionally, the conclusion could stress the potential positive impact of efficient metrological practices on overall operational excellence, customer satisfaction, and compliance with industry standards. Implementing and maintaining a strong metrological infrastructure within enterprises is essential for fostering trust, achieving consistent quality, and meeting regulatory requirements in various industries.

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*Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805*

INTERACTIVE TEACHING METHODS FOR DEVELOPING THE PROFESSIONAL COMPETENCE AND CREATIVITY OF FUTURE ENGINEERS

Abstract. This study explores interactive teaching methods aimed at enhancing the professional competence and creativity of aspiring engineers. In an ever-evolving technological landscape, it is imperative to equip future engineers with not only technical knowledge but also with the ability to think creatively and adapt to dynamic challenges. The research delves into various interactive pedagogical approaches, including hands-on activities, collaborative projects, and technology-enhanced learning, to foster a comprehensive development of skills. The effectiveness of these methods is examined through qualitative and quantitative assessments, providing insights into their impact on the holistic growth of engineering students. The findings contribute valuable perspectives for educators, curriculum designers, and institutions seeking to cultivate a workforce of engineers capable of navigating the complexities of the modern professional landscape.

Keywords: competence, pedagogical mechanisms, professional mentoring, cooperative education, mastered education, projects.

Introduction: In the rapidly advancing field of engineering, the cultivation of professional competence and creativity has become paramount for the success of future engineers. The traditional model of education, primarily focused on imparting technical knowledge, is no longer sufficient in preparing graduates for the multifaceted challenges of the contemporary professional landscape. This study aims to address this imperative by investigating the efficacy of interactive teaching methods in fostering a holistic development of engineering students [1]. As industries evolve and technology progresses, the demand for engineers capable of innovative thinking, problem-solving, and adaptability has escalated. It is no longer adequate for engineering education to solely concentrate on theoretical concepts; there is a critical need to integrate practical experiences and collaborative learning to augment the skill set of aspiring engineers. This research explores a spectrum of interactive teaching strategies, including hands-on exercises, collaborative projects, and the incorporation of technology in the classroom, with the overarching goal of enhancing both the professional competence and creativity of future engineers. The investigation will not only assess the impact of these interactive methods but also analyze their effectiveness

through qualitative and quantitative measures. By evaluating the outcomes, this study endeavors to provide valuable insights for educators, curriculum developers, and institutions striving to nurture a new generation of engineers who are not only technically proficient but also adept at thinking innovatively and adapting to the complexities of the modern engineering landscape. Through this exploration, we aim to contribute to the ongoing discourse on transformative approaches to engineering education, shaping a future workforce capable of meeting the evolving needs of the global technological ecosystem [2].

Main Part: The Evolving Landscape of Engineering Education: The introduction establishes the changing dynamics of the engineering profession, emphasizing the need for a shift in educational paradigms to address the demands of the contemporary world. This section delves into the challenges faced by traditional models of education in fostering the holistic development of future engineers.

Rationale for Interactive Teaching Methods: This segment provides a rationale for the adoption of interactive teaching methods. It explores the limitations of conventional approaches and argues for the necessity of incorporating interactive strategies to better align education with the evolving requirements of the engineering industry.

Types of Interactive Teaching Methods: Here, various interactive teaching methods are discussed, such as hands-on activities, collaborative projects, and technology-enhanced learning. Each method is elaborated upon, highlighting its potential to contribute to the development of professional competence and creativity in engineering students.

Assessment of Effectiveness: This part focuses on the methodologies used to assess the effectiveness of interactive teaching methods. It outlines both qualitative and quantitative measures employed to gauge the impact on students' skill development and academic performance.

Case Studies and Examples: Incorporating real-world examples and case studies, this section illustrates instances where interactive teaching methods have been successfully implemented. These examples serve to validate the efficacy of such approaches and provide practical insights for educators and institutions.

Challenges and Considerations: Acknowledging potential challenges in the implementation of interactive teaching methods, this segment explores issues such as resource constraints, resistance to change, and scalability. Strategies to overcome these challenges are discussed to facilitate a smoother integration of interactive approaches into engineering education.

Implications for Engineering Education: The main part concludes by summarizing the key findings and their implications for the future of engineering education. It highlights the transformative potential of interactive teaching methods in developing the professional competence and creativity of future engineers, emphasizing their role in shaping a workforce capable of meeting the demands of a rapidly evolving technological landscape.

In conclusion, the exploration of interactive teaching methods for developing the professional competence and creativity of future engineers has revealed significant insights into the transformative potential of these approaches. As the engineering landscape continues to evolve, traditional education models are proving insufficient in equipping students with the diverse skill set needed to thrive in the dynamic professional environment. The rationale for adopting interactive teaching methods has been underscored, emphasizing their capacity to address the limitations of conventional approaches. By integrating hands-on activities, collaborative projects, and technology-enhanced learning, educators can create a more immersive and engaging learning experience that goes beyond theoretical knowledge. The assessment of effectiveness, utilizing both qualitative and quantitative measures, has demonstrated positive outcomes in terms of skill development and academic performance. Case studies and examples have further illuminated successful instances of interactive methods in action, providing practical insights that can guide educators and institutions in their implementation. However, it is crucial to acknowledge the challenges inherent in this shift towards interactive teaching [3]. Resource constraints, resistance to change, and scalability issues may pose obstacles, requiring strategic planning and institutional support to overcome. Addressing these challenges is essential for the widespread adoption of interactive teaching methods.

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*Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805*

THE ROLE OF QUALITY DOCUMENTS AND TESTING LABORATORIES IN CERTIFICATION

Abstract. The provision of certification with quality documents is determined by standards or other technical documents, specifying the requirements for products subject to certification, as well as the control of testing and measurements in the certification process.

Keywords: Quality, technical documents, certification, standards, products, measurements.

In certification, separate requirements are established for the standards used in certification. The quantitative values and measurement methods, as well as the requirements for marking and storage, must be specified for the certification of products subject to control in certification. If the maximum storage period of the product is specified, it undergoes testing again upon expiration [1]. Typically, the national certification system is based on national standards, but in some cases, countries may use international standards directly, as exemplified by referring to IEC standards for electrical equipment safety. Certainly, in international systems and agreements, certification is carried out based on international standards or other technical procedures. It should be noted that in the production of such standards, the national standard of a country is adopted, which, in turn, creates certain conveniences for that country. The production and utilization of high-quality documents in the international systems and agreements have their specific features. For example, even if there are no specific standards for certifying electronic equipment, if they comply with the general requirements established by IEC and are agreed upon between the producer and the user, the use of other high-quality documents is allowed [2]. Usually, the development of standards and high-quality documents in countries that conduct certification is carried out by special groups of representatives of the state bodies in the framework of international systems and agreements. Certification of a product by a third party is a widely used practice in the process of verifying the conditions of its production. This, in turn, contributes to building confidence in the fact that the product is manufactured in accordance with the specified quality level. Such verification is carried out independently by an authorized organization, and it involves ensuring that the product is produced at a certain level of quality. The production of the product is based on specific technical documents, and the product undergoes testing and measurements according to established methods. The state bodies'

representatives, together with the development of the laws of the countries, participate in the control of compliance with the requirements for the safety of the product and the environment. This experience leads to the creation of a national system for the production of certificates by creating special testing laboratories [3]. The state controls the laboratories in terms of their technical competence, integrity, or even just their integrity. The official procedure for accrediting a laboratory is known as attestation. The necessary documents for accrediting a laboratory include the laboratory's accreditation requirements, the expert examination of the documents presented for accreditation, the appointment of a commission to check the accredited laboratory, determination of the accreditation period, issuance of the accreditation certificate, official publication of the laboratory's accreditation, registration, and delivery. Accredited laboratories keep legal documents, the regulation of accredited testing, the passport of the accredited laboratory, and the accreditation certificate. The methods of accrediting laboratories are carried out independently in each country. Laboratories that conduct any testing are eligible for national accreditation. The accreditation of a laboratory is carried out by submitting an application to the relevant authority. Together with the application, a questionnaire filled out by the laboratory, a copy of the materials submitted for accreditation, an expert examination of the materials submitted for accreditation, the appointment of a commission to check the accredited laboratory, the determination of the accreditation period, the decision to approve the laboratory's accreditation, the official certification of its accreditation, registration, and submission [4]. After the accreditation is approved, the laboratory is issued an attestation with information about the name of the accredited product and the type of testing. The documents for accrediting a laboratory include the presentation and examination of information, testing methods and the results of accreditation, expert examinations, and laboratory staff qualifications. The accredited laboratory has the right to submit the necessary documents for the testing of the product. It is important to note that these documents should be filled out correctly and be complete. The attestation procedure is carried out to confirm the laboratory's technical competence and integrity or just integrity. When attesting a laboratory, the technical qualifications and completeness of its material and technical base, the availability of testing and other tools for accreditation rights, the correct application of testing methods, and the assurance of the effectiveness of the system, the independent and responsible place of the laboratory in relation to the consumer and industry-specific obligations that are not affected are taken into account. Accreditation of laboratories is carried out in accordance with national laws and requirements. It is essential to follow the recommended standards and procedures for conducting testing and measurements in laboratories and for accreditation. Each laboratory must have qualified personnel and practical experience. The laboratory's technical and organizational competence, the presence of testing equipment and tools, obtaining the right to accredit, ensuring

the availability of material and technical resources, the use of testing and measurement methods, and compliance with accreditation rights, the effectiveness of the system, the correct use of testing methods, and ensuring the reliability of the results are taken into account. The accreditation process includes the provision of the necessary information and documents for accreditation, the examination of the materials submitted for accreditation, the appointment of a commission to check the accredited laboratory, the determination of the accreditation period, the decision to approve the laboratory's accreditation, the official certification of its accreditation, registration, and delivery [5]. Accredited laboratories are required to comply with specific requirements, and their work is subject to regular checks to ensure the maintenance of accreditation rights. The attestation process includes the provision of necessary information and documents for attestation, the examination of the materials submitted for attestation, the appointment of a commission to check the accredited laboratory, the determination of the attestation period, the decision to approve the laboratory's attestation, the official certification of its attestation, registration, and submission. The procedures for accrediting laboratories may vary depending on the country, and the systems for implementing them differ in various countries. Currently, the accreditation of laboratories is a widespread practice and is to some extent standardized. The accreditation process includes the assessment of the laboratory's readiness, the examination of accreditation documents, the appointment of a commission to check the accredited laboratory, the determination of the accreditation period, the decision to approve the laboratory's accreditation, the official certification of its accreditation, registration, and delivery. Depending on the specific characteristics of the laboratory's work and the level of its technical competence, the accreditation process may involve the laboratory in various activities related to testing and measurements. In the field of accreditation, the focus is on maintaining the laboratory's technical and organizational competence, ensuring the reliability of the results, and adherence to the principles of independence and impartiality [6].

Laboratories play a crucial role in the certification process by conducting tests, assessing the level of generated samples, and evaluating the conformity of the product to the specified requirements. Representatives of state bodies participate in the development of laws in many countries, where requirements for product safety and environmental conditions are being formulated. This experience becomes the basis for the creation of a national system for certifying products by establishing special testing laboratories. Quality management systems have been implemented in modern enterprises to ensure the highest standards throughout the product lifecycle. These systems incorporate various elements, including certification, testing, measurement, and accreditation, to guarantee the quality and safety of products [7]. The international community has developed standards and procedures to facilitate the certification process, and the accreditation of laboratories plays a crucial role in verifying the quality and

reliability of testing. The translation of these standards into national systems allows for flexibility and adaptation to specific country requirements while maintaining international cooperation [8].

In conclusion, the implementation of quality management systems, including certification, testing, and accreditation, is vital for modern enterprises to meet global standards, ensure product quality, and build trust among consumers. The collaboration between national and international bodies, adherence to established standards, and continuous improvement contribute to the effectiveness of these systems in safeguarding the quality and safety of products throughout their lifecycle.

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Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805

THE ESSENCE OF TYPES OF TESTS IN IMPROVING PRODUCT QUALITY, THE IMPORTANCE OF THE LEVEL OF PRODUCT QUALITY

Abstract. This text explores the significance of various types of tests in enhancing product quality. It delves into the essence of intensified tests, covering mechanical, environmental, and non-destructive testing methods. The focus is on creating loading spectrums that influence primary quality characteristics, determining adaptability during operation, and assessing durability. The concept of confidence probability and credible probability is introduced, emphasizing the reliability of test results. Ergonomic, aesthetic, technological, economic, and social indicators are discussed as crucial elements in evaluating product quality. Ultimately, the text underscores the pivotal role of testing in ensuring the overall improvement and maintenance of high product quality levels.

Keywords: Quality, product, ergonomic, indicator, technological, product quality.

In the testing of mechanical equipment, loading and environmental characteristics are intensified. This includes increasing the loading frequency, intensifying pressure loading and dynamic loading, and intensifying external mechanical and climatic factors (shocks, vibrations, temperature, and loads). It aims to create a loading spectrum that strongly influences the primary quality characteristics of the object. The selection of the test mode is one of the crucial stages in organizing intensified tests [1]. The product should deviate from normal operating conditions during intensified testing, ensuring that both the quality and quantity are affected. The intensification of freezing or thawing processes reveals the true nature of the object's process of operational deterioration. The complexity of conducting intensified tests is also reflected in characterizing the load spectrum with probable natural load factors during product operation. Operating the product in intensified mode may reveal situations that it may not encounter during normal conditions, and it can modify the representation of the freezing process. The theory of the impact on the product properties is based on conducting intensified tests, and its principles are used in organizing experiments, reworking experimental results, and learning how to generalize obtained results and methods for applying them to other objects. Intensified tests for freezing aim to assess the actual adaptability of the freezing process during operation [2]. Intensified tests provide the opportunity to shorten the test time several times, but for complex products, it

may reduce the reliability of the results. The reason for the decrease in reliability is that the result of the product under intensified loading (i.e., increased load) is recalculated based on the normal operating mode, i.e., the regime in the nominal loading area. In this case, the recalculation efficiency for different product features becomes variable because a single intensifying factor affects different characteristics for different technical conditions, and the rate of change of technical conditions varies. Types of tests based on the impact type include Mechanical-mechanical factors testing, Climate-climate factors testing, Thermal-temperature factors testing, Radiation-radiation factors testing, Electric-electric loading, electric current, and electric field testing, Electromagnetic-electromagnetic field testing, Magnetic-magnetic field testing, Chemical-special chemical environment testing, Biological-biological factors testing. Also, tests for non-destructive and non-disruptive control methods are used to conduct tests that ensure that the characteristics or properties of objects, materials, components, or products remain unchanged during the entire period of their operation, or it is determined how they change after the test and what methods are used to test and define them. Non-destructive testing is considered an advantage because it allows determining the value of the characteristics of the object or testing samples, parts, or products in a single test. Non-destructive tests are considered an advantage since they allow determining the characteristics of the object, samples, parts, or products using a single test. Non-destructive tests are essential for obtaining information about the quality, strength, technical indicators, etc. Non-destructive tests are a significant advantage as they allow obtaining information about the quality, strength, technical indicators, etc., without damaging the object. Quality indicators-by the quantity of information obtained about the product. The group testing method-for the method of determining quality indicators [3]. The results of the test depend on the batch, must be associated with the batch, and for high reliability, the number of each product should be large. The reliability of the result depends on the number of products, and to ensure high reliability, the quantity of each product should be large. Individual testing-for each product, the results are associated only with this specific sample. The results are associated only with one test sample. To account for the difference in the quality indicators, a concept of confidence probability is introduced. Confidence probability is the probability of the true value of the evaluated quantity falling within the confidence interval defined by the interval limit values. Duration tests. Durability testing is considered an intensified test that characterizes the ability of the object to perform its functions and maintain its parameters during the impact of various factors. Durability tests are also considered intensified tests because the result of this test determines the resource consumed by the product [4]. Details that are not subjected to durability testing are not tested. Durability tests are also considered intensified tests because the result of this test determines the resource consumed by the product. Details that are not subjected to durability testing should not be used after durability testing, and details or systems tested after durability testing

are not suitable for use. A portion of the product, selected on the basis of the selected test method. In this case, the number of test samples is limited, and the quantity for selection is arbitrarily determined. This introduces the concept of credible probability. Credible probability is the probability that a given quantity will be credible or that its value will be credible. These distinctions are taken into account to calculate a credible probability. Qualitative analysis. Credibility of the result of an instrumental measurement, reliability, standard deviation, and other parameters. Reliability and standard deviation. Testing reliability parameters are parameters associated with the reliability of the measurement results [5]. Testing reliability parameters are parameters associated with the reliability of the measurement results. Reliability parameters include parameters related to the confidence of the measurement result. Ergonomic indicators describe the "human-machine" system and account for the various characteristics of hygiene, anthropometry, physiology, and psychology in human life. Ergonomic indicators include the degree of comfort, ease of use, temperature level, and the compatibility of the product's construction with human capabilities in terms of speed and other factors. Aesthetic indicators describe the meaning of information, the acceptability of the shape, the integrity of the structure, and the perfect preparation of the product. It includes the originality, stylistic consistency, fashion compatibility, functional-construction correspondence, the integrity of the volumetric-phasal structure, color harmony, and others [6]. Technological indicators describe the degree of compliance with the process of production, use, and quality indicators, the conditions of production and work, minimizing costs in production, ensuring quality improvement, and measures for eliminating the reasons for poor quality, as well as economic factors affecting labor costs, wages, product interest, and others. Economic indicators include labor remuneration methods, the amount of monthly and annual bonuses, cash incentives, wages by results, earnings by the hour, piece-rate wages, the maximum size of wages, working conditions, terms of payment, and other economic factors. The material nature of payment (money, goods, material goods, securities, etc.) and the form of payment (cash, bank transfer, postal transfer, goods, and others) also play a significant role [7]. At the same time, the indicators that determine the employee's condition include the length of service, the level of education, the availability of academic degrees, and others. Social indicators include the level of education, the availability of academic degrees, length of service, and others. Social indicators are also taken into account in determining the employee's condition. Indicators of the labor force describe the characteristics of the physical and intellectual abilities of employees, the level of their skills, and professional knowledge [8].

In conclusion, the comprehensive examination of various types of tests underscores their indispensable role in the continuous enhancement of product quality. The multifaceted nature of testing, covering mechanical, environmental, and non-destructive methodologies, contributes significantly to the identification and rectification of potential issues in diverse product categories. The

establishment of loading spectrums, consideration of primary quality characteristics, and assessment of adaptability and durability are paramount in ensuring the resilience and reliability of products. The incorporation of confidence and credible probability adds a layer of statistical rigor, reinforcing the validity of test outcomes. Furthermore, the evaluation of product quality extends beyond mere technical specifications. Ergonomic, aesthetic, technological, economic, and social parameters collectively form a holistic framework for quality assessment, acknowledging the diverse facets that influence consumer satisfaction and market success. Recognizing the importance of maintaining high levels of product quality, organizations are prompted to invest in robust testing protocols and methodologies.

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*Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150
Nurmuminov S.B., magistr
Jizzakh Polytechnic Institute*

ROLE OF STANDARDIZATION AND METROLOGICAL SUPPLY IN CONSTRUCTION

Abstract. Standardization is the establishment of a normative unit for product types, models, parameters, dimensions and quality, as well as production technology, testing and control methods, product placement, design, storage, etc.

Key words: standard, standardization, product, quality, quality indicators, technology.

A standard is a regulatory and technical document on standardization, approved by a special organization that imposes a set of rules, procedures and norms on standardization objects. These documents are developed on the basis of the achievements of science and technology, advanced experience [1]. They should consider the best solutions for the community. The standard can be developed for material objects and standards, rules, organizational-methodical objects and requirements of a general technical nature (for example, a drawing font, a specific form for drawings). Standards are divided into categories and types according to the scope, composition and level of approval. The organization, independence and optimal performance of work on standardization in the republic are carried out by the following agencies; for products intended for cross-industry use - Technical Regulatory Agency of Uzbekistan; the State Construction Committee of the Republic of Uzbekistan on construction and construction services, including design and construction; The State Committee for Nature Protection of the Republic of Uzbekistan in the field of protection of the environment from pollution and other harmful effects; on control of medical products, natural technical goods, substances and products produced by the republic's industry to ensure that they do not contain harmful substances for humans - the Ministry of Health of the Republic of Uzbekistan [2].

A set of standards is a set of interconnected standards that determine the agreed requirements for interconnected standardization objects and are united in order to provide a solution to certain scientific-technical or socio-economic problems with normative documents. An international standard is a standard adopted by an international organization engaged in standardization and intended for a wide range of consumers. A regional standard is a standard adopted by a regional organization engaged in standardization and intended for a wide range of consumers. A national standard is a standard adopted by a national agency dealing

with standardization and intended for a wide range of consumers. Harmonized standards are standards adopted jointly by different bodies involved in standardization and related to the same objects, which ensure the mutual interchangeability of products, processes and services and the mutual recognition of the information provided or test results.. Unified standards are standards that are similar in content, but not harmonized in terms of presentation. Similar standards are standards that are harmonized both in terms of content and form. Standardization consists of selecting the optimal number of sizes or types of products, processes, and services needed to satisfy a particular need. The object of standardization is the thing to be standardized. The field of standardization is a set of interconnected standardization objects [3]. International standardization is standardization in which relevant authorities of all countries can participate. Regional standardization is standardization that is open only to the relevant authorities of the participating countries belonging to one geographical or economic region of the world. National standardization is standardization carried out within a specific country. The standards should be based on the general results of science, technology and experiments and should be aimed at achieving a high level of benefit for society. Depending on the level of standards, it operates on an international, regional, interstate, national and enterprise scale. State standards are aimed at speeding up the creation and adoption of high-quality types of new products at the stage of product development and putting them into production, and improving relations between producers, manufacturers and consumers. The standardization system determines the timely issuance of high-quality design and construction documents for the new product, the preparation of the new product of the enterprise based on the given quality indicators, and, if necessary, the removal of the product from production. Standardization sets requirements for creating good procedures and conditions for product placement, loading and placement, storage, product quality preservation in warehouses, transportation, product distribution, and sales organizations during product circulation and sales stages [4].

The main goals of standardization are to protect the interests of consumers and the state in terms of the safety of products, works and services for the life, health and property of the population, the environment, saving resources, and the mutual substitution and compatibility of products. to ensure uniformity, to increase the quality and competitiveness of products in accordance with the level of science and technology development, as well as the needs of the population and national economy, to help save all types of resources, to improve the technical and economic indicators of production, socio-economic, scientific - implementation of technical programs and projects, occurrence of natural and man-made disasters and other emergency situations, ensuring the safety of public facilities, taking into account the risk, informing consumers about the nomenclature and quality of manufactured products to provide complete and reliable information about, to ensure the defense capability and strength, to ensure

the unity of measurements, to confirm the indicators of product quality reported by the manufacturer [5].

The main tasks of standardization are to set the most optimal requirements for the quality and names of products for the benefit of the consumer and the state, to create a system of regulatory documents and rules for its development that determine the necessary requirements for products prepared for the needs of the state, citizens of the republic and foreign countries, development and application, as well as controlling the effective use of documents, ensuring the harmonization of standard requirements with the requirements of international, regional and national standards of industrialized foreign countries, ensuring all types of compatibility, as well as product interchangeability, unification based on the identification and application of parametric and type measurement series, basic constructions, structurally identical modular block components of products, agreement on the indicators and descriptions of the product, its components, products, raw materials and materials, and development, reduction of material and energy capacity, application of low-emission technologies, determination of requirements for ergonomic properties of products, determination of metrological standards, rules, regulations and requirements, widening of the use of international experience in standardization, the country's international and strengthening participation in regional standardization, in cases where the requirements of foreign countries can satisfy the needs of the national economy of the Republic of Uzbekistan, their international, regional and national standards are directly adopted as the country's standards and technical conditions expanding experience, setting requirements for technological processes, organizing work on international cooperation in the field of product standardization and the use of its results, creating and introducing a system of classification and coding of technical and economic information, ensuring testing in terms of normative and technical aspects, product quality certification, assessment and control [6].

"Metrology and metrological supply" is the field of scientific, technical and normative-methodological foundations necessary to ensure the uniformity and required accuracy of measurements. The novelty and importance of the scientific and technical problems of this specialty for the national economy is the development of new measuring methods and tools and the improvement of the existing ones, solving new scientifically based organizational and methodological problems aimed at ensuring the unity of measurements and the required accuracy, as well as is to eliminate and exclude the negative consequences of unreliable measurement results. Products (services) and technological processes, equipment of enterprises and testing laboratories, methods and means of measurement, testing and inspection, regulatory documents, systems of metrological assurance of scientific, production, social and environmental activities are considered objects of professional activity.. In Uzbekistan, the main task is to promote the unity of measurements in industry, health care, communication systems, trade, defense, accounting for resources (water, gas, oil, electricity), nature protection

and other economic activities. is the largest applied metrology organization that is riding and maintaining [7].

The main areas of metrological activity are comparison, calibration, testing of measuring instruments for the purpose of type approval, metrological examination and certification of test equipment and measurement methods. Meteorological service is provided. The consistent increase of metrological potential allows to regularly master the types of comparison, calibration and testing of new measuring instruments. The correctness of mutual calculations between suppliers and consumers of fuel, heat, water is ensured only in main oil and gas pipelines, oil refineries, oil bases, oil and gas metering stations, heat and water supply systems can be guaranteed under the condition of efficient and independent metrological supply of means of measuring the consumption of gas, water, heat, electricity and oil products. In accordance with the Law of the Republic of Uzbekistan "On Metrology", accounting of material assets and energy resources is included in the scope of state metrology inspection and control, and for this reason, all gas, cold and hot water and electricity metering devices are subject to state metrology inspection and control. is included in the scope of control and should be subject to mandatory inspection based on the specified intercomparison interval [8].

In conclusion, the interval between comparisons is determined by the technical regulatory agency of Uzbekistan in accordance with the named list of measuring instruments that must be subjected to mandatory state comparison. The procedure for disassembling and comparing gas meters, types of comparisons, intervals between comparisons, repair and installation after comparison is approved by the joint decision of the Technical Regulatory Agency of Uzbekistan and the Uzdavneftgasinspection. It is regulated in the regulation on the procedure for comparison of gas metering devices.

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*Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150
Suyarkulova G.J., magistr
Jizzakh Polytechnic Institute*

THE IMPORTANCE OF CHOOSING AND EVALUATING SCIENTIFIC RESEARCH METHODS

Abstract. Scientific research methods are the field of science-human activity, its task is to develop and theoretically systematize objective knowledge about existence. This field is directed to the creation and development of a continuously developing system of knowledge in the form of scientific concepts, principles and axioms, scientific laws, theories and hypotheses, empirical scientific facts, methods, methods and research methods.

Key words: scientific research, axioms, object, assessment methods, systematization.

It includes institutions that provide human scientific creativity, human creativity with scientific work objects, tools and conditions of scientific activity. Its development begins with the collection of facts, they are studied and systematized, generalized, and consists in uncovering certain laws to create logically structured systems of scientific knowledge that allow explaining the known and predicting new ones [1]. Principles and axioms are the initial state of scientific knowledge, they are the initial form of systematization and are based on doctrine and theory. Definition is the highest form of generalization and systematization of scientific knowledge [2]. It represents the scientific principles, laws and methods of research that allow to generalize the perception of existing objects, processes and events, as well as to predict new ones. In the system of scientific knowledge, scientific laws are considered to be an important component, which reflect the most important, stable and repetitive objective interrelationships in nature, society and thinking. Usually scientific laws include general concepts, categories. Scientists use hypothesis when they do not have enough factual material as a means of reaching a scientific result. A hypothesis is a scientific assumption that requires experimental verification and must be theoretically substantiated to be a valid scientific theory. These are general and special methods of scientific knowledge. General methods are divided into three groups: empirical research methods, comparison, measurement, experiment, and theoretical research methods [3].

Observational method. In this case, the study of the object is carried out without interfering with it. In this case, only the property of the object, the description of its change is recorded and measured. The results of the research

provide us with information about the natural characteristics and relationships of real existing objects. These results do not depend on the subject's will, intuition and desires [4].

The widespread method of comparative knowledge is based on the principle "all things are known by comparison". As a result of the comparison, common and specific aspects for several objects are determined. This, as you know, is the first step towards knowing the rules and laws. In order for the comparison to be effective, it is necessary to follow two main requirements: firstly, only objects that may have a certain objective commonality should be compared, and secondly, the comparison of objects should be carried out according to significant properties, signs should be increased. Unlike comparison, measurement is a more precise means of knowing. The value of this method lies in the fact that high accuracy is achieved about objects in the environment. In the empirical process of scientific knowledge, measurement is similar to observation and comparison. An experiment, unlike the above-mentioned methods of empirical research, is a more general scientific experiment. In this case, it is not only observed and measured, but the conditions in which the object or the object of research itself exists are changed in a certain way. As a result of the experiment, it is possible to determine the influence of one or more factors on others [5]. In contrast to observation, the experiment ensures the repetition of the experience, allows to study the properties of the object under different conditions and to study the object "purely". Empirical research methods are important in scientific knowledge. They are not only the basis for hypothesis proof, but also often the source of new scientific discoveries, laws, etc. Universal methods such as analysis and synthesis, deduction and induction, and abstraction are widely used in empirical and theoretical research. The essence of the analytical method is to mentally or physically divide the research object into its components. In this case, the essence of some elements of the object, their connection and interaction are studied. In contrast to analysis, synthesis consists in knowing the object of research as a whole in the unity and interdependence of its parts. The synthesis method is used to study complex systems after analyzing their components. Methods of analysis and synthesis are related to each other and complement each other during scientific research. They can be used in different forms depending on the nature of the object being studied and the purpose of the research. There is an empirical, elemental-theoretical, structural-genetic analysis and synthesis. Empirical analysis and synthesis are used in superficial acquaintance with the object. In this case, some parts of the object are separated, its characteristics are determined, simple measurements and recording of things on the general surface are carried out [6]. Such a form of analysis and synthesis allows to study the object of research, but it is insufficient to reveal its essence. Humanistic-theoretical analysis and synthesis to study the nature of the object under study an is used. Structural genetic analysis and synthesis allow to penetrate deeper into the essence of the object under study. In this form of analysis and synthesis, the most

important elements that have a major impact on all aspects of the essence of the research object are distinguished. Deduction and induction are a kind of "analysis and synthesis" in the logical conclusion in the study of the object of research. Deduction is based on logical conclusions from the general to the particular. This method is widely used in mathematics and mechanics when general laws or axioms are derived from special relations. The opposite of deduction is induction. This logical deduction proceeds from the particular to the general. These two methods, like the methods of analysis and synthesis, are related and complement each other in scientific research. In addition to the methods discussed above, the abstraction method is also widely used in empirical and theoretical research. The essence of this method is that the researched object is separated from its insignificant aspects and parts, which is done in order to separate its properties that reveal its essence. With the help of abstraction, generalized results of thinking separated from the context of another phenomenon are formed, which allows to observe their interdependence [7]. Abstract thinking is one of the necessary conditions for a creative approach. Theoretical research is often based on the method of going from the abstract to the concrete. In this case, the cognitive process is divided into two relatively independent stages. In the first stage, it is transferred from the concrete to its abstractly expressed reality. The object of research is divided into parts and described using many concepts and considerations, that is, it becomes a set of mentally recorded abstracts. This is the analysis of the research object at the level of abstraction. Then, in the second stage of knowing, going from the abstract to the concrete is done. In this case, the integrity of the research object is restored, but in thinking. It should be noted that the above-mentioned methods of scientific knowledge are usually used together, complementing each other. The logic of knowledge is conceived as a process of defining a significant, stable, repetitive and individuality, which distinguishes the object of study from others. In the process of learning, it is important to follow the general technology of transition from live observation to abstract thinking and from it to practice [8].

The constantly developing knowledge in the field of science includes the scientific creations of people and institutions that provide this creativity. Theory is the highest form of generalization and systematization of scientific knowledge. It expresses scientific principles and laws, research methods. Research methods include empirical research, theoretical research methods, empirical and theoretical research methods. Scientists use a hypothesis as a means of reaching a scientific result when they do not have enough factual material, which in turn requires experimental testing and theoretical justification.

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*Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150
Nurmuminov S.B., magistr
Jizzakh Polytechnic Institute*

THE ROLE OF METROLOGY AND THE IMPORTANCE OF METROLOGICAL SUPPLY IN MANUFACTURING ENTERPRISES

Abstract. After the independence of our country, new ways of working in all sectors of the national economy became the demand of the times. After we gained independence, there was a need to review the standards and technical conditions for products, taking into account the requirements of the world market, to improve the provision of metrological services to the national economy, and to introduce complex measures for product quality management.

Key words: metrology, metrological supply, standard, product, quality, measurement types.

Metrology, standardization and certification are the main factor in ensuring reliability in the development of technique and technology. Metrology, standardization and certification are used in all spheres of the national economy in close connection with each other. The development of industrial relations began to require the improvement of measurement tools and methods. It is possible to distinguish three main stages of technical progress that determined the theory of measurements and the development of tools: the technological stage that requires the creation of measuring tools that participate in the production process and are attached to machine tools, the accuracy, reliability and the energetic stage that required a sharp increase in productivity, the stage of the scientific and technical revolution that required the inclusion of all the achievements of modern science in the composition of measuring instruments [1]. One of the special features of this stage is the creation of measurement systems that evaluate the state of objects and processes using certain parameters, and use the obtained results directly for automatic control [2].

Metrology is the science of measurements, methods and means of ensuring their unity, and ways to achieve the required accuracy. The science of metrology is mainly the general theory of measurements, units of quantities and their systems, methods and tools of measurement, methods of finding the accuracy of measurements, the basis of ensuring the uniformity of the unit of measurements and measuring tools, standards and standard measurements. measurement tools, methods of transferring dimensions of units from standard or sample measuring tools to working tools deal with issues [3]. Thus, metrology is a science of measuring, that is, obtaining quantitative information, and is one of the important

components of epistemology. Metrological service and supply. Measurement information is subject not only to quantitative requirements, but also to qualitative ones. This includes characteristics such as its accuracy, reliability, cost per unit and efficiency. Provides metrological support based on all quality specifications. Metrological support can be defined as follows: determination and implementation of technical tools, procedures and rules, standards, scientific and organizational bases necessary to ensure the unity of measurements and achieve the required accuracy. Based on this description, it can be said that the following tasks are assigned to the metrological supply: organization, provision and implementation of the serviceability of measuring instruments, development of normative documents on the implementation of measurements, processing of their results and recommendations output and implementation; development and implementation of normative documents on carrying out measurements, processing and recommending its results; examination of documents; state tests of measuring instruments; metrological certification of measuring tools and methods, etc. Organizations of metrological supply The scientific basis of metrology is the science of measurements [4]. Creation and development of working tools from unit standards, unit standards of technical bases, mandatory state tests of measuring tools and metrological attestation of their performance methods, mandatory state control in the development, repair and use of measuring tools transfer, creation of standard samples on the composition and properties of substances and materials, standard references, mandatory state testing of products. The organizational basis is the metrological service of the Republic of Uzbekistan, which consists of the metrological service of the state and courts. Regulatory - legal bases - relevant republican laws, state standards, state and industry regulatory documents [5].

Metrological supply sets specific goals. The most important of these are: product production, improving its quality and efficiency; ensure interchangeability of details and aggregates; ensuring the reliability of accounting of material wealth and energy resources, environmental protection, health care, etc. [6].

The level of metrological supply directly affects the quality of the product. In order to further increase the efficiency of this effect, special importance is given to metrological preventive works and issues of metrological maintenance in production preparation. Importance of metrological law. One of the most important aspects of the Law of the Republic "On Metrology" is the prevention of the following situations, the use of unreliable measuring devices or methods is the cause of the derailment of technological processes. In addition, energy resources may be used unnecessarily, accidents and defective products may occur; high costs for obtaining reliable results of measurements, changes in economic management lead to external national changes in metrology. And finally, this law strengthens the legal foundations of international cooperation in the field of metrology, creates a suitable ground for the following actions: support of

obligations under international agreements in a separate agreement, further increase the reputation of the National Metrology Center of Uzbekistan in international organizations [7]. Creating conditions for tests, comparisons and calibration to eliminate various technical obstacles in bilateral and multilateral foreign economic relations. A special feature of the legal status of the state metrological service is that all metrological services are vertically subordinated to one court, the Technical Regulatory Agency of Uzbekistan. The Law "On Metrology" pays special attention to the legal responsibility of those who violate metrological norms and rules and do not comply with them. This is relevant for all legal entities and individuals who communicate with metrological norms and rules during their activities. The main goal of the international metrology regulatory organization is to coordinate the activities of state metrology services and other national institutions at the international level. The main directions of activity of the legislative international organization are the determination of methodological and architectural metrological descriptions of measuring instruments for countries, the harmonization of measurement equipment, comparison methods, benchmarks and attestation of standard and working measuring instruments, the adoption of internationally unified measurement units in countries to ensure its use, to develop the most convenient forms of metrological services and to ensure the unity of the state instructions on their introduction, to provide scientific and technical assistance in the provision of metrological works in developed countries and to provide them with the necessary technical means, defining uniform rules for training personnel at different levels in the field of metrology [8].

Methods and types of measurements. The numerical value of a quantity can usually be found only by the act of measurement, that is, it is determined how many times the amount of this quantity is greater or smaller than the quantity of this type, which is taken as equal to one. "Measurement" refers to the process of perception, determination, and comparison, in which the quantity to be measured is compared with the amount perceived as a unit of the same type during the physical experience, that is, the experiment. In this definition, it is possible to conclude that: firstly, measurement is the creation of information about various quantities, secondly, it is a physical experiment, and thirdly, the measurement unit of the measured quantity is used in the process of measurement. Therefore, the purpose of measurement is to find the ratio of the difference between the quantity being measured and the quantity accepted as a unit of measurement. That is, the sought-after quantity in the measurement process is such a basic quantity that its determination is the task and purpose of the entire research and inspection, and the object of measurement is involved. The object of measurement is such an auxiliary quantity, with the help of which the main sought-after quantity is determined, and it is such a device, with the help of which the measured quantity is compared. Thus, it is necessary to distinguish three concepts from each other: measurement, measurement process, measurement method. Measurement generally means receiving and changing information about

various quantities. The purpose of this is to determine the numerical value of the sought quantity in a form convenient for use. The process of measurement is the process of conducting a comparison experiment. The measurement method is a physical experiment that is carried out with the help of a specific, known structure, measurement tools and a specific way of conducting the experiment, an algorithm, a method of implementation.

In conclusion, measurement usually begins with determining the purpose of measurement, and then, based on the analysis of the description of this quantity, the object of direct measurement is determined. With the help of the measurement process, information about the object of measurement is generated, and finally, by some mathematical processing, the result of the measurement is obtained about the purpose of the measurement or about the sought quantity.

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150
Suyarkulova G.J., magistr
Jizzakh Polytechnic Institute

STATISTICAL METHODS OF FORECASTING

Abstract. Statistical forecasting methods are inextricably linked with the time of predicting one or another event in the life cycle of the product. Forecasting is a probabilistic process, taking into account the impossibility of accurately predicting the conditions and factors that will affect the implementation of an existing event in the future.

Key words: statistic, product, prediction, probability, raw material, stability.

Forecasting issues are tracked through the new product development stages. Among them; prediction of characteristics of product sales in the market; reliability links and structure of the product predict its use; prediction of product production system stability; prediction of quality stability of constituent raw materials and materials; forecasting of product sales and others. The choice of forecasting methods depends on many factors, including the size of the past (old) data set, the required accuracy of the forecast, the cost of time and expenses for making the forecast, etc. Time forecasting is divided into short term (up to one year), medium term (up to three years) and long term (over three years) [1]. It is known that the accuracy of the prediction that separates the actual process from the prediction is greater (accuracy of the prediction depending on the duration of the prediction). Most forecasting methods require a sufficient number of initial data, without which they cannot work. The existing methods of forecasting can be divided into two groups: qualitative and quantitative. Classification of forecasting methods Qualitative methods of forecasting are built using the opinion of experts who have knowledge in a certain field. Quantitative methods are based on the processing of numerical arrays of data, and are divided into random (or causal) or time series analysis methods [2]. Casual methods are used when predictions involve large numbers of interconnected factors. Searching for mathematical (equality or inequality) and other relationships makes sense of the casual method. Temporal (dynamic or chronological) simulation is concerned with the sequential evaluation of individual indicators in time series. For example, product price or sales forecast. One of the main criteria that should be guided by forecasters when choosing a suitable method is the cost of forecasting. The second part of costs is more significant for the budget of the organization [3].

Time series analysis (analysis). Temporary series are divided into two types; with constant, $x(x_1, x_2, \dots, x_n)$ the quantity of the observed indicators corresponding to a certain constant of time $T(t_1, t_2, \dots, t_n) > t_{n-1}$; interval (interval) when the corresponding time intervals are indicated: $(t_0 - t_1), (t_1 - t_2) \dots (t_{n-1} - t_n)$.

In forecasting problems, time series are used when the number of real values (quantities) is significant. Time series simulation allows us to analyze from scratch what might happen in the absence of additional factors. The development of processes that are actually observed in life consists of some stable tendencies (trends) and some random elements. Elementary (a) and intermediate (b) temporal series. This is reflected in the fluctuation of the value of indicators around the trend line. Skewed trends smooth the dynamic series values of the indicators by separating the general trends. It is the choice of the slanting thread that determines the results of the analysis in many cases, although it is considered an afterthought. The trend can be affected by new seasonal and cyclical factors. Cyclical organizers are distinguished from seasonal ones by the long duration and non-constantness of the amplitude [4]. Usually, seasonal organizers are measured in days and weeks, while cyclical ones are measured in years and so on. In this work, cyclic generators will not be considered for the sake of simplicity. At the same time, we accept that the trend is characterized by a linear relationship. Sales tenders at the beginning and end of the product life cycle. We will consider three methods of learning temporary series in examples. Classification of time series analysis methods [5]. An example. Let's assume that the determination of the defects of products made in the enterprise will be built with the following temporary series. In the same way, let's make the temporary series shorter and replace the time with the serial number of the day. t - agenda number; x is the number of defects.

Moving average method. This method is divided into moving (sliding) means and comparative (sliding) means.

a) moving (sliding) method of the middle. This method consists in the fact that at the time of forecasting, the calculation of the indicator is built by averaging the amount of this indicator several days ago. Let's say we only have metrics data for the first three days. Let's calculate the number of defects predicted for the fourth day of the disaster (Thursday, April 6). To do this, we determine the average value (quantity) of the number of defects for the past three days. In general, the calculation formula of the forecast is as follows [6]:

where: x - the real (real) amount of the indicator at the moment of time, N is the (previous) number of the moment of time, the prediction at the moment of time. Plot of line (x) and prediction (f) by moving average method. We evaluate the accuracy of the prediction. Any part of a dynamic range covered by a trace can be treated as a selection. An increase or decrease in line length or observation density at each time interval changes the observation size or observation density value of the indicators. However, the value of the "mean" for each segment of the series can be viewed as a selective estimate of some "true" mean. Taking this into

account, it is possible to determine the error of the "selective" mean and confidence intervals. For a small number of observations, we estimate its confidence limits f_{max} and f_{min} using Student's distribution. Taking into account the average amount of the segment of lines x to the advancing moment t , the amount of prediction f_k is calculated. The equation for the average selectable confidence limit has the following form [7]. where - $(n-1)$ degrees of freedom and the tabular quantity of the Student's statistic with the confidence level of the probability R , S_x - the mean squared error of the "mean" (prediction). In turn, the average squared deviation of sample n is equal to the following: From the given equations, we determine the number of defects for Thursday, April 6, the reliability limits and the error of the prediction. From equation (3), when $n=3$, we get $t = 1.52$. We assume that the reliability probability is $R = 0.90$. Then $t = 1.9$. In this case, from the formula (1), we get the following: As can be seen in Figure 1.6, when calculating the prediction for the first three observations from the given intervals, the number of defects made by shop workers on Monday, April 3 and Thursday, April 6 indicators did not fall. This is due to our acceptance of the calculation of the probability of low reliability of observations. Calculations show that the upper limit of prediction in 11 defects can be obtained when the reliability probability is $R = 0.94$ [8].

b) It is necessary to conduct frequent observations when making a forecast with the method of comparison (sliding) of the average, method of averaging. The actual metrics used tend to have the same impact level, with "new" data generally weighted. Taking into account that the weight indicator α_i is included in the formula (1), the number of the prediction in the conditions that the weight of today's indicator is 0.6, yesterday's is 0.3, and the previous day's is 0.1 We calculate the value. We display the obtained results in a graph. Plot of time series (x) and prediction (f) by means comparison method.

Exponential correction method. The deviation of the previous prediction from the real indicator is taken into account in the forecast with the exponential correction method, and the calculation itself is determined (carried out) by the following formula:

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150

THE ROLE OF TECHNICAL REGULATIONS IN ORGANIZING SAFE ROAD TRAFFIC

Abstract. This study delves into the pivotal role that technical regulations play in ensuring the safety of road traffic. As road networks become increasingly complex and diverse, the need for comprehensive and effective technical regulations becomes paramount. The research explores the development, implementation, and impact of these regulations in creating an organized and secure environment for road users.

Keywords: Technical regulations, Road traffic organization, Safety standards, Road safety, Transportation regulations, Traffic management, International standards.

Drawing on international standards and practices, the study emphasizes the importance of aligning with established norms to enhance road safety. The analysis also considers the challenges and opportunities associated with the enforcement of technical regulations, including the defined periods and conditions for implementation. Furthermore, the study highlights the crucial relationship between technical regulations and various aspects of road safety, such as vehicle specifications, road design, traffic signals, and driver behavior. By understanding the significance of technical regulations, policymakers, regulatory bodies, and stakeholders can contribute to the continuous improvement of road safety measures and ensure a safer transportation infrastructure for all [1].

In the organization of safe road traffic, the development of general or specific technical regulations is considered essential. The utilization of international standards is necessary for the development of general or specific technical regulations. It is crucial to fully align current practices with international standards and make extensive use of national standards when developing technical regulation drafts. Consideration should be given to the period and conditions for the implementation of technical regulations, as well as the timing and terms associated with the introduction of the regulations and the production of the goods [2]. Issues related to the implementation of technical regulations and other conditions for their application may also be specified in technical regulations or accompanying normative legal documents that have been approved.

Methodological recommendations for the application of technical regulations. Manufacturers of technical regulations develop methodological recommendations for the application of technical regulations within a specified timeframe. These recommendations elaborate on the rules outlined in the

technical regulations, ensuring a clear understanding and facilitating the effective implementation of these regulations. Methodological recommendations for the application of technical regulations are officially published on the websites of authorized state regulatory bodies that have approved the relevant methodological recommendations, starting from the date of their official confirmation [3].

Normative documents in the field of technical regulation are developed by the State Fund of Standards under the Institute of Standardization, as well as by other authorized state bodies within their competence in the field of technical regulation. Normative documents in the field of technical regulation encompass general and specific technical regulations, consolidating information about them. Specialized state bodies, and state authorities themselves, present their specially approved technical regulations to the State Fund of Standards using technical means by the established procedure.

The system for the development and implementation of normative documents in the field of technical regulation is determined by the Cabinet of Ministers of the Republic of Uzbekistan. Technical regulations specify requirements for the safety of products and services, including biological safety, mechanical safety, chemical safety, nuclear and radiation safety, fire safety, electrical safety, the use and disposal safety of machines and equipment, electromagnetic compatibility, construction safety, safety in using buildings and structures, ecological safety, veterinary safety, industrial safety, transportation safety, information security, and methods for measuring and testing standardization [4].

The development of programs for creating technical regulations is carried out by the Agency for Standardization, Metrology, and Certification of the Republic of Uzbekistan, taking into account the proposals of other relevant state bodies and the coordination and direction of state and economic management bodies. Technical regulations are developed by the approved programs for the development of technical regulations. Manufacturers of technical regulations announce information about the development of technical regulations in the order established, determine the groups and types of products and services for which technical regulations are needed, evaluate compliance with the requirements specified in the technical regulations, adopt developed technical regulations, and ensure the freedom to use them. State bodies and economic management bodies submit general technical regulations for examination by technical regulatory bodies by the direction of their activities [5].

Technical regulatory bodies and state authorities submit specially approved technical regulations to the State Fund of Standards for expert examination based on the conclusion of a specialized expert commission in the field of technical regulation. General and special technical regulations are announced by the procedure established in the legal documents. In the development of technical regulations, national and international normative documents in the field of technical regulation specifying the safety zones of products and services are used.

The Agency for Standardization, Metrology, and Certification of the Republic of Uzbekistan ensures the fulfillment of the obligations of normative legal acts of the Cabinet of Ministers of the Republic of Uzbekistan in organizing and ensuring the implementation of normative legal acts. The Agency, in the framework of its powers, develops and adopts the necessary measures to ensure the timely and proper execution of normative legal acts by ministries, state committees, and authorities, organizes and directs their activities, coordinates and directs the implementation of normative legal acts, and, if necessary, submits proposals for improvement, taking into account the execution of normative legal acts on the application of the law. In the process of using normative legal acts, the Agency coordinates and organizes the work of other organizations, implements measures for the timely and proper execution of normative legal acts, ensures the preparation of normative legal acts for publication, organizes their printing, distribution, and storage, ensures the provision of information on normative legal acts to interested organizations, legal entities, and individuals, and provides legal protection for normative legal acts [6].

Local government bodies develop and ensure the implementation of normative legal acts on normative regulation and provide leadership in the field of technical regulation within their territories. Local government bodies in their areas, by the established procedure, develop and adopt the necessary measures for the timely and proper execution of normative legal acts by ministries, state committees, and authorities, organize and direct their activities, coordinate and direct the implementation of normative legal acts, and, if necessary, submit proposals for improvement, taking into account the execution of normative legal acts on the application of the law [7]. The State Fund of Standards ensures the development and implementation of normative legal acts in the field of technical regulation and compliance with the established procedure for their publication. The State Fund of Standards ensures the timely and proper execution of normative legal acts in the field of technical regulation, organizes and directs the activities of its staff, coordinates and directs the implementation of normative legal acts, ensures the provision of information on normative legal acts to interested organizations, legal entities, and individuals, and provides legal protection for normative legal acts [8].

In conclusion, this study underscores the pivotal role that technical regulations play in the organization and enhancement of safe road traffic. Through an examination of international standards and practices, it becomes evident that the establishment and enforcement of comprehensive technical regulations are imperative for ensuring the safety of road users. The analysis has illuminated the multifaceted nature of these regulations, encompassing various aspects such as road design, traffic signals, vehicle specifications, and driver behavior. The study also recognizes the challenges associated with implementing and enforcing technical regulations, emphasizing the need for a harmonized approach and adherence to defined timelines.

As road networks continue to evolve and face new challenges, the significance of up-to-date and effective technical regulations cannot be overstated. The findings of this research highlight the need for ongoing collaboration between policymakers, regulatory bodies, and stakeholders to continuously improve and adapt technical regulations to evolving transportation landscapes. By prioritizing and investing in the development, implementation, and enforcement of technical regulations, we can contribute significantly to the creation of a safer and more organized road traffic environment for all.

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THE ROLE OF QUALITY MANAGEMENT SYSTEM IN CURRENT INTERNAL AUDIT

Abstract. This study investigates the pivotal role of a Quality Management System (QMS) in the context of ongoing internal audits. The implementation and maintenance of an effective QMS are crucial elements for organizations aiming to uphold and enhance the quality of their processes and outputs. This research delves into how a robust QMS framework contributes to the efficiency and effectiveness of internal audits, ensuring that organizational processes align with established standards and regulations. The analysis highlights the integration of QMS principles in internal auditing practices, emphasizing the continuous improvement aspect inherent in quality management.

Keywords: Quality Management System (QMS), Internal audit, Audit processes, Organizational efficiency, Quality standards, Regulatory compliance, Continuous improvement, Process optimization.

The systems of quality management, environmental management, industrial safety, and occupational health and safety management, as well as other management systems present in the organization, need to undergo regular internal audits. Once the quality management system is in place, the leadership of the organization needs to assess how the system operates, where potential weaknesses or issues may exist, and collaborate with specialists to evaluate the effectiveness of the system [1]. The results of internal audits serve as a database for the organizational leadership to analyze and make informed decisions, facilitating the development of corrective actions and identifying opportunities for overall improvement in certain processes or the system as a whole. The purpose of conducting internal audits is to assess the compliance of the quality management system with specified requirements, ensuring its correct implementation and functionality in the current work environment. It involves identifying the effectiveness of corrective actions taken regarding previously identified nonconformities and making decisions for further improvement of the system [2].

In the ISO 19011 international standard, audits are conducted with the aim of identifying to what extent the specified requirements of the implemented system are met, and the results of these investigations are systematically, independently, and documented in defined procedures used for objective evaluation. It is noted that internal audits are one of the processes in the quality management system and are implemented according to the Plan-Do-Check-Act cycle [3]. Considering the audit objectives, international standards, internal

regulatory documents, rules, procedures, contracts, and other documents of the organizational quality management system can be used as audit criteria.

First-party audit (internal audit) is an audit conducted by specialists of the organization, meaning an internal examination of the organization's own systems, procedures, and activities to gain confidence in their compliance with specified requirements. Internal audit provides information to the management about the execution of directives, instructions, and orders, the effectiveness or ineffectiveness of the system at a defined level, and the presence of deficiencies in the system. Internal audit ensures the provision of complete 'communication channels' throughout the organization and identifies opportunities for improving activities. The organization guides its internal audits, demonstrating the compliance of the quality management system with standard requirements to the extent necessary. However, other organizations may await the results of internal audits with skepticism [4]. Still, during the preparation process for certification, it is possible to identify the organization's movement from the second and third parties to evaluate it.

Second-party audit is an examination carried out on the organization from the customer's side or from a party with a particular interest or curiosity in the organization's activities. The purpose of the second-party audit is to ensure the organization's confidence in the implementation of the customer's requirements at the specified level, and it should be carried out regularly in accordance with the requirements. The results of the second-party audit reveal the impact of both organizations on each other's future business decisions. Therefore, for guaranteed accurate information, the audit should be carried out by competent, trained personnel during the preparation process for certification [5]. If one organization orders another organization to conduct an audit, and the auditing organization receives results from the auditing organization, it is possible to consider the organization having conducted the audit.

Third-party audit is an inspection carried out by an external independent organization, usually for certification purposes. Like the second-party audit, the third-party audit also establishes specific requirements for auditors and the audited organization. The results of the audit should show the objectivity of the system being audited at a specified level and the high objectivity of the auditors reviewing the system. The organization being audited can benefit from the results of external audits for promotional purposes, demonstrating compliance with established requirements and the effectiveness of the quality system [6]. Negative aspects of external audit include the organization's unfamiliarity with the customs of the corporation, the organization's employees characterizing auditors as 'strangers,' difficulties in providing the necessary information in some cases, the auditor's lack of knowledge of unofficial procedures in a short period, the possibility of complicating the collection of necessary information during the audit, and the likelihood of revealing confidential information during the audit [7].

The stages of the audit typically consist of internal and external audits, often involving two stages: adequacy checking and conformity checking.

Adequacy checking assesses the degree of compliance of the documented system with the requirements specified in the standard. Adequacy checking is carried out by reviewing the documented system, comparing the applicable standard requirements, and checking whether the documented system matches the parts that are in compliance with the standard requirements [8].

Conformity checking involves reviewing the system by the organization's or company's employees to ensure that the requirements of the documented system are understood, implemented, and supported. If a documented system has not been established for a specific procedure or activity required by the standard, conformity checking may be performed relative to the implementation of the standard requirements.

In conclusion, the role of the Quality Management System (QMS) in the current internal audit process is pivotal for ensuring organizational excellence. The synergy between QMS principles and internal audit practices establishes a robust framework for continual improvement and adherence to established standards. Through systematic planning, implementation, and monitoring, the QMS not only facilitates the identification of areas for enhancement but also provides a structured approach to addressing non-conformities. The integration of QMS principles in the internal audit process not only enhances the effectiveness of audits but also contributes to the overall efficiency and competitiveness of the organization. As organizations navigate the complex landscape of quality assurance, the symbiotic relationship between QMS and internal audit emerges as a cornerstone for sustained success, fostering a culture of quality, compliance, and continuous improvement.

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150

PRODUCT LIFECYCLE IN IMPLEMENTED QUALITY MANAGEMENT SYSTEMS OF MODERN ENTERPRISES

Abstract. Organizing and optimizing the necessary processes for the production of goods is considered crucial. The alignment of the production processes should be in accordance with the requirements of other processes within the quality management system. This ensures that the production of high-quality competitive products is achieved.

Keywords: Product lifecycle, quality management systems, modern enterprises, implementation, quality control, lifecycle management, product development, process optimization, quality standards.

In the planning of production processes in organizations, it is necessary to determine the goals and requirements for the quality field, secure the production processes and documents for a specific product, ensure the production with necessary resources, establish procedures for activities related to verification, validation, monitoring, evaluation, control, and tests, and formalize the required documents to confirm their compliance with the organization's goals in a convenient format. The document should reflect the entire process of quality management, including the management of production processes, resource management, measurement and analysis processes, and their interrelation. It is essential for the organization to align the production processes with its goals and establish connections with management processes, resource management, measurement and analysis processes, and improvement processes [1].

Processes related to users. The requirements placed on the product by the user, as well as the requirements for post-delivery services, are necessary. If information about them is available, it is necessary to specify the legal and mandatory requirements for the use of the product, as well as the additional requirements specified by the user for specific purposes. The organization must identify and analyze user requirements, needs, and expectations [2]. Determining the requirements of users is carried out in the marketing activity of the organization based on product types, sales markets, and requirements of various user groups. It is necessary to ensure the understanding of all requirements in full, taking into account the requirements of users and other relevant parties. The organization must determine, analyze, and define the requirements placed on the product. Such analysis should be carried out before accepting the requirements and should ensure that the identified mandatory requirements and additional requirements for the organization are consistent with the objectives of the

organization. It is necessary to ensure the ability to comply with the mandatory requirements and specified requirements of users and other relevant parties related to the product at each stage of production [3]. The organization must analyze the requirements for the product. Such analysis is necessary before accepting the mandatory requirements and ensures the organization's ability to comply with the mandatory requirements and specified requirements of users and other relevant parties. The organization needs to analyze the requirements for the product. This analysis must take place before accepting the mandatory requirements and ensures that the organization can comply with the mandatory requirements and specified requirements of users and other relevant parties. The results of the analysis and subsequent actions should be documented, and if the user does not present documented requirements, the organization must ensure that these requirements are confirmed before accepting them. If the requirements for the product are changed, the organization must ensure that the changes are entered and provided to relevant employees [4].

It is necessary to analyze the requirements for the product. This analysis must take place before accepting the mandatory requirements and ensures that the organization can comply with the mandatory requirements and specified requirements of users and other relevant parties. The results of the analysis and subsequent actions should be documented, and if the user does not present documented requirements, the organization must ensure that these requirements are confirmed before accepting them. If the requirements for the product are changed, the organization must ensure that the changes are entered and provided to relevant employees. It is necessary to analyze the requirements for the product. This analysis must take place before accepting the mandatory requirements and ensures that the organization can comply with the mandatory requirements and specified requirements of users and other relevant parties. The results of the analysis and subsequent actions should be documented, and if the user does not present documented requirements, the organization must ensure that these requirements are confirmed before accepting them. If the requirements for the product are changed, the organization must ensure that the changes are entered and provided to relevant employees. The organization should analyze the requirements for the product. This analysis must take place before accepting the mandatory requirements and ensures that the organization can comply with the mandatory requirements and specified requirements of users and other relevant parties [5]. The results of the analysis and subsequent actions should be documented, and if the user does not present documented requirements, the organization must ensure that these requirements are confirmed before accepting them. If the requirements for the product are changed, the organization must ensure that the changes are entered and provided to relevant employees [6]. The organization should analyze the requirements for the product. This analysis must take place before accepting the mandatory requirements and ensures that the organization can comply with the mandatory requirements and specified

requirements of users and other relevant parties. The results of the analysis and subsequent actions should be documented, and if the user does not present documented requirements, the organization must ensure that these requirements are confirmed before accepting them. If the requirements for the product are changed, the organization must ensure that the changes are entered and provided to relevant employees [7].

Planning and implementation of production, Planning and implementation of the organization's production process is crucial. Product lifecycle processes such as business processes are essential for the organization because they add value to the product. The processes can be small processes. Planning and implementation of production processes should be aligned with the organization's goals and should establish mutual connections with management processes, resource management processes, measurement and analysis processes, and improvement processes [8].

The conclusion of the text is likely to emphasize the critical importance of effectively managing the product lifecycle within the framework of implemented quality management systems in modern enterprises. It would likely highlight the significance of aligning production processes with specific quality standards, ensuring compliance with regulations, and emphasizing the need for continuous improvement throughout the product development and manufacturing stages. The text might stress the role of thorough analysis, validation, verification, and monitoring in achieving quality objectives and meeting the diverse requirements of consumers. Overall, the conclusion would likely underscore the holistic and strategic approach required to successfully navigate the complexities of product lifecycle management within the context of modern quality management systems.

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THE IMPORTANCE OF TESTS IN PRODUCTION OF QUALITY PRODUCTS IN ENTERPRISES

Abstract. Product quality indicators and evaluation methods. The indicator of product quality means the quantitative description of one or more properties of the product, its application to specific conditions of its creation and use or consumption. They must meet the basic requirements of stability of quality indicators, help to increase production efficiency on a planned basis, taking into account scientific and technical achievements, ability to meet certain needs according to specific tasks. Functional indicators describe the properties of the product, determine their main tasks, determine the field of application of the product.

Keywords: Product, quality, indicators, importance, tests, production.

Composition and structure indicators represent the amount of chemical elements or group structures in the product [1]. The composition and structure indicators include the mass fractions of the structural components of steel, the concentration of various components in acids, the mass fraction of sulfur and ash in coke, the mass fractions of sugar and salts in food and other products. Raw materials, materials, fuel and electricity saving indicators describe the product's properties and represent its technical improvement level or the standard of raw materials, materials, fuel and electricity consumed by them. Many quality indicators of the product are their functions and parameters [2]. However, in most cases this relationship is difficult to understand adequately. The concepts of "symptom", "parameter" and "quality indicators" are interrelated. Describing the complex nature of products, it is called the functional ability of the product to fulfill its needs, purpose and tasks assigned to it. A complex property describing the artistic expression of the product, the correctness of the form, the integrity of the composition is called the aesthetics of the product. The safety of the product is its complex property, an indicator that determines the amount of harmful effects for humans [3]. The environmental friendliness of the product is considered one of its complex properties and determines the amount of harmful impact on the environment. The consumer price of the finished product is the sum of its consumption price and others and the costs of its consumption or use. The description of the product, which represents its differentiation from competing products both in terms of the degree of compliance with a specific need and in terms of the costs of satisfying this need, is called its competitiveness. Quality, like other concepts, has its own system. A quality system is a set of organizational

structures, responsibilities, work procedures, processes, resources, and the implementation of overall quality management. Selection of the nomenclature of the quality indicators of the specified product, determining the values of these indicators and comparing them with the basic values is called the evaluation of the level of product quality. To evaluate the level of product quality, products are divided into categories of products that are consumed in use and products that consume their own resources. Consumable products are used in the process of using products of the series according to their function [4]. Usually, recycling is an irreversible process, or it can be the burning of fuel, the assimilation of food products, and sometimes it can also be a reversible process. When using products of a category that consumes its own resource according to its function, its resource is consumed. In this case, the product is used due to its technical and spiritual obsolescence. The application of the specified description of the product is a number of actions when choosing the names of a single indicator of a certain group of products, determining the field of use of the product, selecting one or more samples as the basis, creating systems of state standards for the names of the quality indicators of the product. creates relief. It refers to the quality systems of activities that include quality from all sides, provide all its aspects and cover all life stages of the product. Quality work begins in the marketing area and ends with the stage of using the waste generated from the use of the product. The sum of these stages is called a quality ring, and its definition is given above. Special requirements are placed on the methodological basis of product quality assessment in quality systems, especially in mandatory and voluntary product certification, in which a comprehensive analysis and objective assessment of all properties of the product in consumption, the possibility of demonstrating safety and environmental friendliness, based on the given assessment, the consumer creation of a basis for social protection from the risk of the use and environmental protection of the product and the risk of incorrect assessment of the product and its quality is almost completely ensured by

The main purpose of evaluating the level of product quality is to justify the parameters of new types of products, to prepare technical assignments for the development of products, standards, and technical conditions, and to draw up technical level cards for new products, to make decisions based on the test results of manufactured products, to repair products, etc. making a decision is to create a basis for the product to be sufficiently valued in the market and sold at a reasonable price [5]. Different methods are used in the evaluation of product quality level: differential, complex, mixed and statistical methods. The differential method refers to the method of product quality assessment based on the use of a single indicator of the product. The differential method is based on the comparison of the indicator of the quality of the evaluated product with the indicator that is the basis. For example, the service life of the equipment produced by one enterprise is 8 years, and at the second enterprise this number is 12 years, the basic value is lower than the basic value, and at the second it is higher. This

indicator was achieved as a result of improving its service life. The method of product quality assessment based on the use of aggregate indicators of product quality is called an aggregate method. For example, when assessing the quality of buses, the generalized quality indicator is their annual productivity. The mixed method is the evaluation of the quality of the product using both single indicators and complex indicators at the same time. Mathematical statistical methods are used to evaluate the quality of the product using the statistical method. Organoleptic method - product quality is determined by smell, sight, hearing, taste. The chemical composition, physical, microbiological and technological properties of the product are determined by the experimental method. The result is expressed in numbers, but the time is long [6]. The expert method consists of no less than 7 highly qualified specialists-experts-commodity experts, designers, constructors, and the quality is evaluated according to their opinion. The expert commission consists of two groups: an expert and a working group. The expert group evaluates the goods, and the working group performs technical and organizational work, organization of survey work, distribution and collection of questionnaires, processing and analysis of expert evaluations. Classification of types of product testing. Product testing and types of tests are divided into classes according to international standards. Depending on the purpose of the tests, they can be carried out for research, for control, for comparison, for determining the value. Research tests are carried out in the process of experimental processing of a sample item in accordance with the design document. The purpose of this test is to study certain characteristics of the property of the object. A real sample can also be used as a test object. In these tests, information is obtained about the properties of the material or product. This information is necessary for more effective use of the identified feature. Control tests are carried out in order to control product quality, that is, to control the conformity of the quality indicator achieved in practice with the specified value. These tests are carried out during the production process. As a result of these tests, the causes of inconsistency are determined and eliminated, and a recommendation for further quality improvement is developed. Such tests are carried out only on real samples. Control tests do not provide sufficient information about product stability. In order to determine its durability, additional special tests such as long-term durability, non-destructive operation, storage and other tests should be conducted. The results of control tests are not only used to determine the unusability of the product, but the statistically processed result of the control test allows to determine the quality of technological processes and find ways to further improve it. Each parameter of the control test characterizes the state of a certain part of the technological process. Comparison tests - testing similar or identical objects in terms of characteristics in the same conditions in order to test their properties. Determination test - the previously unknown values of the object characteristics with specified accuracy and reliability, and if necessary, a random size distribution is considered a test of determination with legal value [7]. Finished

product testing is a qualification test-testing of the first industrial production batch of the product in order to assess the readiness of the enterprise to produce a specific product in a specified volume. Pre-delivery test is a test conducted by the technical service of the manufacturing enterprise before the product is presented to the customer, consumer or other receiving office [8].

In conclusion, tests are an integral part of the production process for enterprises aiming to deliver quality products. By prioritizing testing at every stage of production, businesses can uphold high standards, meet customer expectations, and achieve long-term success in the competitive market.

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150

THE IMPORTANCE OF TESTING EQUIPMENT CERTIFICATION IN PRODUCING QUALITY PRODUCTS

Abstract. This statement emphasizes the significance of conducting tests in the manufacturing process to ensure the production of high-quality products within enterprises. The need for testing arises as it forms the foundation for the core function of producing and utilizing equipment during the manufacturing process. Testing is crucial during production, in establishing the inventory of equipment, in the contemporary creation of testing equipment, and in the development of specific and governmental programs. The certification of testing equipment holds paramount importance, with its primary objectives being the precise documentation of equipment specifications, their compatibility with documented references, and the determination of their suitability for utilization.

Keywords: Product, quality, indicators, importance, tests, production.

To create a technical device for the certification of testing conditions of the testing equipment. Classification is necessary because it serves as the basis for production and use when creating and using the testing equipment, during production and in the nomenclature list of the testing equipment, in the production of modern testing equipment, and in the development of purposeful and state programs. The certification of the testing equipment is considered crucial in determining the main tasks of the testing equipment [1]. The main purpose of the certification of testing equipment is to identify the precise specifications of the equipment, its compatibility with documented specifications, and to specify the suitability of the equipment for use.

Understanding the technical specifications that specify the testing requirements within the specified range with clarity and accuracy, and defining the possibilities of using and strengthening within the specified period are crucial. For example, in addition to the descriptive specifications, technical specifications that clearly indicate the ability to use the equipment safely and effectively in conducting experiments beyond the descriptive specifications are part of the complex of technical specifications unique to the equipment [2]. Determining the compatibility of the testing equipment's precise specifications with international standards is essential in identifying the suitability of the equipment for use. The certification types of testing equipment must comply with international standards requirements, based on the fact that all types of testing equipment, whether general industrial, agricultural, or specialized, should strictly adhere to the requirements of the initial, periodic, and non-periodic types of certification. Initial

certification includes newly manufactured equipment, while periodic certification includes equipment initially prepared with experienced samples, modernized testing equipment, specially designed testing equipment, and imported testing equipment [3].

The initial certification of testing equipment is essential to conduct comprehensive checks on all sides. For example, the equipment's specific specifications are examined for precision and completeness, and the compatibility of the equipment with the requirements and modes within the specified range is determined, as well as the possibilities of using and reinforcing them within the specified period. The technical specifications that are essential to determining the compatibility of the equipment's specific specifications with international standards must be derived from international and national documents. In determining the reliability of the equipment, the technical specifications that describe the conditions of testing specific products and the possibilities of using and reinforcing them during the utilization process are essential [4].

The methods of organizing the certification of testing equipment after the initial certification are seen as a complex process of obtaining objective information about the precise specifications of the equipment under test. This process includes dividing the organizational and methodological stages, such as defining the first stage task, preparing and organizing the certification, developing the rules and methodologies for certification, conducting the certification, and summarizing the results and making decisions. Let's go through each stage and outline the tasks that need to be accomplished.

First stage - defining the task: To realize this stage, it is necessary to clearly define the purpose of certification, its tasks, and the specific aspects of its implementation; this point depends on the type of certification in general and its consequences, peculiarities, and tasks will be specific to the type of certification. It is important to identify the certification object and the conditions for its implementation, study the requirements and tasks related to specific product types specified in the specifications, and learn from the regulatory documents on testing methods and norms [5].

Second stage - preparation and organization of certification: When preparing for certification, attention should be paid to the readiness of certification personnel, appropriate documentation, measurement tools, and the readiness of the testing facility and auxiliary technical tools. The staff conducting the certification must have the necessary knowledge of various sciences and be prepared for various activities. It is necessary to study what is necessary for the equipment to meet the technical requirements and norms in the process of certification. Analyzing and analyzing the requirements for the report on certification and other necessary requirements for the preparation of the certification process [6].

Preparation of normative-technical documents: All documents must pass a metrological examination. The metrological examination of the standard

document is carried out on the basis of the requirements for parameters based on the choice of parameters specified in the standard document and the establishment of the range of meanings of measurement methods and tools, as well as the provision of necessary documents and programs, methodics for certification and testing, standards of methodologies and documents. necessary documents.

Third stage - conducting certification: It is essential to ensure that the certification is carried out under the requirements of the certification, the technical specifications are determined, and the parameters of the testing standards and methods within the specified range are determined and confirmed in the established period. It is also important to check the conditions of registration and measurement parameters, calculate the results of certification, evaluate and analyze the results, and prepare reports on the results of certification. In the process of certification, it is necessary to use semi-automatic or automatic measuring instruments to automatically register indicators and parameters that clearly indicate in the documents the measured values and performance indicators of the equipment [7].

Fourth stage - summarizing and analyzing certification results: The main task at this stage is to analyze the results obtained during the certification process and summarize them. Based on the results of certification, conclusions and proposals should be drawn up to improve the quality and metrological work, as well as recommendations for eliminating identified shortcomings [8].

In conclusion, each stage should be considered separately, and the tasks to be accomplished in each stage should be formulated. The execution of each stage is crucial to the success of the certification process and to ensuring the quality and metrological reliability of the testing equipment.

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150

SIGNIFICANCE OF CERTIFICATION STAGES IN ENTERPRISES WITH A QUALITY MANAGEMENT SYSTEM

Abstract. The implementation of a Quality Management System (QMS) is a crucial step for enterprises aspiring to enhance their operational efficiency and product/service quality. Certification stages play a pivotal role in validating the effectiveness of a QMS, ensuring adherence to international standards, and demonstrating a commitment to continuous improvement. This abstract explores the significance of certification stages in enterprises with a QMS, highlighting their impact on organizational processes, customer satisfaction, and market competitiveness.

Keywords: Product, quality, indicators, importance, tests, production, certification, enterprises.

In product certification, based on service certification schemes, with the first scheme, only the types of product samples are tested for compliance with the requirements of the standards in specially certified testing organizations [1]. In this type of certification, the compliance of the sample submitted for testing with the specified requirements is confirmed. Due to its simplicity and low cost, this method is widely used in national and international trade relations. In the second scheme, product samples are tested in specially approved testing organizations, and then its quality is controlled on the basis of samples taken from sales outlets from time to time. This method makes it possible to assess the quality of the submitted samples as well as the quality of the mass-produced product [2]. The advantage of the method is its simplicity. Its disadvantage is that depending on the results of the control tests, if the product is found to be non-compliant with the standard requirements, it will still not be possible to remove it from the sales outlets, or there will be some difficulties to remove it. The third scheme is based on carrying out types of product samples in specially approved testing organizations, and then controlling the inspection of samples from time to time without sending them to the seller or consumer. The difference from the second scheme is that before the product reaches the retail outlets, the test control is carried out, and if non-compliance with the standard is detected, the shipment of the product to the consumer is stopped [3]. The fourth scheme is based on the testing of product samples in the same way as the first and third schemes, and then the quality of the product is taken into account by periodic inspection of samples from the sales office and production. In this case, the product is produced, and after certain expenses for its release, it is determined that it does not meet the

requirements of the standard. The fifth scheme is based on conducting product samples in approved testing organizations and assessing the quality of product production, and then periodically checking and controlling the quality of samples in the sales office and in production. This certification method not only controls the quality of the product, but also ensures that the quality of the product produced by the enterprise is at the required level. Naturally, it is important to determine the criteria for ensuring product quality in the enterprise and evaluating the system. This method is the most common scheme in industrialized countries and international certification systems. Compared to the first and fourth schemes, this scheme is the most complicated and relatively expensive scheme, and its advantage is that the consumer is sure of the high quality of the product, which is the main criterion. The sixth scheme is intended only for the assessment of the system, ensuring the quality of the product in the enterprise. This method is sometimes referred to as certification of the manufacturer [4]. In this type of certification, only the enterprise's ability to produce products of the specified quality level is assessed. The seventh scheme is based on the selection of products from each prepared batch for testing. Based on the results of the selection tests, a decision will be made to increase the herd. For this type of certification, the size of the sample should be determined, which depends on the acceptable quality level of the prepared herd. According to the accepted rule, the collection of samples is carried out by authorized testing organizations [5]. The use of such certification is related to the use of statistical methods. The eighth scheme is based on testing the compliance of each manufactured item with the requirements of the standards. In this certification method, the responsibility of the supplier is much higher than in the above seven schemes. Of course, only the products that have successfully passed the tests will receive a certificate or a mark of conformity. The eighth scheme is used when higher and stricter requirements are imposed on the product, based on use, or when the non-compliance of the product with the standard requirements as a result of its use causes great economic damage to the consumer. This kind of certification is mostly used for products made of precious metals and alloys [6]. The main purpose of this is to check the specified amount of precious metals, composition and purity of the item. The ninth scheme is the certificate of conformity of the declaration of products, which means certification together with declaration documents about the product. A new type of certification was created by the British institute, based on the confirmation of technological processes in production. At present, the advantages and disadvantages of each certification scheme are analyzed in the literature and information sources. The most perfect and complex of these is the fifth scheme. Since this scheme is complete, a modern international certification system is being created based on it. The management office of certification systems organizes its work on the basis of the laws and regulatory documents in force in the country, taking into account the organization of quality control of certain types of products, mandatory requirements for compliance with standards, consumer and trade requirements. The certification

office acts as a third party by conducting tests, controlling the quality of products in the enterprise and in the sales branch, and organizing control and the like [7].

Inspection control of certification facilities. Regulatory documents, documented procedures of the quality system, documents on the field of accreditation and certification and testing are considered objects of inspection control. Inspection control is carried out in a planned manner in accordance with the agreement concluded with the accrediting agency. According to this agreement, the head of the accrediting office will prepare an annual plan-schedule of the inspection control of the facility's activities, approved every year. Unscheduled inspection control of the activities of the certification office, illegal treatment of the applicant in the certification procedure and illegal issuance of a certificate of conformity and official confirmation of unsubstantiated evidence are presented in certain specific evidence, as well as information disclosing the applicant's trade secrets. will be held in case of occurrence. The basis for the inspection control is the order of the accrediting agency, i.e., the composition of the inspection control commission and the specific period of its implementation. The duration of the inspection control should not exceed thirty calendar days. The inspection control is carried out by expert auditors in terms of quality. Due to the fact that the object depends on the field of accreditation, it is possible to include qualified specialists in the commission on the issues that will be considered during the inspection control. The members of the commission must comply with the requirements for ensuring confidentiality [8]. Inspection control is carried out according to the program approved by the head of the accrediting office. The inspection control program must contain the object and purpose of the inspection, the order and volume of work on conducting the inspection control. Before the inspection control begins, the head of the commission should introduce the head of the inspected organization to the purpose and conditions of the inspection control, as well as the members of the commission., and must give a copy of the order and program and receive a receipt stating that they have been received.

Independence of assessment in the planned inspection control of the activities of the certification office; interaction with laboratories; availability and compliance of the selection certificate and identification, test reports, production inspection reports on certification, plan-graph of inspection control of certified products, compliance the basis of the decisions made on issuing the certificate, the correct formalization of the certificate of conformity, the conformity of the information in the normative documents used to make a decision on certification and the information in the certificate of conformity, registration of the issued certificates of conformity; strict calculation of forms of certificates of conformity; analysis and calculation of claims and complaints of applicants, certification of accreditation, provision of regulatory documents for products and services, their validity period, timely introduction of changes to them, certificate of conformity and the measures taken against the certified product manufacturer for the incorrect use of the mark, the compliance of the qualifications and abilities of the

employees, the tasks they perform, the accepted activities, positions and work instructions related to the attestation and improvement of the qualifications of the employees; the existence of the certification office ensuring the confidentiality of information related to the activities and laboratory services; the accreditation office, as well as its mutual activities in making decisions.

In conclusion, the certification stages within enterprises implementing a Quality Management System (QMS) are of paramount significance in shaping the organization's commitment to excellence, adherence to international standards, and continuous improvement. The multi-faceted certification process, encompassing initial assessment, documentation review, on-site audits, and ongoing surveillance, not only validates compliance but serves as a catalyst for organizational evolution.

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Badalov N.J.
associate professor
Jizzakh Polytechnic Institute
Orcid: 0000-0003-3392-9150

METHODS OF ORGANIZING INNOVATIVE SOLUTIONS BASED ON PEDAGOGICAL C TO DEVELOP VOCATIONAL COMPETENCE AND CREATIVITY OF FUTURE ENGINEERS

Abstract. This study explores methods for implementing innovative solutions grounded in pedagogical mechanisms to enhance the vocational competence and creativity of aspiring engineers. The research aims to identify and establish effective strategies that contribute to the development of skills and imaginative thinking in future engineering professionals. By investigating innovative approaches within educational frameworks, this study seeks to provide insights and recommendations for fostering a dynamic and competent workforce in the field of engineering.

Keywords: competence, pedagogical mechanisms, methods, cooperative education, mastered education, projects.

INTRODUCTION: In today's rapidly evolving technological landscape, the demand for skilled and creative engineers is more pronounced than ever before. The dynamic nature of industries requires engineers to possess not only a robust technical foundation but also a high level of professional competence and creativity. Recognizing this imperative, educators and institutions are tasked with developing innovative pedagogical mechanisms that foster the growth of these essential qualities among future engineers [1]. The traditional approach to engineering education, while effective in imparting technical knowledge, may fall short in nurturing the creativity and adaptability demanded by modern industries. As we navigate through the complexities of the 21st century, there is a critical need to explore and implement new methods that go beyond the conventional teaching paradigms. This paper aims to delve into various methods for organizing an innovative approach grounded in pedagogical mechanisms to cultivate the professional competence and creativity of future engineers. By understanding and implementing these approaches, educators can better equip students to thrive in a competitive and ever-changing professional landscape. Through a synthesis of pedagogical strategies, interdisciplinary collaboration, and real-world applications, this paper seeks to contribute to the ongoing discourse on enhancing engineering education to meet the evolving needs of the industry.

MAIN PART: We can use the following methods to organize an innovative approach based on pedagogical mechanisms in the development of professional competence and creativity of future engineers.

Interactive Learning Environments: Embracing interactive learning environments can significantly contribute to the development of professional competence and creativity. Integrating collaborative projects, case studies, and hands-on experiences within the curriculum encourages active engagement and problem-solving. By fostering a participatory atmosphere, students can apply theoretical knowledge to real-world scenarios, promoting a deeper understanding of engineering principles.

Project-Based Learning: Project-based learning (PBL) is a powerful pedagogical approach that immerses students in real-world challenges. By working on projects, students develop problem-solving skills, teamwork, and a holistic understanding of engineering problems [2]. PBL encourages creativity as students explore innovative solutions and learn to navigate the complexities of interdisciplinary projects, mirroring the collaborative nature of the professional engineering environment.

Interdisciplinary Integration: Breaking down silos between engineering disciplines and integrating coursework from various fields enhances the holistic development of engineers. Exposure to diverse perspectives fosters creativity, as students learn to draw from multiple disciplines to address complex problems. An interdisciplinary approach mirrors the collaborative nature of contemporary engineering projects and prepares students for the multifaceted challenges they will face in their professional careers.

Incorporation of Emerging Technologies: Given the rapid advancements in technology, incorporating emerging technologies into the curriculum is essential. Exposure to cutting-edge tools, such as virtual reality, artificial intelligence, and simulation software, not only enhances technical skills but also stimulates creative thinking. By staying abreast of industry trends, students are better equipped to contribute to innovative solutions in their future engineering roles.

Industry Collaborations and Internships: Bridging the gap between academia and industry is crucial for preparing students for the professional realm [3]. Collaborations with industry partners, guest lectures from professionals, and internships provide students with real-world insights. Exposure to industry practices not only enhances technical competence but also instills a sense of adaptability and innovation necessary for navigating the dynamic engineering landscape.

Continuous Assessment and Feedback: Implementing a continuous assessment system ensures that students receive timely feedback on their progress. This iterative feedback loop allows for adjustments and improvements, promoting self-reflection and adaptive learning. By fostering a culture of continuous improvement, students develop resilience and a growth mindset, essential attributes for both professional competence and creative problem-solving.

IN CONCLUSION: Organizing an innovative approach to engineering education based on these pedagogical mechanisms creates a conducive

environment for the development of professional competence and creativity. By combining interactive learning, project-based methodologies, interdisciplinary integration, exposure to emerging technologies, industry collaborations, and a robust assessment system, educators can empower future engineers to thrive in the ever-evolving landscape of the engineering profession.

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CURRENT ISSUES OF ENERGY

Annotation. The article analyzes the estimates of international organizations that due to economic development, the demand for energy will increase by more than 50% by 2030 compared to the beginning of the century, and the total demand will be very high, resulting in a negative impact on the environment.

Keywords: alternative energy sources, renewable energy, solar power, atmosphere, solar power plants, carbon dioxide, wind power plants.

According to international organizations, due to economic development, by 2030 the demand for energy will increase by more than 50% compared to the beginning of the century, and the total demand will be 23.27 billion tons of conventional fuel. This means that the negative impact on the environment is growing.

If such rates continue, it is estimated that the reserves of black gold on the planet will last only 55-60 years. This period is estimated at 70-75 years for natural gas and 150-160 years for coal. In addition, the sustainable use of hydrocarbon resources is degrading the environment and human health, climate change is being observed, and the ozone layer is being depleted. According to experts, 5 billion tons of carbon dioxide are released into the atmosphere every year. tons of carbon dioxide, about 300 million. tons of carbon monoxide. This is 3.5 times more than in the first half of the twentieth century.

Under these conditions, it is natural that the widespread use of alternative energy sources will be on the agenda. This is due to the fact that their types of solar, hydro and wind energy, as well as biomass, are almost unique and renewable, very relevant to the current era of innovative development, and the creation of new jobs. In addition, the equipment and technology working on this basis are environmentally friendly, environmentally friendly and do not lead to man-made disasters.

At present, 10.2% of all energy produced in the world comes from renewable energy sources. By 2050, its share in some species is expected to exceed 70%.

This will reduce emissions by 500 billion tons. This is because the goal of developing low-carbon energy is also to solve the global problems caused by the rising emissions of steam gases. According to the plan, for example, by 2022 it is planned to increase the amount of such gases by 20-25%, in 2040 by 40%, and in

2060 by 50-60%. If such rates continue, it is estimated that the reserves of black gold on the planet will last only 55-60 years. This period is estimated at 70-75 years for natural gas and 150-160 years for coal. In addition, the sustainable use of hydrocarbon resources is degrading the environment and human health, climate change is being observed, and the ozone layer is being depleted. According to experts, 5 billion tons of carbon dioxide are released into the atmosphere every year. tons of carbon dioxide, about 300 million. tons of carbon monoxide. This is 3.5 times more than in the first half of the twentieth century.

Under these conditions, it is natural that the widespread use of alternative energy sources will be on the agenda. This is due to the fact that their types of solar, hydro and wind energy, as well as biomass, are almost unique and renewable, very relevant to the current era of innovative development, and the creation of new jobs. In addition, the equipment and technology working on this basis are environmentally friendly, environmentally friendly and do not lead to man-made disasters.

Map of solar flux to the surface According to the study, the solar flux per 1 m² of land perpendicular to the center of the sun (at the time of entering the Earth's atmosphere) is 1367 W / m² (when the sun is constant). As a result of the absorption of sunlight into the Earth's atmosphere, the high solar flux above sea level is equal to 1020 W / m² (at the equator). However, at different times of the day, the angles of incidence of the sun's rays on the ground change slightly due to changes. In winter, this figure can be reduced by 2 times. Solar power plants have advantages and disadvantages, just as each process has advantages and disadvantages. Advantages of solar power plants: - Prospective, renewable source; - Environmentally friendly and cost-effective; - Renewability of fuel source; - Increased demand for alternative energy sources; - Minimum impact on environmental climate change.

Disadvantages of solar power plants: - Dependence on weather, seasons and time of day for power generation; - The need for additional traditional energy sources in the field of industrial production; - Regular dusting of the panel surface; - Occupying a lot of space. Figure 2. Solar photovoltaic device and consumers: 1 – photoelectric module (solar panel); 2 - inverter charging control device; 3 - rechargeable battery; 4– Consumers The world's demand for electricity has grown by about 50% over the last 5 years. By 2050, solar power plants will reduce carbon dioxide emissions to the environment by 20-25% of annual electricity. Converting only electricity from sunlight to heat energy is a useful example. The Sun alone sends so much heat to our planet every day that it is 20 times more energy consumed by the world's population year-round. Accordingly, last year, 120 billion solar cells were installed at solar stations around the world. More than kWh of electricity was generated. In a number of developed countries, including Germany, the share of non-conventional energy is planned to reach 15% by 2015 and 25% by 2020.

According to statistics from the Department of Energy, in 2001 (solar electricity) the energy received from solar collectors was \$ 0.09–0.12 per kWh, and by 2015–2020 this value will reach \$ 0.04–0.05 and increase economic efficiency. Currently, there are companies around the world that produce solar photovoltaic cells, including:

China Yingli - 2300 MW

USA First Solar - 1800 MW

China Trina Solar - 1600 MW

Canada Canadian Solar - 1550 MW

China Suntech - 1500 MW

Japan Sharp - 1050 MW

China Jinko Solar - 900 MW

US SunPower - 850 MW

REC Group - 750 MW

Korea produces high-quality competitive solar photovoltaic cells Hanwha SolarOne - 750 MW

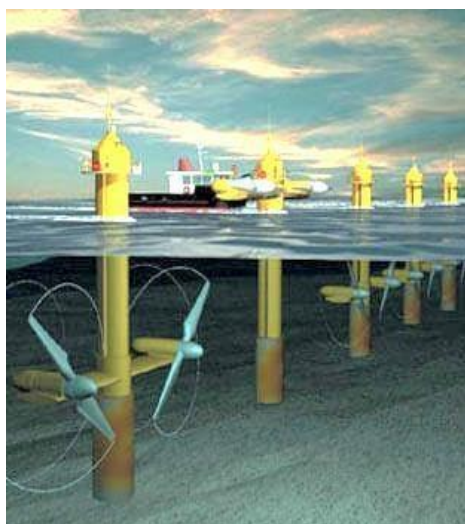
The share of wind and solar energy has more than doubled since the signing of the Paris Agreement on Climate Change in 2015. At that time, the figure was 4.6 percent.

In the first half of 2020, the volume of energy from fossil fuels, the most polluting fuel, decreased by 8.3%.

Analyses show that many large countries, including China, the United States, India, Japan, Brazil and Turkey, get at least 10 percent of their total energy from wind and solar. Britain and the European Union deserve special praise, as they receive 21 and 33 percent of their energy from renewable sources, respectively.

According to the forecasts of the Global Wind Energy Council (GWEC), by 2030 the volume of offshore wind energy worldwide may increase from 29.1 GW in 2019 to 234 GW.

The world's largest sales turbine based on the principle of rise and fall. The turbine, which operates on the basis of the principle of the rise and fall of the water supply, converts the kinetic energy of the water flow into the electric current, which comes in the same direction as the wind turbine. The world's largest hydroelectric power plant near Northern Ireland has a capacity of 1.2 MW. It consists of 2 grain turbines with a diameter of more than 20 m. Due to the rotation of the turbine's turbine system, the turbine and the waves are adapted to each direction. To service the turbine, it may be lifted from the water.



The cost of 1 MW of installed power produced by such a system 5 million equal to a dollar. This is the cost of offshore wind turbines 30% more. However, in 2015, off the coast of South Korea, the cost of 820 million. It is planned to install a turbine operating on the principle of rising and falling water levels with a capacity of more than 1 MW. It is noteworthy that the widespread introduction of such "green technologies" in agriculture, energy, waste management, transport, education and science in our country will create more than 550,000 new jobs over the next ten years.

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*Baratov L.
"Energetika" kafedrası assistenti
Jizzax politexnika instituti*

QUYOSH ENERGIYASIDAN FOYDALANISHDA QUYOSH FOTOELEKTR O'ZGARTGICHLARINING AXAMIYATI

Annotatsiya. Ushbu maqolada quyosh energiyasidan quyosh fotoelektr o'zgartgichlar yordamidan foydalanib elektr energiya olish, qolaversa elektronika elementlarining hususiyatlari keltirib o'tilgan. Quyosh energiyani fotoelektr o'zgartirgichlar sohasidagi nazariy tadqiqot va amaliy ishlanmalar fotoelektr o'zgartirgichlarda nurlanish energiyani o'zgartirishda yuqori FIK bilan amalga oshirish mumkinligini tasdiqlanadi va bu maqsadga erishish uchun asosiy yo'nalishlar belgilanadi.

Kalit so'z: Fotoelektr o'zgartirgichlar, elektronvolt, erkin elektron, n-p-o'tishlar, yoritilganlik.

*Baratov L.
assistant
Department of Energy
Jizzakh Polytechnic Institute*

THE IMPORTANCE OF SOLAR PHOTOELECTRIC CONVERTERS IN USING SOLAR ENERGY

Abstract. In this article, the characteristics of obtaining electricity from solar energy using solar photoelectric converters, as well as the features of electronic elements are presented. Theoretical research and practical developments in the field of solar energy photoelectric converters confirm the possibility of high FIK in the conversion of radiation energy in photoelectric converters, and the main directions for achieving this goal are determined.

Keyword: Photoelectric converters, electronvolt, free electron, n-p-junctions, illumination.

Fotoelektr o'zgartirgichlar (FEO') uchun o'ziga xos taxminan 300-350 K muvozanat va quyosh $T \approx 6000$ K temperaturalarda ularning nazariy FIKning chegarasi 90% bo'ladi. Bu esa, energiyaning qaytmas yo'qotishlarni kamaytirishga yo'naltirilgan o'zgartirgichlarning tuzilma va ko'rsatkichlarni maqbullashtirish oqibatida amalda haqiqiy FIKni 50% gacha va undan ortiqcha ko'tarish mumkinligini kursatadi (laboratoriyalarda hozir FIK 40% gacha erishgan) [1-5].

FEO'larning birjinsli bo'lmagan yarimo'tkazgichli tuzilmalarga quyosh nurlanish ta'sir etganda, hosil bo'ladigan energiyaning o'zgartirishi fotoelektr effektiga asoslangan [6,7].

λ uzunlikdagi to'lqinlar nurlanishda fotonlar energiyasi (eV) quyidagi munosabatdan aniqlanadi:

$$h\nu = h \frac{c}{\lambda} = \frac{1,24}{\lambda};$$

bu yerda $h = 6,626 \times 10^{-34}$ J×s – Plank doimiysi; $c = 2,997925 \times 10^8$ m/s – yorug'lik tezligi; λ – to'lqin uzunligi, mkm.

Elektronvolt – potentsiallar farqi 1 V bo'lgan ikkita nuqtalar orasida elektronni ko'chirish uchun zarur bo'lgan energiyadir [8,9].

$$1 \text{ eV} = 1,6 \times 10^{-19} \text{ J}.$$

λ_g chegara to'lqin uzunligidan boshlab quyosh fotoelementning materialda fotonlar yutiladi:

$$\lambda_g = 1,24 / \Delta YE;$$

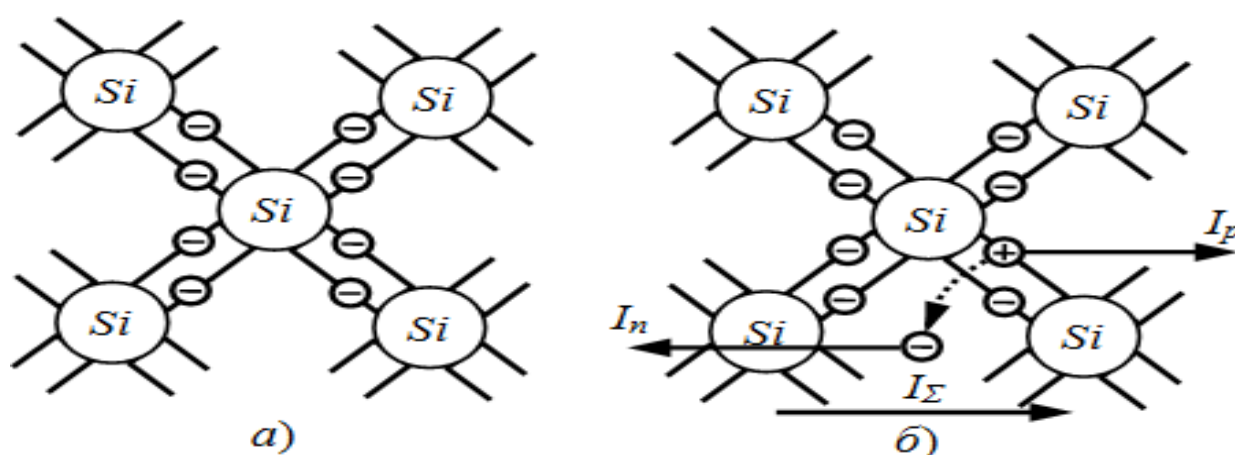
bu yerda ΔYE – taqiqlangan soha, sathlarning yo'qligi bilan tavsiflanadi, eni bo'yicha turli xil materiallar uchun har xil bo'ladi,

$$\Delta YE \approx (1...2) \text{ eV}.$$

Bundan ortiqroq uzun to'lqinli nurlanishlar yarimo'tkazgichlarda yutilmaydi, demak, fotoelektr o'zgartirish nuqtai nazardan foydasiz bo'ladi [10].

Quyosh nurlanish energiyani elektr energiyaga o'zgartirish uchun yarimo'tkazgichli qurilmalar quyosh fotoelementlar (QFE) deb nomlanadi.

Yarim o'tkazgichli materiallardan germaniy *Ge* va kremniy *Si* eng muhim hisoblanadi. Kremniy D. I. Mendeleev Davriy tizimida IV guruhdagi elementlarga kiradi, uning valentligi 4 ga teng. Kremniy atomlar tashqi elektron qobiqda 4 ta elektronlarga ega [11].



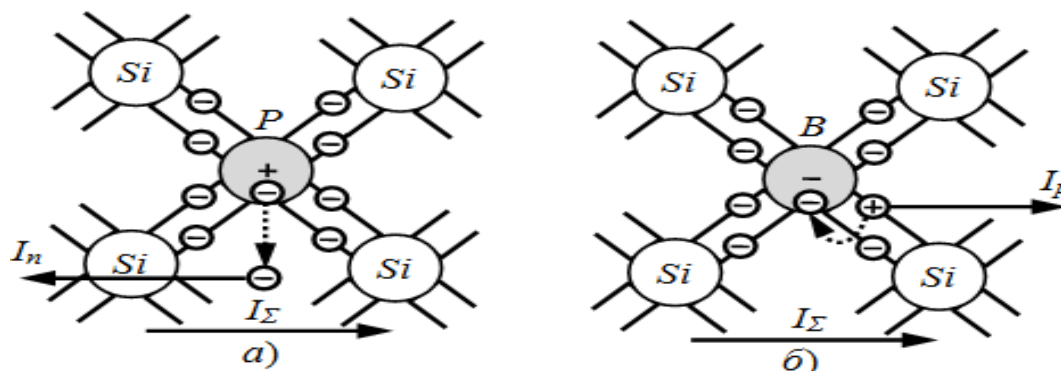
1-rasm: Toza kremniyning kristallik panjara

Energiya (issiqlik yoki yorug'lik) keltirilganda panjarada atomlararo bog'lanishlar elektronlarni yo'qotadi, bunda musbat zaryadlar hosil bo'ladi.

Panjaradagi elektron bo‘lmagan joyga “teshik” deb ataladi. “Teshik” – bu elektronni yo‘qotgan atom, bu esa elektronlarning teshikdan teshikka o‘tish bilan teshiklarning “harakati” vujudga keladi (“teshiklar” o‘zi esa harakatlanmaydi) [12].

Agarda yarimo‘tkazgichga tashqi elektr maydoni ta’sir etmasa, teshik va erkin elektronlar tartibsiz harakatlanadi. Agarda yarimo‘tkazgichni elektr maydonga joylashtirsa, teshik va elektronlarning harakati tartibli yo‘nalgan bo‘ladi. Teshiklarning bir atomdan boshqa atomga o‘tish harakatning yo‘nalishi yarimo‘tkazgich orqali tokning o‘tish yo‘nalishiga mos keladi. Teshiklar harakati bilan hosil bo‘lgan o‘tkazuvchaliqiga teshikli yoki r -turidagi o‘tkazuvchanlik (lotin. *positive*-musbat) deb ataladi. Elektronlar harakati bilan hosil bo‘lgan o‘tkazuvchaliqiga esa elektron yoki p -turidagi o‘tkazuvchanlik (lotin. *negativ*-manfiy) deb ataladi. Shunday qilib, yarimo‘tkazgichning o‘tkazuvchanligi elektronlarning o‘tkazuvchanlik sohasidagi hamda elektronlarning valentlik sohasidagi harakati bilan belgilanadi. Lekin valentlik sohasida elektronlar emas balki teshiklar harakatlanadi deb qabul qilingan. Valentlik bog‘lanishlar bo‘zilishi oqibatda hosil bo‘ladigan yarimo‘tkazgichning o‘tkazuvchanligiga xususiy o‘tkazuvchanlik deb ataladi [13].

To‘rt atomli Si kremniyni besh valentli R fosfor bilan legirlanganda aralashmaning atom joyning o‘rniga ortiqcha elektron vujudga keladi (2 a - rasm).

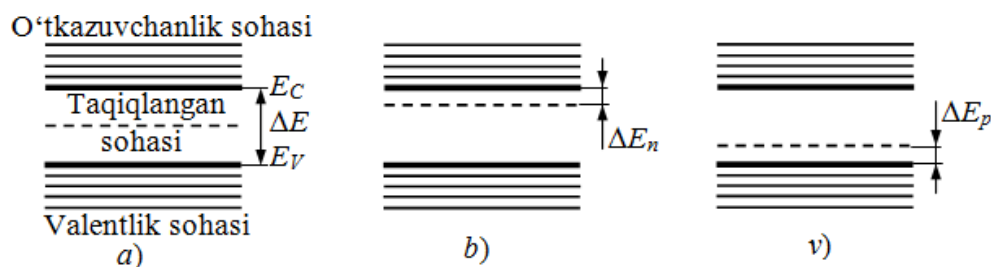


**2-rasm. Legirlangan kremniyning kristallik panjarasi:
a – fosfor bilan; b – bor bilan**

Erkin elektronlarni vujudga keltiruvchi aralashmalarga donorli (lotin. *donore*-hadya qilmoq) deb ataladi. Bu holda kremniy elektron o‘tkazuvchanli yarimo‘tkazgich yoki p -turidagi yarimo‘tkazgich deb nomlanadi. p -turidagi yarimo‘tkazgichda o‘tkazuvchanlik faqat elektronlar bilan hosil qilinadi [14].

To‘rt atomli Si kremniyni uch valentli V bor bilan legirlanganda aralashmaning atom joyning o‘rniga ortiqcha teshik vujudga keladi (2 b- rasm). Erkin elektronlarni kamaytiruvchi aralashmalarga akseptorli (lotin. *acceptor*-qabul qilmoq) deb ataladi. Bu holda kremniy teshik o‘tkazuvchanli yarimo‘tkazgich yoki r -turidagi yarimo‘tkazgich deb nomlanadi. r -turidagi yarimo‘tkazgichda o‘tkazuvchanlik faqat teshiklar bilan hosil qilinadi [15].

p -turidagi yarimoʻtkazgichlarning oʻtkazuvchanligi xususi oʻtkazuvchanligiga ega boʻlgan materiallarning oʻtkazuvchanligiga qaraganda ancha katta boʻladi, chunki donorlarni ionlash energiyasi taqiqlangan sohaning enidan kichik va elektrolarni qoʻzgʻatilganda ular oʻtkazuvchanlik sohaga yengil oʻtadi. Xuddi shunday, r - turidagi materiallarda teshiklar valentlik sohaga yengil oʻtadi. Bu hodisani tushintirish uchun Fermi sathi degan tushuncha kiritilgan. Fermi sathi taqiqlangan sohadagi energiyaning shartli sathini ifodalaydi (3-rasm), bundan asosiy tashuvchilar qoʻzgʻatiladi (elektronlar p -turidagi materiallarda va teshiklar r -turidagi materiallarda).



3-rasm: Yarimoʻtkazgichlardagi Fermi sathi (punktir): a – aralashmasiz yarimoʻtkazgich, b– p -turidagi aralashma, v – r -turidagi aralashma

Qoʻzgʻatilish ehtimoli quyidagiga proporsional:

$$\exp[-e\Delta E_i/(kT)];$$

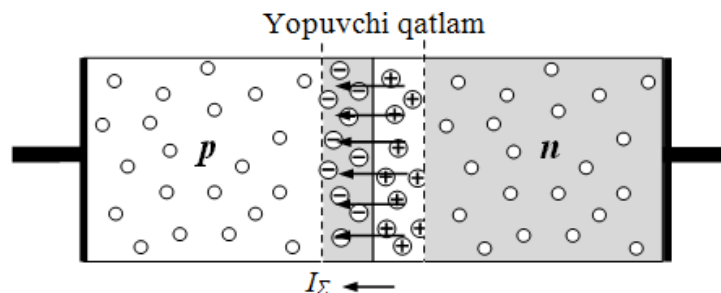
bu yerda $ye=1,6 \times 10^{-19}$ Kl – elektron va teshikning zaryadi;

ΔYei – Fermi sathi bilan valentlik sohasi (ΔY_{er}) yoki oʻtkazuvchanlik sohasi (ΔY_{ec}) orasidagi potentsiallar farqi, J;

$k = 1,38 \times 10^{-23}$ Dj/K – Bolsman doimiysi;

T – yarimoʻtkazgichning temperaturasi, K.

Bitta monokristallda p - va n -turidagi yarimoʻtkazgichlarni birlashtirilganda n -turidagi yarimoʻtkazgichdan r -turidagi yarimoʻtkazgichga elektronlarning diffuzion oqimi vujudga keladi, va teskari, r -turidagi yarimoʻtkazgichdan n -turidagi yarimoʻtkazgichga teshiklar oqimi hosil boʻladi. Bunday jarayonning oqibatda n - r oʻtishga tutushgan r -turidagi yarimoʻtkazgichning qismi manfiy zaryadlanadi, n - r oʻtishga tutushgan n -turidagi yarimoʻtkazgichning qismi, teskari, musbat zaryadga ega boʻladi (4-rasm).



4-rasm: n - p -oʻtish

Shunday qilib, n - r o'tishning yaqin joyda, elektron va teshiklarning diffuziya jarayonga qarshi ta'sir etadigan, ko'p zaradlangan qatlam hosil bo'ladi [16].

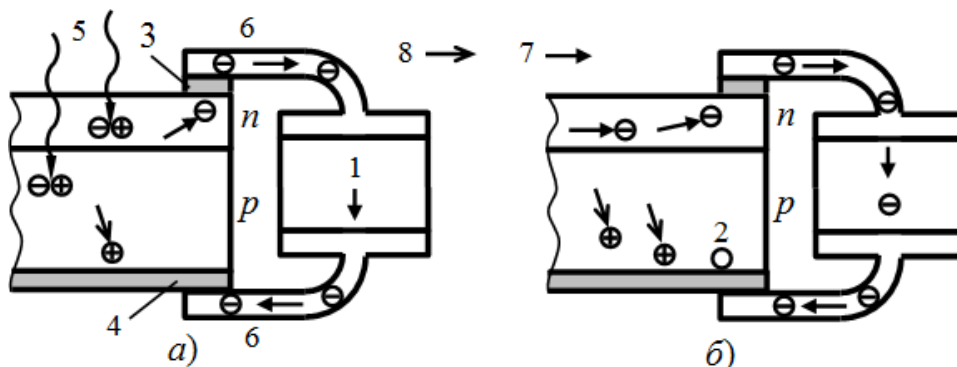
Diffuziya n -sohasidan p -sohasiga elektronlar oqimini yaratishga intiladi, zaryadlangan qatlamning maydoni esa, teskari, n -sohasiga elektronlarni qaytarishga harakat qiladi. Shunga o'xshash ravishda, n - p o'tishdagi maydoni p -dan n -sohasiga teshiklarning diffuziyaga qarshi ta'sir etadi. Ma'lum vaqtdan keyin muvozanat hosil bo'ladi. Zaryadlar to'planish natijada, o'tishning ikkala tomonidan, hosil bo'lgan qarama-qarshi ishoralali elektr maydon, erkin elektron va teshiklar konsentratsiyaning farqi oqibatda vujudga kelgan, diffuziyani muvozanatlashtiradi. Natijada Fermi sathi doimiy potentsiali ostida bo'ladi. Taqiqlangan sohasi ΔYE butun materialida mavjud va o'tkazuvchanlik sohasining hamda valentli sohasining energiyalar orasida potentsiallar sakrashi hosil bo'ladi [17,18].

O'tish joyida hosil bo'lgan kontaktli potentsiallar farqi asosiy zaryadlar tashuvchilarning o'tishiga qarshilik ko'rsatadi, ya'ni r -qatlam tomonidan elektronlar o'tishiga, ammo asosiy bo'lmagan tashuvchilarni qarama-qarshi yo'nalishda qarshisiz o'tkazadi.

n - p -o'tishlarning bu xususiyati, FEO'ni quyosh yorug'lik bilan nurlantirilganda, fotoelektr yurituvchi kuchni (fotoEYUK) hosil qilish imkoniyatini yaratadi. FEO'ning ikkala qatlamlarda yorug'lik bilan hosil bo'lgan elektron-teshik juftlar n - p -o'tishda bo'linadi: asosiy bo'lmagan tashuvchilar (elektronlar) erkinlik bilan o'tish orqali o'tadi, asosiy tashuvchilar (teshiklar) esa tutib qoladi. Shunday qilib, quyosh nurlanish ta'sirida n - p -o'tishda ikkala

yo'nalishda nomuvozanatli asosiy bo'lmagan zaryad tashuvchilar (FEO' ishlash uchun zarur bo'lgan fotoelektron va fototeshtiklar) ning tok o'tadi (5-rasm).

5-rasm. QFEda elektr tokning generatsiyasi:



1-yuklama; 2-rekombinatsiyalangan «teshik» 3-yuqori kontakt; 4-qo'yi kontakt; 5-fotonlar; 6- o'tkazgich; 7-elektronning harakati; 8-teshikning ko'chishi

a) Fotonlar (5) elektron-teshik juftlarni hosil qiladi. Oldingi foton bilan hosil bo'lgan elektron va teshik QFE kontaktlar (3 va 4) ga harakatlanadi. Elektronlar tashqi (6-1-6) zanjir orqali ko'chadi, elektr tokni hosil qiladi.

b) Foton (5) bilan hosil bo'lgan teshik $n-p$ -o'tish orqali o'tadi va musbat kontakt (4) ga harakatlanadi. Foton bilan hosil bo'lgan elektron ham $n-p$ -o'tishdan o'tib, mafiy kontakt (3) ga harakatlanadi. Elektron n -yarimo'tkazgichdan o'tkazgich (6) ga o'tadi. Elektron r -yarimo'tkazgichga o'tib, teshik (2) bilan rekombinasiyalanadi.

QFE orqali I_{Σ} tokning zichligi, $n-p$ -o'tishda hosil bo'lgan elektron-teshik juftlar hisobidan hamda p - va n -sohalarga muvofiq bo'lgan, elektronlar I_n tok va teshiklar I_r toklarning yig'indisidan iborat:

$$I_{\Sigma} = I_n + I_p - eg; (5)$$

bu yerda g – $n-p$ -o'tishda yuza birligi hisobidan vaqt birligida hosil bo'lgan elektron-teshik juftlarning miqdori.

Yuqoridagi ma'lumotlardan kelib chiqib, yorug'lik intensivligi turli xil bo'lsa foto EYUK ham har xil hosil bo'ladi. Yoritilganlikning keng diapazonda fotoEYUK kattaligi yorug'lik intensivligining logarifmga proporsional bo'lib o'sadi.

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*Barnoyev O.
JizPI "Iqtisodiyot va menejment" kafedrasi assistenti*

MEHNAT MOTIVATSIYASI HAMDA MEHNATNI RAG‘BATLANTIRISH TIZIMINI TAKOMILLASHTIRISH

Annotatsiya: ushbu maqolada, mehnat motivatsiyasi tushunchasi, korxonada mehnat motivatsiyasi maqsadi hamda mehnatni rag‘batlantirish tizimini takomillashtirish borasida ma’lumotlar yoritilgan.

Kalit so‘zlar: rag‘batlar, mehnat motivatsiyasi, tarkibiy va prosessual, mehnatga undash.

*Barnoyev O.
assistant
JizPI "Economics and Management" department*

IMPROVEMENT OF LABOR MOTIVATION AND LABOR INCENTIVE SYSTEM

Abstract. This article contains information on the concept of labor motivation, the purpose of labor motivation in the enterprise, and the improvement of the labor incentive system.

Key words: incentives, labor motivation, structural and procedural, motivation to work.

Mehnat motivatsiyasi bu – odamlarning o‘zini-o‘zi yoki biron kimsa tomonidan mazkur korxonaga maqsadlariga erishish uchun zarur faoliyatga undash hisoblanadi. Ma’lumki, kishilarni mehnatga undash zarurati turli sabablarga ko‘ra, xodimlarning mehnat jarayonidan begonalashuvi sodir bo‘lgan vaqtda kuchayadi. Ya’ni, bu jarayonda inson mehnatning ichki mazmuni hamda uning pirovard maqsadini yo‘qotib qo‘yadi. Tashqi rag‘batlar orqali bu maqsad uning muqobili bo‘lgan pul, mavqe’, maqom, o‘zligini namoyon qilish imkoniyati va hokazolar bilan almashtirilib boriladi.

Motivlashning zamonaviy nazariyalari psixologik tadqiqotlar natijalariga asoslangan va shartli ravishda ikki toifa: tarkibiy va prosessual turlarga bo‘linadi. Odamlar uchun ehtiyojlar deb atalmish ichki da’vatlarning ahamiyatini ochib beruvchi nazariyalar “tarkibiy” deb yuritiladi. Bunda birinchi navbatda Maslouning ehtiyojlar nazariyasi piramidasi va Alderferning ERG nazariyasiga to‘xtalish joizdir. Alderfer ham inson ehtiyojlarini alohida guruhlariga birlashtiradi, biroq Maslouning ehtiyojlar iyerarxiyasi nazariyasidan farqli o‘laroq, u mazkur ehtiyoj guruhlarini uchga, ya’ni: tiriklik ehtiyojlari, aloqa ehtiyojlari va o‘shish ehtiyojlariga bo‘lib chiqadi.

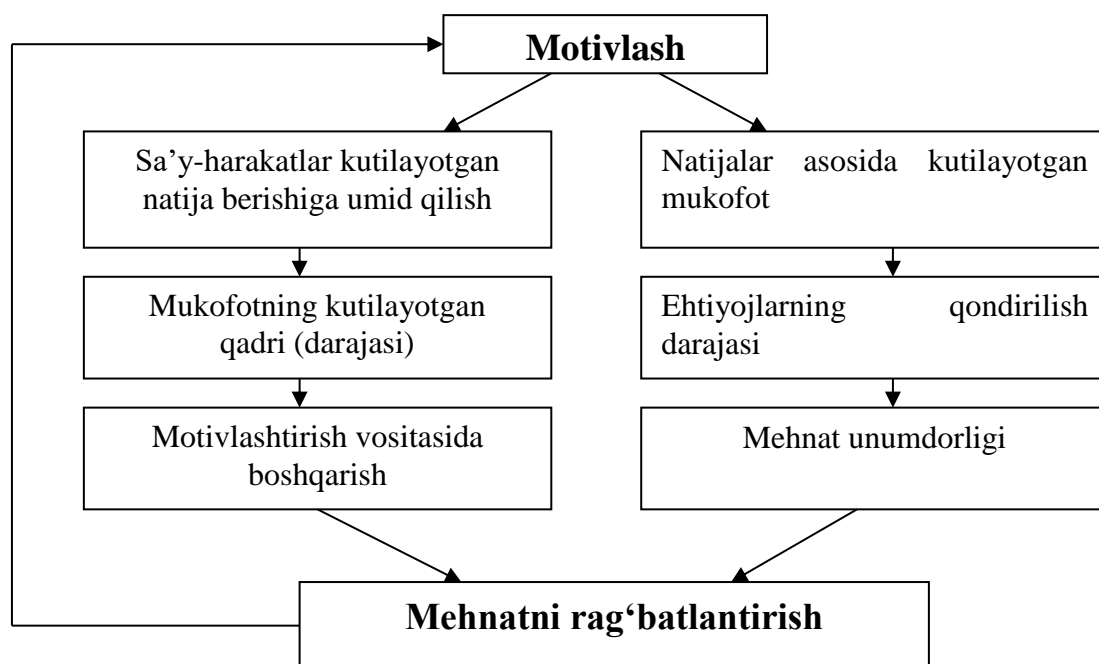
Ayni paytda, Maslou va Alderfer nazariyalarida jiddiy farqlar ham bor: Maslougga ko‘ra, ehtiyojdan ehtiyoj tomon harakat faqat pastdan tepaga bo‘ladi. Alderferga ko‘ra, harakat har ikki tomonga bo‘lishi mumkin; uning ehtiyojlar iyerarxiyasi aniqroq ehtiyojlardan noaniqroq ehtiyojlar tomon harakatni aks ettiradi. Uning fikricha, har safar ehtiyoj qondirilmasa, yanada aniqroq ehtiyojga o‘tish sodir bo‘ladi va bu jarayon yuqoridan quyiga ham harakatlanishi mumkin. Alderfer nazariyasi xodimlarni boshqarish amaliyotida ham asqotadi.

Mehnatga undashni tahlil qilishda umidlar nazariyasi quyidagi uchta o‘zaro bog‘liq omillarning eng muhim ekanligini ta’kidlaydi:

- mehnat sarflari– natijalar;
- natijalar– mukofotlanish;
- mukofotlanish– rag‘batdan qoniqish.

Bunda sarflar va natijalarga nisbatan umidlar– bu sarflangan sa’y-harakatlar va olingan natijalar o‘rtasidagi nisbatdir. Natijalar va mukofotlanishga nisbatan umidlar– bu erishilgan natijalar darajasiga javoban ma’lum bir rag‘bat olishni kutish demakdir. Muayyan mukofotga umidlar va undan qoniqish darajasi turli odamlarda har xil bo‘ladi. Chunki, odamlarni qobiliyat darajasi turlicha bo‘lgani bois, ular muayyan mukofotni ham turlicha baholaydilar. Demak, korxonah rahbariyati taxmin qilayotgan mukofotni xodimning ehtiyojlariga taqqoslab, samarali motivatsiyani ta’minlash uchun erishilgan natijalar va mukofot o‘rtasida aniq nisbatni o‘rnatishi lozim.

Adolat nazariyasi. Mazkur nazariyaga ko‘ra, odamlar olingan mukofotning sarflangan sa’y-harakatlarga nisbatini subyektiv tarzda aniqlaydilar va uni xuddi shu ishni bajarayotgan boshqa odamlar olgan mukofotga qiyoslaydilar. Agar taqqoslash adolatsizdek tuyulsa, ya’ni xodim, uning hamkasbi xuddi shu ish uchun kattaroq mukofot oldi, deb hisoblasa, unda psixologik zo‘riqish yuzaga kelishi mumkin. Bunday holda vaziyatni to‘g‘rilab, bu xodimni yana qo‘shimcha usullar bilan mehnatga undash lozim.



1-rasm. Mehnat motivatsiyasi va mehnatni rag'batlantirish tizimiga ta'sir ko'rsatuvchi belgilar

Hozirgi vaqtda dunyoning yetakchi davlatlari taraqqiyoti uchun sanoat rivojlanishidan keyingi bosqich xos bo'lib, bu bosqichda iqtisodiy o'sish omillarining roli va o'рни o'zgarib bormoqda. Bunda asosiy e'tibor mehnat resurslarining intellektual salohiyatini, fan va texnologiya yangiliklarini ishlab chiqarish jarayoniga samarali joriy etish asosida zamonaviy ishlab chiqarish tarmoqlarini rivojlantirishga qaratiladi. Jamiyat taraqqiyotidagi bunday holat iqtisodiyotning boshqa sohaslariga nisbatan ishlab chiqarish sohasini kengroq rivojlanishini talab etadi.

Mehnat samaradorligi milliy va korxonalarining ijtimoiy-iqtisodiy rivojlanishini tavsiflovchi eng muhim bo'lgan iqtisodiy kategoriyalardan biridir. Mehnat samaradorligini iqtisodiy kategoriya sifatida mohiyati va mazmunini 3 yo'nalishda tahlil qilishimiz mumkin: birinchi yo'nalish, o'rganish predmeti bo'yicha mehnat yoki ishlab chiqarish iqtisodiy samaradorligining o'zi hisoblanadi. Bu iqtisodiy kategoriyaning iqtisodiy fanlar tizimidagi o'рни katta e'tiborga ega, mehnat samaradorligining obyektiv iqtisodiy qonunlar bilan o'zaro aloqasi tadqiq qilinadi, shuningdek ko'pgina olimlarni bu iqtisodiy kategoriya ishlab chiqarishning turli shakllarida o'ziga xosligi bilan qiziqtiradi; ikkinchi yo'nalish, bu mehnat samaradorligi mezonlari va uning miqdoriy me'yorlarini, shuningdek iqtisodiyotning turli darajalarida samaradorlik ko'rsatkichlarini izlash, samaradorlik dinamikasini o'rganishi bilan bog'liq; uchinchi yo'nalish esa alohida ta'sir qiluvchi omillar, shuningdek, iqtisodiy sohalari orqali mehnat samaradorligini oshirish yo'llari va zahiralarini tadqiq qilish bilan ham bog'liq. Ushbu 3 ta yo'nalish ham bir-biri bilan uzviy bog'liq va ularning asosiy maqsadi mehnat samaradorligini nazariy jihatdan asoslab berishdan iboratdir.

Mehnat samaradorligining mohiyatini o'rganishni eng avvalo uning qaysi sohaga tegishli ekanligi aniqlashdan boshlashimiz lozim: moddiy ishlab chiqarish sohasidami yoki nomoddiy ishlab chiqarish sohasiga tegishli. Ko'pchilik olimlar mehnat samaradorligini moddiy ishlab chiqarish sohasiga tegishli deb e'tirof etishadi, chunki bu sohada qilingan sarf-xarajatlar yaqin davr ichida o'z natijasini berishi bilan farqlanadi. Boshqa bir guruh olimlar esa mehnat samaradorligi noishlab chiqarish (xizmat ko'rsatish) sohasiga tegishli deb fikr yuritiladi, chunki bu sohada qilingan sarf-xarajatlar uzoq muddat o'z natijasini bermasa ham, lekin vaqti kelganda shunday natija beradiki, buni hech qanday mikdoriy va sifatiy o'lchovlar bilan aslo o'lchab bo'lmaydi.

Mehnat unumdorligini oshirish yo'llari ko'p qirrali tushunchadir. Bu ishlab chiqarish jarayonlarini avtomatlashtirish va mexanizatsiyalashtirish, yangi mashinalarni joriy qilish, ishlayotgan dastgohlarni zamonaviylashtirish va ulardan samarali foydalanish, ishlab chiqarish va mehnatni ilmiy tarzda tashkil etishni yaxshilash, ish vaqtidagi yo'qotishlarni tugatish, ilg'or ishlab chiqarish tajribalaridan foydalanish, mehnatga haq to'lash va moddiy rag'batlantirish sistemasini to'g'ri tashkil qilish va hokazolardir.

Moddiy ishlab chiqarish sohasidagi mehnat samaradorligi unumli mehnat bo'lib, inson hayoti uchun kerakli moddiy sharoitlar yaratadi, uni ko'rsatkichlarining ishini esa, hayot sharoitlarida yanada yaxshilaydi, shuningdek jamiyat a'zolarining ma'naviy rivojlanishini ta'minlashga yordam beradi. Mehnat unumdorligi vaqt birligi (soat, smena, oy, kvartal, yil) ichida ishchilar tomonidan bajarilgan ishlar hajmidan yoki ishlab chiqarishga sarf qilingan vaqt birligi bilan o'lchanadi.

Kiritilayotgan yangilik shunday tovarki, uni na qo'l bilan ushlab, na jismonan o'lchab bo'ladi: ma'lum miqdordagi ilmiy (ayniqsa matematik) bilimlarga, kasbiy malakaga hamda zarur axborotga ega bo'lmay turib, undan foydalanish mumkin emas, uni avvaldan tegishli tayyorgarliksiz va qayta ta'lim olmay turib ishga tushirib ham bo'lmaydi. Daromadlarni cheksiz multiplikatsiyalash bunday tovarning o'ziga xos xususiyatidir. Tegishli huquqiy shaklda himoyalangan intellektual tovar, u xoh axborot, xoh kashfiyot, xoh nou-xau va h.k. bo'lsin, unga necha marta xaridor topilsa, o'zining qonuniy egasi tomonidan shuncha marta sotilishi ham mumkin.

Xulosa qilib aytish kerakki, bugungi kunda ko'plab tadbirkorlikni yanada rivojlantirish orqali raqobatbardosh mahsulotlar ishlab chiqarish, aholining bandligi va turmush farovonligini oshirishga alohida e'tibor qaratishimiz lozimdir.

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Barnoyev O.
JizPI "Iqtisodiyot va menejment" kafedrasi assistenti
Khurmatov B.
Abu Ali Ibn Sino nomidagi Tojikiston
Davlat tibbiyot universiteti o'qituvchisi

RAQAMLI IQTISODIYOTNING MAMLAKAT IQTISODIYOTIDA TUTGAN O'RNI

Annotatsiya. Dunyoda shiddat bilan rivojlanayotgan raqamli texnologiyalar mamlakatlarning ijtimoiy-iqtisodiy faoliyati, iqtisodiy siyosati va davlat boshqaruvi tuzilishini sifat hamda texnologik jihatdan tubdan o'zgarishiga olib kelmoqda. Ushbu maqolada raqamli iqtisodiyotning mamlakat iqtisodiyotida tutgan o'rni haqida ma'lumotlar keltirilgan.

Kalit so'zlar: raqamli texnologiyalar, iqtisodiyot, jamiyat, raqamlashtirish, jarayon, axborot-kommunikatsiya.

Barnoyev O.
assistant
"Economics and Management" department
JizPI
Khurmatov B.
teacher
Tajik State Medical University named after Abu Ali Ibn Sina

THE ROLE OF THE DIGITAL ECONOMY IN THE COUNTRY'S ECONOMY

Annotation: digital technologies, which are rapidly developing in the world, are leading to a radical change in the structure of socio-economic activity, Economic Policy and public administration of countries, both qualitatively and technologically. This article provides information on the role of the digital economy in the country's economy.

Keywords: digital technology, economy, society, digitization, process, information and communication.

Jahonda jadallik bilan rivojlanib borayotgan raqamli texnologiyalar mamlakatlarning ijtimoiy-iqtisodiy taraqqiy etishini, davlatning iqtisodiy siyosati va boshqaruv tizimini modernizatsiyalashni taqozo etada. Sababi, raqamli texnologiyalarning tez sur'atlarda joriy etilishi oqibatida mamlakatlar o'rtasidagi rivojlanish tafovutlarining yanada kuchayishiga sabab bo'lmoqda. Bunda har bir mamlakatning rivojlanish darajasi, jamiyatning axborotlashganlik darajasi albatta katta ta'sir ko'rsatadi. Bugungi kunda dunyoda «raqamli iqtisodiyot»ning o'sish

sur'atlari 15,5 foizni tashkil etmoqda. Rivojlangan davlatlarda «raqamli iqtisodiyot»ning yalpi ichki mahsulotdagi ulushi 7 foizga yetgan. Ular hozirgi paytda o'zida «raqamli iqtisodiyot»ning joriy qilinishidan juda katta foyda ko'rmoqda. Masalan, hozirgi vaqtda AQSh yiliga 400 milliard AQSh dollaridan ko'proq «raqamli xizmat»larni eksport qilayotgan bo'lsa, 2025-yilgacha AQSh sanoat sohasini «raqamlashtirish»dan qo'shimcha 20 trln. AQSh dollardan ortiq daromad olishi kutilmoqda.

Iqtisodiyot va jamiyatning "raqamlashtirish" jarayoni (ingliz tilida – digitization ya'ni, raqamlashtirish, ba'zan esa digitalization ya'ni, raqamlashtirilishi ma'nosini bildiradi.) haqida gapirganda, birinchi navbatda, terminologiyaga aniqlik kiritish zarur. Keng ma'noda "raqamlashtirish" jarayoni odatda raqamli texnologiyalarni keng qo'llash va assimilyastiya qilish tashabbusi bilan boshlangan ijtimoiy-iqtisodiy o'zgarishni anglatadi: axborotni yaratish, qayta ishlash, almashish va uzatish texnologiyalaridir¹¹.

1995-yilda amerikalik dasturchi Nikolas Negroponte “raqamli iqtisodiyot” terminini amaliyotga kiritdi. Hozirda bu istilohni butun dunyodagi siyosatchilar, iqtisodchilar, jurnalistlar, tadbirkorlar – deyarli barcha qo'llamoqda. 2016-yilda Butunjahon banki dunyodagi raqamli iqtisodiyotning ahvoli haqida ilk marta ma'ruza e'lon qildi (“Raqamli dividendlar”)¹².

Raqamli iqtisodiyot bu axborot-kommunikatsiya texnologiyalari – AKTga asoslangan iqtisodiyotdir. Iqtisodiy Hamkorlik va Taraqqiyot Tashkiloti (OECD) uni elektron ma'lumot almashish, uni qayta ishlash va boshqarishni ta'minlaydigan yoki yaratadigan korxonalar deb tasniflaydi¹³.

R. Meshcheryakovning fikricha raqamli iqtisod tushunchasining talqini bo'yicha 2 xil yondashuv mavjud¹⁴:

– klassik yondashuv: raqamli iqtisod – bu raqamli texnologiyalarga asoslangan iqtisod bo'lib, ayni paytda faqatgina elektron mahsulotlar va xizmatlar sohasini tavsiflaydi. Klassik misollarga teletibbiyot, masofaviy ta'lim, media-kontentni keltirish mumkin (kino, televizor, kitoblar va boshqalar).

– zamonaviy yondashuv: raqamli iqtisod – raqamli texnologiyalardan foydalangan holda iqtisodiy ishlab chiqarishdir. Iqtisodchi-sotsiologlarning ta'rifiga ko'ra «raqamli iqtisod bizning haqiqatimizni to'ldiruvchi virtual muhitdir».

Raqamli iqtisodiyot – bu raqamli texnologiyalarga asoslangan, elektron biznes bo'lib, elektron tijorat bilan bog'langan hamda raqamli ko'rinishga ega bo'lgan tovar va xizmatlar ishlab chiqarayotgan va taqdim etayotgan iqtisodiy

11 Данное определение приводится, в частности, экспертами UNCTAD (The Transformative Economic Impact of Digital Technology, http://unctad.org/meetings/en/Presentation/ecn162015p09_Katz_en.pdf)

12 <https://aniq.uz/yangiliklar/raqamli-iqtisodiyot-nima>

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faoliyat turi hisoblanadi. Bunda iqtisodiy xizmat va tovarlar uchun hisob-kitoblar bevosita elektron pul orqali amalga oshiriladi.

Xulosa qilib aytganda, raqamli iqtisodiyot bu yangi texnologiyalar, platformalar va biznes modellari yaratish va ularni kundalik hayotga joriy qilish orqali mavjud iqtisodiyotni yangicha tizimga ko‘chirish deganidir. Raqamli iqtisodiyotning belgilari ma’lum bo‘lib, u quyidagi xususiyatlar bilan ham ajralib turadi:

- yuqori darajada avtomatlashtirilganlik darajasi;
- elektron hujjat almashinuvining amalga oshirilishi;
- buxgalterlik va boshqaruv tizimlarining o‘zaro elektron integratsiyalashuvi;

- ma’lumotlar elektron bazalarining mavjudligi;
- CRM (mijozlar bilan o‘zaro munosabat tizimi) mavjudligi;
- korporativ tarmoqlarning rivojlanishi va undan foydalanish.

Raqamli iqtisodiyot bir qator qulayliklarga ega bo‘lib, u quyidagilar bilan ajralib turadi:

- to‘lovlar uchun xarajatlar qisqaradi;
- tovar va xizmatlar haqida ko‘proq va tezroq ma’lumot olinadi;
- raqamli dunyodagi tovar va xizmatlarning jahon bozoriga chiqish imkoniyatlari yuqori bo‘ladi;

- iste’molchi fikrini tez olish hisobiga tovar va xizmatlar jadal takomillashtiriladi;

- tezroq, sifatliroq va qulayroq imkoniyatlarga ega bo‘ladi.

Raqamli texnologiyalarning rolini global miqyosda ham, mahalliy darajada ham ko‘rishimiz mumkin. Bir tomondan, raqamli iqtisodiyot yangi tarmoqlar to‘plami sifatida global iqtisodiyotning jadal rivojlanayotgan qismini ifodalaydi. So‘nggi yillarda zamonaviy texnologiyalarning rivojlanishi Internet xizmatlari, uyali aloqa, onlayn o‘yinlar sanoati, elektron savdo va boshqalar uchun katta bozorlarni yaratishga olib kelmoqda.

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Baylepesov K.U.
O‘zbekiston Davlat Jismoniy Tarbiya va Sport Universiteti Nukus filiali
Sport o‘yinlari kafedrası Assistent o‘qituvchisi

ESHKAK ESHISH SPORTINING TUZILMASI, TARTIBI VA FAOLIYAT HAJMIGA QO‘YILADIGAN TALABLAR

Annotatsiya. Eshkak eshish jismonan talabchan sport turi bo‘lib, yuqori darajalarda raqobatlashish uchun zarur bo‘lgan kuch va chidamlilikni rivojlantirish uchun qattiq tayyorgarlikni talab qiladi. Sport ko‘rsatkichlarini maksimal darajada oshirish va jarohatlar xavfini minimallashtirish uchun eshkak eshish dasturlari vaqt o‘tishi bilan intensivlik va hajmning rivojlanishini hisobga olgan holda ehtiyotkorlik bilan tuzilishi kerak. Ushbu maqolada eshkak eshish bo‘yicha mashg‘ulotlar rejasini tuzish uchun asosiy talablar, mashg‘ulotlar tartibi va turli bosqichlarda tegishli hajm bo‘yicha aniq tavsiyalar berilgan.

Kalit so‘zlar: eshkak eshish sporti, kelib chiqishi, talablar, sportchilar tayyorgarligi, mashg‘ulotlar.

Baylepesov K.U.
assistant teacher
Department of Sports Games
Uzbekistan State Physical Education and Sports University
Nukus branch

REQUIREMENTS FOR THE STRUCTURE, ORDER AND VOLUME OF ACTIVITY OF ROWING

Abstract. Rowing is a physically demanding sport that requires rigorous training to develop both the strength and endurance necessary to compete at higher levels. In order to maximize athletic performance and minimize injury risk, rowing programs must be carefully structured with consideration given to progression of both intensity and volume over time. This article will outline the key requirements for structuring a rowing training plan, with specific recommendations regarding order of activities and appropriate volume at different phases.

Keywords: rowing sport, origin, requirements, athlete training, training.

Kirish: Baydarka va kanoeda eshkak eshish texnik va jismoniy jihatdan ancha qiyin sport turidir. Shu bilan birga, baydarka va kanoeda eshkak eshish yosh, jismoniy rivojlanish va salomatlik holatiga qarab inson tanasidagi jismoniy va ruhiy stressni tartibga solish imkonini beradi. Ayni paytda bolalar va yoshlar o‘rtasida sportning turli turlariga qiziqish faol. Hayotdagi zamonaviy tendentsiyalar shaxsni ozod qilishga, erkinlikka intilish va o‘zini o‘zi tasdiqlashga

qaratilgan. Eshkak eshish sportchida kuch, chidamlilik va g'alaba qozonish istagini rivojlantiradi. Ushbu sportning eng aniq afzalliklaridan biri shundaki, mashg'ulotlarning aksariyati suv havzalarida, toza havoda o'tadi.

Baydarka va kanoeda eshkak eshishga individual, tabaqalashtirilgan yondashuv imkoniyati nafaqat uni ommalashtirdi, balki nogironlarni Paralimpiya o'yinlari va faxriylar o'rtasidagi jahon chempionatlariga jalb qilish imkonini berdi.

Musobaqalar sportchilarning sport tayyorgarligining muhim qismi bo'lib, shunday rejalashtirilishi kerakki, ular o'z yo'nalishi va qiyinchilik darajasi bo'yicha sportchilarning uzoq muddatli sport mashg'ulotlarining ushbu bosqichida qo'ygan vazifalariga mos kelsin.

Larbor:

-nazorat musobaqalari, unda sportchining imkoniyatlari, uning tayyorgarlik darajasi va mashg'ulotlar samaradorligi aniqlanadi. Ularning natijalarini hisobga olgan holda keyingi o'quv dasturi ishlab chiqilmoqda. Nazorat funksiyasini rasmiy musobaqalar ham, maxsus tashkil etilgan nazorat musobaqalari ham bajarishi mumkin.

-saralash musobaqalari, natijalariga ko'ra jamoalar yakunlanadi va asosiy musobaqalarda ishtirokchilar tanlanadi. Asosiy musobaqalarda ishtirokchilarni jalb qilish printsiptiga ko'ra, saralash musobaqalarida sportchiga birinchi yoki birinchi o'rinlardan birini egallash va nazorat standartini bajarish vazifasi qo'yiladi, bu esa asosiy musobaqalarda muvaffaqiyatli chiqishga umid qilish imkonini beradi.

-asosiy musobaqalar, ularning maqsadi uzoq muddatli sport mashg'ulotlarining ma'lum bir bosqichida g'alaba qozonish yoki eng yuqori o'rinlarni egallashdir.

Sport musobaqalarida qatnashish uchun sportchilarga qo'yiladigan talablar.

-ishtirokchining yoshi va jinsi qoidalariga (reglamentlarga) muvofiqligi rasmiy sport musobaqalari va eshkak eshish sporti qoidalari haqida baydarka va kanoeda eshkak eshish;

- ishtirokchining sport malakasi darajasi Yagona Butunrossiya sport klassifikatoriga va baydarka va kanoeda eshkak eshish sporti qoidalariga muvofiq rasmiy sport musobaqalari to'g'risidagi nizomlarga (nizomlarga) muvofiqligi;

-sport tayyorgarligi rejasini amalga oshirish;

- dastlabki tanlov tanlovidan o'tish;

- sport musobaqalarida qatnashish uchun ruxsatnoma to'g'risidagi tegishli tibbiy ma'lumotnomaning mavjudligi;

xalqaro antidoping tashkilotlari tomonidan tasdiqlangan umumrossiya antidoping qoidalari va antidoping qoidalariga rioya qilish.

Sportchilar tashkilot tomonidan sport musobaqalariga Dasturda nazarda tutilgan jismoniy tarbiya va sport tadbirlari rejasiga hamda sport musobaqalari va sport tadbirlari to'g'risidagi nizomga (nizomlarga) muvofiq yuboriladi.

O'quv-mashg'ulot yig'inlarida tayyorgarlik ko'rishga ayniqsa ijodiy yondashish kerak, chunki mashg'ulotlar sportchilarning band bo'lgan jadvallari bilan cheklanmaydi.

Kuniga uchta mashg'ulot bilan har bir mashg'ulot aniq yo'nalishga ega. Ertalabki mashg'ulot tananing umumiy ohangini oshirishga va keyingi mashg'ulotlarda ish faoliyatini yaxshilashga yordam beradi. Kunduzgi va kechki mashg'ulotlarda asosiy o'quv vazifalari hal qilinadi. Bundan tashqari, biri mikrotsiklning ushbu kuni uchun asosiy vazifani hal qilishga qaratilgan, ikkinchisi esa ikkinchi darajali.

Sportchilarning o'quv-mashg'ulot yig'inlarida ishtirok etishini rejalashtirish va ularni o'tkazish muddatlari rasmiy jismoniy tarbiya va sport tadbirlarining kalendar rejasi va musobaqalar to'g'risidagi nizomga muvofiq belgilanadi.

Sport mashg'ulotlarining har bir bosqichida sport mashg'ulotlari dasturlarini amalga oshirish natijalariga qo'yiladigan talablarga muvofiq Dasturni amalga oshirish natijalarini baholash mezonlari

Dastur quyidagi maqsadlarga erishishga qaratilgan:

- salomatlikni mustahkamlash, asosiy jismoniy sifat va qobiliyatlarni rivojlantirish, individual jismoniy tayyorgarlikni oshirish, asosiy tana tizimlarining funktsional imkoniyatlarini kengaytirish;

- harakatlar madaniyatini shakllantirish, umumiy va maxsus eshkak eshish yo'nalishidagi jismoniy mashqlar bilan harakat tajribasini boyitish;

- barqaror manfaatlar va sport faoliyatiga ijobiy hissiy va ruhiy munosabatni rivojlantirish;

- jismoniy tarbiya va baydarka va kanoeda eshkak eshishning sport turi sifatidagi qadriyatlarini, ularning sog'lom turmush tarzini shakllantirishdagi o'rni, shaxsning mustahkam irodali, axloqiy va estetik fazilatlarini rivojlantirish haqidagi bilimlarni o'zlashtirish;

- baydarka va kanoeda eshkak eshish bo'yicha tayyorgarlik, raqobatbardoshlik, instruktorlik va hakamlik ko'nikmalarini egallash;

Sportchilarni tayyorlashning asosiy tamoyillari quyidagilardan iborat:

- o'quv jarayonining barcha tarkibiy qismlarining (jismoniy, texnik, taktik va nazariy tayyorgarlik, tarbiyaviy ishlar va rehabilitatsiya tadbirlari, pedagogik va tibbiy nazorat) chambarchas bog'liqligini ta'minlovchi murakkablik;

- dasturiy materialni taqdim etish ketma-ketligini, o'quv vazifalarini belgilash, o'quv vositalari va usullaridan foydalanish, o'quv va raqobatbardosh yuklarning hajmlari va intensivligidan foydalanish, jismoniy va texnik-taktik tayyorgarlik ko'rsatkichlari dinamikasini belgilaydigan uzluksizlik;

- sport tayyorgarligi muammolarini hal qilish uchun keng va xilma-xil jismoniy mashqlar va o'quv yuklamalaridan foydalanishni o'z ichiga olgan o'zgaruvchanlik;

- qo'llaniladigan mashg'ulot vositalari va usullarining sportchilarning morfo-funksional va aqliy imkoniyatlariga muvofiqligini belgilaydigan sport faoliyatining yoshga mosligi.

Xulosa: Xulosa qilib aytganda, eshkak eshish mashg'ulotlarini alohida tayyorgarlik, raqobatbardosh va o'tish bosqichlarida intensivlik, hajm va tiklanishning rivojlanishini hisobga olgan holda mos ravishda tuzish fitnesni rivojlantirish, ishlashni yaxshilash va ortiqcha jarohatlardan qochish uchun juda muhimdir. Ushbu maqolada keltirilgan dalillarga asoslangan ko'rsatmalarga rioya qilish murabbiylar va sportchilarga mashg'ulotlar tartibi, davomiyligi va haftalik ish yukini davriy rejalashtirish orqali mashg'ulotlarga moslashish va sport salohiyatini maksimal darajada oshirishga imkon beradi. Shaxsning mashg'ulotlarga bo'lgan munosabati asosida muntazam ravishda qayta baholash va sozlash dasturning xavfsiz va samarali dizaynini ta'minlaydi.

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*Bayzakova D.F.
Jizzax Politexnika instituti
O'zbekiston, Jizzax*

O'ZBEKISTONDA OILAVIY TADBIRKORLIKNING RIVOJLANTIRILISHI

Annotatsiya. Ushbu maqolada O'zbekistonda tadbirkorlik, oilaviy tadbirkorlik faoliyati va olib borilayotgan iqtisodiy islohotlar orqali iqtisodiyotning barqaror o'sishi, hamda mamlakatimizda oilaviy tadbirkorlikning rivojlantirilishi bo'yicha amalga oshirilayotgan ishlar bayon etilgan. Bunda iqtisodiy o'sishga ta'sir ko'rsatuvchi omillar tahlili, ya'ni qo'shilgan ulushlarning tarkibi hamda YaIMning o'sishiga qo'shgan hissasi ko'rib chiqilgan.

Kalit so'zlar: Tadbirkorlik, oilaviy tadbirkorlik, oilaviy korxonalar, makroiqtisodiy ko'rsatkichlar, yalpi ichki mahsulot, bandlik, aholi daromadlari.

*Bayzakova D.F.
Jizzakh Polytechnical institute
Uzbekistan, Jizzakh*

DEVELOPMENT OF FAMILY BUSINESS IN UZBEKISTAN

Annotation. This article describes the activities of entrepreneurship, family entrepreneurship in Uzbekistan, sustainable growth of the economy, through on going economic reforms and development of family entrepreneurship in our country. being carried out in Uzbekistan. The analysis of the factors affecting economic growth, for example, the composition of the added shares and the contribution the structure of the added shares and their contribution to the growth of GDP, was considered.

Key words: Entrepreneurship, family entrepreneurship economic growth, macroeconomic indicators, gross domestic product, employment, population income.

Oilaviy tadbirkorlik – oila a'zolari va ularning yaqin qarindoshlari tomonidan tashkil etiladigan tadbirkorlik faoliyatidir. Oilaviy tadbirkorlik oila a'zolari tomonidan tavakkal qilib va o'z mulkiy javobgarligi ostida daromad (foyda) olish maqsadida amalga oshiriladigan tashabbuskorlik faoliyatidir. Oilaviy tadbirkorlik o'z ishtirokchilarining ixtiyoriyligiga asoslanadi.¹⁵

Har bir shaxs faoliyatini oilaviy tadbirkorlik shaklida tashkil etish u uchun maqbul tanlov hisoblanadi. Chunki, oilaviy tadbirkorlikni tashkil etish orqali o'zi yashab turgan hududda faoliyat yuritishi hamda ishlab chiqarilgan mahsulotni shu

¹⁵ O'zbekiston Respublikasining 2012-yil 26-apreldagi O'RQ-327sonli «Oilaviy tadbirkorlik to'g'risida»gi qonuni, 3-modda

joyning o'zida sotishi mumkin. Bunda u o'z turar joyini yashash uchun mo'ljallanmagan joyga aylantirishi shart emas. Shuningdek, u tadbirkorlik faoliyatini o'z uyida tashkil etsa, elektr energiyasi, suv ta'minoti, kanalizatsiya, gaz ta'minoti va issiqlik ta'minoti kabi kommunal xizmatlar haqini aholi uchun belgilangan tariflarda to'lashi mumkin. Bu esa, boshqa shakldagi korxonalariga nisbatan yengillik va katta imtiyoz demakdir.

Oilaviy tadbirkorlikni yuridik shaxs tashkil etmagan va yuridik shaxs tashkil etgan holda yo'lga qo'yish mumkin. Yuridik shaxs tashkil etmagan holdagi oilaviy tadbirkorlik oilaviy tadbirkor (OT), yuridik shaxs tashkil etgan holdagi oilaviy tadbirkorlik oilaviy korxonasi (OK) deb nomlanadi

Oilaviy korxonasi faoliyatning ayrim turlarini faqat maxsus ruxsatnoma (litsenziya) mavjud bo'lganda amalga oshirishi mumkin. Oilaviy korxonasi aksiz solig'i to'lanadigan mahsulotni ishlab chiqarishni va yer qabulidan foydalanganlik uchun soliq solinadigan foydali qazilmalar qazib olishni, shuningdek, yuridik shaxslar uchun qat'iy belgilangan soliq yoki yagona yer solig'i to'lash nazarda tutilgan faoliyatni amalga oshirishi mumkin emas.

Oilaviy korxonasi uning ishtirokchilari tomonidan tovarlar ishlab chiqarish (ishlar bajarish, xizmatlar ko'rsatish) va oldi-sotdi qilishni amalga oshirish uchun ixtiyoriy asosda, oilaviy korxonasi ishtirokchilarining ulushli yoki birgalikdagi mulkida bo'lgan umumiy mol-mulk, shuningdek oilaviy korxonasi ishtirokchilaridan har birining mol-mulki negizida tashkil etiladigan kichik tadbirkorlik subyektidir. Oilaviy korxonasi faoliyati uning ishtirokchilarining shaxsiy mehnatiga asoslanadi. Oilaviy korxonasi tadbirkorlik subyektlarining tashkiliy-huquqiy shakllaridan biridir. 16

O'zbekiston Respublikasi Prezidenti huzuridagi Statistika agentligi ma'lumotlariga ko'ra, 2023 yilning 1 yanvar holatiga respublikamizda faoliyat yuritayotgan oilaviy korxonalar soni 59110 tani tashkil etgan.

Hududlar kesimida faoliyat yuritayotgan oilaviy korxonalar soni

№	Hududlar	Oilaviy korxonalar soni
1	Samarqand viloyati	10499 ta
2	Farg'ona viloyati	6608 ta
3	Surxondaryo viloyati	5847 ta
4	Xorazm viloyati	5488 ta
5	Qashqadaryo viloyati	5226 ta
6	Toshkent viloyati	5073 ta
7	Navoiy viloyati	4157 ta
8	Toshkent shahri	3297 ta
9	Buxoro viloyati	3450 ta
10	Andijon viloyati	2962 ta
11	Qoraqolpog'iston Respublikasi	2172 ta
12	Jizzax viloyati	2140 ta

16 O'zbekiston Respublikasining 2012-yil 26-apreldagi O'RQ-327-sonli «Oilaviy tadbirkorlik to'g'risida»gi qonuni, 4-modda

13	Namangan viloyati	1337 ta
14	Sirdaryo	356 ta

O'zbekiston Respublikasi Prezidenti huzuridagi Statistika agentligi ma'lumotlari

O'zbekiston Respublikasi Prezidenti huzuridagi Statistika agentligi ma'lumotlariga

ko'ra, 2022 yilning yanvar-sentabr oylarida kichik tadbirkorlik (biznes)ning yalpi ichki mahsulotdagi ulushi 52,8 foizni tashkil etdi. Bundan oldin xizmatlar sohasining yalpi ichki mahsulotdagi ulushi oshgandi.17

Foydalanilgan adabiyotlar:

- 1.O'zbekiston Respublikasining 2012-yil 26-apreldagi O'RQ-327-sonli «Oilaviy tadbirkorlik to'g'risida»gi qonuni, 4-modda.
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O'ZBEK VA INGLIZ TILLARIDA FALSAFIY TERMINLARNING TARKIBI

Annotatsiya. Ushbu maqola o'zbek va ingliz tillaridagi falsafiy atamalarning tarkibiy qismlarni ko'rib chiqishga va bu murakkab iboralarni belgilaydigan lingvistik nozikliklarni ko'rib chiqadi. Tadqiqotda o'zbek va ingliz tillaridagi falsafiy atamalarning tarkibi o'rganilib, qiyosiy yondashuv qo'llaniladi. Aniq tahlil va illyustratsiya orqali tadqiqot madaniy, tarixiy va lingvistik omillar falsafiy tushunchalarning shakllanishi va talqinini qanday shakllantirishi haqida nozik tushuncha beradi. Maqolada o'zbek kontekstida falsafiy atamalarning o'ziga xos namunalari o'rganilib, ularning qatlamlarini ochib, ularning ma'nosiga xizmat qiluvchi madaniy va til ta'sirlari ochib berilgan

Kalit so'zlar: falsafiy terminlar, terminlarning tarkibiy tahlili, o'zbek va ingliz tillarida falsafiy terminlar.

Boynazarov I.
Termiz State University

COMPOSITION OF PHILOSOPHICAL TERMS IN UZBEK AND ENGLISH LANGUAGES

Abstract. This article examines the components of philosophical terms in Uzbek and English and examines the linguistic subtleties that define these complex expressions. The composition of philosophical terms in Uzbek and English languages is studied in the research, and a comparative approach is used. Through clear analysis and illustration, the study provides a nuanced understanding of how cultural, historical, and linguistic factors shape the formation and interpretation of philosophical concepts. The article examines specific examples of philosophical terms in the Uzbek context, reveals their layers, and reveals the cultural and linguistic influences that serve their meaning.

Keywords: philosophical terms, structural analysis of terms, philosophical terms in Uzbek and English.

Falsafiy atamalarning tarkibiy qismlarini o'rganish bir necha sabablarga ko'ra muhim ahamiyatga ega. Birinchidan, ushbu atamalarning tarkibiy elementlarini tushunish murakkab falsafiy g'oyalarni ifodalovchi lingvistik arxitektura haqida bizga asosiy tushunchalarni beradi. Olim va faylasuflar atamalarning tuzilishini ajratish va tahlil qilish orqali ma'lum bir til, xoh ingliz, xoh o'zbek tillari doirasida bo'lsin tushunchalar qanday shakllantirilishi, ifodalanishi va bog'lanishi haqida chuqurroq tushunchaga ega bo'ladilar.

Ikkinchidan, bunday tadqiqotlar falsafiy nutqda muloqotning aniqligiga hissa qo'shadi. Falsafiy g'oyalarning nozik tabiati ko'pincha aniq va to'g'ri ifodalashni talab qiladi. Terminlarning qurilish komponentlarini tahlil qilish bir-biriga yaqin tushunchalar orasidagi nozik farqlarni aniqlashga yordam beradi, olimlar o'z g'oyalarini ravshanlik bilan etkazishlarini ta'minlaydi va yuzaga kelishi mumkin bo'lgan tushunmovchiliklarning oldini oladi. Masalan, "*nisbiylik*" yoki "*egoizm*" kabi atamalarni yaratadigan o'ziga xos morfologik o'zgarishlar yoki kombinatsiyalarni anglash va tushunish, murakkab falsafiy pozitsiyalarni aniqroq etkazish imkonini beradi.

Uchinchidan, falsafiy atamalarning tarkibiy elementlarini o'rganish g'oyalar va falsafiy paradigmalar evolyutsiyasining tarixiy bayonini yoritib beradi. Til dinamik va madaniy hamda intellektual o'zgarishlarni aks ettirganligi sababli, atamalarning rivojlanishini kuzatish vaqt o'tishi bilan o'zgaruvchan falsafiy manzara haqida tushuncha beradi. Turli davrlar va til an'analari o'rtasidagi qiyosiy va qarama-qarshi tahlillar falsafiy tafakkurdagi o'zgarishlarni, yot tushunchalarning qabul qilinishini va yangi g'oyalarning paydo bo'lishini ochib berishi mumkin.

Bundan tashqari, ingliz va o'zbek kabi tillardagi falsafiy atamalarning tarkibiy qismlarini qiyosiy tahlil qilish madaniyatlararo muloqotlarni ham osonlashtiradi. U olimlarga umumiy tushunchalarni, tilshunoslik manbalarini va falsafiy asoslarni aniqlash imkonini beradi, turli til va madaniy kontekstlarda falsafiy fikrning o'zaro bog'liqligini chuqurroq tushunishga yordam beradi. Ushbu qiyosiy yondashuv yanada keng qamrovli va global ma'lumotga ega falsafiy nutqqa hissa qo'shadi.

O'zbek falsafiy terminlar bazasida qo'shma so'z shaklidagi termin birikmalar uchraydi. Ular asosan OT + OT shaklidagi qolib asosida qurilgan bo'lib, ikki bir xil qiymatga ega bo'lgan tushunchalarni bir-biriga solishtiradi yoki bir-biriga qarama-qarshi qo'yadi. Bularga misol qilib, *zamon va makon*, *internalizm va eksternalizm*, *analiz va sintez* kabi terminlarni keltirish mumkin. Bu qo'shma terminlar, asosan, ingliz tilidan qalqalash orqali yoki so'zma-so'z tarjima qilish orqali yasalib, o'zbek tili terminologiyasining boyishiga xizmat qiladi: *time and place*, *internalism and externalism*, *analysis and synthesis* kabi.

Shuningdek, o'zbek tilida tarkibiy jihatdan umumiy ko'rinishga ega bo'lgan birikmali terminlarning bir qancha qoliplari ko'p uchraydi. Bularga:

1. OT+OT: *Baden maktabi, predikat belgisi, sartarosh paradoksi, vatan ravnaqi, vijdon erkinligi va hokazo.*

2. SIFAT+OT: *badiiy empatiya, deduktiv fikr, dunyoviy jon, estetik did, fundamentalistik eksternalizm, geografik determinizm, gipotetik mulohaza, ilohiy nazariya, kategorik imperativ, milliy ong, ontologik argument.*

3. FE'L+OT: *bilish nazariyasi, bilish usuli, ideallashtirilgan obyekt.*

4. SIFAT+OT+OT: *millatlararo muloqot madaniyati, moddiy ekvivalentlik qonuni, moddiy ta'sir qonuni, qadimgi xitoy falsafasi, yetarli asos qonuni.*

O'zbek falsafasidagi *psixozanaliz* va *antifashist* misolida keltirilgan qo'shma atamalar tilning murakkab falsafiy iboralarni shakllantirishdagi ko'p ildizlarning uyg'unlashuvi orqali moslashishini yorqin ifodalaydi. "Psixozanaliz" "psixo" (ong yoki psixologiya) bilan "analiz" (tahlil) bilan birlashib, inson ongini tushunishga ko'p qirrali yondashuvni o'z ichiga olgan atama hosil qiladi. Bu ildizlarning uyg'unlashuvi o'zbek tilidagi falsafaning fanlararo tabiatini ifodalaydi, chunki u psixologik tushunchalarni falsafiy manzara bilan uzviy bog'laydi.

Boshqa tomondan, "antifashist" siyosiy mafkurani aks ettiruvchi "anti" (muxolifat)ni "fashist" (fashist) bilan birlashtiradi. Bu murakkab atama fashistik tamoyillarga qarshi falsafiy pozitsiyani qisqacha ifodalaydi. Siyosiy falsafaning kengroq kontekstida "antifashizm" atrofidagi munozaralar avtoritar mafkuralarga qarama-qarshi bo'lgan axloqiy mulohazalarni o'rganadi. Bu qo'shma atamalarning tuzilish tarkibini o'rganar ekanmiz, rang-barang lingvistik elementlarning uyg'unligi o'zbek tilidagi falsafiy iboralarning aniqligi va teranligini oshirishi ma'lum bo'ladi.

O'zbek falsafasida, "*mafkuraviy harakat*" ham "mafkuraviy" so'zini "harakat" bilan qo'shib, ijtimoiy-siyosiy kontekstdagi g'oyalarning murakkab o'zaro ta'sirini o'zida mujassamlashtirgan atama hosil qiladi. Ushbu oddiy birikmali atama mafkuralar evolyutsiyasi, ijtimoiy o'zgarishlar va jamoaviy fikrning siyosiy dinamikaga ta'siri haqida munozaralar uchun eshik bo'lib xizmat qiladi. Ushbu so'zlarni birlashtirib, atama mafkuralar haqidagi falsafiy nutqning ko'p qirrali mohiyatini va ularning ijtimoiy ta'sirini lo'nda aks ettiruvchi lingvistik vositaga aylanadi.

Bundan tashqari, murakkab birikmali atamalarga "tashqi dunyo skeptitsizmi" (outer world scepticism) kabi tushunchalar ham kiradi. Bunda "tashqi dunyo" va "skeptitsizm" birikmasi bir nechta so'zlarni birlashtirib, muayyan falsafiy pozitsiyani ifodalaydi. Ushbu murakkab frazeologik termin tashqi dunyoning mavjudligi yoki uning o'z ongidan tashqarida bilish mumkinligiga shubha qiladigan skeptik pozitsiyani qamrab oladi.

O'zbek falsafiy leksikasi tarkibidagi xilma-xil strukturaviy elementlar, ya'ni soddadan tortib, murakkab birikmalargacha, o'z mohiyatiga ko'ra, teran falsafiy tushunchalarni yetkazishda qo'llanilgan tilga xos boylik va teranlikni aks ettiradi.

Ingliz tilidagi ko'p komponentli terminlar asosan tarkibiga ko'ra quydagi bir qancha guruhlariga bo'linishini tahlilimiz davomida guvohi bo'ldik:

1. N+N: *axiology, copyright, psychologism, slingshot, structure-description, thing-word, topic-neutral;*

2. Adj+N: *aesthetic appropriation, aesthetic empathy, basic action, dynamic logic, ethical compliance, existential quantification, false dilemma, free will, implicit bias, modal logic, natural deduction, personal identity, possible worlds.*

3. Adj+N+N: *divine command theory, external world skepticism, greatest happiness principle, total evidence requirement, unexpected examination paradox.*

4. Adj+Ving: *circular reasoning, ethical decision making, categorical reasoning, evidential investigating, metaphysical speculating.*

5. N+N: *axiology, assertion sign, barber paradox, copyright, feminist epistemology, Frege argument, gambler's fallacy, proof theory, relevance logic, sound argument, truth value, virtue ethics.*

6. N+of+N: *context of discovery, denial of antecedent, fallacy of composition, fallacy of red herring, fallacy of reification, principle of credulity, principle of testimony.*

Ingliz falsafiy nutqida "egoism" va "absolutism" kabi shakllangan atamalar oddiy atamalarni o'zgartirish orqali tilning maxsus falsafiy tushunchalarni yaratish qobiliyatini misol qilib ko'rsatadi. "Ego" tushunchasidan kelib chiqqan "egoism" axloqiy individualizmni chuqur o'rganadi, shaxsiy manfaatni asosiy tamoyil sifatida ta'kidlaydi. Axloqiy falsafada "egoism" atrofidagi munozaralar o'z manfaatlarini jamoaviy farovonlikdan ustun qo'yishning axloqiy oqibatlarini o'rganadi. Bu atama individual axloq va ijtimoiy qadriyatlar to'g'risidagi kengroq nutqda nozik axloqiy pozitsiyani egallab, o'zgarishlarga uchraydi.

Ingliz falsafiy leksikasidagi "*Chinese room argument*" (sifat + ot + ot) bilan ifodalangan murakkab frazema atamalar turli komponentlarni birlashtirib, murakkab falsafiy bahslarni qamrab oladi. "*Chinese room argument*" sun'iy intellekt, ong va tushunish haqidagi savollarni o'z ichiga oladi, aql va idrok haqidagi falsafiy munozaralarga xos bo'lgan murakkab qatlamlarni tasvirlaydi.

Bundan tashqari, murakkab birikmali terminlarga "*existential crisis story*" (sifat + ot + ot) kabi atamalar kiradi. Bu yerda "existential" va "crisis" birikmasi ekzistensial falsafani "hikoya" nazariyasi bilan birlashtiradi. Ushbu misol murakkab birikmali terminlar turli intellektual an'analar va intizom sohaslariga tayangan holda nozik falsafiy nuqtai nazarlarni ifodalashni qanday osonlashtirishini ko'rsatadi. "*Chinese room argument*" va "*existential crisis*" kabi terminlar ingliz tilining boy falsafiy mazmunni o'z ichiga olgan murakkab atamalarni yaratish qobiliyatiga misol bo'lib, falsafiy izlanish va lingvistik ifodaning o'zaro bog'liqligini ta'kidlaydi.

Xulosa qilib aytadigan bo'lsak, o'zbek va ingliz tillarida qiyosiy tahlilni amalga oshirish orqali falsafiy atamalarning tarkibiy qismlarini tushunish yaxshilanadi va u madaniyatlararo falsafiy tadqiqotlar atrofida davom etayotgan muloqotga hissa qo'shadi, falsafa sohasida yanada yaxlit va global miqyosda ishonchli ma'lumotlarni beradi.

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*Chorshanbayev U.
lecturer
Gulistan State University
Muratjanova L.
student
Gulistan State University*

ASOSIY VOSITALAR HISOBINI MOLIYAVIY HISOBOTNING XALQARO STANDARTLARI TALABI BO'YICHA YURITISHNING DOLZARB MASALALARI

Аннотация. Мақолада асосий воситалар ҳисобини молиявий ҳисоботнинг халқаро стандартлари талабларига асосан ҳисобга олишни амалиётга татбиқ қилишнинг назарий ва амалий жиҳатлари таҳлил этилган. Асосий воситаларни дастлабки баҳосини тан олиш ва унинг қийматиغا харажатларни ўтказиш услубиётини такомиллаштириш масалалари атрофлича ўрганилиб, техник қаров, жорий таъмирлаш ҳамда капитал таъмирлаш харажатлари ҳисобини такомиллаштириш юзасидан хулосалар шакллантирилган.

Калит сўзлар: асосий воситалар, харажатлар, баҳолаш, дастлабки қиймати, жорий қиймати, харажатни тан олиш, амортизация, асосий воситаларнинг эскириши.

*Chorshanbayev U.
lecturer
Gulistan State University
Muratjanova L.
student
Gulistan State University*

CURRENT ISSUES OF KEEPING ACCOUNTING FOR FIXED ASSET ACCORDING TO THE REQUIREMENTS OF INTERNATIONAL STANDARDS OF FINANCIAL REPORTING

Abstract. The article analyzes the theoretical and practical aspects of the implementation of accounting for fixed assets based on the requirements of international standards of financial reporting. The issues of recognizing the initial value of fixed assets and improving the method of transferring costs to its value were studied in detail, and conclusions were formed regarding the improvement of the calculation of the costs of technical maintenance, current repairs and capital repairs.

Key words: fixed assets, costs, valuation, original value, current value, cost recognition, depreciation, depreciation of fixed assets.

Kirish. Ma'lumki, asosiy vositalar xo'jalik yurituvchi sub'ektning daromad olish jarayonida muhim rol o'ynaydi. Xo'jalik yurituvchi sub'ektjoylashuvi, miqdori, holati, texnik xizmat ko'rsatish va amortizatsiya holatini kuzatishda jiddiy qiyinchiliklarga duch kelishadi. Asosiy vositalar hisobini tashkil etish korxonalariga asbob-uskunalar va transport vositalarini kuzatish, ularning holatini baholash, ularni maqbul ish tartibida saqlash, asbob-uskunalarining nosozliklarini va ishlamay qolish vaqtlarini minimallashtirish va aktivning ishlash muddatini yaxshilash imkonini beradi.

Material va metod. Asosiy vositalar hisobini takomillashtirishning dolzarb masalalari doimiy ravishda tadqiqot ob'ekti sifatida o'rganilib kelingan. Bu borada xorijiy olimlar o'z ilmiy ishlarida turli xil fikrlarni bildirib o'tishgan:

A.G. Efimenko va V.P. Efimenkolar avtomobil transporti korxonalarida xarajatlarni o'zgaruvchan va shartli doimiy xarajatlarga bo'lishadi. Doimiylariga esa, asosiy vositalarga eskirish kiradi.

V.E. Lixacheva doimiy xarajatlarga avtomobil transportining yurgan masofasiga bog'lik bo'lmagan xarajatlarni kiritadi. Bunday xarajatlarga amortizatsiya normasi yurgan masofaga bog'lik bo'lmagan xarakatdagi tarkibning amortizatsiyasi, yo'l xarajatlarini kiritadi. Muallif shartli ravishda xaydovchilarning ish xaqilari va u bilan bog'lik ijtimoiy xarajatlarni xam doimiy xarajatlarga kiritish mumkinligini ilgari suradi.

Mamlakatimiz olimlari xam bu borada ilmiy izlanishlar olib borishgan;

I.N. Ismanov tomonidan asosiy vositalar hisobini uzoq muddatli aktivlar tarkibida hisobga olishni taklif etilgan: "Uzoq muddatli aktivlar – bu mulkiy qiymatliklar bo'lib, korxonadan ishlab chiqarish jarayonida uzoq muddat foydalanish uchun sotib olinadigan, unumdorligi, foyda keltira olishi va nazorat qilinishi mumkinligi bilan tavsiflanadigan mablag'lardir. Shu bilan birga, uzoq muddatli aktivlarning shakllanish tamoyillari va tavsiflanishiga e'tibor qaratish lozim".

Xalqaro amaliyotda ko'chmas mulkni buxgalteriya hisobining ob'ekti sifatida hisobga olishda bir nechta MHXSlardan foydalaniladi, jumladan, MHXS (IAS) 16-sonli "Asosiy vositalar", MHXS (IAS) "Tovar-moddiy zaxiralar", MHXS (IAS) 40-sonli "Investitsiyaviy ko'chmas mulk" va boshqa standartlardan. Moliyaviy hisobotning xalqaro standartlariga asosan asosiy vositalarning boshlang'ich qiymati haqiqiy xarajatlar (MHXS 16-sonli "Asosiy vositalar") yoki qayta baholangan qiymat (MHXS 36-sonli "Aktivlarning qadrsizlanishi") standartlaridagi normalar bilan aniqlanadi.

Natijalar. Asosiy vositalar – quyidagilar uchun mo'ljallangan moddiy aktivlardir:

"... –mahsulotlarni ishlab chiqarish va yetkazib berishda, yoki xizmatlarni ko'rsatish, yoki boshqa tomonlarga ijaraga berish, yoki ma'muriy maqsadlarda foydalanish uchun mo'ljallangan aktivlardir; va uzoqroq muddat davomida foydalanilishi kutilgan aktivdir.

Asosiy vositalar ob'ektining tannarxi faqatgina quyidagi shartlar bajarilganda aktiv sifatida tan olinadi:

- tadbirkorlik sub'ekti tomonidan asosiy vosita bilan bog'liq kelgusi iqtisodiy naf olinishi ehtimoli mavjud bo'lsa;
- aktivning tannarxi ishonchli baholana olsa”.

Ta'rifni talqin qilish va moddiylik tushunchasini qo'llash munosabati bilan muammolar vujudga kelishi mumkin.

Ta'riflar ba'zi joylarda amaliy qiyinchiliklar olib keladi. Misol uchun, aktiv ishlab chiqarish, tovarlar yetkazib berishda yoki xizmatlar ko'rsatishda foydalanish uchun olingan, lekin endi uni sotish lozim bo'lsa, 5- sonli MHXS qoidalariga muvofiq moliyaviy holat to'g'risidagi hisobotda “sotish uchun mo'ljallangan” aktivlar sifatida alohida tasniflanadi. Bunday munozarali holatlarni bir qancha olimlarning ilmiy qarashlarida ko'rish mumkin. Ularning ilmiy qarashlarida asosiy vositalar hisobini

takomillashtirishga qaratilgan taklif va tavsiyalar ishlab chiqilgan.

Asosiy vositaning tannarxi quyidagilardan tashkil topadi:

➤ savdo chegirmalarini va imtiyozlarini chegirgan holda, uning xarid narxi, jumladan import bojlari va sotib olish bilan bog'liq qoplanmaydigan soliqlar.

➤ aktivni undan tadbirkorlik sub'ektining rahbariyati tomonidan ko'zlangan holda foydalanish uchun zarur bo'lgan joy va holatiga olib kelish bilan bog'liq bevosita xarajatlar.

➤ asosiy vosita ob'ektini demontaj qilish va olib tashlash xamda u joylashgan joydagi tabiiy resurslarni qayta tiklash xarajatlarining boshlang'ich bahosi.

Tadbirkorlik sub'ekti asosiy vosita sotib olingan paytda yoki undan ma'lum davr mobaynida tovar-moddiy qimmatliklarni ishlab chiqarish bilan bog'liq bo'lmagan maqsadlarda foydalanish oqibatida ushbu xarajatlar bo'yicha majburiyatni o'z zimmasiga oladi.

Quyidagilar bevosita xarajatlarga misollardir:

- asosiy vosita ob'ektini barpo etish (qurish) yoki sotib olish natijasida bevosita hosil bo'ladigan hodimlarga haq to'lash xarajatlari;

- joyni tayyorlash xarajatlari;

- yetkazib berish va ortish-tushirish bilan bog'liq boshlang'ich xarajatlar;

- o'rnatish va montaj bo'yicha xarajatlar;

- aktivning to'g'ri ishlashini sinab ko'rish xarajatlaridan aktivni tegishli joyga va holatga keltirish paytida ishlab chiqarilgan mahsulotni (uskunalarni sinovdan o'tkazishda

ishlab chiqarilgan mahsulotlar kabi) sotishdan olingan sof tushumning ayirmasi; va

- malakali xizmatlar uchun haqlar.

Tadbirkorlik sub'ekti ob'ektdan ma'lum bir davr mobaynida tovarmoddiy zaxiralar ishlab chiqarish uchun foydalanishi oqibatida paydo bo'ladigan ob'ektni

demontaj qilish va olib tashlash hamda u egallagan yer maydonida tabiiy resurslarni qayta tiklash majburiyatlari bo'yicha xarajatlarga nisbatan 2-sonli BHXS "Tovar-moddiy zaxiralar" ni qo'llaydi. 2-sonli BHXS yoki 16-sonli BHXS ga mos ravishda hisoblanadigan xarajatlar

bo'yicha majburiyatlar 37-sonli BHXS "Rezervlar, shartli majburiyatlar va shartli aktivlar" ga mos ravishda tan olinadi va baholanadi.

Iqtisodiyotni modernizatsiyalash sharoitida asosiy vositalar hisobi va auditini takomillashtirish yuzasidan izlanishlar olib brogan K.X.Xatamovning fikricha asosiy

vositalar hisobini takomillashtirishning dolzarb jihatlariga alohida e'tibor berib, "...xalqaro moliyaviy hisobot standartlariga ko'ra asosiy vositalarni tan olish masalasi muhim hisoblanadi.... aktiv bilan bog'liq bo'lgan kelgusi iqtisodiy foyda korxonadan olinishi ehtimoli yuqori darajada deb tasdiqlanganda; korxonadan uchun aktivning tannarxi ishonchli baholanishi mumkin bo'lganda.

Asosiy vositalarni ushbu ikki shartga javob berishiga qarab tan olinishi amalga oshiriladi. Shu jumladan, asosiy vosita tan olishning birinchi shartiga javob bersa, korxonadan dastlabki tan olinish vaqtiga qarab aktiv bilan bog'liq kelgusi iqtisodiy foyda olish ehtimolini belgilaydi. Ushbu ehtimollik darajasi korxonadan aktiv bilan bog'liq manfaat va risklarni olishi aniq bo'lishini talab etadi. Asosiy vositalarni hisobga

olishdagi asosiy qoidalar ularni aktivlar deb e'tirof etish paytini aniqlash, bu aktivlarga nisbatan qo'llanilishi lozim bo'lgan ularni balans qiymati va amortizatsiya meyorini aniqlash, shuningdek, asosiy vositalarning balans qiymatidagi boshqa o'zgarishlarni aniqlash hamda hisobga olish, amortizatsiya ajratmalarini hisoblab chiqarish va ularni hisobdan chiqarishdan iborat".

M.B. Kalonovning fikricha asosiy vositalarni hisobini takomillashtirishda ularning kelib chiqish markazlari va foydalanish markazlariga bo'lib o'rganishni taklif qilganlar. "...Avtomobil transporti korxonalarida xarajatlar hisobini takomillashtirish mavzusida olib borilgan ilmiy tadqiqotlar asosida quyidagi xulosalar shakllantirildi:

Avtomobil transporti korxonalarida asosiy vositalar hisobini takomillashtirish mavzusida olib borilgan ilmiy tadqiqotlar asosida quyidagi xulosalar shakllantirildi:

-Avtomobil transporti korxonalarida asosiy vositalarni kelib chiqish markazlari bo'yicha hisobini yuritish xizmatlar tannarxini aniqligini, shaffofligini, xarajatlarni to'g'ri qilinayotganligini nazorat qilish imkonini beradi.

-Respublikamizda avtomobil transporti korxonalarida xizmatlar tannarxini tashkil etuvchi xarajatlarga asosiy vositalarni eskirish xarajatlari, avtomobil yoqilg'isi, moylash materiallari, avtomobil ehtiyot qismlari, harakatdagi tarkib amortizatsiyasi, harakatdagi tarkibni ta'mirlash xarajatlari kiradi.

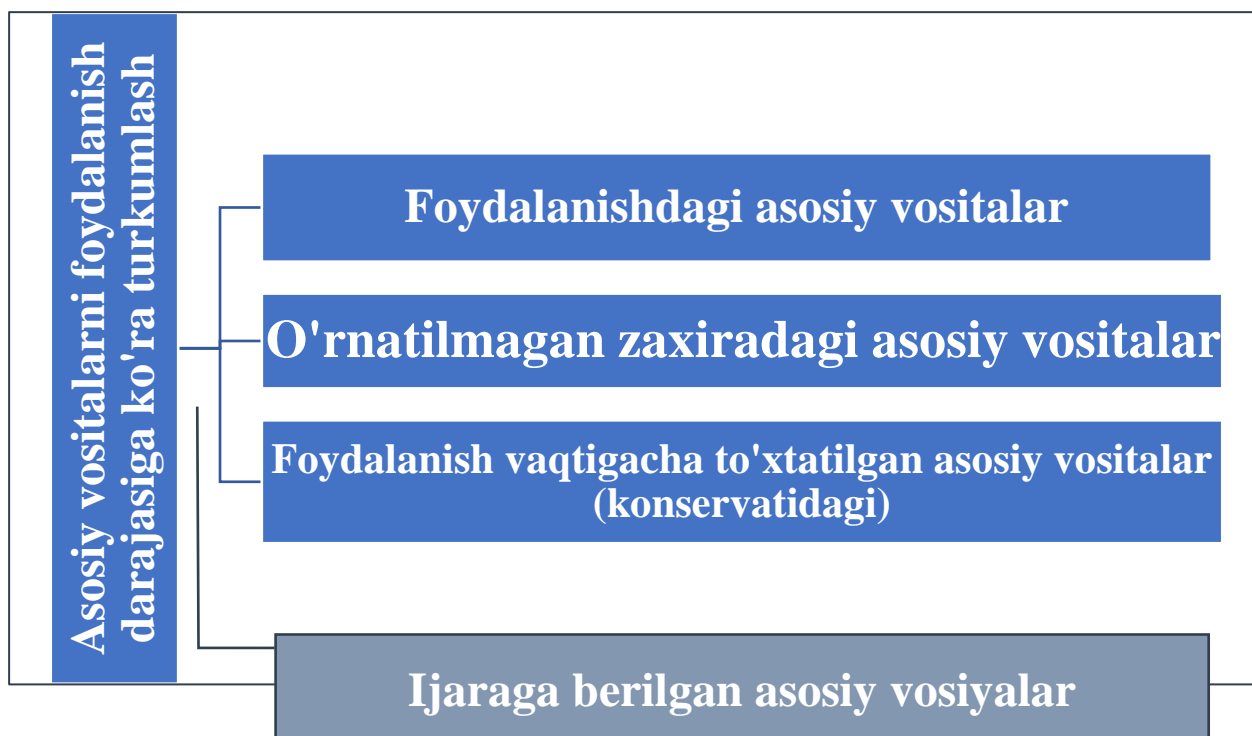
Ko'rib o'tilgan xususiyatlar avtomobil transporti korxonalarida xarajatlarning guruhlanishi hamda hisobga olinishiga o'z ta'sirini o'tkazadi", deb asosiy vositalarga

sarflanadigan xarajatlarni turkumlash va uning tarkibini aniqlashtirish natijasida baholash hamda xarajatlarni tan olish xususiyatlarni ochib berganlar.

Kichik biznes korxonalarida asosiy vositalar buxgalteriya hisobini takomillashtirish masalalari izlanishlar olib brogan D.D. Tursunovaning fikricha asosiy vositalar buxgalteriya hisobini takomillashtirishda quyidagilarga alohida to'xtalib o'tshga e'tibor berib, "...rivojlangan mamlakatlar amaliyotida buxgalteriyada asosiy vositalarni hisobga olish bir nechta moliyaviy hisobotning xalqaro standartlari asosida tartibga solinadi. 16-sonli BHXS "Asosiy vositalar", 5-sonli MHXS "Sotish uchun mo'ljallangan uzoq muddatli aktivlar va davom ettirilmaydigan faoliyat", 17-sonli BHXS "Ijara", 40-sonli BHXS "Investitsion mulk" hamda 13-sonli MHXS "Haqqoniy qiymatni baholash" kabi xalqaro standartlar shular jumlasidandir. Bundan tashqari biologik aktivlarni hisobga olish uchun alohida 41-sonli BHXS "Qishloq xo'jaligi" nomli standart ko'p yillik o'simliklar hamda ishchi va mahsuldor hayvonlarni hisobga olish shartlarini belgilaydi. Ushbu sanab o'tilgan standartlar asosiy vositalarni o'ziga xos xususiyatlarini inobatga olgan holda ularni tan olish, baholash, qadrsizlanishni aniqlash va hisobdan chiqarish jarayonlari uchun zarur shartlarini belgilaydi hamda a) mahsulotlarni ishlab chiqarish yoki yetkazib berish, yoki xizmatlarni ko'rsatish, yoki boshqa tomonlarga ijaraga berish, yoki ma'muriy maqsadlarda foydalanish uchun mo'ljallangan va (b) bir davrdan uzoqroq muddat davomida foydalanilishi kutilgan hisob ob'ektlarini asosiy vosita sifatida e'tirof etadi", asosiy vositalar bo'lishi uchun talablar va uni tan olish hamda baholash masalalari bo'yicha takliflar ishlab chiqqan.

Darxaqiqat asosiy vositalarning hisob jarayonini takomillashtirish uchun, avvalo, uning tannarxi yoki boshqacha aytganda dastlabki qiymatini to'g'ri shakllantirish uchun zarur shartlarni belgilanishi kerak.

Masalan, asosiy vositalar dastlabki qiymatini shakllantrishda milliy standartlarda asosiy vositalarni demontaj xarajatlarining diskontlangan qiymatlarini kirim qilinishi nazarda tutilmagan. Mazkur qiymatlar ham xalqaro standartlar talablari asosida dastlabki qiymatga qo'shilishi zarur. Asosiy vositalarni tasniflashda ularning turlariga emas, asosiy etibor ulardan foydalanilish maqsadlariga qaratilishi lozim.



1-rasm. Asosiy vositalarni foydalanish darajasiga ko‘ra turkumlash¹⁸

Asosiy vositalarni balansda haqqoniy qiymatlarda aks ettirib borish, qayta baholash natijalarini muvofiqlik tamoyili bo‘yicha asosiy vositalarning xizmat muddatiga mutanosib shaklda taqsimlanmagan foydaga o‘tkazib boorish ham korxonaning investision jozibadorligini oshiradi. Asosiy vositalarni tasniflashda ularning turlariga emas, asosiy etibor ulardan foydalanilish maqsadlariga qaratilishi lozim.

“Asosiy vositalarni hisob jarayonini tashkil etishda milliy va xalqaro standartlar talablari orasida juda katta tafovut mavjud. Jumladan, asosiy vositalarning tasniflanishi, asosiy vositalarni kiritish jarayonlari, asosiy vositalarga eskirish hisoblash jarayonlari, ijara munosabatlarini hisobga olish masalalarini sanab o‘tish mumkin. Asosiy vositalar hisobi moliyaviy hisobning xalqaro standartlari talablaridan kelib chiqib “tarixiy qiymat” yoki “qayta baholash” usullarida hisobga olinishi mumkin.

Milliy hisoblar tizimida esa bu haqda ma'lumotlar keltirilmagan. Kiritish jarayonida MHXSga ko‘ra asosiy vositalar qiymatining yirik qismini tashkil etgan, asosiy vositalardan farqli xizmat muddatiga ega bo‘lgan elementlari alohida hisob ob'ekti sifatida kiritish va ularga alohida eskirish usullarini qo‘llash, asosiy vositalar boshlang‘ich qiymati tarkibiga demontaj xarajatlarining diskontlangan qiymatlarini kiritish mumkinligi aytilgan bo‘lsa, BHMSda bu haqda ham etarli ma'lumotlar keltirilmagan”.

Xalqaro tajribalar talablari bo‘yicha asosiy vositalarning hisobini tashkil qilishda asosiy jihatlaridan yana biri bu, asosiy vositalarni sotib olinib,

¹⁸ Muallif ishlanmasi

foydalanishga topshirgandan keyin amalga oshiriladigan xarajatlar, jumladan ta'mirlash, xizmat ko'rsatish yoki yaxshilanish quyidagi usullarning biri bo'yicha hisobga olinadi:

1. Xarajat sifatida tan olinadi.
2. Kapitallashtiriladi.
3. Jamg'arilgan eskirishni kamaytirilishi sifatida tan olinadi.

Agar korxonada tomonidan aktivni foydalanshdan dastlab kutilayotgan bo'lg'usi iqtisodiy naflar oshish ehtimoli yuqori deb, hisoblansa, xarajatlar tegishli aktivning balans qiymatiga qo'shilishi mumkin. Asosiy vositalar ob'ektlari bilan bog'liq keyin amalga oshiriladigan xarajatlar faqat ular aktivning holatini yaxshilasa, yoki oldindan hisoblangan dastlabki me'yorlarga qaraganda uning unumdorligini oshirsa aktiv sifatida

tan olinishi mumkin. Bo'lg'usi iqtisodiy nafni oshirish imkoniyatini yaratadigan yaxshilashga oid misollarga quyidagilarni kiritish mumkin:

- asosiy vositalarni foydali xizmat muddatini ko'paytiradigan, shu jumladan uning quvvatini oshiradigan zamonaviylashtirish xarajatlari;

- ishlab chiqariladigan mahsulot sifatini ahamiyatli ravishda yaxshilaydigan qism va birikmalarni mukammallashtirish, va

- dastlab hisoblangan ishlab chiqarish xarajatlarni ahamiyatli ravishda qisqartirish imkoniyatini yaratadigan yangi ishlab chiqarish jarayonlarni tadbir etish.

Ayrim asosiy vositalar ob'ektlarining qismlari muntazam ravishda almashtirilishi talab etilishi mumkin. Masalan, avtomobillarda filterlar, metal ertish pechlarining futerovkasi ma'lum ishlash soatlari o'tganidan so'ng almashtirilishi kerak bo'lishi mumkin, samolyotlardagi o'rindiklar va oshxonada kabi asbobuskunalar samolyotning foydali xizmat muddati davomida bir necha marta almashtirilishi mumkin. Asosiy vositalarning ob'ektlari sifatida binoning ichki devorlarini almashtirish kabi o'zgartirishlarni kamroq takrorlash yoki takrorlanmaydigan qilib almashtirish maqsadida sotib olinishi mumkin.

Tadbirkorlik sub'ekti asosiy vositaning balans qiymatida uning bir qismini almashtirish bo'yicha xarajatlarni ushbu xarajatlar amalga oshirilgan paytda tan olishi kerak, agar bunda xarajatlar tan olish mezonlariga mos kelsa.

Xalqaro tajribada asosiy vositalar ob'ektining ayrim qismlarini almashtirilishi yoki almashtirilmagligidan qat'iy nazar, nuqsonlar paydo bo'lganligini aniqlash uchun muntazam ravishda katta ko'lamdagi texnik ko'riklarini o'tkazish shu ob'ektdan (masalan, atom elektr stansiyalaridan) foydalanishni davom etishning shartlaridan biri bo'lishi mumkin. Har bir katta ko'lamdagi texnik ko'rik o'tkazilganda, u bo'yicha xarajatlar tan olish mezonlari bajarilganda asosiy vositalar ob'ektining balans qiymatida qisman almashtirish sifatida tan olinadi. Har qanday oldingi texnik ko'rik bo'yicha xarajatlarning aktivning balans qiymatidagi qoldig'i (extiyot qismlardan tashqari) hisobdan chiqariladi. Bunday hisobdan chiqarish oldingi tekshiruv xarajatlari ob'ekt

sotib olinishi yoki qurilishi paytidagi operatsiyada tan olinganligi yoki olinmaganligidan qat'iy nazar amalga oshiriladi. Zarur bo'lganda, ob'ekt sotib olinishi yoki qurilishi paytidagi balans qiymatiga qo'shilgan texnik ko'rik xarajatlarini aniqlashda shu kabi kelgusi tekshiruv xarajatlarning baholangan summasidan foydalanish mumkin.

Hozirgi amaliyotda amalga oshiriladigan har yilgi joriy ta'mirlash va texnik xizmat ko'rsatishga sarflangan mablag'lar joriy xarajatlar, deb hisoblanadi. Mazkur xarajatlar hisobining ikki usuli mavjud: rezerv tashkil etish yo'li bilan va rezerv tashkil etmaslik yo'li bilan.

Kapital xarajatlar – bu asosiy vositalarni xarid qilish yoki rivojlantirish uchun sarf bo'lgan mablag'lardir. Odatda, kapital xarajatlar ativlar schyotida aks ettirilib balansda ko'rsatiladi, chunki ushbu xarajatlar bilan bog'liq bo'lgan foyda kelgusi davrda olinadi. Bu xarajatlar asosiy vositaning balans qiymatini o'zgartirishga olib keladigan xarajatlar tarkibiga kiradi.

Asosiy vositalarni tamirlashga sarflangan operatsion xarajatlar esa uzoq muddatli aktivlarni hisobot davri mobaynida ishchi holatda saqlab turish bilan bog'liq sarflarni o'z ichiga oladi. Shuning uchun ular sarf-xarajatlar schyotida aks ettirilib, moliyaviy natijalar to'g'risidagi hisobotni xarajatlar elementi sifatida e'tirof etiladi.

Bundan ko'rinib turibdiki, asosiy vositalarni shakllantirish bilan bog'liq va uni ekspluatatsiyasi mobaynidagi sarf-xarajatlarni aktivlar qiymatiga solishtirishni to'g'ri aniqlash zaruriyati tug'iladi.

Kapital xarajatlar bilan operatsion xarajatlarni farqlash zaruriyati shundan iboratki, kelgusida daromad olish maqsadida qilingan sarf-xarajatlarni kapitallashtirmasdan, joriy hisobot davri ichida olingan daromadlar bilan qoplanilsa, u holda joriy davr uchun moliyaviy natijalar soxtalashtirilgan bo'lib qaladi.

Xulosa qilsak, qanday holatlarda amalga oshirilayotgan xarajatlarni kapital xarajatlar yoki operatsion xarajatlar deb farqlash imkoni bo'ladiyu, buni qanday asosiy mezon aniqlab beradi? Ushbu savollarga javob berish uchun 5 – BXMSga murojaat qilish lozim bo'ladi. Ushbu standartning 22-bandiga muvofiq, asosiy vosita qiymatiga o'tkaziladigan kapital qo'yilmalar asosiy vositalardan foydalanishda kelgusida iqtisodiy foyda olishni oshirish shartlari ma'lum bo'lgan holdagina kapitallashtirilgan xarajatlar deb tan olinadi. Kelgusida olinadigan iqtisodiy foydani oshirmaydigan boshqa barcha xarajatlar ular amalga oshirilgan davrdagi davr xarajatlari sifatida tan olinishi lozimligi ta'kidlangan.

Asosiy vositalar ta'mirlanishi hisobining vazifalari quyidagilardan iborat:

bajarilgan ta'mirlash ishlarining tannarxi va hajmini to'g'ri va o'z vaqtida aniqlash; ta'mirlash bilan bog'liq xarajatlarning mahsulot yoki bajarilgan ish tannarxiga to'g'ri o'tkazilishini ta'minlash;

ta'mirlash ishlari uchun

ajratilgan mablag'dan to'g'ri foydalanilishi ustidan nazorat olib borish; ta'mirlash ishlarining o'z vaqtida va yaxshi sifatli qilib olib borilishi ustidan nazorat olib borish va boshqalar.

Ta'mirlash xarajatlari ikki xil usul bilan tegishli schyotlarga yozilishi mumkin:

ta'mirlash bo'yicha hamma xarajatlarni vujudga kelishjarayonida Ishlab chiqarish xarajatlari schyotlariga yozish bilan;

maxsus rezerv fondi tashkil qilish yo'li bilan.

Ta'mirlash ishlari xo'jalik yoki pudrat usulida olib boriladi. Xo'jalik yurituvchi sub'ektning remont-mexanika sexi yoki asosiy ishlab chiqarish sexlari ishchilari tomonidan bajariladi. Pudrat usulida esa ta'mirlash ishlari maxsus remont-qurilish tashkiloti tomonidan shartnoma asosida bajariladi.

Akt ikki nusxada yozilib, bir nusxasi buxgalteriyaga topshiriladi.

Ma'lumki, "G'ALLA ALTEG" aksionerlik jamiyatining samarali faoliyat yuritishi, eng avvalo, ularning ishlab chiqarish quvvatlaridan unumli foydalanishga bog'liq. Buning uchun esa ishlab chiqarish quvvallarining asosini tashkil qiluvchi ishlab chiqarish vositalarining texnik holatini yaxshilashga alohida e'tibor berish zarur. Ishlab chiqarish vositalarini ekspluatatsiya qilish va ularning muddatidan ilgari ishdan chiqishini yoki ekspluatatsiya sifatleri pasayishining oldini olish maqsadida, bino, inshoot, mashina, asbob-uskuna va shunga o'xshashlar doimiy texnik qarov va ta'mirni talab etadi. Texnik qarov odatda ekspluatatsiya jarayonida bevosita mashina va dastgohni boshqaruvchi ishchimashinistlar tomonidan bajariladi. Texnik qarov jarayonida ishlab chiqarish vositalarini moylash, tozalash, bo'shagan zanjirlarni tortish va shunga o'xshash

ishlar amalga oshiriladi. Texnik qarovni amalga oshirishdan ko'zlangan asosiy maqsad, uning texnik holati bir me'yorda saqlab turilishi va buzilishi kabi noxush holatlarning oldini olish hisoblanadi.

"G'ALLA ALTEG" aksionerlik jamiyatida foydalaniladigan har qanday texnikani o'z vaqtida texnik qarovdan o'tkazish uchun uni ekspluatatsiya qilish bo'yicha belgilangan ko'rsatmalarga amal qilinadi. Masalan, donni quritishda foydalaniladigan ZSPJ-8 markali quritgich butun ekspluatatsiya qilish jarayonida me'yor bo'yicha 20 marta texnik qarovdan o'tkaziladi, texnik qarovlar oralig'idagi ekspluatatsiya qilish soatlari 210 soatni tashkil qilishi zarur. Har bir texnik qarovni amalga oshirish uchun sarflanadigan ish vaqti 6-8 soatni talab qiladi.

Ta'mirlash jarayonining murakkabligi, hajmi, qiymatidan kelib chiqqan holda, ular ikki turga: capital kapital va joriy ta'mirlashlarga bo'linadi.

Kapital ta'mirlashda ishlab chiqarish vositalarining ayrim qismlari yoki asosiy uzellari almashtiriladi. Masalan, yuqorida ta'kidlangan donni quritish jarayonida foydalaniladigan ZSPJ-8 markali don quritgichni kapital ta'mirlashdan o'tkazish jarayonida quyidagi ishlar bajarilishi zarur:

ishlab chiqarish asbob-uskunalarini ta'mirlashga tayyorlash;

alohida uzellarni bo'lish;

uzellarni alohida detallarga ajratish;
detallarni tozalash va yuvish; detallarning nuqsonlarini aniqlash;
detallarni yasash, restavratsiya qilish va ta'mirlash bo'yicha boshqa
ishlarni bajarish detallarni yig'ib uzellarni komplektlash;
asbob-uskunani bo'yash; moylash, regurilovka va obkatka qilish;

Umuman olganda, ishlab chiqarish vositalarini kapital ta'mirlashda mashina va agregatlarning konstruktiv qismalari, shu jumladan, ikkinchi darajali qism va detallari almashtiriladi. Joriy ta'mirlashda ularning asosiy bo'lmagan qismlarini almashtirish, to'g'irlash va ta'mirlash amalga oshiriladi.

Texnik qarov, joriy va capital ta'mirlash korxonalarida ularni amalga oshirish uchun zarur bo'lgan ehtiyot qismlar, materiallar, moylash materiallarni sotib olishni, ta'mirlashda qatnashayotgan ishchilarga ish haqi hisoblash va boshqa xarajatlar uchun pul mablag'larini sarflashni taqozo qiladi. Bir so'z bilan aytganda, ishlab chiqarish vositalarini ta'mirlash uchun sarflanayotgan moddiy qiymatliklar (ehtiyot qismlar, materiallar va h.k.) ishchi kuchi va mehnat vositalarining amortizatsiyasi oxiroqibatda korxonada moliyaviy resurslarining sarflanishiga olib keladi. Tabiiyki, har bir korxonarahbari va mutaxassis sarflangan moliyaviy resurslarni iqtisodiyjihatdan samarali bo'lishini hohlaydi va shunga harakat qiladi.

Buning uchun esa rahbar va mutaxassislar ta'mirlash jarayonlari to'g'risida ma'lumotlarga ega bo'lishi zarur.

Ammo buxgalteriya hisobining amaldagi tizimi bu ma'lumotlarni berish imkoniyatiga ega emas. Chunki buxgalteriya hisobi ma'lumotlarini bir tizimga keltiruvchi vosita hisoblangan schyotlar rejasida bunday ma'lumotlarni yig'uvchi va shakllantiruvchi schyotlarning o'zi yo'q.

Buning uchun esa, asosiy vositalarini ta'mirlash xarajatlari hisobini shunday tashkil qilish zarurki, unda quyidagi ko'rsatkichlarni olish imkoniyatlari vujudga kelsin: Korxonada bo'yicha asosiy vositalarni ta'mirlash xarajatlari to'g'risida, shu jumladan, joriy va kapital ta'mir bo'yicha alohida ma'lumotlarning shakllantirish bo'yicha alohida schyotlar va uning registrlarini yaratish zarur. Birinchidan, asosiy vositalarning guruhlarini bo'yicha ta'mirlash xarajatlari va ularning tarkibi to'g'risidagi ma'lumotlarni berishi. Ikkinchidan, asosiy vositalarining har bir turi bo'yicha ta'mirlash xarajatlari to'g'risidagi

ma'lumotlarni vujudga keltirishi lozim. Uchinchidan, hisob registrlarini tarkibiga ham ayrim o'zgartirishlar kiritish zarur bo'ladi.

Asosiy vositalar hisobini takomillashtirish bo'yicha buxgalteriya hisobining ishchi schyotlari rejasiga "Asosiy vositalarni ta'mirlash xarajatlari" schyotini kiritish va ushbu schyotga korxonada bo'yicha sarflangan ta'mirlash xarajatlari to'g'risida ma'lumotlarni shakllantirish vazifasini belgilash lozim. Ushbu schyotning debet tomonida jami haqiqiy ta'mirlash xarajatlari va kredit tomonida ushbu xarajatlarni kalkulyatsiya ob'ektlariga hisobot oyi oxirida taqsimlashga oid yozuvlarni amalga oshirish amaliyotini joriy etish zarur.

Korxonada bo'yicha ishlab chiqarish vositalarining joriy va kapital ta'mirlash xarajatlari to'g'risida alohida ma'lumotlarni vujudga keltirish uchun 2400 – “Asosiy vositalarni ta'mirlash xarajatlari” schyotiga uchta ikkinchi tartibli schyot ochish maqsadga muvofiqdir:

2410 - “Asosiy vositalarni texnik qarov xarajatlari”.

2420 - “Asosiy vositalarni joriy ta'mirlash xarajatlari”.

2430 - “Asosiy vositalarni kapitalizatsiya qilish xarajatlari”.

Albatta, ushbu ma'lumotlarni shakllantirish belgilangan tartibda amalga oshiriladi. Asosiy vositalarni ta'mirlash xarajatlarini hisobga olish va nazorat qilishda asosiy vositalarining har bir turiga sarflanayotgan texnik qarov va ta'mirlash xarajatlari hisobini tashkil qilish alohida ahamiyatga ega. Buni taklifni hayotga tatbiq qilishda asosiy vositalarning har biriga alohida shaxsiy varaqa ochish maqsadga muvofiqdir. Ushbu varaqa ikki bo'limdan iborat bo'lib, birinchi bo'limda unga sarflangan barcha ta'mirlash xarajatlari uchga bo'lib hisobga olinadi, ya'ni:

- texnik qarov xarajatlari;
- joriy ta'mirlash xarajatlari;
- kapital ta'mirlash xarajatlari.

Barcha xarajatlar ularning turlari bo'yicha yuritilishi lozim. Ya'ni, kalkulyatsiya moddalari va xarajat elementlari bo'yicha hisobga olib boorish tashkil etiladi.

Asosiy vositalarni ta'mirlashning tannarxini hosil qiluvchi xarajatlarni iqtisodiy mazmuniga ko'ra quyidagi elementlar bilan guruhlarga ajratib hisobini tashkil etishni tavsiya qilamiz:

- asosiy vositalarni ta'mirlash uchun moddiy xarajatlar (qaytariladigan chiqitlar qiymati chiqarib tashlangan holda);

- asosiy vositalarni ta'mirlash uchun mehnatga haq to'lash xarajatlari;
- asosiy vositalarni ta'mirlash uchun yagona ijtimoiy soliqqa ajratmalar;
- asosiy vositalarni ta'mirlash uchun nomoddiy aktivlar amortizatsiyasi;
- asosiy vositalarni ta'mirlash uchun boshqa xarajatlar.

Ushbu varaqaning xarajatlar bo'limida ushbu ishlab chiqarish vositalarini ekspluatatsiya qilish xarajatlari ham ko'rsatilishi lozim. Varaqaning ikkinchi bo'limi “Bajarilgan ishlar va xarajatlarning taqsimlanishi” deb nomlanadi va unda asbob-uskunalarining ishlagan soatlari va bajarilgan ish hajmi ko'rsatiladi. Taklif qilinayotgan shaxsiy varaqa o'z navbatida bajarilgan ishning tannarxi to'g'risida ham keng qamrovli

ma'lumotlar beradi.

Xulosa qilib aytganimizda, asosiy vositalarini ta'mirlash xarajatlarining bitta alohida schyotda hisobga olinishi, ta'mirlash xarajatlarini tezkor nazorat qilish va amalga oshirilgan har bir ta'mirning tannarxini aniqlash va korxonadagi har bir ishlab chiqarish vositasiga sarflanayotgan kapital va joriy ta'mir xarajatlari to'g'risidagi ma'lumatlarni

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make different from zero or at least as large as modulo it. For this, the Gaussian method is used by selecting the leading term, that is, the equation with the largest coefficient in terms of modulus from the unknown loss column is selected as the working equation.

Iteration, that is, the method of successive approximation, is useful for solving high-order systems. In addition, unlike exact methods, this method has the property of non-accumulation of errors, which can be one of the decisive factors in solving high-order systems.

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*Daminova Yu.S., PhD
dotsent
Qarshi davlat universiteti
Texnologik ta'lim kafedrasi mudiri*

**OLIY TA'LIM MUASSASALARI TALABALARINI O'QITISHDA
KOLOBORATIV TA'LIMDAN FOYDALANISH METODIKASI
(PEDAGOGIKA FANLARI MISOLIDA)**

Annotatsiya: muallif tanqidiy semantik aks ettirish usuli va tadqiqot ishlari va o'qitish amaliyoti natijalariga asoslanib, zamonaviy ta'lim sohasida paydo bo'lgan ba'zi yangi atamalarni, shu jumladan elektron o'quv dasturlarini ko'rib chiqadi. Maqolada elektron, kooperativ, hamkorlikdagi, aralash, teskari ta'lim tushunchalarining qiyosiy tahlili berilgan, ularni ta'lim innovatsiyalari deb tasniflashning qonuniyligi masalasi ko'tarilgan.

Kalit so'zlar: raqamli tarmoqlarda ochiq masofaviy ta'lim, kooperativ ta'lim, hamkorlikdagi ta'lim, pedagogika, innovatsiya.

*Daminova Yu.S., PhD
associate professor
Head of the Department of Technological Education
Karshi State University*

**METHODOLOGY OF USING COLLABORATIVE EDUCATION IN
EDUCATION OF STUDENTS OF HIGHER EDUCATION
INSTITUTIONS (EXAMPLE OF PEDAGOGICAL SCIENCES)**

Abstract. The author, based on the method of critical semantic reflection and the results of his research and teaching practice, examines some new terms that have appeared in the field of modern education, including electronic. The article provides a comparative analysis of the concepts of electronic, cooperative, collaborative, mixed, and inverse learning, and raises the question of the legality of attributing them to educational innovations.

Keywords: open distance learning in digital networks, cooperative learning, collaborative learning, pedagogy, innovation.

Qarshi viloyati ishchilari va mutaxassislari kadrlarini kasbiy tayyorlash tendentsiyalarini tahlil qilish kasb-hunar maktabini jadal rivojlantirishning asosiy tamoyillarini ajratib ko'rsatishga imkon beradi. Birinchidan, trening asosiy faoliyat jarayonida olingan bilim va ko'nikmalardan foydalanishga qaratilgan bo'lishi kerak. Ikkinchidan, kasb va mutaxassislikni sotib olish strategik va ijtimoiy-iqtisodiy maqsadlarni amalga oshirishga hissa qo'shishi kerak va kadrlar tayyorlash ikki tomonlama investitsiyalar nuqtai nazaridan – insonga va ishlab

chiqarishga ko'rib chiqilishi kerak. Uchinchidan, kadrlarning kasbiy va malakaviy tuzilishini va mehnatni tashkil etishning progressiv shakllarini takomillashtirish kasblarni aylantirish jarayonining keskin o'sishini, kasbiy va malakaviy kompleks tarkibida ilgari to'plangan tajribaning ahamiyatini qayta baholashni hisobga olishi kerak.

Kasbiy ta'limda AKTdan foydalanish axborot jamiyatini rivojlantirishning eng muhim yo'nalishlaridan biridir. Bugungi kunda ta'lim tizimi "kelajakdan zarba" holatida rivojlanmoqda: inson bir dunyoda tug'iladi va o'rganadi, boshqasida esa mustaqil ravishda harakat qilishi kerak. Bunday sharoitda kasb – hunar maktabi talabalarida yangi ko'nikmalarni shakllantirishi kerak-bu dunyoda moslashish va o'zini topish qobiliyati, mustaqil ravishda ma'lumot to'plash, tahlil qilish, umumlashtirish va boshqa odamlarga etkazish, yangi texnologiyalarni o'zlashtirish qobiliyati.

AKTni faoliyatning turli sohalariga joriy etish, yangi kommunikatsiyalarni shakllantirish nafaqat kasb-hunar ta'limi an'anaviy tizimini o'zgartirish, balki axborot jamiyatining ochiqligi va shaffofligini shakllantirishning boshlanishi bo'ldi. Hozirgi vaqtda kasb - hunar maktabini modernizatsiya qilishning asosiy vazifasi izolyatsiya, uning tashqi ta'siriga ochiqlik muammolarini hal qilish, ta'limning sifatli o'sishi va uning jamiyat va mehnat bozori talablariga muvofiqligi uchun sharoit yaratishdir. Zamonaviy sharoitda bu faqat kasb-hunar ta'limi sohasidagi innovatsion jarayonlarni faollashtirish, ta'lim, ilmiy va amaliy faoliyatni birlashtirish, o'quv jarayoni ishtirokchilarining tarmoq o'zaro ta'siri bilan mumkin.

Ta'limda axborot va kompyuter texnologiyalaridan foydalanish mavjud ta'lim tizimini tubdan o'zgartirishi mumkinligiga shubha yo'q. Ta'limning analitik, amaliy va eksperimental tamoyillaridan keng foydalanish o'quv jarayonini innovatsion formatda tashkil etishga yordam beradi.

Hozirgi vaqtda ta'lim muassasalarida ijtimoiy va hamkorlikdagi o'quv dasturlarini qurish, boshqarish va tartibga solish zarurati paydo bo'ldi. O'zgarishlarga bo'lgan ehtiyoj ko'plab omillarga bog'liq: bilimga asoslangan iqtisodiyot tamoyillarini amalga oshirish; professional o'qituvchilar bilan Internetga kirish; ijtimoiy tarmoqlar uchun dasturiy vositalar va platformalarning jadal rivojlanishi.

Bundan tashqari, so'nggi yillarda o'quvchini ta'lim tizimining markazi deb hisoblaydigan bir qator yangi nazariyalar paydo bo'ldi. Ushbu g'oyalar situatsion ta'lim (situated learning), hamkorlikdagi ta'lim (collaborative learning) va ta'limga konstruktivistik yondashuvlar tushunchalaridan kelib chiqadi, ular bilimga asoslangan iqtisodiyotning yangi modeli uchun asos bo'lgan. Masofaviy ta'limda ta'lim texnologiyalarini qo'llash bilan shug'ullanadigan o'qituvchilar uchun bu yondashuvlar ham katta qiziqish uyg'otadi.

Bugungi kunda hamkorlik obro'li va istiqbolli degan ma'noni anglatadi.

"Hamkorlik" atamasini keng tarqalgan deb tasniflash qiyin. Shu bilan birga, bunday tushuncha yashash huquqiga ega va Internetdagi barcha hamkorlikka

mingdan ortiq havolalar buning ishonchli dalilidir. Texnologiyalar, loyihalar, jarayonlar, dasturlar, ilovalar, ishlar, o'qitish, tadqiqotlar hamkorlik qilishi mumkin.

Ingliz tilidan-hamkorlik-umumiy, birlashtirilgan, qo'shma.

Kasb-hunar ta'limi ta'lim muassasalarining faoliyati kasb-hunar o'qituvchilari, tarkibiy bo'linmalar va ularga nisbatan tashqi boshqa tashkilotlar, tashkilotlar, davlat-xususiy sheriklarning faol o'zaro ta'siriga asoslangan.

Bunday kontaktlarning barcha shakllarini "AHM"deb nomlangan shartli guruhlariga bo'lish mumkin.

Aloqa: ishchilar ma'lumotni boshqaradilar va / yoki kimdirdan so'rashadi.

Hamkorlik: ta'lim muassasasi xodimlari odamlarning o'zaro ta'sirini talab qiladigan funksiyalarni bajarish uchun qo'shma ish maydonidan foydalanadilar.

Muvofiqlashtirish: turli tarkibiy bo'linmalar va tashkilotlarning mutaxassislari oldindan belgilangan qoidalarga bo'ysunadigan muayyan jarayonlarga jalb qilinadi.

Agar biz ushbu o'zaro ta'sir shakllarini qo'llab-quvvatlaydigan kompyuter texnologiyalari haqida gapiradigan bo'lsak, unda bu mos ravishda:

- * elektron pochta va xabarlarni yo'naltirish tizimlari;
- * kollektiv kirish ma'lumotlar bazalari;
- * biznes protseduralarini avtomatlashtirish vositalari (ish oqimi).

Kommunikatsiyalarni tartibga solish uchun mo'ljallangan va marshrut funksiyalari bilan jihozlangan hamkorlik tizimlarining asosini yuqorida sanab o'tilgan texnologiyalar tashkil etadi. Bu ularni elektron pochta imkoniyatlari bilan birlashtirilgan taqsimlangan jamoaviy kirish ma'lumotlar bazalari tizimlari sifatida tavsiflashga imkon beradi, bu nafaqat xodimlar-foydalanuvchilar o'rtasida pochta xabarlarini amalga oshirish, balki ma'lumotlar bazalari va ilovalarning o'zlari ham odamlarga, ham boshqa ma'lumotlar bazalariga hujjatlarni yuborish qobiliyatini anglatadi.biznes protseduralarini avtomatlashtirishda muhim xususiyat.

2000 va 2001 yillarda ikkita muhim siljish yuz berdi: Internet yangi kompyuter platformasi sifatida paydo bo'ldi va AQShda tanazzul boshlandi. Ushbu ikki omil birgalikda "o'qituvchi tomonidan boshqariladigan" toifasidan "on-layn"ga o'quv dasturlari va materiallarini tarjima qilish jarayoniga kuchli e'tibor qaratdi. O'sha kunlarda G'arbda hatto haqiqiy ta'lim muassasalarining yopilishi haqida mish-mishlar tarqaldi, chunki hamma Internetda o'qish va ta'lim olishga shoshildi.

Bugungi kunda e-learning etuklik bosqichida, shuning uchun bozorda onlayn ta'lim va ta'limning ko'plab shakllari mavjud. "Tezkor onlayn ta'lim" shakllari (PowerPoint va Flash texnologiyalaridan foydalangan holda), dasturlar bilan ishlashni modellashtirish, animatsion belgilar, audio, video va o'quv jarayonining boshqa interaktiv elementlaridan foydalaniladi.

Ko'pgina ta'lim muassasalarida Internet darslarga materiallar tarqatish, o'qituvchilar va talabalar, talabalar o'rtasidagi aloqa, shuningdek, asosiy ta'lim texnologiyalari va vositalarini tarqatish uchun faol foydalanilmoqda.

Bugungi kunda o'quv materiallarini Tom ma'noda hamma joyda topish mumkin: YouTube-dan "xavfsiz haydash maktablari" gacha. Endi biz zamonaviy uyali telefonlar, noutbuklar va kompyuterlar yordamida ushbu materiallarni ko'rib chiqishimiz va ular bilan ishlashimiz mumkin.

Bundan tashqari, e-learning-ning dastlabki "tushunchalari" ham ba'zi o'zgarishlarga duch keldi. Dastlabki bir necha yil ichida ta'lim muassasalari mavjud slaydlar va o'quv materiallarini imkon qadar tezroq internetga joylashtirishga intildilar. Ushbu yondashuvning kashfiyotchisi skillsoft bo'lib, u ta'lim mazmuni bozoridagi eng yirik o'yinchi hisoblanadi. Bugungi e-learning dasturlari o'qituvchi tomonidan boshqariladigan ta'limdan juda farq qiladi: ular Real vaqtda filmlar, onlayn video o'yinlar va to'liq immersion virtual tajribalar sifatida namoyish etiladi va ishlaydi.

Bugun biz We-Learning (bir-biridan o'rganish) davriga kirmoqdamiz. Ushbu davr "ijtimoiy ta'lim", "norasmiy ta'lim" va "hamkorlikdagi ta'lim" deb nomlanadi.

1. We-Learning diqqatni an'anaviy ta'limdan uzoqlashtiradi va yangi fanlarni o'rganish zarurligini yaratadi.

We-learning har qanday ta'lim muassasasi baham ko'rishi kerak bo'lgan to'plangan bilim va tajribaga ega ekanligi oddiy va chuqur haqiqatni o'z ichiga oladi. O'qituvchi o'zini o'qituvchi, tashkilotchi va hamkorlikdagi ta'limni olib boruvchi sifatida ko'rsatishi kerak. Biz bir nechta eski paradigmalardan voz kechishimiz kerak. Hozirgi kunda ko'pchilik o'zlarining o'quv dasturlarini "o'quv muhiti" ni yaratish yo'nalishi bo'yicha qayta ko'rib chiqmoqdalar, bu esa hamkorlikdagi va ijtimoiy ta'limning "o'rnatilgan" funksiyalarini nazarda tutadi.

Va bu erda o'z qadr – qimmatigizni oshirish yo'llari bor-zamonaviy o'quv va malaka oshirish guruhining muvaffaqiyati uchun yangi fanlarning butun to'plami talab qilinadi. E-learning davrida Flash, media-dizayn, tarkibni ishlab chiqishni o'zlashtirish kerak, jamiyatni boshqarish, teglash, axborot arxitekturasi va tahlilni o'rganish kerak

2. Bashoratlarga qaramay, e-learning an'anaviy ta'lim va ta'limni buzmadi. Shu sababli, we-learning-ning yangi kontseptsiyasi puxta ishlab chiqilgan o'quv dasturlarini to'liq o'rnini bosa olmaydi.

Ko'plab ilmiy nashrlar an'anaviy ta'limning tezda o'limini bashorat qilishdi. Ammo ta'lim muassasalari, tashkilotlar hali ham ko'plab pozitsiyalar bo'yicha bilim va ko'nikmalarning asosiy darajasini shakllantirish uchun rasmiy o'qitish va sertifikatlashni talab qiladi, shuning uchun an'anaviy ta'limning yo'q bo'lib ketishi haqida gapirilmaydi. Ammo endi ilmiy hamjamiyat tan olishicha, biz individual ta'limning 80% dan ortig'ini boshqa manbalar – murabbiylar, ekspertlar, menejerlar va ishdagi hamkasblar orqali olamiz.

Shunga o'xshab, we-learning rasmiy ta'lim, rasmiy ta'lim va an'anaviy ta'lim dasturlarini ishlab chiqish zarurligini buzmaydi. Bu an'anaviy ta'lim shakllarini kengaytirish va yaxshilash ehtimoli ko'proq – ko'p hollarda rasmiy ta'limni yanada samaraliroq qiladi. Agar siz biron bir mavzu bo'yicha mutaxassis bo'lsangiz, o'zingiz bilgan narsalarni amalda qo'llaydigan yuzlab odamlarning jamoaviy ongiga ulanishingiz mumkin bo'lsa, siz o'z darajangizni tezroq oshirishingiz mumkin – bu sizning rasmiy dasturlaringizda yanada samarali vositalar va dasturlarni ishlab chiqishga yordam beradi.

3. We-Learning ko'plab yangi vositalar va platformalar uchun bozor yaratadi.

Shuningdek, e-learning zamonaviy LMS ta'limni boshqarish tizimini yaratdi, rivojlanish vositalarining xilma-xilligi, va katta investitsiyalar menedjment kontent, we-learning shuningdek, onlayn hamkorlikda ishlaydigan odamlarni boshqarish, kuzatish va osonlashtirish maqsadida ko'plab yangi vositalar va tizimlarni yaratadi va qo'llab-quvvatlaydi.

Bunga ba'zi yirik kompaniyalar yordam beradi: Google Google Wave-ni ishlab chiqishga sarmoya kiritadi; Microsoft SharePoint va Live Services - ga sarmoya kiritadi; Adobe Adobe Connect va boshqa mahsulotlarni ishlab chiqarishga juda katta miqdorda sarmoya kiritadi; Cisco Webex-ga millionlab sarmoya kiritadi; va Citrix GotoMeeting va uning oilasida ajoyib yangi vositalar to'plamini ishga tushirdi-va bu faqat birinchi qaldirg'ochlar. Odnoklassniki, Vkontakte, Facebook, LinkedIN, ningva boshqa ijtimoiy tarmoq saytlari korporativ ta'lim tizimlarida tez sur'atlarda nusxa ko'chiriladigan turli innovatsion g'oyalar uchun alohida minnatdorchilikka sazovor bo'ldi.

E-learning davrida asboblari o'zgaradi. Agar bugun biz Jive yoki Sharepoint-dan ijtimoiy ta'lim platformasi sifatida foydalansak, oldinda yangi va mutlaqo boshqacha narsaga tayyorlaning. Taleo-ning yangi rivojlanishni rejalashtirish moduli, yangi ijtimoiy ta'lim muhiti va Plateau Talent Gateway-ning yangi iste'dodlarni boshqarish vositasi aloqa va bilimlarni almashishni rivojlantirish uchun vositalar va paradigmalari beradi.

4. We-Learning malaka oshirish va kasbiy qayta tayyorlash xatti-harakatlarini o'zgartiradi.

E-learning odamlarni ish safariga yuborish amaliyotini to'xtatishga imkon bergani kabi, we-learning ham odamlar qayerda va qanday o'rganishi haqidagi tushunchani o'zgartiradi. Sun Microsystems kompaniyasining yangi Sun Learning Exchange ta'lim tizimini ko'rib chiqing. Ushbu platforma odamlarga mutaxassislardan video, audio va boshqa materiallarni topish va tomosha qilish imkonini beradi; bu sizga mobil telefonga yuborilgan qiziqish doiralari bo'yicha pochta xabarlarini yuklab olish va obuna bo'lish imkonini beradi, foydalanuvchilar ham yangilanishlarni olishlari va o'z sharhlarini elektron pochta orqali yuborishlari mumkin.

E-learning auditoriyada o'qish zaruratidan xalos bo'lgani kabi, we-learning ham statsionar kompyuterda o'tirish zaruratidan xalos bo'ladi. Hamkorlikdagi

ta'lim uyali telefonlar va boshqa mobil qurilmalar orqali tobora ko'proq amalga oshiriladi.

Hamkorlikdagi ta'lim rasmiy ta'limning deyarli har qanday shakli bilan o'zaro aloqada bo'lish imkoniyatini beradi. Darsdan oldin odamlar o'z maqsadlarini muhokama qilish uchun onlayn tarzda yig'ilishadi. Dars davomida ular o'qituvchidan olgan tajribalarini baham ko'rish uchun bir-birlari bilan o'zaro aloqada bo'lishadi. Darsdan so'ng, amaliyotchilar hamjamiyati tashkil etiladi, u erda odamlar mashg'ulotlar davomida olingan narsalarni amalda qo'llash haqida ma'lumot almashishlari mumkin.

5. We-Learning madaniyat va etakchilikni o'zgartirishni talab qiladi.

Rahbarlarni tushunish muhim ko'rinadi-odamlarni biz o'rganishga jalb qilish uchun qo'llab-quvvatlash, madaniyat va motivatsiya berish kerak. Sizning muassasangizda umumiy bilimlardan foydalanish madaniyati bormi? Innovatsion o'qituvchilar o'zlarining eng yaxshi amaliy ishlanmalarini baham ko'rishlari uchun rag'batlantiriladimi? Va eng muhimi, eng yaxshi o'qituvchilarga "biz sizni muassasaning kollektiv bilimlar bankiga hissa qo'shishingizni kutamiz" degan rag'batlantiruvchi choralar va martaba rivojlantirish modellaridan foydalaniladimi?

Dasturlar, tizimlar va tajribalar qanchalik yaxshi ishlab chiqilganligi muhim emas – ular faqat tashkilotning o'zi tashkiliy va individual ta'limga uzoq vaqt e'tibor qaratishni qadrlaganda "ildiz otadi". Kasb-hunar ta'limi muassasalarining tobora ko'payib borayotgan vakolatli rahbarlari "men ushbu tashkilotdagi odamlar imkon qadar tezroq ma'lumot almashishni va tezroq o'rganishni boshlashlari uchun nima qilishim kerak" deb o'ylashadi.

Hamkorlikdagi (hamkorlikdagi) ta'lim-bu o'quvchilar o'rtasida yoki talabalar va o'qituvchilar o'rtasida yaqin o'zaro munosabatlarga asoslangan ta'lim yondashuvidir. Jarayon ishtirokchilari ma'lumotni faol ravishda birgalikda qidirish, ma'nolarni muhokama qilish va tushunish orqali bilimga ega bo'ladilar. Hamkorlikdagi ta'lim guruh loyihalari, hamkorlikdagi ishlanmalar va boshqalar kabi formatlarni o'z ichiga oladi.

Hamkorlikdagi ta'lim vaqt o'tishi bilan ko'proq davom etadi, bundan tashqari, ishtirokchilar bir-birlari va o'qituvchi bilan doimiy aloqada bo'lishadi.

Institutda olib borilgan ilmiy tadqiqotlarni umumlashtirib, xulosa qilishimiz mumkinki, ta'lim jarayonini axborotlashtirishning eng katta ta'siri quyidagi muammolarni hal qilishda namoyon bo'ladi:

- qog'oz ommaviy axborot vositalaridan yanada tejamkor va qulay elektron axborot vositalariga o'tish;

- o'qitish va taraqqiyotni nazorat qilishni avtomatlashtirish (o'quv va nazorat dasturlaridan foydalanish orqali);

- o'quv jarayoni ishtirokchilari o'rtasidagi makon-vaqt chegaralarini yo'q qilish (jamoaviy aqlning ishi tufayli, bu hamkorlikdagi ta'limning mohiyatini tashkil etadi).

So'nggi paytlarda hamkorlikda o'qitish elektron ta'lim (computer-supported collaborative learning) kontekstida yangi talqin qilindi. Shu ma'noda, hamkorlikda o'qitish — bu veb-2.0 xizmatlaridan (vikilar, bloglar, ijtimoiy tarmoqlar, qo'shma dasturlar, virtual sinflar, amaliyot jamoalari (amaliyot Kommunitlari-CoP) va boshqalar) o'quv maqsadlarida foydalanish.

Hamkorlikdagi ta'lim haqida gapirish uchun quyidagilarni tashkil qilish kerak:

- 1) o'quv ishtirokchilarining yaqin o'zaro ta'siri;
- 2) faol hamkorlik qidiruvi;
- 3) veb-2.0 xizmatlaridan o'quv maqsadlarida foydalanish.

Bunday holda, it ta'lim texnologiyalarini amalga oshirish vositasi sifatida ishlatilishi kerak. Hamkorlikdagi ta'lim talabalarning faol bilim ishlarini ta'minlaydi, bilimlarni qo'llash usullarini izlash sifatida individual yoki guruh qidiruviga turtki beradi, ya'ni hamkorlik potentsialini o'z ichiga oladi, transchegaraviy aloqalarni o'rnatish orqali akademik harakatchanlikni oshirish vositasi bo'lib xizmat qiladi.

Pedagogikada sinxron va asenkron o'rganish tushunchasi mavjud. Vikipediya ko'ra, sinxron o'rganish bir vaqtning o'zida bir xil bilim yoki ko'nikmalarni egallash uchun ishlaydigan bir guruh odamlarning faoliyatini tavsiflaydi. Ushbu turdagi pedagogika asosan universitetgacha bo'lgan ta'limda qo'llaniladi. O'rta va oliy kasb — hunar ta'limi tizimida sinxron ta'limning bitta uslubiy turi-ma'ruzalar keng tarqalgan bo'lib qolmoqda.

Kattalarni o'qitishning zamonaviy amaliyotida elektron ta'limga nisbatan sinxron va asenkron o'qitish usullari haqida gapirish odatiy holdir. Uning jadal rivojlanishi ushbu ikki turdagi ta'limni boshqa nuqtai nazardan ko'rib chiqishga imkon berdi.

Sinxron elektron ta'lim o'qituvchi/murabbiy/repetitorning Real vaqt rejimida auditoriya bilan o'zaro aloqasini o'z ichiga oladi. Repetitor tinglovchilarning reaksiyasini baholash, ularning ehtiyojlarini tushunish, ularga javob berish qobiliyatiga ega: savollarga javob berish, guruh uchun qulay bo'lgan tezlikni tanlash, talabaning jarayonga jalb qilinishini kuzatish va kerak bo'lganda uni guruhga "qaytarish".

Asenkron ta'lim bilan kursni o'tash, adabiyotlarni o'qish va h.k. lar uchun javobgarlik butunlay talabalarning yelkasiga tushadi. O'qituvchi / murabbiy / repetitor "ekrandan tashqarida" qoladi, buning uchun talaba o'zi uchun qulay vaqtda va o'zi uchun qulay bo'lgan rejimda kursni o'tashi mumkin bo'lgan o'z-o'zini tarbiyalashning afzalligi paydo bo'ladi.

Asenkron elektron ta'lim texnologiyalari toifasiga O'zbekiston bozorida eng mashhur an'anaviy elektron o'quv kurslari kiradi. O'quv kursi talabaga qanday etkazib berilishidan qat'i nazar: diskda yoki ta'limni boshqarish tizimi (LMS) orqali - o'qituvchi bilan aloqa vaqt o'tishi bilan uziladi.

Hamkorlikdagi / hamkorlikdagi ta'limning tobora ommalashib borishi munosabati bilan virtual sinf elementlari (texnologiyalari) orasida shartli ravishda

"hamkorlikdagi sinxron o'qitish vositalari"deb atash mumkin bo'lgan guruh ajralib turdi. Bularga quyidagilar kiradi:

Whiteboard (so'zma-so'z: oq taxta. An'anaviy taxtaning elektron analogi) - hamkorlik taxtasi vazifasini bajaradigan elektron panel. Ma'lumotlar har bir ishtirokchining kompyuterida Real vaqtda yangilanadi

Jarayonning har bir ishtirokchisi boshqa jarayon ishtirokchilari bilan bir xil rejimda doskadagi tarkib bilan ishlash imkoniyatiga ega, ya'ni: doskadagi diagrammalarga o'z sharhlarini qo'shish, shuningdek masofadan turib hamkasblariga o'z nuqtai nazarini chizish, tuzatish, aniq tushuntirish. Shuning uchun whiteboarding a'zolari turli joylarda bo'lgan "aqliy hujum" uchun juda yaxshi. Whiteboarding wiki texnologiyasiga tegishli. Ushbu turdagi shovqin ko'pincha videokonferentsaloqa dasturiga kiritilgan. "Taxtalar" o'quvchilarga ba'zi g'oyalar yoki jarayonlarga e'tibor berishga yordam beradi.

Breakout rooms (so'zma — so'z-Breakout rooms) - kichik guruhlarda ishlash uchun virtual xonalar, matn va video materiallar bilan hamkorlik qilish texnologiyalari bilan jihozlangan. Ko'pincha whiteboarding texnologiyasi, power point taqdimot hamkorlik texnologiyasi va boshqa hamkorlik texnologiyalarini o'z ichiga oladi.

Breakout xonasi ham virtual sinfning elementidir. O'qituvchi kichik guruhlarda ishlash uchun "xonalar" dan foydalanishi mumkin. Shu bilan birga, u har bir kichik guruhni alohida tanaffus xonasiga joylashtiradi, masalan, ishni hal qilish yoki muhokamaga tayyorgarlik ko'rishda qarama-qarshi dalillarni muhokama qilish uchun. Xona ichidagi o'quvchilar bir-birlarini ko'rishadi va eshitishadi, doskaga rasm chizishadi, suhbatlashishadi, lekin boshqa guruhlarning a'zolarini ko'rmaydilar. O'qituvchi har bir xonada ishni kuzatishi va boshqarishi mumkin. O'qituvchining qaroriga ko'ra, xonalardan kelgan talabalar umumiy sessiyada yig'ilib, guruh ishlarining natijalarini muhokama qilishlari mumkin.

Ilovalar bilan birgalikda ishlash-bu holda o'qituvchi yoki tegishli huquqlarga ega bo'lgan boshqa virtual sinf foydalanuvchisi boshqa barcha talabalarga kompyuter ekranini (butun ekran yoki alohida dasturiy mahsulot) almashishni boshlaydi. Ba'zi hollarda, o'qituvchi o'z kompyuterini boshqarishni talabaga topshirishi yoki aksincha, o'z kompyuterida talabaga ba'zi harakatlarni ko'rsatishi, ularni sharh bilan birga olib borishi mumkin.

Interfaol so'rovlar sizga ma'lum bir mavzu bo'yicha o'quv ishtirokchilarining fikrlarini tezda to'plash imkonini beradi. Texnologiya sizga anketani tezda yaratishga, uni tahrirlashga, masalan, virtual sinfda va boshqa sinxron elektron o'quv vositalarida joylashtirishga imkon beradi.

Veb — saytlar (webtours) - birgalikda veb-bemaqsad. Veb-saytlar orqali birgalikda "sayohat qilish" imkonini beruvchi texnologiya.

Powerpoint bilan hamkorlik-bir vaqtning o'zida bir nechta guruh yoki ishchi guruh a'zolarining powerpoint taqdimotlari bo'yicha bir martalik hamkorlik. Odatda masofadan ishlashni anglatadi.

Вебинар-веб + семинар каби о'quv vositasi sinxron va asenkron электрон та'лим тоифасига кириши мумкин. Агар сиз "jonli" вебинarda (onlayn вебинар) иштирок etsangiz, ya'ni.Real vaqt rejimida ma'ruzachini tinglang va unga suhbat orqali savol berishingiz mумкин, keyin sиз sinxron o'rganish bilan shug'ullanasiz. Агар сиз bir necha hafta oldin o'tgan вебинар yozuvini yuklab olgan bo'lsangiz, unda sizning oldingizda электрон та'limning asenkron turi mavjud. Вебинарлар shunchaki qulaydir, chunki ularni jonli ravishda o'tkazgandan so'ng, "quruq qoldiq" qoladi, bu odamlar tomonidan asl nusxadan ham ko'proq talab qilinishi mумкин.

Haqiqiy o'quv vositalaridan tashqari, o'qitish, ma'lumot uzatish uchun ishlatilishi mумкин bo'lgan aloqa vositalari ham mavjud. Bundan tashqari, bunday aloqa vositalari та'limning o'zi uchun muhimdir, chunki ular o'quvchilarga o'qituvchi va guruh bilan aloqani his qilish va yuzaga keladigan muammolar va muammolarni tezda hal qilish imkonini beradi.

Bunday vositalarga messengerlar (ICQ, SKYPE, Twitter, chat) kiradi. Odatda repetitorlar tinglovchilar bilan doimiy aloqada bo'lish va ularning savollariga tezkor javob berish uchun messengerlardan foydalanadilar. Ba'zan suhbatlar virtual sinflarga, вебинарларга va boshqalarga joylashtirilishi mумкин.

Ijtimoiy tarmoqlar, аgar suhbatdosh on-layn rejimida bo'lmasa, o'qituvchi va talabalar bilan sinxron rejimda ham, vaqtincha tanaffusda ham aloqada bo'lishga imkon beradi.

Shunday qilib, aralash та'lim yondashuvidan foydalangan holda o'qitishning eng yuqori samaradorligiga erishish mумкин: dasturning ba'zi modullari e-learning formatida, ba'zilari oddiy yuzma-yuz formatda, jarayon иштирокchilarini auditoriyada to'playdi

Qizig'i shundaki, aralash электрон та'lim (aralash электрон та'lim) atamasi mavjud bo'lib, u o'quv dasturi sinxron электрон та'lim elementlaridan ham, asenkron elementlardan ham qurilganligini anglatadi. Boshqacha qilib aytganda, o'quv materialining bir qismi o'quv kurslari, bir qismi esa virtual sinf darslari va boshqalar sifatida amalga oshirilishi mумкин.

Hamkorlikdagi та'lim yondashuv sifatida zamonaviy та'lim va rivojlanish sanoatining tendentsiyasini ifodalaydi. Ushbu bum ishchi kuchi safiga qo'shilgan yangi avlod Y (1980 yildan keyin tug'ilgan) o'qitish mazmuni va uni etkazib berish usullari uchun boshqa ehtiyojlarga ega degan fikr bilan boshlandi. Bu avlod kompyuterdan yoshroq va do'stlari va qarindoshlari bilan doimiy virtual aloqasiz o'z hayotini tasavvur qila olmaydi.

Ammo virtual o'zaro ta'sir texnologiyalari nafaqat yoshlar uchun muhimdir. Ko'pgina mutaxassislar doimiy ravishda qiziqish saytlari yoki aniq maqolalar uchun havolalar va xatcho'plarni almashadilar, Vikipediya dan foydalanadilar, ijtimoiy tarmoqlarda ro'yxatdan o'tadilar va boshqa ko'plab veb-2.0 xizmatlaridan foydalanadilar. Veb-2.0 yondashuvi nafaqat aloqa uchun, balki ish muammolarini hal qilish va kasbiy rivojlanish uchun ham qiziqarli va qulay bo'lib chiqdi.

Biroq, chuqur o'rganishni talab qiladigan bir qator muammolar mavjud.

1. Bugungi kunda yagona texnik va uslubiy platformada heterojen dasturiy mahsulotlarni birlashtirish sohasida tayyor echimlar mavjud emas.

2. Hozirgi vaqtda o'quv mashg'ulotlarida internetdan ommaviy foydalanish uchun texnik imkoniyatlar juda cheklangan, bu o'qituvchilarning so'rovi bilan tasdiqlangan. Har qanday kanal orqali Internetga ulangan UPODA o'quv jarayonida ishlatiladigan bitta kompyuterga kiruvchi trafikning o'rtacha ulanishi 256 Kbit /s*ni tashkil qiladi. Ko'rsatkich-bu ma'lum bir darajadagi upo-da kiruvchi trafik orqali Internetga kirish kanallarining umumiy o'tkazish qobiliyatining o'quv jarayonida ishlatiladigan kompyuterlarning umumiy soniga nisbati. Ulanishning o'rtacha darajasi Dial-up telefon liniyalaridan foydalanishga xosdir. Bu asosiy Internet texnologiyalari va xizmatlari (elektron pochta, veb-resurslar, suhbatlar, forumlar, telekonferentsiyalar) uchun etarli. Shu bilan birga, mavjud ulanish darajasi ta'lim texnologiyalarida foydalanish uchun eng istiqbolli bo'lgan oqim resurslaridan (audio oqim, video oqim, video telekonferentsiya) foydalanish uchun etarli emas.

3. Aksariyat rahbarlar internetning funksional imkoniyatlaridan foydalanish muhimligini to'liq anglamaydilar. Kompyuter uskunalarning sezilarli darajada o'sishiga qaramay, ta'lim jarayonida AKT va internetdan foydalanish etarli darajada rivojlanmagan

4. Shuningdek, kasb-hunar o'qituvchilarining past axborot madaniyati, ichki motivatsiya va yangilarini ishlab chiqish va mavjud aktlarni o'rganish istagi yo'qligi muammosi mavjud. Axborot ta'lim muhitining imkoniyatlaridan samarali foydalanish uchun o'qituvchining o'zi foydalanuvchi va instrumental Kompetentsiyalarning to'liq to'plamiga, shuningdek ularni hamkorlikda o'qitish uchun qo'llash ko'nikmalariga ega bo'lishi kerak.

Shunga qaramay, bugungi kunda ishonch bilan aytish mumkinki, kasb - hunar ta'limi muassasasini AKT bilan to'yingan muhitda rejalashtirilgan ish rejimiga o'tkazish va axborotlashtirish jarayonlarining barqarorligi yo'lida muhim qadam qo'yildi.

Ta'lim-tarbiya jarayonini axborotlashtirish vazifalarini bajarish natijalarini tahlil qilish, "ta'lim tizimini rivojlantirish va qarshi viloyati aholisini tarbiyalashga bo'lgan ehtiyoj darajasini oshirish" mintaqaviy maqsadli dasturining rejalashtirilgan indikativ ko'rsatkichlariga erishish ushbu yo'nalishni amalga oshirishning muvaffaqiyati haqida gapirishga asos beradi

Bugungi kunda qarshi viloyati spo va nodavlat notijorat tashkilotlarining ta'lim muassasalarini Internetga ulash bilan bog'liq vaziyat o'zgardi. Agar 2006 yilda kasb-hunar ta'limi muassasalarining atigi 10 foizi internetga ochiq kirish uchun jihozlangan sinflarga ega bo'lsa, 2009 yil holatiga ko'ra 93 foiz. Internet resurslariga keng polosali ulanishdan o'rganilayotganlarning 85 foizi foydalanadi. 56 ta ta'lim muassasasi (60 %) internetga ochiq kirish uchun jihozlangan sinflarga ega. Upo-ning Internetga kirishiga qaramay, kasb-hunar o'qituvchilari sessiyalarga kirish huquqiga ega yoki boshqa imkoniyatlardan foydalanadilar (boshqa muassasalar, Internet uyda shaxsiy kompyuterga ulangan va boshqalar).

So'rovda qatnashganlarning qariyb 40 foizi tajribali kompyuter foydalanuvchilari bo'lib, Internet xizmatlaridan asosan ma'lumot va resurslarni qidirish uchun faol foydalanadilar, keyinchalik ular o'quv jarayonida foydalanadilar. So'rovda qatnashganlarning 60 foizi elektron pochtdan foydalanadi. Shu bilan birga, tarmoq, suhbatlar, forumlar, masofaviy ta'lim (so'ralganlarning 15%) kabi imkoniyatlar kamroq talabga ega.

55 ta kasb – hunar ta'limi muassasalarining ilmiy faoliyatida 186 ga yaqin dasturiy mahsulotlar, o'quv faoliyatida 2 204 ta, metodik faoliyatida 378 ta va darsdan tashqari 492 ta birlikdan foydalaniladi.

Bu sohada kasb-hunar ta'limi axborotlashtirish sohasida ilmiy-amaliy tadqiqotlar olib borilayotgan birinchi yil emas.

Hozirgi vaqtda Kuzbass mintaqaviy kasbiy ta'limni rivojlantirish institutida davlat axborot jamg'armasida ro'yxatdan o'tgan "tarmoq axborot resurslari sifatini monitoring qilish" amaliy ilmiy ishlari amalga oshirilmoqda (FGNU "ijro etuvchi hokimiyat organlari axborot texnologiyalari va tizimlari markazi", Moskva). Ushbu ishning maqsadi kasb-hunar ta'limi muassasalarining o'quv jarayoniga yuqori sifatli tarmoq axborot ta'lim resurslarini joriy etish uchun sharoit yaratishdir

Masofaviy o'qitish shakli bo'yicha malaka oshirish uchun sharoitlar yaratilmoqda. Masofaviy ta'lim jarayonini amalga oshirish uchun asos bo'lgan ochiq uzluksiz ta'lim kontseptsiyalari internetda hamkorlikda o'qitish texnologiyasidan foydalanishga asoslangan malaka oshirishning tarmoq modelini ishlab chiqishni asoslaydi.

Kasb-hunar ta'limi sifatini oshirish va akademik harakatchanlikni rivojlantirish doirasida bir qator dasturiy tadbirlar amalga oshirildi. "Xalqaro hamkorlikni qo'llab-quvvatlash dasturlari", "qo'shma ilmiy loyihalarni qo'llab-quvvatlovchi va moliyalashtiradigan tashkilotlar va fondlar" ma'lumotlar bazalarini birlashtirgan Internet-hamkorlik rejimida ishlaydigan ilmiy fondlar ma'lumotlar bazasi yaratildi. Institut veb-saytida xalqaro tadqiqot dasturlari va akademik almashinuvlarni amalga oshirishda ta'lim muassasalari xodimlarining ishtiroki faoliyati va natijadorligini monitoring qilish maqsadida ushbu vazifalarni hal etishga imkon beruvchi so'rovnoma va ovoz berish xizmati yo'lga qo'yildi

Hozirgi vaqtda ta'lim hamjamiyati ishtirokchilari Internet orqali elektron shaklda ta'lim xizmatlarini ko'rsatish bilan bog'liq jiddiy ishlarga duch kelishmoqda

Qarshi viloyati ta'lim portalini Kuzbass kasb-hunar ta'limi portali asosida joylashtirish bo'yicha takliflar tayyorlandi. Endi bitta texnik saytda kasb-hunar ta'limi bilan bog'liq resurslar birlashtirilgan: axborot resurslari reestri; ilmiy fondlarning ma'lumotlar bazasi; "Dekanat" dasturiy mahsulotlari; o'qituvchining Internet jurnali; virtual ko'rgazma; tarmoq uslubiy cho'chqachilik banki; "Kuzbass kasb-hunar ta'limi" elektron jurnali; masofaviy o'qitish markazi; so'rovnoma va ovoz berish xizmati, videokonferentsiyalar va vebinarlarni tashkil etish va o'tkazish xizmati.

Asosiy istiqbollarga qarshi viloyati kasb-hunar ta'limi axborot makonini loyihalash va monitoring qilish tizimini yaratish, shu jumladan barcha darajalarni Respublika ta'lim dasturlari bilan muvofiqlashtirish kiradi. Ushbu yo'nalishni amalga oshirish kasb-hunar ta'limi tizimini modernizatsiya qiladi va texnik jihatdan o'qitishning yangi usullarini, o'qituvchilarni tayyorlashni, o'quvchilarni nazorat qilishni va o'qitish samaradorligini oshirishni ta'minlaydi.

Yuqoridagilarni umumlashtirib shuni ta'kidlash mumkinki, AKT integratsiyasi asosida tegishli ta'lim vositalari kompleksini ishlab chiqishning dolzarbligi va ahamiyati ushbu jarayonni har tomonlama o'rganish va uni tizimli nuqtai nazardan ko'rib chiqishni zarur qiladi.

Axborot va ta'lim texnologiyalarini birlashtirishda oqilona va maqbul echimlarni tanlash, birinchi navbatda, hamkorlikda o'qitish – axborot jamiyati sharoitida hamkorlikda o'qitish va kommunikatsiyalarning texnik qulayligi asosida ta'lim samaradorligini tahlil qilishga asoslangan.

Vaqt muammolariga munosib javob-bu o'quvchilarning mustaqil ishiga, ta'limning jamoaviy shakllariga va zarur ko'nikmalarni shakllantirishga qaratilgan o'quv jarayonining yangi modelini amalga oshirish. Ushbu transformatsiyada axborot-kommunikatsiya texnologiyalaridan o'quv jarayonida faol foydalanish katta rol o'ynashi mumkin va bo'lishi kerak, chunki:

1. Ta'lim jarayonida AKTni o'rganish va qo'llash talabalarga zamonaviy jamiyatda yashash va ishlash uchun zarur bo'lgan kasbiy va asosiy vakolatlar, ko'nikmalar va malakalarni olishga imkon beradi.

2. AKT kasb-hunar ta'limi sifatini oshiradigan o'qitishning yangi shakllari va usullarini rivojlantirish uchun samarali vositadir

3. AKTning keng qo'llanilishi ta'limning mavjudligini oshirish, umrbod ta'limdan umrbod ta'limga o'tish uchun sharoit yaratadi (Life Long Learning-LLL-paradigma), bu axborot jamiyati va bilimga asoslangan iqtisodiyotning rivojlanish sharoitlariga doimiy moslashishni ta'minlaydi.

4. Ta'lim va tarbiya jarayoniga AKTni samarali joriy etish kasbiy ta'limni umumiy modernizatsiya qilish, o'quv faoliyati mazmuni va shakllarini yangilash, kasbiy ta'limni boshqarishning zarur tarkibiy qismi va shartidir.

5. Shu munosabat bilan qarshi viloyati kasb-hunar ta'limi tizimi oldida bugungi kunda kasb-hunar ta'limi muassasalarida AKTdan foydalanish modelini o'zgartirish vazifasi turibdi: "informatika fanini o'qitish uchun kompyuter sinfi" modelidan AKT barcha fanlarni o'qitishda faol foydalaniladigan, butun o'quv jarayonini qayta qurish vositasi bo'lgan modelga o'tish.

Qarshi viloyatida ushbu ta'lim modelini rivojlantirishning asosiy tendentsiyalari jahon va umumiy o'zbeklarga mos keladi:

* ishlatilgan axborotlashtirish vositalarining o'ziga xos xususiyatlari bilan bog'liq o'zlashtiriladigan muntazam texnologik bilim va ko'nikmalar hajmi kamayadi. Talabalar standart interfeysning intuitiv aniq vositalari bilan tanishadilar, shundan so'ng dastur davomida muayyan dasturiy muhit va texnik

qurilmalar bilan ishlashning o'ziga xos xususiyatlari ular tomonidan mustaqil ravishda o'zlashtiriladi;

* barcha umumta'lim va maxsus fanlarni o'rganish jarayonida, darsdan tashqari va darsdan tashqari mashg'ulotlarda (tegishli ko'nikma va ko'nikmalardan foydalanishni talab qiladigan) ko'nikma va malakalarni (kompyuterlardan foydalanish bilan bog'liq va "mashinasiz") amaliy rivojlantirish orqali alohida fan doirasida axborot-kommunikatsiya texnologiyalarini o'rganishni tushirish rejalashtirilgan.;

* talabalar uchun umumiy ta'lim tayyorgarligining ajralmas qismi sifatida talabalar tomonidan professional dasturlash muhiti va tillarini majburiy o'zlashtirishdan bosh tortish;

* "ijtimoiy informatika" (axborot bilan ishlashning axloqiy va huquqiy masalalari) savollarining taqdimoti kengaymoqda.

Axborotlashtirishning keyingi bosqichi erishilgan darajani saqlab qolish uchun emas, balki uning rivojlanishiga hissa qo'shishi kerak. AKT rivojlanishining jadal dinamikasi kasb-hunar ta'limi muassasasi oldiga qo'ygan vazifalarni doimiy ravishda qayta ko'rib chiqishni talab qiladi. Bu ta'lim-tarbiya jarayonida AKT vositalaridan rejali foydalanish uchun tashkiliy shart-sharoitlarni yaratish, moddiy-texnik bazani yangilash va o'quv jarayonining barcha ishtirokchilarining texnik, mazmunli va uslubiy rejalaridagi malakasini oshirishga tegishli.

Zamonaviy ta'lim va axborot-kommunikatsiya texnologiyalarini integratsiyalash yo'nalishi axborotlashtirishning keyingi bosqichida ustuvor bo'lib qolishi kerak.

Kasb-hunar ta'limi axborotlashtirish sohasidagi tadqiqotlarning istiqbolli yo'nalishlari:

1. Pedagogika fanini rivojlantirishning zamonaviy axborot-kommunikatsiya texnologiyalarini joriy etish bilan bog'liq uslubiy va bashoratli jihatlari.

2. Zamonaviy axborotlashtirish va kommunikatsiya vositalari asosida amalga oshirilayotgan talabaning intellektual salohiyatini rivojlantirishga yo'naltirilgan ta'lim texnologiyalarini takomillashtirish.

3. Yagona axborot ta'lim makoni asosida kasb-hunar ta'limi axborotlashtirishning integratsiyalashgan o'quv-uslubiy muhiti modelini ishlab chiqish.

4. Axborot-kommunikatsiya texnologiyalari imkoniyatlaridan foydalanish sohasida o'z-o'zini tarbiyalash jarayonining mazmuni va dasturiy-uslubiy ta'minotini shakllantirish.

5. Internet va korporativ axborot tarmoqlarining taqsimlangan axborot resurslari salohiyati asosida ilmiy-pedagogik axborot banklari va ma'lumotlar bazalarini takomillashtirish.

6. Axborot-kommunikatsiya texnologiyalari vositalari asosida kasb-hunar ta'limi tizimini boshqarish usullarini takomillashtirish.

7. Global kommunikatsiyalarning korporativ axborot tarmoqlari negizida faoliyat ko'rsatayotgan "virtual" birlashmalarning hayotiy faoliyatini ta'minlashning nazariy va uslubiy asoslari hamda telekommunikatsiyalarga kirish ochiq ta'lim tizimlarining taqsimlangan axborot resurslari salohiyatidan foydalanish.

Raining rivojlanish strategiyasi, trbcnfyf 2025 yilgacha inson salohiyati va uning shakllanishining yangi sifati haqidagi tushunchaga asoslangan tizimli innovatsion dasturdir. Zamonaviy axborot jamiyatida ta'lim va aql shaxsning iqtisodiy holati va ijtimoiy xavfsizligini belgilaydigan muhim mezonlarga aylanadi.

Qarshi viloyatining samarali zamonaviy kasb-hunar ta'limi tizimi axborot jamiyati va kommunikatsiyalarning texnik yengilligi sharoitida hamkorlikda o'qitishga yo'naltirilgan innovatsion loyihalarni amalga oshirishda oldinda ishlash va yetakchi o'rinlarga erishish orqali qo'yilgan vazifalarning barqaror yechimini ta'minlashga qodir.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Oripova M.O.
Uzbekistan, Karshi

METHODS OF USING MODERN METHODS BY TEACHERS OF MATHEMATICS AND INFORMATION TECHNOLOGIES IN THE CLASSROOM

Abstract: the article discusses about methods of using modern methods by teachers of mathematics and information technologies in the classroom.

Key words: methods, using, teachers, mathematics, information, technology, classroom.

Electronic educational resources are educational materials that are reproduced by electronic devices.

The introduction of e-Learning resources into the educational process does not exclude traditional teaching methods, but harmoniously complements and combines with them at all stages of education: familiarization, training, application, control. The use of e-Learning resources in the learning process provides great opportunities for independent creative and research activities of students. E-Learning for a teacher is an opportunity not to write daily and painstakingly notes for lessons; apply control tests or modules almost every day, saving yourself from lengthy checks; assigning objective grades (they are given by the computer); solve the problem of children's interest in the subject (it's no secret that even the "weakest" student will prefer computer testing to a test).

For a student, e-Learning resources are, first of all, an opportunity to really learn. They allow you to perform more full-fledged practical activities at home - virtual visits to museums, observations of production processes, laboratory experiments, etc. Also, the student will be able to independently certify their own knowledge, skills, and abilities without the participation of a teacher or a parent who will prompt him or her to give the right answers - everything is already laid down in the e-Learning Program. As for research work, e-Learning resources allow not only to study descriptions of objects, processes, and phenomena, but also to work with them in an interactive mode.

Classification of e-Learning resources can be carried out in several directions: In terms of creation technology, these are resources consisting of visual or audio content;

- by type of content – electronic reference books, quizzes, dictionaries, textbooks, laboratory work, control and measurement materials; by type of

application – for work both directly in the classroom and for independent work of students.

All e-Learning resources are divided into three main types: Theory – obtaining information. Resources that make the learning process more visual, accessible, and interesting. Practice – this section contains simulators. Their goal is to form and consolidate the practical skills and abilities of students on each topic. The presence of "help" and "hint" modes in this section helps students who have made mistakes to analyze the solution and make appropriate corrections. Practice is a kind of section content simulators. Their goal is to form and consolidate to practice skills and abilities of students on their topic. You're a presence of "help" and "hint" modes in such a section helps students and have made mistakes, then analysis you are a solution and make appropriate correction. Information modules:

An interactive lecture is a sequence of animations that are accompanied by text or voiceover.

When working with these modules, you can turn the sound on or off, pause by pausing the module, and enlarge the screen. You can look at the scenes sequentially, and after you've finished watching all the scenes, you can go back to any scene and work through it in more detail. Practical modules:

They are a set of tasks. As a rule, the tasks in the workshops are arranged in order of complexity from scene to scene. Each time the module is launched, the numerical data in the tasks changes.

Control modules: These are sets of tasks that show the student's result with a record of the time and number of attempts. information acquisition module (I-type); Practical training module (P-type); Monitoring module (in general, attestation) (K-type).

All information modules AND have the following structure:

1. Informational part containing text, animations, video clips and interactive models.

2. Security questions.

3. A brief synopsis.

P-modules provide students with opportunities and tools to apply the acquired knowledge in practice, to consolidate this knowledge, as well as to develop skills and abilities based on it. The difference between this type of module and the others is that there is a "Hint" feature that the student can use. The K-type module presents tasks that are similar to the U-type tasks. Except that when you complete these tasks, you are not given the opportunity to receive a hint and complete the task again. The K-type tasks have primarily a control function and can be used as control and measurement materials. Among the main types of lessons, the following three can be distinguished:

- a lesson of introduction (explanation) of new material;

- a lesson to consolidate knowledge, skills and practice skills;

- a lesson of generalization and control of knowledge, skills and abilities.

The lesson of introduction (explanation) of new material can be built in the form of: the teacher's story (conversation), lecture, excursion, Workshop, research laboratory work, playful training session, etc.

A lesson to consolidate knowledge, skills and practice skills can be built in the form of: laboratory work, Problem-solving workshop, Lab, Simulation, Problem Seminar, playful training session, etc.

A lesson of generalization and control of knowledge, skills and abilities can be built in the form of: discussion, consultation, interview, theoretical test, practical test, public review of knowledge, laboratory work, Lab, independent work, Test.

In the lessons of explaining new material, electronic educational resources help the teacher to present the material clearly and intelligibly. With e-Learning Resources, the component of learning – the acquisition of information – changes. It is one thing to study textual descriptions of objects, processes, and phenomena, but it is quite another to see them and study them interactively.

The goal of this type of lesson is to teach students new material. In addition, during the lesson, in the course of studying new material, work is also underway to organize and consolidate what has been previously learned. It is impossible to study new material without recalling, analyzing, relying on the material already covered, without applying it to the conclusions of some new propositions. The goal of this type of lesson is to teach students new material.

To do this, schoolchildren should be involved in solving such didactic tasks as the assimilation of new concepts and methods of action, independent search activities, and the formation of a system of value orientations.

You can start a new introduction lesson with a problematic question that students don't yet know the answer to, but with the help of the new topic, they will be able to answer it. You can offer to do an assignment that students think they can do, but in fact they don't have enough knowledge to do it yet. The following sequence is possible:

1. New material should be studied not in class, but by offering the next educational block of I, P, K-modules (FCIOR) as homework.

2. There is no need to conduct a sample survey, with which the lesson usually begins, it is enough to look at the results of students' home self-certification, and there will be much more information about the current state of the educational process than as a result of a traditional, even frontal survey.

3. Instead of a one-sided presentation of the educational material, it is necessary to organize answers to the questions that arose during the homework, then in the process of discussion, which requires detailing, additions, and explanations from the teacher, it is necessary to formulate general conclusions.

4. If individual educational trajectories have been used, it is reasonable to give students the opportunity to compare and argue about the results of theoretical and practical assimilation of new knowledge, skills, and abilities from different, in general, subject areas. In this version, the lesson takes place mainly in the form

of active communication. Such creative work of a teacher requires appropriate training. On the other hand, the main advantages are an increase in the efficiency of the educational process and the strengthening of the educational function. The lecture form of lessons is expedient when studying new material that has little to do with previously studied, considering material that is difficult for independent study, presenting information in large blocks, in terms of implementing the theory of enlargement of didactic units in teaching, performing a certain type of tasks on one or more topics, sections, applying the studied material in solving practical problems.

Activation of students' cognitive interest at the lecture can be carried out by using a problem situation that arises in solving a mathematical, practical or applied problem. Applied problems are the main source of mathematical problem situations, so you should focus on their wide use in the development of scenarios for all types of lessons. In the course of the educational process, the I-type module can be used as a whole or its separate parts. In order to achieve the maximum pedagogical result, it is advisable to organize work on the development of the I-type module by students in two forms:

1. An individual form of work that allows you to take into account the individual characteristics of each student;

2. Work in pairs.

At the same time, the teacher can act as a coordinator, employee, or assistant.

When completing tasks from the P-type, the number of times one task can be completed is unlimited, after the first completion, the student can use the "Hint" button to get help with the task. It is advisable to use P-type e-learning not only to review and consolidate the knowledge gained, but also to create new opportunities for students to obtain additional information.

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MODERN METHODS IN TEACHING FOREIGN LANGUAGES

Abstract. This paper deals with the modern methods and approaches in teaching a foreign language thoroughly. Moreover, this article illustrates how to use new innovative technologies in teaching English. The author's purpose is to show the significant role of some up-to-date methods in teaching English intensively.

Keywords: teaching methods, learner-centered, communicative teaching methods, peer collaboration, interactive, integrative.

Introduction. The needs of our state for highly qualified specialists capable of establishing business contacts and business cooperation with foreign partners, professionals who speak a foreign language at a professional level, are reflected in the working curricula of universities in the country. Today, a foreign language is not just a part of the culture of a certain nation, but it is also the key to success, the future successful career of students. Achieving a high level of proficiency in a foreign language is impossible without fundamental language training in higher education. At most universities in the country, students master at least two foreign languages. Modern ways of educating English have enhanced in the last twenty years. Nowadays everything alters, obviously in teaching the English language. As a matter of fact, there is an enormous variability of strategies of teaching foreign languages to language learners. Today the process of English learning will be more student – centered, but less time consuming. Therefore, we should use the modern methods in teaching a foreign language. The modern teaching methods help to build or develop a productive understanding of basic science and technology.

Innovative teaching methods help the students to question their preconceptions, and motivates them to learn, by putting them in a situation in which they come to see themselves as the authors of answers and the agents of responsibility for change. But whenever the teachers can teach by this method, they are faced with some barriers and requirements. Teachers are introducing different innovative ideas to explain the content to learners. Also, it is the responsibility of teachers to teach students with suitable and modern methods. It is a teacher who plays a vital part in students' success. So, it becomes the duty of a teacher to take a step towards accepting modern methods of teaching. To provide a sound education, there should be an amalgamation of a skilled teacher and innovative ways of teaching. Modern teaching methods have many advantages. Unlike traditional teaching methods, modern teaching methods are more interactive and keep students intact. It maintains the interest of students by

animations and videos. The visual medium is way better than any other medium to give instructions. It helps • to memorize the concept fast and for a more extended period than reading. Modern teaching methods are less time-consuming. Teachers take less time to cover • the syllabus. Writing on the blackboard is not required. Blackboard explanation of content is less explanatory than are presentation of videos and • animations used in the modern teaching methods. In order to understand what the basis of modern methods of teaching English is, it is necessary to consider in detail methodological principles which underlie these techniques. The structure of the communicative method includes cognitive, developmental and educational aspects, which are aimed at raising student. Given this and the concept of “communicative”, as well as the complexity of learning systems, we can formulate the following methodological principles of communicative methodology: - The principle of mastering all aspects of foreign language culture through communication. The communicative method was first put forward the proposition that communication should be taught only through communication. In this case, communication can be used as a channel for education, learning and development. Communication is a social process in which the exchange activity, experience, embodied in the material and spiritual culture. In the communication by the emotional and rational human interaction and influence each other. This communication is essential to proper education. Thus, communication serves as teaching, learning and development and education in communicative teaching methodology.

The process of learning foreign language communication is a model of the real process of dialogue on key parameters: motivation, focus, information communication process, innovation, situational features, character interaction and communicating system of speech means. This is what creates the learning environment, adequate real that ensures the successful mastery of skills and their use in real communication. Some interconnected aspects of learning a foreign language culture. The complex nature of foreign language culture manifests itself in the unity and the relationship of its educational, cognitive, educational and developmental aspects. Each of these aspects, in a practical sense, is equal. But the true mastery of one is possible only when adequate mastery of others. In this regard, any type of work, any exercise in the learning process, integrates all four aspects of foreign language culture and evaluated depending on the availability of these data points. - The systems principle in the organization of foreign language teaching. This principle means that the communicative learning system is constructed by the reverse: first scheduled final product (target), then determined the tasks that can lead to this result. This takes place with in the course, each year, the cycle of lessons and one lesson and applies to all aspects. This approach provides a systematic training, with all its qualities: integrity, hierarchy, unity of purpose. Systematic study builds on the students’ mastery of the laws of each of its aspects. The principle of individualization in learning foreign language. In the communicative approach the student is perceived as a personality. Each student

as an individual has certain abilities, both general and partial nature. Communicative learning is aimed at identifying their original level and further their development. To that end, use special tools to detect abilities - special tests for Development- Exercises and legs. When organizing joint activities the student will develop personal qualities necessary for effective cooperation. The joint activity is organized so that students are aware that each of them depends on the success of the common cause. The combination of communication and other activities can bring learning to the real communication that takes place not only for communication but also serves other activities occurring simultaneously. For a more productive mastery of students in all aspects of foreign language provides for a system means (memos and special exercises) for the formation of students' skills and abilities for the formation of the ability to learn, which is subjective individualization. It is important to note that the more autonomy a student takes, the more effective will assimilate. Therefore, this method pays great attention to the development of independent thinking, in particular, in discussing the problems. And, finally, autonomy, related to the control. In the communicative teaching used such a strategy, which plans to control the transformation of a mutual control of self-control. In order to do this as a hidden control, and conscious possession of the students' knowledge of objects and control criteria and their application are used. - The principle of functionality in foreign language teaching. This principle assumes that every student should understand that it can give not only practical language skills, but also to use the knowledge gained in cognitive and emerging dimension. This principle is also what is going on mastering functions of speech activities as a means of communication that is understood and assimilated the functions that are performed in the process of human communication: reading, writing, speaking, and listening. According to the principle of functionality, the object of learning is not verbal means alone, and the functions performed in a language. On the basis of creating a functional model of speech means that should be studied in foreign language courses: are selected certain speech means different levels of expression for each of the speech functions. Depending on the purpose for the expression each function can be offered and the maximum and minimum number of means of expression. Of course, here is connected and non-verbal means of expression. I

We proceed to the following method of teaching English language. This is an intensive method. - The principle of collective interaction, which is leading in the method of activation, the most famous in the intensive method. This principle relates the objectives of training and education, describes the means, methods and conditions of the educational process. To the educational process, which was based on this principle, characterized by the fact that students interact with others, broadening their knowledge, improve their skills. - The principle of learner-centered communication is no less important. It is based on the impact of communication, his character and style for the implementation of rehabilitation and educational purposes. In conversation, each is both impact and exposed.

Especially important place here is the knowledge of other people, which is a prerequisite of human communication.

Conclusion It is important to note that all the above principles are interrelated, interdependent and mutually reinforcing. Therefore, adherence to the attached system requires compliance with all the above principles and how they are combined.

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*Efimenko O.V., candidate of medical sciences
associate professor*

*Department "Hospital Pediatrics"
Andijan State Medical Institute
Republic of Uzbekistan, Andijan City
Khaydarova L.R.*

*senior lecturer
Department of "Hospital Pediatrics"
Andijan State Medical Institute
Republic of Uzbekistan, Andijan City*

*Inakov K.T.
master's student
department "Hospital pediatrics"
Andijan State Medical Institute
Republic of Uzbekistan, Andijan City*

FREQUENCY OF COMPLICATIONS IN CHILDREN AFTER SURGICAL CORRECTION OF VENTRICULAR SEPTAL DEFECT

Abstract. Ventricular septal defect refers to septal defects, which in children undergo significant transformation during the process of growth and development, depending on the size and location of the defect, as well as on the duration of the disease. The radical method of treatment is surgical correction, however, in the postoperative period, complications associated with anatomical damage to the conduction system of the heart located in the interventricular septum very often develop.

Keywords: ventricular septal defect, heart rhythm disturbances, sinus tachycardia, sinus bradycardia, incomplete right bundle branch block, surgical correction, residual shunts.

Relevance. Isolated ventricular septal defect (VSD) represents the most important medical and social problem in relation to the development of a threat to the life of a child. (2,3,6).

Small defects in the interventricular septum can occur for a long time without clinical manifestations and have a tendency to spontaneous closure, with a good subsequent prognosis. In children with a large defect, conservative treatment cannot always prevent the development of complications, and only timely correction of the defect will prevent irreversible changes, both in the parts of the heart and in the pulmonary vessels. (4,5,8)

However, as the results of recent studies show, even timely correction of VSD in 15-28% of cases in the postoperative period can be accompanied by

complications such as heart rhythm disturbances, in particular those associated with impulse conduction, the frequency of which in long-term follow-up increases 2,5 times. In addition, the appearance of residual shunts at the correction sites requires repeated surgical intervention (1,2,3,7).

Thus, all of the above formed the basis of our scientific research. There are still many unresolved questions, and it remains to be hoped that scientific and clinical research conducted in this direction will be able to answer most of them.

Materials and methods of research. We examined children with corrected VSD who received treatment in the cardio-rheumatology department. When selecting children, we obtained parental consent to participate in the clinical study. The study program did not include children in whom VSD was part of complex multicomponent defects, combined and was not part of genetic syndromes. The scope of our research included 45 children who received one-stage surgical correction at different age periods: the group of children with an early postoperative period included 32 children and those with late surgical correction – 13 children. Information about the health status of children before admission to the hospital was obtained during a conversation with parents.

Clinical examination of all children was carried out according to generally accepted standards, and instrumental examination included: ECG in 12 standard leads and EchoCG with assessment of intracardiac hemodynamics.

Results. The age of children after surgical correction of VSD is represented by a wide age range from 1 year to 16 years. The most numerous groups were children from 4 to 6 years old (32%), 11-16 years old (32%) and from 1 to 3 years old (18%). When analyzing gender, there were slightly more boys (54%) than girls (46%).

According to our results, the main group consisted of children who received radical surgical correction in the period of early (29%) and preschool age (24,4%). We classified children whose defect correction occurred in the older age group (46,6%) as the most unfavorable time to receive surgical treatment.

We assessed the state of the heart rhythm, according to ECG data, and the nature of cavitory disorders of the heart chambers according to echocardiography in children in the early and late stages after surgical treatment. We included 32 children in the group of children with an early postoperative period, with a period of surgical correction of 1-3 years.

Table 1. ECG changes in children with the early postoperative period (n=32)

ECG symptoms	Abs	%
Sinus rhythm	32	100%
Sinus tachycardia	23	71,8%
Sinus bradycardia	9	28,2%
Normal position of the ELH	3	9,4%
ELH deviation to the left	11	34,4%
ELH deviation to the right	18	56,2%
Left ventricular hypertrophy:		

1) with 1st degree AV block with complete blockade of the right leg of the Giss beam	1	3,1%
2) with with incomplete blockade of the right leg of the Giss beam	7	22%
3) with 1st degree AV block	3	9,4%
Right ventricular hypertrophy:		
1) with incomplete blockade of the right leg of the Giss beam	16	50%
2) with complete blockade of the right leg of the Giss beam	2	6,2%
Hypertrophy of the right and left ventricle:		
1) with complete blockade of the right leg of the Giss beam	2	6,2%
2) with 1st degree AV block	1	3,1%

According to the results obtained, the predominance of sinus tachycardia indicates the influence of the sympathetic part of the autonomic nervous system, given that it has a direct impact on the adaptive abilities of the cardiovascular system in children in the early postoperative period. Despite the correction of the defect, ECG signs of right ventricular hypertrophy remained in 2/3 of the children. In 16% of children, complete blockade of the right Giss bundle branch was recorded due to traumatic effects in the IVS area, and the presence of AV block was associated with surgical manipulation around the atrioventricular node.

According to echocardiography, 3 children (9.4%) showed dilatation of the right side, which was apparently due to the presence of a residual shunt measuring 2-3 mm.

In the group of children with long-term results, we included 13 patients with a postoperative period of more than 5 years. The results of instrumental assessment of the state of the cardiovascular system are presented in Table 2.

Table 2. ECG changes in children with a long-term postoperative period (n=13)

ECG symptoms	Abs	%
Sinus rhythm	13	100%
Sinus tachycardia	6	46%
Sinus bradycardia	2	15,3%
Age-related heart rate	5	38,7%
Vertical position of the ELH	3	23%
ELH deviation to the right	10	77%
Right ventricular hypertrophy:		
1) with incomplete blockade of the right leg of the Giss beam	9	69,4%
2) with complete blockade of the right leg of the Giss beam	4	30,6%

We associated the predominance of automatism disorders in the form of tachycardia and bradycardia in this group of children with disorders of autonomic regulation of heart rhythm. Complications in the long term after surgical treatment are of concern, in the form of preserved hypertrophy of the right ventricle, with

impaired impulse conduction in the form of incomplete and complete blockade of the right leg of the Giss bundle on the ECG and a different degree of dilation of the right ventricle in all children. A negative complication of the long-term result of surgical correction was the visualization in 2 children of a large residual shunt, 3 mm in size, requiring repeated surgical intervention.

Thus, hemodynamic disorders in children who received surgical treatment are associated with persistent disturbances in heart rhythm due to trauma to the conduction system. An unfavorable complication of the postoperative period, regardless of the timing of surgical correction, was the appearance of residual shunts requiring additional surgical intervention.

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THE AMOUNT OF SALT IN THE WATER AND ITS EFFECT ON THE HYDROECOLOGY

Abstract. This article provides general information about the large class of Pisces and its systematic place, ecology of fish, the main ecological groups of fish, the importance of the amount of salt in water in the life of fish.

Key words: Biocenosis, structure, lifestyle, characteristics fish, fauna, ecological groups, pelagic, littoral, abyssal, impact, transient fish.

Introduction Fishes are the oldest primitive aquatic jawed vertebrates and are very common. The large class of fish includes more than 20,000 species. Fish are the leading group of animals living in aquatic biocenosis. They are of great importance as a food object, mainly providing valuable meat and fat products. There are more than 20,000 species of fish in the modern fauna, which are distributed in all water bodies of the globe. Its structure, lifestyle and ecological characteristics are very well adapted to the aquatic environment. The body is compressed from both sides, covered with long, thin scales, and has three odd and two pairs of fins. Breathing is done through gasps. A two-chamber circulatory system with a heart consists of one circle. The nervous system consists of the brain and spinal cord. The sense organs of fish are eyes, ears, nose, whiskers and side lines. Currently, the size of the globe is 510 million square kilometers, of which 361 square kilometers, or 71%, is covered by ocean and sea waters. 51% of them are inhabited by fish.

Material and methods. Water can dissolve atmospheric air, and fish breathe oxygen dissolved in water. The flow of water, temperature, amount of oxygen and salts in the water are of great importance in the life of fish. The movement of the water environment depends on the constant currents in rivers, seas and closed water bodies. The warming of the water causes the water layers to move in a vertical direction. Fish are cold-blooded animals, that is, their body temperature is not constant, but changes directly depending on the temperature of the environment. Sea waters are saturated with oxygen. Fish are divided into 4 main groups based on their oxygen demand: Fish that require a lot of oxygen, that is, a group of fish that live in waters with 7-11 cm³ of oxygen in 1 liter of water. Examples of these are gulmoy, kumja, peskar, nalim and golyan. This group of fish lives in cold and fast-flowing rivers. Fish that require a lot of oxygen, that is, a group of fish that live in waters with 5-7 cm³ of oxygen in 1 liter of water. Examples of this group include pike, golavl and stonefish. A group of fish that require relatively little oxygen, i.e., a group of fish that live in waters with 4 cm³ of oxygen in 1 liter of water. This group includes bream, flounder and trout. Fish

that require very little oxygen. They live in stagnant waters with very little oxygen, that is, 0.5 cm³ of oxygen in 1 liter of such waters. This group of fishes includes bream, tench and sole. The main ecological groups of fish. To determine the ecological groups of fish, first of all, we need to know the relationship of fish to the amount of salt in water and their habitats in water bodies. Despite the diversity of living conditions in the aquatic environment, there are three main ecological groups of fish: pelagic, abyssal and littoral. Pelagic - fish living in the open water environment, living in the depths of the water from the surface to 150-200 meters. It has a long pod-like body, feeds on aquatic organisms and breeds near the water's edge or near the water's edge. Pelagic fish are very fast and active because they live in an open water environment. Littoral - fish belonging to this group live near the shores of water bodies and are connected to a certain extent with the bottom of the water. All kinds of stones in the water bottom, crevices on coral islands, algae, sand and mud are shelters for littoral fish. Here they find food, reproduce and live. Littoral fish are also mobile, and their appearance is different. Some of them have a leaf-like body and live at the bottom of the water. Abyssal - there are not many species of fish belonging to this group. They mainly live at great depths at the bottom of seas and oceans. The main characteristics of great depths are extremely high pressure, complete absence of light, water not flowing, uniform and low temperature, water salinity and absence of living organisms. It is because of the absence of these living organisms, algae, that the fish of this group are carnivores. When the fish belonging to this group are brought to the surface of the water, their body swells, their intestines protrude from their mouths, and their eyes are pushed out of their sockets. Abyssal fish have poorly developed muscles and skeletons, and their mouths are large. No. Pelagic Littoral Abyssal 1 Shark Scats Dragon fish 2 Salmon Flounders Electric scats 3 Sardines Sea devils Sea cat 4 Herrings Three-spined fish Echinoderms 5 Sailfish Jumping mud fish Pelican fish The importance of the amount of salt in the water in the life of fish. Sea waters are characterized by the presence of mainly chloride salts, that is, table salt and magnesium chloride, as well as a large amount of magnesium sulfate. Chlorine salts make up 90% of sea salt. Chloride salts are not high in freshwater. Different types of fish are adapted to live in salt water in different ways. Some species of fish can tolerate high levels of salt in the water, while other species of fish can die even if the level of salt in the water is slightly high. For example: the Caspian jellyfish can live in conditions where 100% of the water is 60% salt, while stilts will die even in 0.2-0.3% salt water. Transient fish are often adapted to different levels of water salinity. Fish are divided into 4 groups depending on their relationship to the amount of salt in the water: Sea fish that spend their whole lives in salty waters. Most of the fish belonging to this group spend their whole life in salt water. When such fish are placed in fresh water, they die in a short time.

Conculution. Freshwater fish that spend their whole life in rivers, lakes and ponds. Such fish are not found even in slightly salty sea waters, they live only in fresh waters. Transient fish, that is, if this type of fish lives in the sea, it moves

to rivers to reproduce. Fish belonging to this group, depending on the development process, live both in the sea and in the river. This type of fish grows and matures in the seas, and spawns and spawns in rivers. Small transient fish. Fish belonging to this group live in the parts of the seas that are adjacent to rivers and where the water is much fresher. № Marine fish Freshwater fish Transient fish Small transient fish 1 Flounder Gulmoy Salmon Redhead fish 2 Herrings Churn Squid Whitefish 3 Cods Ola sturgeon Ostyotr Wobla 4 Sharks Sole fish Beluga White fish

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Egamberdiyeva S.G.

teacher

Uzbekistan state World languages University

Uzbekistan, Tashkent city

A COMPARATIVE ANALYSIS OF NATIONAL-CULTURAL CHARACTERISTICS OF SPEECH ETIQUETTE IN ENGLISH AND UZBEK FAMILY SETTINGS

Abstract. This study aims to study and compare the linguistic and cultural aspects of family relations in English and Uzbek households. By studying the national-cultural characteristics and communication patterns and dynamics, social roles and values of the speech etiquettes used in these families, the research seeks to understand the similarities and differences between these two cultures.

Keywords: Family, communication, relations, culturally marked, communication, cross-cultural, linguistic picture of the world, speech etiquette, social roles.

Introduction. Language and culture are closely intertwined, representing core aspects of one's identity and heritage. In today's interconnected world, families from diverse linguistic backgrounds often find themselves navigating the complexities of maintaining their mother tongue while embracing the language and culture of their new environment. This article delves into the fascinating linguocultural relations between Uzbek and English families, shedding light on the challenges, benefits, and strategies employed by these families in fostering multilingual and multicultural environments within their homes.

The family is the main social unit of society. Its members have rights and obligations in relation to each other, established in the laws of the country. Family relationships are personal or property relationships that occur between people. This cell includes spouses, children, grandparents. There are different types of family legal relations that allow you to regulate different areas of activity.

From birth, a person needs a family, because it helps him to overcome all difficulties. Strong relationships help everywhere. Support is of great importance, so the creation of a family is appreciated.

Language and culture are deeply intertwined aspects of human society. They shape our identity, thoughts, and interactions within and beyond our communities. Within a single family, the integration of different languages and cultures can create a uniquely enriched linguistic and cultural environment. In this article, we delve into the dynamics of Uzbek and English family linguocultural relations, exploring how these two distinct worlds merge, influence one another, and contribute to the diverse tapestry of our global society.

The family relations in Uzbek and English families are quite similar in some aspects, although differences may exist due to cultural and traditional variations.

1. Nuclear Family: Both cultures typically have nuclear families consisting of parents and their children, living together and forming the basic unit of society.

2. Extended Family: While extended families are important in Uzbek culture, they are less prevalent in English culture. Uzbek families often live together with grandparents, uncles, aunts, and cousins, fostering strong intergenerational bonds.

3. Gender Roles: In both cultures, traditional gender roles have been prominent, although English families now often have more equal distribution of tasks and responsibilities. In Uzbek families, men are traditionally seen as the primary breadwinners, while women play a significant role in taking care of the household and children. However, this is gradually changing with increasing urbanization and globalization.

In English-speaking families, politeness and indirectness are emphasized. Family members often use polite forms of address, such as "sir" or "ma'am," when speaking to parents or elders. There is a tendency to be more formal and use euphemisms when discussing sensitive topics. Parents often teach children to say "please" and "thank you" and to use expressions like "excuse me" when interrupting or leaving the table. English-speaking families also value individualism and independence, leading to more open discussions and debates within the family.

On the other hand, Uzbek-speaking families prioritize respect and collectivism. Addressing elders with proper honorifics is crucial, and children are taught to use respectful terms like "aka" (brother) or "opa" (sister) when addressing older siblings. Uzbek families emphasize obedience and conformity.

Uzbek Language and Culture: Uzbekistan, a landlocked country in Central Asia, is home to the Uzbek people who speak the Uzbek language. Uzbek is a Turkic language and is the official state language of Uzbekistan. The language serves as a cohesive force, giving a strong sense of national identity to the Uzbek people. Family relations are deeply valued, and traditional customs and practices continue to play a significant role in everyday life.

Preserving the Uzbek language and Culture: Uzbek families living in English-speaking countries face the constant struggle of preserving their heritage language and culture within a predominantly English-speaking context. This challenge is particularly relevant for parents who value passing down their cultural traditions to their children. Uzbek families often employ various strategies, such as organizing language immersion programs, attending cultural events, and maintaining close ties with the Uzbek community, to ensure their children maintain a strong connection to their heritage language.

Family is a fundamental unit of society, and understanding the dynamics within different cultures can provide valuable insights into their overall social structure. This study focuses on English and Uzbek families, considering both linguistic and cultural aspects to examine the various dimensions influencing family relations in each culture.

Language and culture play pivotal roles in shaping the identity, values, and traditions of individuals and communities. In this article, we explore the intricacies of linguocultural relations from the unique viewpoint of an Uzbek and English family. By examining their experiences and challenges, we aim to shed light on the enriching journey of navigating linguistic and cultural boundaries.

Setting the Stage: Imagine a household where an Uzbek spouse and an English spouse constantly find themselves at the intersection of two vibrant linguistic and cultural worlds. Their home becomes a melting pot of traditions, customs, and dialects, creating a fascinating environment for cultural exchange and growth.

Language as a Channel for Connection:

One of the greatest bridges between cultures is language. The Uzbek and English spouses, with their respective mother tongues, find solace in using their native languages as a communication tool in the privacy of their home.

Conclusion. This study will employ a mixed-methods approach, combining qualitative and quantitative research methods to gain a comprehensive understanding of family relations and speech etiquette. The research sample will include English and Uzbek families living in their respective countries or within the same cultural diaspora. Data collection will involve interviews, surveys, participant observation, and analysis of linguistic and cultural artifacts.

Through a linguistic and cultural analysis, this study aims to explore the intricate dynamics and influences that language and culture have on family relations within English and Uzbek households, shedding light on the similarities, differences, and potential areas of conflict between these two distinct cultural contexts.

Through a comparative analysis of linguistic practices and cultural norms, this study aims to explore the complexities of family relations in English and Uzbek households, shedding light on the impact of language and culture on communication, socialization, and identity formation within these families.

The study explores the intricate interplay between language and culture in English and Uzbek families, shedding light on how these factors shape and influence family relations, communication patterns, and identity formation. It is not an exaggeration to say that language is not only a reason for the emergence of human communication, but also a postcard that speaks about the history, mentality, value, and national cultural characteristics of different countries.

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*Ergashev T.K., candidate of economic sciences
associate professor
Karshi Engineering-Economics Institute
Tohirova N.Z.
trainee teacher
master's student
Karshi Engineering-Economics Institute*

A MODERN AND INNOVATIVE APPROACH TO THE STRATEGIC MANAGEMENT OF THE COMPANY

Abstract. One of the most pressing issues today is finding solutions to the main issues of innovative (strategic) management of enterprises in the national economy. In the present day, an effective management system relies on identifying optimal solutions for enterprise management and implementing them through the use of innovative management tools.

Key words: Innovative management, modern, strategic management, enterprise, resources, strategy, efficiency.

Introduction

One important consideration for the continued development of the Republic of Uzbekistan is the timely implementation of modern innovative management technologies. It is essential to widely apply the advancements of science and technology to all sectors of the economy, social, and other spheres. At present, our country is undergoing reforms aimed at innovative development, which have the potential to significantly renew all spheres of state and social life. Because, at a time when the world is going through complex economic and political processes, it is difficult to make rational scientifically based decisions in order to save the country from the brink of economic collapse and lead it to the path of development. To address this issue, it is important to consider innovative solutions for organizing and improving public administration in the rapidly evolving modern era. It may be beneficial to implement a rational policy in the management system to keep up with the pace of change. Any country that solves these problems will succeed in this difficult environment.

If we take into account the nature of innovation, it is related to the future. By implementing innovative ideas and approaches today, we can work towards building a better future. Therefore, it may be beneficial to consider implementing reforms based on modern innovative ideas, developments and technologies, which could potentially facilitate rapid and high-quality progress of our country towards becoming a leader in world civilization. It is worth noting that all spheres of society and state life are rapidly developing at both macro and micro levels.

The primary objective of developing scientific and innovative activities in the management system of the Republic of Uzbekistan is to enhance the scientific

basis for decision-making in macro and micro-level management systems. This includes selecting optimal and alternative options, improving management efficiency through scientific research, and utilizing automated management systems. The ultimate goal is to advance the socio-economic development of our country by critically studying the advanced experiences of developed nations.

Literature analysis:

In enterprises operating in the conditions of market economy and completely independent management, the responsibility for making strategic decisions and ensuring their implementation rests entirely with the manager. It is suggested that managers consider acquiring modern management knowledge and utilizing innovative methods to effectively adapt to the constant changes in the external environment.

As businesses operate in an ever-changing external environment, it is important to adapt their activities accordingly. Continuous improvement of the entire management system and effective utilization of ICT in information exchange systems are also crucial. Modern management methods should be employed to achieve these goals. This allows enterprises to become open systems that are adapted to competitive market conditions, using innovative and strategic management methods.

To ensure objectivity in our scientific research, it is important to pay close attention to the terminology used. In the scientific literature related to the field, there are many definitions of innovative and strategic management. These definitions are conceptually multifaceted and are interpreted in diverse ways depending on changes in the external environment. Therefore, there is a need to clarify, supplement, and update the term.

First, let us consider the concept of 'strategy'.

The term 'strategy' in the philosophical encyclopedia refers to a form of organizing human relations that considers the problems, difficulties, and conflicts that hinder the realization of opportunities, prospects, means, interactions, and influence of the subjects [1]. It can be seen that this term can be used in all areas of human knowledge.

In scientific literature, strategy is defined as a general plan to achieve a main goal, which includes determining how to use limited resources [2].

The concept of strategy in relation to business can be interpreted as follows: Business strategy is a set of agreed decisions, which consists of determining the impact of actions that have long-term and irreversible consequences affecting the activity of the enterprise and organization [3].

The term 'Strategic management' was first used in the United States of America during the second half of the twentieth century to distinguish and define the level of management in enterprises. As we know from scientific literature, strategic management is carried out at the highest level of management in these enterprises, and current management is carried out at the production level. Changes in the business environment suggest that a distinction between terms is

necessary. The scientific analysis conducted indicates that the American scientist Igor Ansoff [4] is the founder of the ideas of strategic management in enterprises. The author published the findings of their scientific research in the field of strategic management in 1965.

The definitions of the founders of the field of strategic management theory, D. Shendel and K. Hatter, will be the focus of our consideration [5]. Both authors consider strategic management as a process of determining the organization's relationship with the external environment. This process involves achieving set goals and striving to establish effective communication with the environment by allocating resources. It enables the organization and its departments to work efficiently. This statement describes how strategic management is a management process that aims to achieve an organization's mission by managing its interaction with the environment, according to D. Higgins [6].

Research Methodology.

The methods of comparative analysis and comparison of factors affecting the innovative development of strategic management of enterprises operating in economic sectors were used to study the results of our scientific research.

Analysis and Results:

The tariffs provided for strategic management, as previously mentioned, cannot be fully utilised in the analysis of innovative management processes within enterprises. As strategic management and innovative development differ from a simple management system, they are classified differently depending on the purpose of scientific research.

Nowadays, strategy is one of the important conditions and features of effective business. The practice results demonstrate that in today's competitive environment, no enterprise can achieve successful operation without a clear goal and innovative technologies in management.

The use of innovative management methods in business processes is widespread in our country. This is evidenced by the fact that our economy is developed on the basis of digital technologies. This fragment describes the product of extensive reforms in the management system. When defining the concept of 'strategy' in a strategic initiative at the enterprise level, the following suggestions can be made: Corporate strategy is a management plan that combines business organization and competitive methods to achieve organizational goals. This is known as strategic management, which involves developing and implementing strategies at the enterprise level.

Based on the results of the analysis and scientific research, strategic management of enterprises is the process of setting goals, developing a strategy, and organizing its implementation. This process involves the formation of enterprise management.

The main advantages of applying strategic management in practice at the enterprise level are as follows:

- The concept of strategic management involves formulating and implementing an enterprise's development strategy based on constant monitoring and evaluation of changes in its activities. This is done in order to maintain the ability to survive and operate efficiently in an unstable external environment.

The company is concentrating all its resources on implementing the general development strategy.

- It is important to identify new opportunities that arise from changes in the economy and direct managers to respond quickly and make optimal decisions to prevent potential threats.

In strategic enterprise management, the use of innovative tools and high-quality technologies is becoming increasingly important. It is crucial to consider the current state of societal development when implementing these tools. This is why many developed countries are currently focusing on the innovative aspect of economic growth. Successful strategic innovative management of enterprises involves intensive use of innovative methods in their activities. This includes innovative processes, products, and programs, which are relevant for all types of enterprises and are essential for ensuring competitiveness and sustainable development. Innovation, as we know, is the process of creating new products, technologies and services, along with the introduction of new organizational and economic forms that give the enterprise an advantage over competitors for a long time, and an increased interest in assessing and taking into account the needs of consumers in the future. From a strategic management perspective, innovation's economic essence is to alter resource income.

From a consumer perspective, this product is designed to meet their needs and adapt to changes in value, enabling enterprises to use resources efficiently. At the same time, enterprises must diversify their product types and utilise new techniques and technologies to enhance their business and increase competitiveness.

The innovative development of strategic management in enterprises is closely related to innovative entrepreneurship. Innovative entrepreneurship refers to the process of creating technical and technological innovations and utilizing them for commercial purposes. Entrepreneurial innovation typically relies on innovations in products or services that allow the creation of a new market to satisfy new needs. Innovation is a crucial tool for entrepreneurship. Creating and implementing innovations is a complex and risky process. The complexity arises from the need to develop production and work tools that do not yet exist or to modernise those that should be superior in quality to well-known analogues.

In this process, there are inherent risks as the acceptance of the new product by the consumer is uncertain. Additionally, the economic compatibility and efficiency of the new product will be unknown if it is put into production. The innovation process should be approached by considering innovative ideas and creating appropriate institutions and organizations for enterprises to formulate and implement innovative policies and projects. Innovation is the foundation for

creating interrelated organizations that are essential in solving problems within the innovation process. A crucial aspect of developing innovative projects is establishing a structure that can effectively address problems and achieve specific goals. To effectively tackle the challenges that arise during the innovation process, the enterprise structure must be dynamic and adaptable to changing parameters.

When enterprises commence operations, they establish organisational structures to achieve specific objectives. When employing innovative methods in strategic management, it is crucial to consider the creative groups, their ideas, assumptions, and the forms and methods they use to achieve them. In managing innovative processes within innovative enterprises, attention is paid to fundamental and applied research, innovative development, and the introduction of technical and technological innovations into production. Additionally, the production of new types of products is implemented, taking into account their content and essence. The innovation process consists of separate activities and serves as the foundation for creating innovative enterprises. Each enterprise forms its own links in the overall innovation process, and all businesses interact with one another. The formation and activity of innovative enterprises are regulated by the logic of the innovation process, specifically the division of labor.

The development of strategic management in enterprises is closely linked to innovative entrepreneurship. It involves a creative process of creating new products or services and is based on the constant search for new opportunities and innovation.

In this situation, the entrepreneur is willing to take on the risk of implementing a new project or improving an existing one, in addition to their financial, moral, and social responsibilities. Innovative entrepreneurship is a socio-technical and economic process that involves creating goods, services, or technologies through the practical application of innovations. This statement can be considered as a perspective on the innovative development of strategic management in enterprises.

Conclusions and Recommendations

Based on the analysis above, the strategic management of enterprises can create opportunities for businesses in the future.

1. Product renewal, i.e. renewal of the enterprise's marketing potential, ensuring the viability of the company, increasing profits, expanding market share, retaining and increasing the number of customers, strengthening the independent position and reputation, creating new jobs, etc.

2. The process of introducing technological innovations, i.e. modernizing production capabilities to increase labour productivity, save energy and raw materials, and ultimately increase company profits, while ensuring safety and taking measures to protect the environment and information systems.

3. Innovation, from a social perspective, is the process of improving the humanitarian sphere of an organization. The use of innovations expands opportunities in the labour market, mobilises employees to achieve set goals, and

strengthens the trust of the organization in its social obligations to workers and society. It is important to note that this definition excludes subjective evaluations unless they are clearly marked as such.

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Ergashov L.M.
teacher of mathematics and computer science
Nazarov B.M.
teacher of mathematics and computer science

METHODOLOGY OF TEACHING THE SUBJECT "BASIC RULES OF COMBINATORICS" USING MS POWERPOINT SOFTWARE

Annotation. In this article, the methods of teaching the topic of basic rules of combinatorics using MS PowerPoint program are considered. In addition, it is possible to use substitution, grouping and several other methods in combinatorial problems and prepare a presentation in the program.

Key words: combinatorics, MS PowerPoint program, combinatorial problems, substitution, grouping, slide, presentation, information technologies.

Combinatorics is a set of elements of mathematics under certain conditions is a section on selection and placement.

Human life is connected with technology and production. We usually have to do it We look at whether the work we do is useful or not. So, the work being done

It is important to know in advance whether it will be beneficial or harmful, so it is important to do it methods should be searched and analyzed.

Combinatorics is the condition of a finite number of given objects is to count the combinations.

In combinatorics, operations are always performed on the elements of a set. Below is one an example is given. It contains a set of 3 vegetables. Collection items {turnip, carrot, eggplant} respectively {a1, a2, a3} can be defined as.

Problems of this type are placement in combinatorics (placement or is called the issue of deception. In this, as you can see, all elements participate and by changing their places, ways to solve the problem are determined. Such sorting (placement) is called displacement.

The number of permutations made up of n elements is $P_n = n!$ will be equal to and is read as "n factorial".

$$n! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot \dots \cdot n$$

0! is defined and the value is $0! = 1$, 0 becomes 0 again when the elements are swapped. di. That's because permutations of 0 elements make 0 again

$$0! = 1 \text{ will be.}$$

$$0! = 1 \quad 1! = 1$$

$$2! = 1 \cdot 2 = 2$$

$$3! = 1 \cdot 2 \cdot 3 = 6$$

$$4! = 1 \cdot 2 \cdot 3 \cdot 4 = 24$$

$$5! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 = 120$$

$$6! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 = 720$$

$$7! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 = 5040$$

$$8! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 = 40320$$

$$9! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 = 362880$$

$$10! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot 10 = 3628800$$

The main property of the factorial:

$$(n + 1)! = (n + 1) \cdot n!$$

For example:

$$(5 + 1)! = (5 + 1) \cdot 5!$$

Indeed:

$$6! = (1 \cdot 2 \cdot 3 \cdot 4 \cdot 5) \cdot 6 = 720$$

If we calculate the value:

$$(1 \cdot 2 \cdot 3 \cdot 4 \cdot 5) = 5! = 120$$

In how many different ways can 5 students be placed on 5 chairs?

$$P_5 = 5! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 = 120.$$

In how many different ways can 6 letters be placed in 6 envelopes?

$$P_6 = 6! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 = 720.$$

In how many different ways can 4 books be distributed to 4 children?

$$P_4 = 4! = 1 \cdot 2 \cdot 3 \cdot 4 = 24.$$

Apples of 4 different colors are given. Take 2 of these apples how many different groups can be formed?

In this case, we have the following cases we can determine.

So, the number of groupings we are looking for is 6.

If the element A is first in n ways and then the element B is in m ways can be chosen, then the pair A and B can be chosen in $n \cdot m$ ways.

The use of MS PowerPoint presentation materials allows you to visually present the material being studied in the form of static text or graphic information and animation. This form of training is relatively easy to technically support (you need a projector and a computer with installed Microsoft PowerPoint, which is part of the standard Microsoft Office package). At the same time, behind the external ease of presentations costs careful preparation of the speech, planning of demonstrations materials, collection and synthesis of necessary information, clear knowledge of time frames and the correct choice of necessary technical means.

Most authors agree on what it should look like good presentation. The main tasks of the developer include the correct selection of colors, competent use of animation and illustrative material and clear structuring of the material.

For presentation text, it is recommended to use fonts and their sizes that ensure good readability and perception.

Images. Fonts typically used are Times New Roman and Arial. When repeating the same text on multiple slides, it is recommended to maintain the font style and size. For the name you should use the size font size of at least 28 pt., for regular text - at least 24 pt.

Maximum the total amount of text on slides is 10–15 lines. Font size may require adjustment as you move from room to room, as the brand of projector and location have a significant impact on the size of the projection.

Animation allows for interactive appearance capabilities individual slide elements in parts. Better for lecture presentation use one type of animation effect, for example emergence. Using different types of animation on the same slide (if it is not dictated by special tasks) distracts the audience and makes the presentation lightweight.

Creating hyperlinks allows you to more effectively navigate through presentation slides, as well as bring objects that are not included into the presentation. Into the presentation directly (text documents, tables, video materials, graphic materials, websites). A hyperlink can be issued to a text inscription, to a picture, or to a special control button. It must be borne in mind that all external sources of information, communication with which it is registered via hyperlinks, it is necessary to permanently store in the place where the hyperlink points and transfer it to another computer along with the presentation.

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**ANALYSIS OF THE ORGANIZATION OF STANDARDIZATION,
METROLOGY AND CERTIFICATION IN THE DIGITAL ECONOMY
IN UZBEKISTAN**

Abstract. This article provides historical data on the establishment of metrology and certification in our country. achieved in Information about the fact that the Russian government issued an instruction on the unconditional use of Russian measurements in Turkestan and the metrological history of the period that has passed until today, as well as the contributions of Western scientists to metrology given. Friendship, strategic partnership relations between Uzbekistan and Russia, state visits of the leaders of the two countries and the achieved results, as well as the effective work carried out in the political, trade-economic, military-technical, cultural-humanitarian spheres and the Central Asian region It is intended to make a brief comment on the views on the issue and to analyze the current political processes between the two countries. As a novelty of the work, it is possible to see that with the arrival of the President of Uzbekistan Sh. Mirziyoyev at the top of the government, the foreign policy has been significantly activated and is moving into an open policy mode.

Key words: Ammeter, rotating disk induction mechanism, wattmeter, phasometer, galvanometer, standardization, magnet.

Introduction: It is necessary to highlight the contribution of Ulugbek in the development and improvement of the theory of measurements, that in the territory of our country, great importance is attached to measurement work, that is, to the field of metrology. The fact that the information he recommended as a result of his astronomical observations and measurements differed very little from the information obtained on the basis of modern and sophisticated devices, and in some cases did not differ at all, still amazes scientists and specialists. The theory of measurements is also given special importance in "Nightmare" by Kaikovus, who traveled all over the world. Danish scientist H. Oersted invented the magnetic effect of electric current. The German physicist G. Ohm who used it in 1826 showed that the change of the magnetic shaft depends on the current passing through the conductor, i.e. the turning of the magnetic shaft to a certain angle under the influence of the magnetic field around the conductor. checked the dependence on the material. By making a tool based on this principle, Om created his own law [1]. In 1867, U. Thompson (Kelvin) created a galvanometer with a movable coil and a permanent magnet. The second half of the 19th century is famous for the invention of electromechanical energy sources in the history of electrical engineering. These sources cannot be used without electrical measuring instruments. The service of the Russian electrical engineer M.O. Dolivo

Dobrovsky in the creation of electrical measuring devices deserves special attention. He invented electromagnetic ammeters and voltmeters, rotating disk induction mechanisms. Based on these devices, wattmeters and phasometers were created. In 1872, A.G. Stoletov investigated the effect of the strength of the magnetic field on the magnetic absorption of iron and proposed a method based on the measurement of magnetic induction. Academician B.S. Jacobi, who used a ballistic galvanometer, proposed several devices for measuring electrical circuit parameters. He was the first to prove the need for a common supply unit for measuring electrical quantities. Because, at that time, electrical measuring devices were needed to compare the results of innovations and inventions in the field of electrical engineering, to prove complete similarity. Therefore, the need for general measurement support of the system of electrical quantities has arisen. Such a system was adopted at the 1st International Electrotechnical Congress held in Paris in 1881 [3].

The great Russian scientist D. I. Mendeleev - as the author of fundamental works in the field of weights and measures, made a great contribution to the development of the science of metrology. In 1892, on the initiative of D. I. Mendeleev, the "Chamber of Weights and Measures" was established in Russia. Another great service of the scientist is that he founded the implementation of the metric system in Russia and prepared it from an organizational point of view. Buesia was a suitable ground for the implementation of the metric system in 1918-1920. Standardization, metrology and certification in the republic. On April 18, 1923, according to the decision of the SNK of the Republic of Turkestan, the "Regulation on Weights and Scales" was approved, and the Turkestan Bureau of Weights and Scales was established under the committee for establishing internal trade. The Chamber of Comparison of Trade Scales and Scales was established in the city of Tashkent, the scope of which covered the entire territory of the Republic of Turkestan [2, 5]. In 1924, the first laboratory of state control over standards and measuring instruments (DNL) was established. In the same year, the name of the Chamber of Comparison was changed to the name of the Central Asian Chamber of Weights and Measures, and Kyrgyzstan became the founder of metrological services in the republics of Tajikistan and Turkmenistan. One of the biggest achievements of this period was the complete implementation of the metric system in our republic. In March 1930, a standardization committee was established under the Council of the Uzbek SSR, and in 1931 it was merged with the Chamber of Weights and Measures. In the years after the war, state testing laboratories (DTL) were established in each regional center. Their work was led by the representative of the committee on measuring instruments and measuring works under the Council of Ministers of the Uzbek SSR.

The laboratory of the Republic of Uzbekistan (UzRDTL) will be established in the city of Tashkent for state control over measuring techniques and standards. In 1979, UzRDTL was transformed into the Center of Standardization and Metrology of Uzbekistan (UzSMM) [3]. In 1992, standardization, metrology

and certification under the Cabinet of Ministers of UzSMM was changed to the state center of the Republic of Uzbekistan (Decision of the Cabinet of Ministers of Uzdavstandart No. 93 of March 2, 1992 "On the organization of standardization work from the Republic of Uzbekistan") [2, 3, 4]. Uzdavstandart is designated as the national office of the Republic of Uzbekistan in the fields of standardization, metrology and certification. In order to carry out the tasks assigned to it, Uzdavstandart and its regional offices have a fleet of sample measuring instruments and high-precision comparison instruments, including working standards and 2319 units. The new two-story building with an area of more than ten thousand square meters houses the laboratories, where the comparison of measuring instruments for 15 types of measurements is carried out. A repository of state standards is being created.

Conclusion: To conclude this article, it should be said that today the role of certification in ensuring the quality and efficiency of products is considered very high. It would not be wrong to say that the introduction of standardization, metrology and certification in the Republic of our first country led to the production of products that meet the high standards of foreign requirements. The aim of the article is to propose effective ways to introduce some of the introduced standards to new ones in our country, analyzing the standards of products that can withstand competition in today's globalization era.

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*Eshonqulova M.
Jizzax politexnika instituti assistent*

TEXNIK SHARTLAR, STANDARTLARNI JORIY QILISH MUDDATI VA ASOSIY TAMOYILLARI

Annotatsiya: standartlashtirish doimo muhim amaliy vazifalarni hal qilishga yo'naltiriladi va ilmiy texnik taraqqiyotga xizmat qiladi. Yuqorida aytganimizdek, yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish.

Kalit so'zlar: chegaraviy, standartlar, kvalitet, xatolik, st'byudent, ishonchlilik, taqqoslash, parametr, kvadrat, o'lchamlar.

*Eshankulova M.
assistant
Jizzakh Polytechnic Institute*

TECHNICAL CONDITIONS, STANDARDS IMPLEMENTATION TERM AND BASIC PRINCIPLES

Annotation: standardization is always aimed at solving important practical problems and serves scientific and technological progress. As we said above, the development and implementation of new types of state standards should review those that were.

Keywords: borderline, standards, quotient, error, styling, reliability, comparison, parameter, square, dimensions.

O'zbekiston Respublikasi standartlari va texnikaviy shartlarini ishlab chikish, odatda xar bir manfaatdor korxon va tashkilotning muxtor vakili bulgan mutaxassislardan tashkil topgan texnikaviy kumitalar (TK) kuchi bilan yoki standartlash buyicha tayanch tashkilotlar tomonidan amalga oshiriladi [1]. Standartlashtirish doimo muhim amaliy vazifalarni hal qilishga yo'naltiriladi va ilmiy texnik taraqqiyotga xizmat qiladi. Yuqorida aytganimizdek, yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish har yili shakllantiriladigan "Yangi turdagi davlat standartlarini ishlab chiqish va amalda bo'lganlarini qayta ko'rib chiqish bo'yicha respublika standartlashtirish rejasi"ga asosan amalga oshiriladi. U muayyan tamoyillarga amal qilgan holda o'tkaziladi. Ko'rib chiqilgan xato tarkibiy qismlarini kamaytirish uchun sxemalarga muvozanatni kiritish kerak. [2,3].

Kommutatorning eng maqbul varianti nazorat sargisining qisqa tutashuv rejimida kerakli tezlikni va minimal qo'llaniladigan qarshilikni ta'minlaydigan kalit deb hisoblanishi kerak [4].

Tizimlilik tamoyili. Texnik rivojlanish va mahsulot sifatini oshirish ishlab chiqarish jarayoniga, jumladan standartlashtirishni o'tkazishga tizimli yondashuvni talab qiladi. Hozirgi paytda standartlashtirish ishlab chiqarishning xom ashyo, materiallar, butlovchi buyumlar va tayyor mahsulotdan foydalanishning barcha bosqichlarini qamrab olgan bo'lishi, shuningdek barcha turdagi mahsulotlar sifatiga o'zaro aloqadorlikdagi talablar o'rnatishi kerak. Kompleks va oldinda boruvchi standartlashtirishni amalga oshirish, mahsulot sifatini nazorat qilishning kompleks tizimlarini joriy etish tizimlik tamoyiliga asoslanadi [5].

Qulaylik tamoyili. Sanoat va ishlab chiqarishning ko'p tarmoqlarida qo'llaniladigan buyumlarga standartlar belgilanadi. Ular parametrlarning katta diapozonida tarqaladi va shuning uchun standartlar ishlab chiqishda qulaylik tamoyilini qo'llashadi. Bu esa bir nomdagi turli buyumlar turkumlari va nomenklaturasini cheklashni, bir nomdagi buyumlar ayrim turkumlarining ishlatilish sohalari kengayishini yoki o'zaro almashinuvchanlik darajasi o'sishini ta'minlaydi, korxonalarni ixtisoslashtirish va kooperatsiyalashga, seriyali ishlab chiqarishni rivojlantirishga va mahsulotning arzolashishiga olib keladi [6].

Standartlarning ilg'orlik va maqbullik tamoyili standartlashtirishning mohiyati hisoblanadi va standartlarning qabul qilingan ta'riflarida o'z aksini topadi. Yangi standartlar fan va texnikaning zamonaviy talablariga javob berishi kerak. Yangi standartlar joriy etish minimal xarajatlar sarf etilib, maksimal mumkin iqtisodiy samara olishni ta'minlashi kerak [1].

Funksionnal o'zaro almashinuvchanlik tamoyili standart buyumlarning ishchi ko'rsatgichlari bo'yicha o'zaro almashinuvchanligini ta'minlaydi va shuning uchun kompleks va oldinda boruvchi standartlashtirishning asosiy tamoyili hisoblanadi [2]. Standartlarni o'zaro bog'lash tamoyili. Bu tamoyilni amalga oshirmay turib, yangi umumtexnik va tarmoqlararo standartlarni ishlab chiqish, Tuzilishi raqamli qurilmalar, kontrollerlar, mikroprotessorlar, kompyuterlardan foydalanadigan tizimlar diskretidir [7], kompleks hamda standartlashtirishni rivojlantirish mumkin emas [1].

Ilmiy-tadqiqot tamoyili. Barcha turdagi standartlarni ishlab chiqish zaruriy ilmiy tadqiqot ishlari o'tkazish bilan birgalikda olib borilishi kerak [6]. Materiallar nisbiy sarfining minimallik tamoyili. Sanotda va qurilishda tayyor mahsulot qiymatining katta qismini xom ashyo, materiallar va yarim fabrikatlar narxi tashkil etadi. Ishlab chiqarish hajmini e'tiborga oladigan bo'lsak, materiallarga ketadigan xarajatlarni 1% ga kamaytirish ham juda katta iqtisodiy samara beradi. Shuning uchun standartlar ishlab chiqishda detallarning ratsional tuzilmalarini tanlash, hisoblashning yangi uslublarini ishlatish, ilg'or texnologik jarayonlardan foydalanish kerak [8].

Standartlarning patent tozaligi tamoyili. Yangi mashinalar, mexanizmlar, asboblarni loyihalash, tayyorlashda va boshqa vaziyatlarda, boshqa mamlakatlar tomonidan patentlangan original tuzilmalar, texnologik jarayonlar, sinash va o'lchash uslublari va boshqa ob'ektlardan foydalanishga yo'l qo'yib bo'lmaydi.

Bu qoidani buzish, patent qonunchiligi nuqtai nazaridan, xalqaro jazo sanksiyalarining qo'llanilishiga olib keladi [7,9]. Standartlar, texnik shartlar va rahbariy hujjatlarning amal qilish muddati ularning kafolatlash muddatini ham belgilaydi. Patent materiallarini tahlil qilish natijasida mexanik kuchlanish transformatorlarini konstruktiv takomillashtirishning bir qator umumlashtirilgan usullari olingan, bu erda eng muhim xususiyatlar: asosiy kuchlanish yo'nalishini o'zgartirishning sezgirligi va xatosi [1,10].

Texnik shartlar, standartlarni joriy qilish muddati va asosiy tamoyillarini ta'limni xalqarolashtirish yoki ta'lim migratsiyasi ilmiy va ta'lim faoliyatida xalqaro integratsiya jarayonini anglatadi. Ushbu jarayonning roli katta, chunki u mamlakatlar va xalqlar o'rtasidagi madaniy aloqalarni faollashtiradi, ta'lim sohasidagi yutuqlar bilan o'zaro almashinuvni kengaytiradi, shuningdek talabalar o'rtasidagi o'zaro almashinuvni kengaytiradi. Mamlakatlarning rivojlanishi uchun bu jarayon o'z ta'siriga ega. Hozirgi vaqtda universitetlarning axborot va ta'lim muhiti yaratilayotgani va ularda o'quv mazmuni joylashtirilganligi sababli, ijtimoiy-madaniy, lingvistik va akademik moslashuvdan tashqari, kichik kurs talabalari uchun axborot ta'lim resurslaridan foydalanishga tayyorgarlikni shakllantirish vazifasi turibdi [11,12].

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*Galimyanov A.F., Ph.D.
associate professor*

Kazan (Volga Region) Federal University

*Irisboyev F.B.
assistant*

*Department of Radioelectronics
Jizzakh Polytechnic Institute*

DYNAMIC AMPLIFIER BASED ON FIELD TRANSISTORS

Abstract. Nowadays, semiconductor structures have great potential for a variety of new applications. Transistor-type amplification devices from this point of view, their temperature, 324 light radiation, pressure, etc. showed that it can record. In this article, certain works on the physical basis of temperature and light sensitivity of diode and transistor structures, as well as on the issues of controlling their properties through constructive and schematic technical solutions are considered.

Key words: semiconductor structures, transistor amplifier, diode, transistor, light radiation, effect of signal on power supply switching, energy efficiency of sound amplifiers.

Embedded systems such as MP3 players, mobile phones, PDAs and GPS integrate increasingly complex functions and therefore consume more energy. The performance time of these embedded systems directly depends on the battery technology used, as well as the total power consumption. Among these functions, the audio part accounts for a third of the power consumption in a mobile phone. Therefore, reducing the power consumption of the embedded audio system is a key factor in improving the autonomy of the embedded system. It is important to improve the energy efficiency of audio amplifiers. Our article is about reducing the power consumption of audio amplifiers for earphones [1]. Runtime is one of the main areas to improve the runtime of the headset in mobile phones.

Since 1915, when the first generation of valve amplifiers provided audio amplification, great advances have been made in electronics with the advent of transistors and related architectures such as the linear AB amplifier. They made it possible to reproduce the audio signal with excellent linearity and relatively low implementation. However, Class AB amplifiers have limited efficiency in the relationship between the RMS voltage of the V_{OUT} signal and the power supply V_{DD}.

$$\eta_{AB} = \frac{\pi}{4} \times \frac{V_{OUT}}{V_{DD}}$$

This expression is valid for pure sinusoidal signals with negligible quiescent current. In practice, the efficiency will be lower in real working conditions [2]. In fact, the required sound level is never maximum, and the shape of audio signals differs from a sinusoidal wave with a high dynamic range (with a peak factor of 5 to 20 dB). The nominal power delivered to the headphones is less than the maximum power, typically 100 μ W (about 30 mW into 32 Ω at 1 Vrms). Therefore, the output amplitude is very low relative to the voltage resulting in only a few percent efficiency. Other structures have been explored to improve the efficiency of amplifiers used in hearing aids. Switched amplifiers, i.e. Class D [1] show high efficiency. Hybrid structures were introduced to combine the advantages of switched architecture (small conduction losses) and linear architecture (small static losses and good linearity). Parallel hybrid amplifiers (class-K) [1-2] have low efficiency at only 100 μ W due to high static consumption.

A Class-G or H-type series hybrid amplifier is an architecture that significantly increases nominal efficiency with high linearity. They include a class AB amplifier supplied by one or two switching voltage converters controlled by a level detector (Fig. 1). A negative voltage regulator is used to center the common mode of the output signal to zero, thus avoiding the use of external AC coupling indicators. The principle is to provide a linear amplifier dynamically as a function of signal amplitude to reduce conduction losses. The current Class-G topology is shown in Figure 1. Five blocks can be optimized to improve efficiency: battery cell, linear amplifier, speaker, DC/DC converter and power supply switching algorithm (PSSA) implemented.

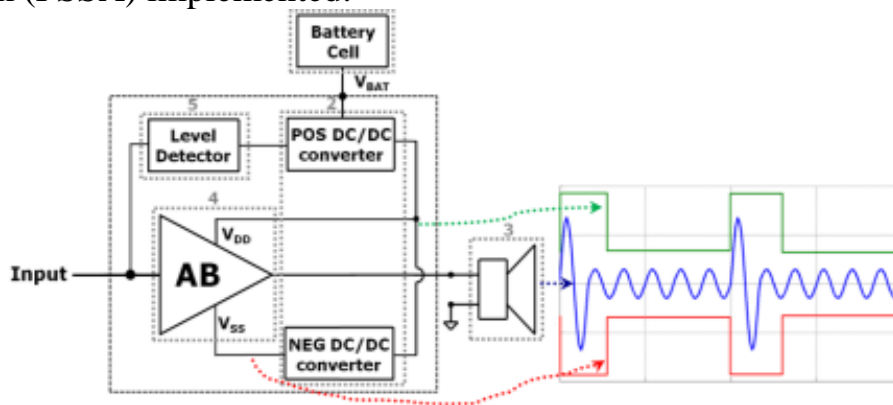


Figure 1. Class-G topological signal transient amplification diagram.
METHODS.

1. Class G amplifiers with more than 5000 transistors [require weeks of computation to simulate transients of a few milliseconds at the transistor level. To reduce this computational time and enable longer transient simulations, a fast and accurate model is proposed.

2. Based on the current most used Class-G architecture. It consists of a Class-AB amplifier with two switching DC/DC converters connected to a level

detector to control the level of the power supplies. The purpose of this level detector is to move the power supplies as close as possible to the output signal without clipping it to reduce losses in the class AB amplifier [3]. Therefore, it changes the reference of the two converters as a function of the amplitude of the input signal. However, the change in amplitude of the signal may be faster than the time it takes to reach the next power supply value, which causes the output signal to be cut off. Furthermore, current class G stand-alone amplifiers [4-5] with their analog-type inputs do not allow any delay between decision making and signal amplification. A difference between the output signal amplitude and the power supply is introduced to avoid any final clipping.

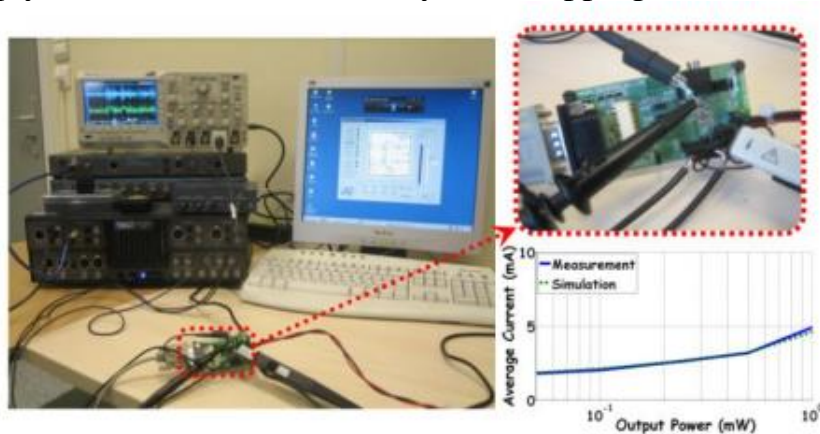


Figure 2 Model/measurement comparison.

Two class G2 amplifiers [6,7] were used to validate our model. The input parameters of the model were found from the measurements. The simulation results were then compared with the different power characteristics of these circuits. Figure 2 shows the comparison result for the test bench and circuit [8,9]. The configuration used here is a 47Ω pure resistive charge, with various audio test signals at 3.6V. The relative error in consumption is 5% to 10% over the entire tested power range. Thus, these results confirm the reliability of our modeling.

Effect of signal on switching power supply Figure 3, we compare the consumption given by the simulated from the model for three test signals. Therefore, the signal used in consumption depends on the selected PSSA. For example, a power increase of 10 mW for signal #1 is $|aVSS|$ has to be achieved. The power supply switches to its second value. For audio signals (No. 2 and No. 3), the crack becomes more progressive as the crest factor is increased. PSSA therefore acts at a lower power than observed [10,11].

CONCLUSION.

In conclusion, this paper presented a PSSA strategy study for a series hybrid amplifier dedicated to headphones to reduce power consumption. First, behavioral modeling was performed to simulate consumption and reconfiguration, as a function of PSSA, to predict sound quality [12]. This modeling made it possible to significantly reduce the computational time, thus allowing the simulation of

real signals of several seconds. The model is also validated in two existing schemes. In addition, it can be easily adapted to other electrical architectures.

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Gulimmatova M.X.
Xorazm viloyati Gurlan tumani
1-son kasb-hunar maktabi
Informatika fani o'qituvchisi

INTERNET TARMOG'IDAN TO'G'RI FOYDALANISH MADANIYATI

Annotatsiya: ushbu maqolada, internet tarmog'ining vujudga kelishi, hozirgi kundagi ahamiyati hamda undan to'g'ri foydalanish madaniyatini shakllantirish haqida ma'lumotlar keltirilgan.

Kalit so'zlar: Internet tarmog'i, xavf, tajovuzkor va ijtimoiy xavfli materiallar, olam, global, tarmoq.

Gulimatova M.Kh.
Informatics teacher
Vocational school No. 1
Gurlan District, Khorezm Region

CULTURE OF CORRECT USE OF THE INTERNET NETWORK

Annotation: in this article, information is presented about the emergence of the internet network, its current importance and the formation of a culture of its correct use.

Keywords: Internet Network, risk, aggressive and socially dangerous materials, universe, global, network.

Internet tarmog'i kun sayin har bir tashkilot, ijtimoiy muassasa, o'quv yurtlari va xonadonimizga kirib kelmoqda. Respublikamizda internetdan foydalanuvchilar soni ortib bormoqda. Ko'pchilik yoshlar hayotiy tasavvurga yetarlicha ega bo'lmasa-da, lekin axborot vositasiga aylanib qolmoqda. Bu shunday taajjubsiz holatki, sababi yoshlar o'zlariga referat yoki kurs ishi izlab, musiqa eshitish, o'ziga yoqqan kitobni sotib olish yoki forum mavzularini jonli mushohadalarida ishtirok etish orqali internetga kirib bormoqdalar.

Internet ta'lim olish, dam olish yoki do'stlar bilan muloqot qildishning ajoyib vositasi bo'lishi mumkin. Ammo hayotga real ko'z bilan qaraydigan bo'lsak, tarmoq o'z o'rnida xavfdan ham xoli emas albatta: uning ham o'ziga xos bezoriligi, jinoiy olami, zarari va nomaqbullik tomonlari mavjuddir. Virtual muloqot insonlarga, bolalarga zarar keltiruvchi manba bo'lib qolishi ham hech gap emas aslida. Oxirgi vaqtlarda Internetda ko'pgina tajovuzkor va ijtimoiy xavfli materiallar paydo bo'lib qolmoqda.



Internet bu – hozirgi zamon talabidagi yagona ommabop kompyuter tarmog'i bo'lib, bizga barcha sohalarga oid noaniqlik ya'ni ongimizga mavhum bo'lgan tushunchalar haqida ochiq, oddiy va ravon ma'lumot beruvchi axborot manbaidir.

Tabiiyki, hozirgi kunda ushbu omilga bo'lgan ehtiyojmandlar soni kundan kunga ortib bormoqda. Mazkur tarmoq butun dunyo miqyosida global tarmoq hisoblanadi. Zero unda mavjud yangiliklardan xabardor etuvchi matnlar, tasvir hamda ovoz xizmatlari va bir qator imkoniyatlar barcha jabhada katta yengilliklarni yuzaga keltirayotgan bo'lsa-da, ammo ikkinchi tomondan insoniyatni beixtiyor virtual olamga jalb etib bormoqda.

Ayniqsa bu ta'sir doirasidan o'smir yoshlar ham yo'q emas albatta. Bu borada mutaxasislarning so'zlari quyidagi natijalarni isbotlab bermoqda:

Internet tarmog'idagi ijobiylik insonning fan, soha va faoliyatiga bog'liq muhim aniq dalillarga ega bo'lishida har tomonlama qulayligi va tegishli vaqt miqdorining tejalishiga olib kelishi hammaga ayon, lekin qiziquvchanlik sababli Internet axborotlaridagi ortiqcha ma'lumotlarga haddan ziyod berilib ketishlaridir. Izlanuvchanlik, fikriy rivojlanish, mushoxada, tahlil qilish qobiliyati hamda xotiraning o'tkirlik darajasini susaytirishga sabab bo'lmoqda.

Ma'lumki, Internet vositasidan foydalanish hech kimga majburiy bo'lmagan va insonning o'z tafakkuridan kelib chiqqan qonun-qoidalar asosida bo'lishi kerakligi hamda undagi me'yor talablari, ya'ni Internet tarmog'idan axborotlarni to'g'ri tanlash har bir jihatdan o'rinlidir. Bundan ko'rinib turibdiki, ushbu tarmoq vositasining o'z ichiga qamrab olgan axborotlar miqyosi shu qadar keng va ko'p ekanligi gohida o'zimizga kerakli bo'lgan ma'lumotlarni ajratib olishimizda ham bir muncha qiyinchilik tug'dirmoqda.



Barchamizga ma'lumki, Internetda ishlashimiz uchun qidiruv tizimining o'rni beqiyosdir.

O'zingizga kerakli barcha ma'lumotlarni shu kabi biron bir saytning "izlash" katakchasiga yozib, chiqarilgan ko'pgina ma'lumotlar

ichidan o'zingizga keraklisini tanlab olaverasiz yoki ma'lum bir saytning manzili yodingizdan ko'tarildimi, yana o'sha qidiruv sistemalari yordamga keladigan saytga aloqador bo'lgan kalit so'zlarini terasiz va qarabsizki, o'sha sayt qarshingizda namoyon bo'ladi.

Internet tarmog'ida: Yahoo, Google, Ref.uz singari yana boshqa nomlar bilan ataluvchi qidiruv tizimlari mavjuddir. Yuqoridagi qidiruv dasturlari haqida batafsil va umumiy ta'rif berishda ularni biror bir tizim orqali masalan, Google tizimini tushuntirish albatta maqsadga muvofiq bo'ladi. Bu kompaniya Internetdagi yetakchi qidiruv tizimi hisoblanadi, dunyo bo'ylab tarmoq foydalanuvchilarning o'ntadan yettitasi xoxlagan ma'lumotlarni topish ilinjida aynan mana shu saytga murojat qilishadi. Tizim har kuni deyarli 50 millionga yaqin so'rovlarni qabul qiladi, sakkiz milyardlab veb-sahifalarni indeksatsiya qiladi. U 101 tildagi axborotni ham izlab topishi mumkin. Keyingi yillarda butun dunyo internet foydalanuvchilari orasida keng ommalashib borayotgan Google tizimi 1998 – yil sentyabrda ishga tushgan. Hozirda bu kompaniyaning qidiruv tizimlaridan tashqari yana bir qator foydali va qulay xizmatlari mavjud va ular soni juda ortib bormoqda.

Darhaqiqat, hozirda nafaqat Internet tarmog'i vujudga kelganligi, bundan tashqari shu kabi jahonaro rivojlanib kelayotgan turli – tuman axborot texnologiyalar yosh avlodga ijobiy ta'sir kuchini o'tkazayotganligini bir tomondan quvonarli bo'lsa – da, ammo ikkinchi tomondan ularni turli salbiy saboqlardan asrash maqsadida tarbiyaviy muhitni kuchaytirishga undaydi. Bugungi kunda xarbiy hizmatchilar radio–televidenie, matbuot Internet kabi vositalar orqali rang barang axborot va ma'lumotlarni olmoqda.

Hozirgi zamon axborot tizimining juda keng imkoniyatlaridan kelib chiqib aytish mumkinki, O'zbekistonda axborot olish, saqlash, foydalanish va tarqatishning umumiy manfaat va umumiy taraqqiyot nuqtai nazaridan boshqaruv mexanizmini yaratish, uning mohiyati va unsurlarini chuqur anglash zarurdir. Ana shu hayotiy ehtiyojdan kelib chiqqan holda, axborot sohasida milliy xavfsizlikni ta'minlash tizimini yaratishning quyidagi usullarini qo'llash madaniyatini zarur deb hisoblaymiz:

Birinchiidan, sotsiologik yo'nalish. Bunda axborot olish hamda tarqatish jarayonida jamiyat taraqqiyotining axborotini ijtimoiy voqelik sifatidagi roldan kelib chiqib, jamiyatda shakllanayotgan ijtimoiy ong yo'nalishlari ijtimoiy tafakkur darajasi va uning oqimlarini o'rganishni yo'lga qo'yish kerak. Aholi turli qatlamlari, qarashlari, kasbiy va boshqa ijtimoiy holatlari asosidagi fikrlash tarzini aniqlab borish zarurdir.

Ikkinchiidan, statistik yo'nalish. Ko'p millatli mamlakatda, xususan, 130 dan ortiq millat va elat yashayotgan O'zbekistonda millatlararo va dinlararo mojarolarni turli siyosiy manfaatlar va buzg'unchi g'oyalar ta'sirida kelib chiqishi mumkin bo'lgan nizolar manbalarini o'rganib borish, bu borada aniq hisob – kitoblarga tahliliy yechimlarga ega bo'lishi darkor.

Uchinchiidan, siyosiy konfliktologiya va siyosiy psixologiya. Axborot psixologik xavf avj olayotgan bir paytda, turli buzg'unchi g'oyalar inson ongi va tafakkuriga o'z ta'sirini o'tkazayotgan bir sharoitda siyosiy mojarolar kelib chiqish mumkin bo'lgan manbalarni o'rganish, omillarini aniqlash hamda siyosiy qarashlari, ruhiyati, ijtimoiy – siyosiy psixologik izchil ravishda o'rganib borilmog'i lozimdir.

To'rtinchiidan, mantiqiy tizimiy va funksional tahlil. Axborot tizimi, xususan, axborot psixologik ta'sir axborot siyosati tizimi va vositasining muhim qismi sifatida baholashi lozimdir. Voqelikka ana shu tarzda yondashib, ilmiy – tahliliy nazariy hamda amaliy xulosalar chiqarish kerak. Tig'iz axborotlashgan jamiyatda axborot oqimi ta'sirida shakllanayotgan ijtimoiy fikr fan nuqtai nazaridan izchil o'rganilmog'i lozim.

Yana shuni alohida ta'kidlash lozimki, Internet vositalaridan o'rin olgan jamiki axborot va ma'lumotlarning hammasi ham real, haqqoniy emasligi ayni paytda ayon bo'lmoqda. Bundan kelib chiqib aytish mumkinki, olinayotgan dalillarning qay darajada to'g'riligini ongli ravishda mushohada etish maqsadga muvofiqdir. Shundagina Internet orqali egallayotgan bilimlarimiz hayotimizda ijobiy samara berishiga ishonch hosil qilish mumkin.

Xulosa qilib aytganda, bugungi kunda inson ma'naviyatiga qarshi yo'naltirilgan, bir qarashda arziyasiz bo'lib tuyuladigan, kichkina xabar ham xattoki axborot olamidagi globallashtirish shiddatidan kuch olib, ko'zga ko'rinmaydigan, lekin zararini hech narsa bilan qoplab bo'lmaydigan ulkan bir ziyon yetkazishi mumkindir.

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Haydarova D.Sh.
intern-teacher
Gulistan State University
Institute of digital economy and innovation
"Accounting and Finance" department
ORCID:0009-0005-2739-3435

Achilboyeva S.O.
student
Gulistan State University
ORCID:0009-0008-3759-0792

Tokhtayeva M.T.
student
Gulistan State University
ORCID:0009-0005-0426-629X

MECHANISMS FOR DEVELOPMENT OF INTERNATIONAL ECONOMIC RELATIONS

Abstract. The article shows the problems in the field of global economic relations and the importance of solving them, as well as issues related to their current state. International economic relations have analyzed many problems that often hinder the continuous flow of trade, investment, and economic cooperation between countries. At the same time, the influence of factors such as exchange between foreign currencies, financial systems, and foreign investments is also covered.

Keywords: cooperation, integration, export, import, liberalization, development, foreign economic relations, investments, currency policy.

INTRODUCTION.

International economic relations focus on the study of how countries interact with each other in terms of trade, investment, and financial flows. It is an interdisciplinary field that combines elements of economics, political science, and international relations and is critical to understanding the relationship between states and the impact of this cooperation on the global economy. Success in this field often requires a deep understanding of economics, politics, and international relations, as well as a willingness to constantly learn and adapt to changing global conditions.

International economic relations include the set of economic relations of individual countries, their regional associations, as well as individual enterprises (transnational, multinational corporations) that are opposed to each other in the world economic system. Not the economy of foreign countries, but the specific aspects of economic relations between them are studied. International economic

relations, like any other science, studies not all economic relations, but the most returnable, typical, characteristic, determining relations [1].

LITERATURE ANALYSIS AND METHODOLOGY.

Finding solutions to problems arising in the field of international economic relations has always been studied. Avdokushin E.F., one of the European scientists, touched on this topic in his work "Mejdunarodnie ekonomicheskie otnoshenia", and our local scientists. According to Vahobov A., Burkhanov U., and Jumaev N., in the book "Investment of foreign countries", "international relations are emphasized as having two important mechanisms, these are international economic relations and the mechanism of their improvement" [2], while others " In the book "International Financial Relations" Vahobov A., Burkhanov U., Jumaev N. "International economic relations is a complex of various levels that frequently repeats itself in the world economic system, a single country, and its territorial associations and entities, "includes relations between separate organizations" [3].

The mechanism of international economic relations includes legal norms and means of their implementation (international economic contracts, agreements, "codes", charters, etc.), the activities of international economic organizations aimed at the implementation of the goals of the development of international economic relations.

RESULTS.

The mechanism of international economic relations includes legal norms and means of their implementation (international economic contracts, agreements, "codes", charters, etc.), the activities of international economic organizations aimed at the implementation of the goals of the development of international economic relations.

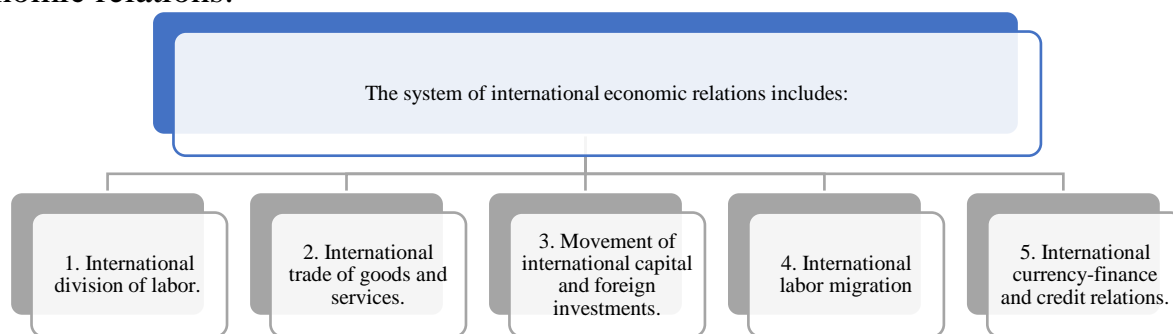


Figure 1. Structure of international economic relations.

International economic relations (mainly trade) existed even before the world economy. For example, FDI between European countries, and international economic relations between regions (Europe-North Africa, Europe-Middle East, etc.) (Fig. 1). These relations were regional. With the emergence and development of the world economy, international economic relations have expanded and deepened and acquired a global character. International economic relations based on the economy of individual countries or the world economy are more dependent

on them. However, in the course of the implementation of international economic relations, it becomes a state subject to its own laws, a form of existence and development of the world economy, and its internal mechanism.[4]

Several problems may arise in the field of international economic relations. Here are some common problems:

Table 1 Analysis of emerging problems in the field of international economic relations

1.	Trade disputes	Countries can engage in trade disputes over issues such as tariffs, subsidies, intellectual property rights, or unfair trade practices. These differences can lead to trade wars, and protectionism and hinder global economic cooperation.
2.	Economic inequality	The world economy often faces problems of income inequality both within and between countries. An imbalance in the distribution of wealth can lead to social and political conflicts, hinder development, and create imbalances in trade and investment.
3.	Currency change	Fluctuations in exchange rates can create challenges for businesses engaged in international trade. Sudden currency fluctuations can affect the competitiveness of exports and imports, affect investment decisions, and create uncertainty in the global financial system.
4.	Barriers to market entry	Some countries put up barriers that restrict the entry of foreign companies into their markets. These barriers may include tariffs, quotas, discriminatory regulations, or non-tariff barriers that make it difficult for businesses to compete on a level playing field.

Solving these problems requires international cooperation, negotiations, and the development of fair and transparent rules for managing economic relations between countries (Table 1).

DISCUSSION.

Several problems may arise in the field of international economic relations. Solutions to emerging problems in the field of international economic relations

1. Trade Disputes: Encouraging dialogue and negotiation between countries involved in trade disputes will help find mutually beneficial solutions. The use of dispute settlement mechanisms such as those provided by the World Trade Organization (WTO) can provide a platform to resolve disputes and promote fair trade practices.

2. Economic Inequality: Governments can implement policies to address income inequality, such as progressive taxation, social welfare programs, and investments in education and health. International cooperation can also focus on promoting inclusive economic growth, reducing poverty, and bridging the development gap between countries.

3. Currency change: Central banks and banking bodies can try to maintain stable exchange rates through the relevant monetary policy. International

coordination and cooperation in the management of exchange rates will help to minimize change and ensure stability for international trading enterprises.

4. Access barriers to the market: negotiations and implementing trade agreements aimed at reducing trade barriers and encouraging open markets can expand market access to the market. Participation in bilateral or multilateral trade negotiations will help solve the problems associated with the harmonization of tariffs, without tariff barriers and regulation.

CONCLUSION.

In short, solving international economic relations requires joint efforts to develop justice, international organizations, and the private sector in global economic relations, and joint efforts to develop justice, transparency, and cooperation. According to the research, the following suggestions in the field of international economic relations and their solutions were made.

1. Sales imbalance should be prevented: many countries are experiencing a trade balance, they import more goods than exports. This can lead to economic instability and other countries.

2. Elimination of currency manipulation: Some countries manipulate their currencies to have a competitive advantage in international trade, which can compromise market forces and unfair competition.

3. Facilitated and fair trade stimulus helps to eliminate trade imbalances and protective trends that stimulate fair competition and reduce trade barriers

4. Strengthening international economic institutions: Expanding the powers of organizations such as the World Trade Organization (WTO) and the International Monetary Fund (IMF) to monitor and regulate international economic relations will help prevent currency manipulation and unfair trade practices.

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*Igamkulov Z.A., doctor of physics and mathematics
leading researcher
NEOFT VBLHEP JINR (Dubna, RF)
Suyarova M.Kh.
associate acting professor
department of Radioelectronics
Jizzakh Polytechnic institute*

ALTERNATIVE ENERGY SOURCE, SOLAR BATTERY

Annotation. Solar energy can be used both for heat production and for electricity production. The process of producing electricity in a non-traditional way takes place, because obtaining electrical energy without wasting energy, obtaining electrical energy from mechanical energy of water, obtaining energy from organic, obtaining ecological energy, obtaining energy, obtaining energy.

Key words: obtaining electricity using sunlight, photovoltaic element, concentration of charges, potential difference, serial and parallel connection of photovoltaic elements, accumulators.

Solar energy can be used for both heat production and electricity production. Non-conventional generation of electricity is developing, because the prospect of obtaining electricity without wasting fuel is a good method.

It is possible to get electricity using the wind, get electricity using the mechanical energy of water, get electricity from organic substances as a result of the chemical reaction of substances from animal waste and sunlight. One of the convenient ways to obtain electricity using sunlight is among them. The range of sunlight is electromagnetic energy with frequency, and the wavelength of visible light is $\lambda=0.38\div 0.78 \mu\text{m}$ [1,2].

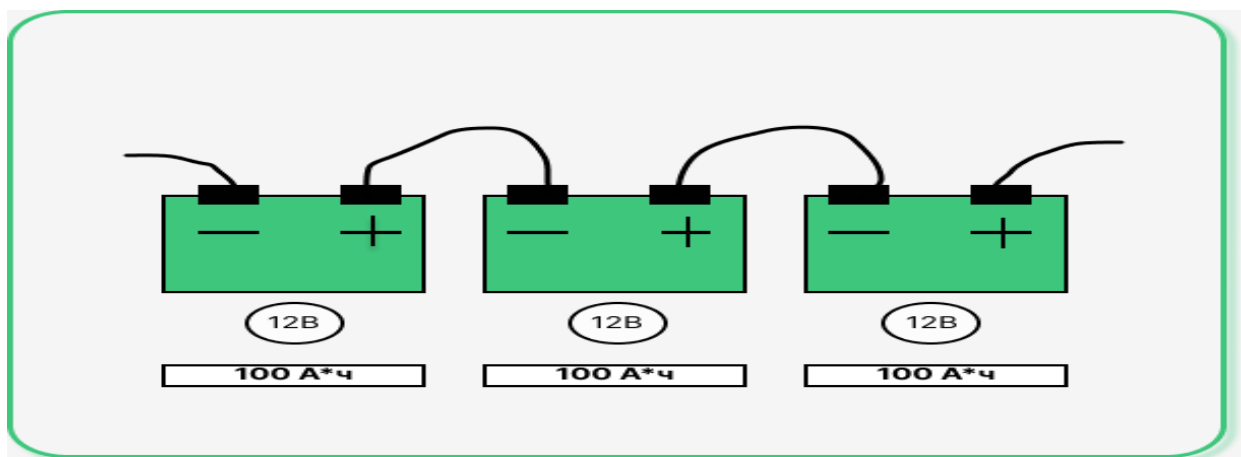
Elements that convert sunlight into electricity are called photovoltaic elements. Selenium, silicon and gallium arsenide are the materials of photovoltaic elements. An output voltage of up to $0.45\div 0.6 \text{ V}$ can be obtained from a photovoltaic element made of selenium and silicon, and up to 0.87 V from a photovoltaic element made of gallium arsenide [3].

Photovoltaic element is made as follows: in one of two thin silicon plates, the main charge carriers are electrons (n), and the non-main charge carriers are holes (p). In the second plate, the non-main charge carriers are electrons (n). If we stick them together, as a result of diffusion in the middle part, a positive layer is formed in the boundary part of the crystal with the main charge carriers n, and a negative layer is formed in the boundary part of the crystal with the main charge carriers p, that is, in the boundary part of the crystals p-n layer is formed [4,5].

When a light beam falls on the plate at an angle of 90° , holes in the n region move to p, and electrons in the p region move to n. As a result, the concentration

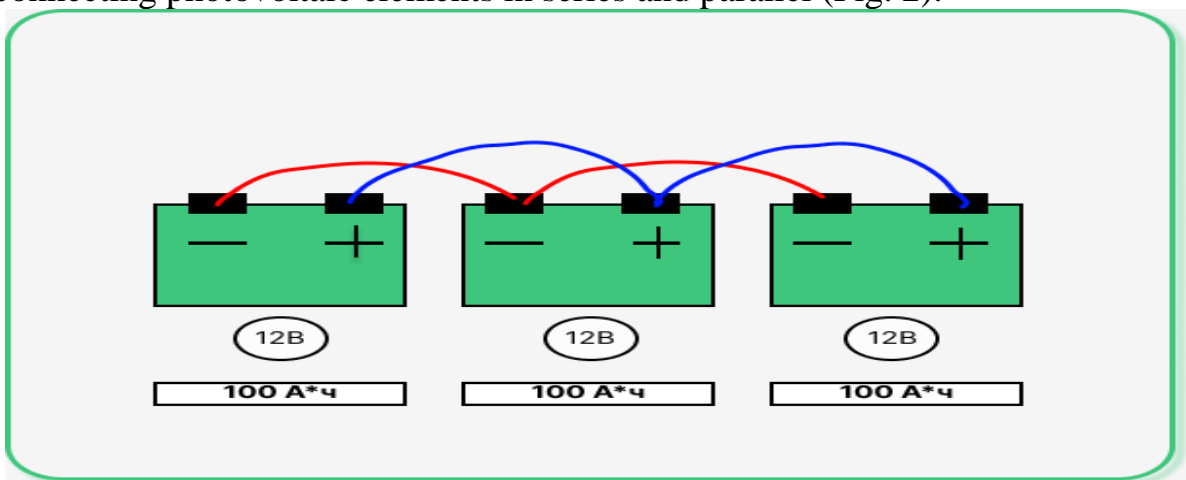
of charges of the same sign increases in the crystals, and a potential difference is created, which leads to an increase in the Electroconductive Force. Forming a chain through the outer part of the crystals and connecting a resistance, the photocurrent PhE flows through the chain. The current at the output of the photovoltaic element is directly proportional to the density of the incident light beam and the increase in the crystal surface. But photo PhE does not depend on the size of the surface. Most often, the voltage at the output of the photovoltaic element is equal to 0.45 V [6].

To increase the output voltage from the solar cell, it is necessary to connect several photovoltaic elements in series (Fig. 1).



To increase the current, photovoltaic elements are connected in parallel. When several photovoltaic elements are connected in series, the negative pole of the first photovoltaic element is connected to the positive pole of the second photovoltaic element, and so on. When a photovoltaic element is connected in parallel, the poles of the elements are connected accordingly [7,8].

If it is necessary to increase the current and voltage in the solar cell at the same time, the required current and voltage for the load are generated by connecting photovoltaic elements in series and parallel (Fig. 2).



Photovoltaic cells do not produce electricity on cloudy days and when it is dark. Therefore, it is advisable to use it in parallel with the electric source

accumulators. When the photovoltaic cell is not producing electricity, the battery works and supplies the load with electricity [9].

In addition to supplying electricity to the load, the battery can also be charged when the photovoltaic cell is generating electricity. For this, a photovoltaic battery, accumulator and load are connected in parallel. The solar battery is convenient to use, safe, environmentally friendly, but the production of photovoltaic elements is technologically more expensive, but it will definitely pay off over time. Because there are many sunny days in Uzbekistan. Therefore, it is desirable to build and operate an industrial enterprise that will produce millions of photovoltaic elements [10].

Use of solar batteries in the economy and technology. Today's concepts of solar cells, batteries and photovoltaic devices have historically appeared 50 years ago, and during the last 10-15 years they have entered the national economy and ordinary people's lives as a source of energy. The essence of the operation of these devices is based on the processes of absorption of solar radiation and separation of charge pairs created as a result of potential barriers created in the semiconductor and transfer to the external electric circuit.

As a result of fundamental researches in the initial period, it was found that ensuring complete absorption of the spectrum of solar radiation depends on the properties of the material. For the practical implementation of solar cells in Earth conditions, it is necessary to increase the profitability of their production and reduce the cost while achieving the maximum efficiency of solar utilization.. This process depends on the factors in house q [11].

1. Reducing material expenses
2. Using relatively cheaper materials for making solar cells.
3. Mechanization and automation of the solar element preparation process and some technological operations.
4. To simplify the technological processes of preparation and strive to develop an optimal technological route.

In order to actively develop solar cell production technology, use homogeneous technological processes and relatively reduce the cost of cells, it is recommended to obtain thinner and cheaper layers, as well as to use as much polymer materials and raw materials as possible in cell production technology [12].

Recently, the relative reduction in the cost of solar cells is directly linked to the improvement of the silicon extraction process. For example, a method of recovery from silicon dioxide has been developed to obtain silicon with pure semiconductor properties. A method of continuous growth of silicon ribbons has been created [13].

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A COMPARATIVE ANALYSIS OF ARTIFICIAL INTELLIGENCE IMPLEMENTATION IN CIVIL SERVICE USING PROJECT MANAGEMENT STANDARDS

Annotation. This research delves into the complex interplay between technological innovation and ethical considerations in the integration of artificial intelligence (AI) within civil service frameworks. Focusing on the practical aspects, the study conducts a comparative analysis of foreign experiences, particularly highlighting the role of project management standards. By scrutinizing the adoption of AI technology, the ethical implications, and the efficacy of project management standards, the research aims to contribute insights into achieving a harmonious and responsible AI implementation in civil service.

Keywords: Artificial Intelligence, Civil Service, Project Management Standards, Technological Innovation, Ethical Considerations, Comparative Analysis, Governance, Public Administration, AI Implementation, Legal Frameworks.

Introduction. The integration of artificial intelligence (AI) technology into civil service holds paramount importance in modern governance. As societies progress into the digital era, leveraging AI in public administration introduces unprecedented opportunities for efficiency, innovation, and improved service delivery. This transformative integration has the potential to streamline bureaucratic processes, enhance decision-making, and optimize resource allocation.

AI's capacity to analyze vast datasets rapidly and make data-driven predictions can revolutionize policy formulation and implementation. Moreover, automation of routine tasks allows civil servants to focus on high-value responsibilities, fostering a more agile and responsive government. As technology continues to advance, embracing AI in civil service becomes not just advantageous but imperative for staying abreast of societal needs and global developments.

However, amid these promising prospects, ethical considerations must be integral to the implementation of AI in civil service. Striking a balance between technological advancements and ethical principles is crucial to ensure responsible governance, protect citizens' rights, and maintain public trust. Thus, the integration of AI into civil service represents a pivotal step towards modernization, efficiency, and, critically, ethical governance.

Literature review. In global literature and practical applications, diverse approaches to the digitalization of public administration have been conceptualized and put into practice [1; 2; 3; 4], These encompass not only the digital transformation of public administration but also various evolutionary paths of its digitalization [5; 6], Additionally, standards or models assessing the maturity of digital government are formulated and actively put into effect [7; 8]. The exploration extends to different methodologies for evaluating the efficacy of information and communication technologies within the public administration system. Furthermore, there is a focus on developing methodologies for appraising the effectiveness of employing artificial intelligence technologies in governmental operations [9]. The primary challenges and benefits of adopting a project-oriented approach in organizational development are scrutinized [10] An analysis of the effectiveness of integrating project management standards into public service, evaluating its impact on enhancing Uzbekistan's standing in international rankings and indexes was held. It was also examined the organizational and economic mechanisms governing the initiation and progression of this developmental process [11].

Research methodology. Analytical methodology and a comparative approach are employed in this research. The investigation relies on examining current statistical and analytical data, both foreign and domestic, concerning artificial intelligence and its practical implementation within public administration. Theoretical frameworks developed by scholars engaged in the exploration of artificial intelligence, encompassing its potential and challenges in contemporary contexts, form the foundational basis of this study.

Analysis and discussion of results. P.M. Morhat defines artificial intelligence (AI) as a system, whether fully or partially autonomous, that is self-organizing and can exist in a computer-software virtual, cyber-physical, or bio-cybernetic form. This definition encapsulates a range of capabilities and functionalities within AI [12]. According to some experts, AI encompasses a diverse array of rapidly advancing technologies and processes. Notably, machine learning emerges as a pivotal and actively evolving domain within AI. Machine learning, classified as a subset of AI methods, is extensively applied in the realms of Big Data and the Internet of Things (IoT). It involves the study and development of algorithms for automated pattern recognition and the extraction of knowledge from extensive datasets. Additionally, machine learning extends to training-based hardware systems that, leveraging acquired data, generate predictive values and recommendations [13].

Governments globally are eager to leverage the transformative potential of artificial intelligence (AI) for both economic growth and streamlined government operations. Numerous countries have publicly declared the formulation of AI strategies. For instance, Canada invested \$125 million in 2017 to establish the Pan-Canadian AI Strategy, fostering initiatives like AI Institutes, Academic Chairs, the AI and Society Program, and the National AI Program. China's State

Council outlined the "Next Generation Artificial Intelligence Development Plan" in 2017, emphasizing AI applications across various public services and proposing a pivotal role for AI in policy-making.

The United Arab Emirates unveiled its National Artificial Intelligence Strategy 2031, aiming to create a smarter and more efficient nation. The strategy focuses on investing in AI technologies and tools to enhance public administration efficiency, anticipating a 50% reduction in government spending and a 35% increase in national GDP. France introduced a digital strategy for AI in 2018, emphasizing meaningful AI and European collaboration. South Korea's plan, "Mid-term and Long-Term Master Plan for Preparing for the Intelligent Information Society," prioritizes citizens in creating an intelligent information society. The United States, with a robust AI ecosystem and global influence, leads in AI, followed by China, aspiring to be a leader by 2030.

The United Kingdom, thanks to its financial hub status, actively supports AI projects. Other countries like Canada, Japan, France, and Germany also play roles in the AI landscape. P.M. Morhat defines AI as a self-organizing computer-software or cyber-physical system with varying degrees of autonomy. Machine learning is a key area in AI, focusing on automated pattern recognition and knowledge extraction from vast data sets, contributing to the development of predictive values and recommendations.

In recent years, Uzbekistan has witnessed positive shifts in its international rankings across various domains due to the integration of digitized elements into public administration. Specifically, in 2014, the country held the 100th position in the UN e-Government Development Ranking. By 2022, it advanced to the 69th position among 193 countries, marking an improvement of 18 places from the previous year. This ascent placed Uzbekistan among the top 10 countries globally, showcasing its significant progress in electronic government development.

Furthermore, the World Bank's GovTech Enablers index positioned Uzbekistan as the 4th country worldwide in terms of digital skills and innovations in public services. This ranking reflects a notable rise of 65 places compared to 2020. Additionally, the "GovTech Maturity Index" for state and public services demonstrated Uzbekistan's remarkable advancement by climbing 37 places to secure the 43rd position out of 198 countries. This achievement propelled Uzbekistan into the "A" group of leading nations in digital transformation.

However, the Government Effectiveness Index indicated a different perspective, with Uzbekistan's average score at -0.2 points in 2021. This suggests room for improvement compared to the world average of -0.03 points for 191 countries in the same year. Despite variations in specific indices, Uzbekistan's overall trajectory in international rankings signals a commendable commitment to advancing its digital capabilities and enhancing public services [14] (Figure #1).



Figure #1. Uzbekistan's GEI index by years

Of course, international ratings have an impact on the country's image and its foreign political and economic relations. This, in turn, leads to an increase in the demand for public service and its quality. The standards of labor management introduced to public service greatly contribute to increasing its positive potential.

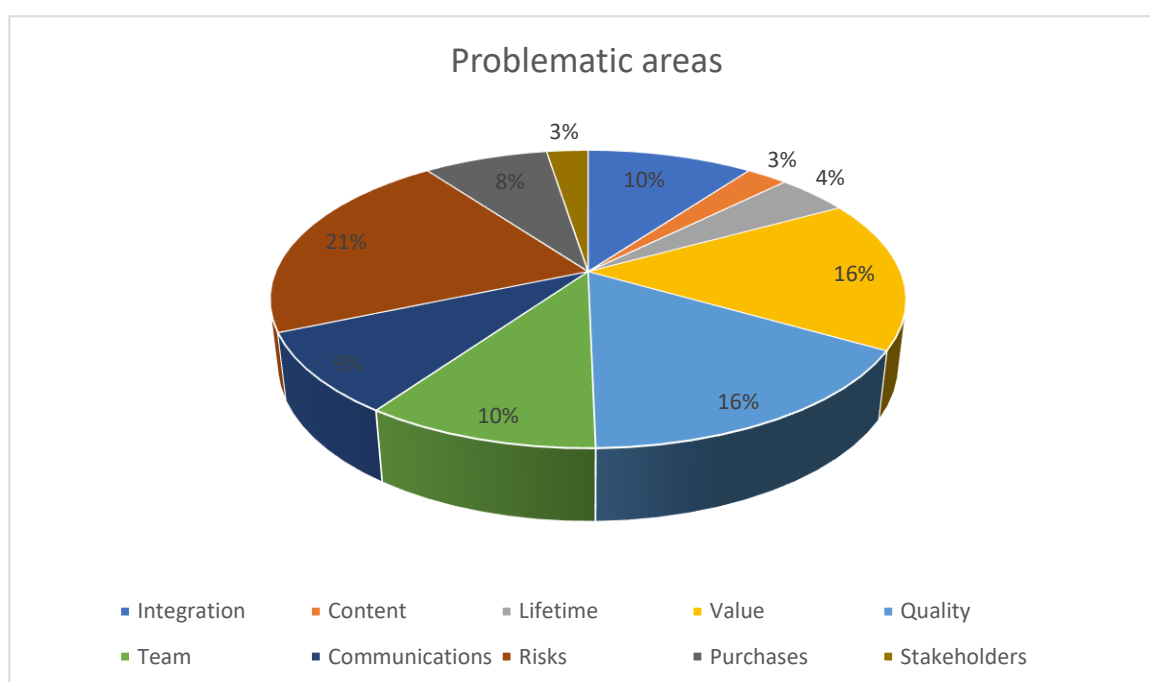
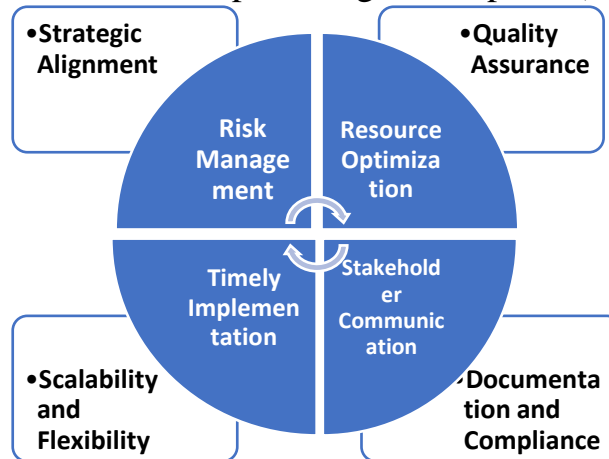


Figure 2. Problem areas of PM standards implementation in civil service

However, there are a number of difficulties in this matter. In a survey conducted among civil servants of Uzbekistan, 21% of participants noted project risk management as the most problematic and complex area in project management, while 16% of participants noted that it is related to quality and value management. Only 3% of participants noted the complexity of project content and stakeholder management, indicating that these areas do not cause much difficulty (Figure 2).

The role of project management standards in optimizing AI adoption is crucial for ensuring a structured and effective integration of artificial intelligence (AI) technologies into various projects and processes. Project management standards provide a framework that helps organizations streamline the implementation of AI initiatives, ensuring they align with organizational goals and industry best practices. Here are key aspects highlighting the importance of project management standards in optimizing AI adoption (Figure #3):



Picture #1. The importance of project management standards in optimizing AI adoption

Project management standards enable organizations to align AI initiatives with overall business strategies. By defining clear objectives, milestones, and deliverables, these standards ensure that AI projects contribute directly to organizational goals and priorities. The adoption of AI involves inherent risks, including technical challenges, data privacy concerns, and ethical considerations. Project management standards provide a systematic approach to identifying, assessing, and mitigating risks, promoting a more secure and responsible implementation of AI technologies.

AI projects often require substantial resources, including skilled personnel, technology infrastructure, and financial investments. Project management standards help optimize the allocation of resources, ensuring efficient utilization and preventing unnecessary costs. Adhering to project management standards ensures a well-defined project schedule with clear timelines and milestones. This helps in avoiding delays and ensures that AI projects are implemented in a timely manner, aligning with business objectives and market demands.

Effective communication is critical in AI adoption, involving various stakeholders with diverse interests. Project management standards facilitate transparent communication channels, ensuring that all stakeholders are informed about project progress, challenges, and outcomes. Maintaining high-quality standards in AI projects is essential for achieving reliable results. Project management standards include mechanisms for quality assurance, allowing

organizations to monitor and enhance the performance of AI applications throughout the project lifecycle.

Project management standards provide a scalable framework that accommodates the evolving nature of AI technologies. This ensures that organizations can adapt and scale their AI initiatives in response to changing business requirements and technological advancements. Standards in project management emphasize documentation and compliance, essential for auditability and regulatory adherence. This becomes particularly important in AI, where ethical considerations, data protection laws, and industry regulations play a significant role.

The integration of Artificial Intelligence (AI) into civil service using project management tools introduces several key elements that contribute to efficiency, effectiveness, and innovation. Below are some prominent elements (Table #1):

Table#1.

The integration of Artificial Intelligence (AI) into civil service using project management tools

<i>Subfields of AI</i>	<i>In Civil Service</i>	<i>PM implementation</i>
Natural Language Processing (NLP):	NLP enables AI systems to understand and interpret human language, facilitating improved communication between stakeholders.	Chatbots and virtual assistants powered by NLP can enhance user engagement and provide instant responses to queries.
Task Automation	Repetitive and rule-based tasks within projects and administrative processes can be automated using AI technologies	This automation leads to increased operational efficiency, reduced errors, and a focus on more strategic aspects of management
Machine Learning Algorithms	Machine learning algorithms enable systems to learn from data, adapt to changing circumstances, and improve performance over time	In project management, machine learning can optimize scheduling, resource allocation, and risk assessment
Image and Pattern Recognition	AI-driven image recognition can be applied in public administration for tasks such as facial recognition in security systems or processing visual data	In project management, it can aid in monitoring and assessing physical progress through images.
Enhanced Data Security	AI technologies play a role in strengthening cybersecurity measures to protect sensitive information in public administration and project management	AI-driven threat detection systems can identify and respond to potential security breaches

Dynamic Resource Allocation	AI can analyze real-time data to dynamically allocate resources in projects and public services, ensuring optimal utilization and cost-effectiveness	
Continuous Learning and Adaptation	AI systems can continuously learn from new data, adapting to evolving circumstances and improving their performance over time	This adaptability is particularly valuable in dynamic project environments and changing administrative landscapes
Citizen Engagement and Services	AI-powered applications can enhance citizen services by providing personalized recommendations, addressing queries, and streamlining interactions	Virtual assistants can offer efficient and accessible services, improving overall public satisfaction
Automated Decision-Making	AI systems can analyze vast amounts of data to support decision-making processes in project management and public administration	Automated decision-making tools can enhance the speed and accuracy of routine decisions, allowing human resources to focus on more complex tasks
Predictive Analytics	AI algorithms can utilize historical data to predict future trends, risks, and outcomes in project management and public administration	Predictive analytics help in proactive planning, resource allocation, and risk mitigation, improving overall project success rates

The incorporation of these AI elements contributes to more streamlined processes, informed decision-making, and enhanced overall performance in project management and public administration.

Ethical considerations in AI implementation are paramount to ensuring responsible and fair use of artificial intelligence technologies. The adoption of AI comes with various challenges related to privacy, bias, accountability, transparency, and the impact on society. Addressing these ethical considerations is crucial for building trust, minimizing risks, and promoting the responsible development and deployment of AI systems. Here are key ethical considerations in AI implementation:

Transparency and Explainability: Ethical AI requires transparency, where organizations should strive to make AI systems understandable and explainable to users and stakeholders. Providing clear explanations of how AI decisions are made helps build trust and allows individuals to understand the basis of automated decisions.

Fairness and Bias Mitigation: AI systems must be designed to be fair and unbiased, treating all individuals and groups equally. Developers should identify and mitigate biases in training data and algorithms to prevent discriminatory outcomes and ensure fairness.

Privacy Protection: Privacy is a fundamental ethical concern in AI, especially when dealing with personal data. Implementing robust privacy protection measures, such as data anonymization and encryption, is essential to safeguard individuals' sensitive information.

Accountability and Responsibility: Establishing clear lines of accountability is crucial when implementing AI systems. Organizations must take responsibility for the impact of their AI technologies, and mechanisms for accountability should be in place in case of unintended consequences.

Security and Robustness: Ethical AI requires a focus on security to prevent malicious use or exploitation of AI systems. Ensuring the robustness of AI models and protecting against adversarial attacks is essential for maintaining ethical standards.

Informed Consent: Individuals affected by AI systems should be informed about how their data will be used, and their consent should be obtained when necessary. Transparency about the purposes of AI applications helps users make informed decisions about their participation.

Human-in-the-Loop and Human Oversight: Implementing AI systems with human oversight ensures that human judgment is involved in critical decisions. Enabling human intervention helps correct errors, prevent biases, and ensures that AI systems align with ethical guidelines.

Societal Impact: Ethical AI considers the broader societal impact of AI technologies. Organizations should assess and address potential negative consequences of AI on employment, inequality, and societal structures.

Continual Monitoring and Evaluation: Ethical AI requires ongoing monitoring and evaluation to identify and rectify emerging ethical concerns. Regular assessments help organizations adapt to changing circumstances and evolving ethical standards.

Collaboration and Stakeholder Involvement: Engaging with a diverse set of stakeholders, including users, experts, and impacted communities, ensures a broad perspective in addressing ethical considerations. Collaborative efforts help identify and respond to ethical challenges more comprehensively.

Analyzing the legal frameworks surrounding AI in civil service involves examining the existing laws, regulations, and policies that govern the development, deployment, and use of artificial intelligence technologies within government agencies. Legal frameworks play a crucial role in ensuring responsible and ethical AI practices, addressing concerns such as privacy, accountability, transparency, and fairness. Here is an analysis of key aspects of legal frameworks related to AI in civil service:

Data Protection and Privacy Laws: Legal frameworks often include provisions related to data protection and privacy, governing the collection, processing, and storage of personal information by AI systems. Compliance with laws such as the General Data Protection Regulation (GDPR) in the European Union or similar regulations in other regions is essential.

Transparency and Accountability: Legal frameworks may require transparency in AI systems, ensuring that government agencies disclose information about the use and decision-making processes of AI algorithms. Accountability mechanisms may be established to hold agencies responsible for the outcomes and impacts of AI applications.

Bias and Discrimination Mitigation: Regulations may address the issue of bias and discrimination in AI by prohibiting discriminatory practices and requiring agencies to take measures to mitigate biases in AI algorithms. Ensuring fairness and equal treatment is a key consideration in legal frameworks.

Algorithmic Impact Assessments: Some legal frameworks may mandate the conduct of algorithmic impact assessments before implementing AI systems in civil service. These assessments evaluate potential risks and impacts on individuals, society, and human rights.

Human Rights and Ethical Standards: Legal frameworks may incorporate principles of human rights and ethical standards to guide the development and use of AI in alignment with societal values. Respect for fundamental rights and adherence to ethical guidelines become integral components.

Procurement and Vendor Accountability: Governments may establish rules for AI procurement, ensuring that vendors adhere to legal and ethical standards. Contracts and agreements with AI service providers may include clauses that hold them accountable for compliance with relevant regulations.

National AI Strategies and Policies: Countries may adopt national AI strategies or policies that outline the legal framework for AI in civil service. These strategies may encompass a comprehensive approach, covering research, development, deployment, and governance of AI technologies.

International Collaboration and Standards: Legal frameworks might encourage international collaboration and adherence to global standards in AI development and deployment.

Alignment with international norms helps address cross-border challenges and promotes a unified approach.

Public Participation and Consultation: Legal frameworks may require public participation and consultation in the development and implementation of AI systems in civil service. Ensuring citizen engagement contributes to a more inclusive and transparent decision-making process.

Oversight and Regulatory Authorities: Legal frameworks may establish oversight mechanisms or regulatory authorities responsible for monitoring AI activities within civil service. These entities may have the authority to investigate complaints, enforce regulations, and impose penalties for non-compliance.

Conclusions and recommendations. In summary, project management standards play a pivotal role in optimizing AI adoption by providing a structured approach to planning, executing, and controlling AI projects. They contribute to strategic alignment, risk management, resource optimization, timely implementation, stakeholder communication, quality assurance, scalability,

flexibility, and compliance – all of which are crucial for the successful integration of AI technologies in diverse organizational settings.

The legal frameworks surrounding AI in civil service are multifaceted, addressing various dimensions of AI governance. These frameworks aim to balance technological advancements with ethical considerations, safeguarding individual rights, and ensuring accountability in the use of AI within government agencies. Continued refinement and adaptation of these legal frameworks are essential to keep pace with the evolving landscape of AI technologies and their applications in the civil service sector.

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EXTRA HIGH FREQUENCY GENERATORS

Abstract. Ultra high frequency generators are used in the frequency range of 1...300 GHz and are created on the basis of semiconductor generator diodes, klystron, magnetron, runner and reverse wave lamps. Separate THOUGHT generators are optical quantum generators. Let's consider the semi-conductor OUCH generators used in communication system transmitters.

Key word: Wave, decimeter and long wave, transistor, autogenerator, diode, tunnel diode, source, circuit.

Autogenerators based on elements of the descending section of VAX. If transistor autogenerators are used in the decimeter and long-wave part of the centimeter wave range, diode generators are widely used in the short centimeter and millimeter ranges. OYUCH diodes VAX used in such autogenerators have decreasing sections, so they have reverse resistance at operating frequencies. Generator diodes are tunnel diodes, fast-flying diodes and Gann diodes. Currently, a solid material "Quantim Welle-diode" with a new "quantum patch" semiconductor structure and negative resistance in a wide frequency range has also been developed [1,2].

Let's consider the principle of operation of the THOUGHT generator based on the tunnel diode [3]. A tunnel diode is a semiconductor diode with a very narrow potential barrier that prevents the movement of electrons. Therefore, it is observed that the n-shaped current depends on the voltage in the correct section of VAX.

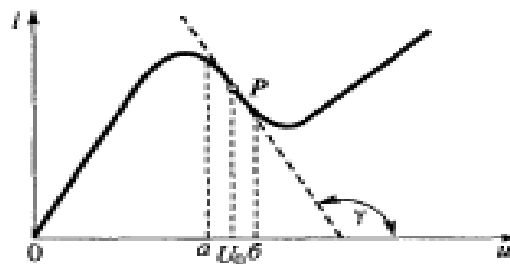


Figure 1. VAX of the tunnel diode

Figure 1 shows VAX_i, which describes the dependence of the forward current of the tunnel diode on the positive bias voltage. In the descending a-b section, the differential resistance of the tunnel diode is negative, that is, $R = du/di = ctgg$, where g-P corresponds to the VAX curve at the operating point $i =$

$f(u)$, the operating voltage $u = U_0$, be the angle of inclination of the test in the case of [4,5].

When connecting a tunnel diode with such a VAX to an oscillating circuit, high-frequency oscillations can be generated, and the resulting circuit becomes an autogenerator with internal feedback (Fig. 2) [6].

A simplified scheme of a generator based on a tunnel diode is shown in Fig. 2a. The oscillating circuit consists of L inductance and S_0 specific capacitance of the diode, r_k - circuit elements and equivalent resistance to losses in the diode, E_0 - voltage shift in the diode. Blocking choke L_{bl} and capacitor C_{bl} ($C_{bl} \ll C_0$) prevent high frequency current from flowing through the DC circuit [7,8].

An alternate scheme of the oscillating circuit is shown in Fig. 2, b. The circuit is shunted by the negative differential resistance of the tunnel diode, and the alternating voltage u_k moving in the circuit can be considered as an electric driving force. As a result of this movement, current $i_{VD} = -u_k / R_-$ flows through the diode [9].

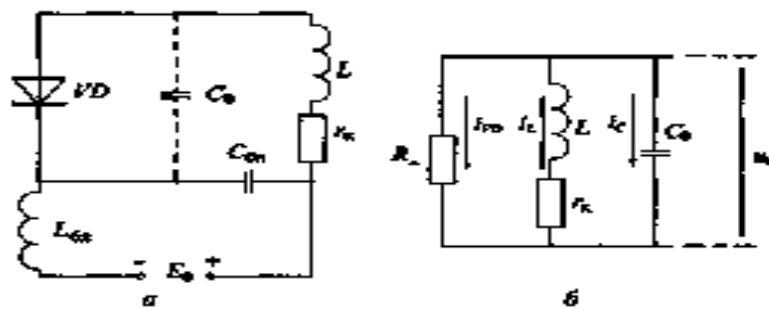


Figure 2. A generator based on a tunnel diode: a-simple scheme; b-substitute scheme.

The currents in the circuit i_{VD}, i_C, i_L and the oscillating voltage u_k are related to each other by the relationship determined by the first and second laws of Kirchhoff and Ohm:

$$\begin{aligned} i_{VD} &= i_C + i_L; \\ i_C &= C_0 u_k / dt; \quad (1) \\ u_k &= r_k i_L + L di_L / dt. \end{aligned}$$

You can find what you want in these functions. For example, it is necessary to determine the current in the inductance network i_L from the oscillation contour. To do this, by removing the current i_C from the first of the equations (2), we determine the following from the first and second relations [10]:

$$i_{VD} = i_L + r_k C_0 \frac{di_L}{dt} + LC_0 \frac{d^2 i_L}{dt^2}. \quad (2)$$

At this time, the diode current

$$i_{VD} = -\frac{1}{R_-} u_k = -\frac{1}{R_-} (r_k i_L + L \frac{di_L}{dt}) \quad (3)$$

Equating the diode current in the next two expressions, we get the following differential equation:

$$\frac{d^2 i_L}{dt^2} + \left(\frac{r_k}{L} + \frac{1}{C_0 R_-} \right) \frac{di_L}{dt} + \frac{r_k + R_-}{LC_0 R_-} i_L = 0 \quad (4)$$

We determine the conditions that cause the growth and decay of vibrations in the generator. In order for high-frequency oscillations to occur in the vibration system and its amplitude to increase, the coefficient of the first derivative in (3) should be negative. From here we determine the condition for the occurrence of vibrations

$$\frac{r_k}{L} - \frac{1}{C_0} \left| \frac{1}{R_-} \right| < 0 \quad (5)$$

$$|R_-| < \frac{L}{r_k C_0} = R_0 = \rho Q = \frac{Q}{\omega_p C_0} \quad (6)$$

In the last two relations, R_- is the absolute value of the negative resistance of the tunnel diode, which depends on the amplitude of oscillations, R_0 is the resonance resistance, in the last two relations, R_- is the absolute value of the negative resistance of the tunnel diode, which depends on the amplitude of oscillations [11], R_0 - resonance resistance, Q - quality, resistance of the oscillation contour is equal to $r = \sqrt{L/C_0}$, Q - quality, resistance of the oscillation contour is equal to $r = \sqrt{L/C_0}$.

The resistance of the tunnel diode $|R_-| = |R_-(U_k)|$, $|R_-(U_k)| = |R_-(U_{kst})|$. If we increase to $= R_0$, the amplitude of stationary oscillations in the autogenerator is set. If $|R_-(U_k)|$ if the resistance has a positive slope at the point of intersection of the R_0 curve, the stationary mode of oscillations is stable [12].

From a physical point of view, the operation of such a generator can be described as follows: the negative resistance R_- of the tunnel diode gives the generator circuit a large amount of energy compared to the energy released by the load resistance, which is calculated as resistance r_k . The tunnel diode is considered a low-power device, and a current of $I_0 = 1$ mA flows through it in the operating mode, at the operating point of the VAX reduction section. But the power generated during loading is 20...30 mW. Such power is considered sufficient in a number of cases, and it will be possible to create generators with increased power [13].

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*Jo'rayeva M.D.
Andijon davlat universiteti
13.00.02- "Ta'lim-tarbiya nazariyasi va metodikasi"
Yo'nalishi tayanch (PhD) doktoranti*

TALABALARNI BOSHLANG'ICH TA'LIM TARBIYA FANINI O'QITISHGA TAYYORLASHDA LOYIXALASH METODIDAN SAMARALI FOYDALANISH TEXNOLOGIYALARI

Annotatsiya. Ushbu maqolada hozirgi kunda boshlang'ich ta'limda eng dolzarb masalalardan biri bo'lgan tarbiya fanini o'qitishda oliy ta'lim muassasalari talabalarini zamonaviy metod va pedagogik texnologiyalardan samarali foydalanishga o'rgatish va mavzularning hayotiy ahamiyatini o'quvchilar ongiga singdirishda loyixalash metodidan foydalanishning afzallik jihatlari, tarbiya fanini samarali o'qitish kelajak yosh avlod uchun xal qiluvchi muhim omillardan biri ekanligi haqida fikr boradi.

Kalit so'zlar: Tarbiya, metod, pedagogik texnologiya, interfaol metodlar loyixalash metodi, pedagogik mahorat, innovatsion texnologiyalar, axborot kommunikatsiya texnologiyalari, pedagogik jarayon.

*Jorayeva M.D.
13.00.02- "Educational theory and methodology"
Major (PhD) doctoral student
Andijan State University*

TECHNOLOGIES OF EFFECTIVE USE OF DESIGN METHOD IN PREPARING STUDENTS TO TEACH PRIMARY EDUCATION

Abstract. In this article, teaching the science of education, which is one of the most urgent issues in primary education today, teaches students of higher education institutions to effectively use modern methods and pedagogical technologies, and uses the design method to instill the vital importance of topics into the minds of students. advantages, it is thought that effective teaching of education is one of the most important factors for the future young generation.

Key words: Education, method, pedagogical technology, interactive methods design method, pedagogical skills, innovative technologies, information and communication technologies, educational games, pedagogical process.

Kirish

Prezidentimiz Sh.M. Mirziyoyevning: "...Bizni hamisha o'ylantirib keladigan yana bir muhim masala-bu yoshlarimizning o'dob-axloqi, yurish-turishi, bir so'z bilan aytganda dunyoqarashi bilan bog'liq. Bugun zamon shiddat bilan o'zgaryapti. Bu o'zgarishlarni hammadan ham ko'proq his etadigan kim –yoshlar.

Mayli, yoshlar o‘z davrining talablari bilan uyg‘un bo‘lsin. Lekin ayni paytda o‘zligini ham unutmasin. Biz kimmiz, qanday ulug‘ zotlarning avlodimiz degan da‘vat ularning qalbidaimaks-sado berib, o‘zligiga sodiq qolishga undab tursin. Bunga nimaning hisobidan erishamiz? Tarbiya, tarbiya va faqat tarbiya hisobidandir...” deya baralla aytgan fikrlari nechog‘lik ahamiyatli ekani hech kimga sir emas. Albatta yosh avlodni komil shaxs sifatida kamol toptirishda o‘qituvchilar va bo‘lajak pedagoglarning o‘rni beqiyos.

Boshlang‘ich sinflarda tarbiya darsi orqali vatanga sadoqat hissini, irodalilik, mafkuraviy immunitet, shuningdek, ularning shaxsiy, hissiy, nutqiy, jismoniy, ijodiy qobiliyatlarini rivojlanishi hamda mehr-oqibatlik, mas‘uliyatlik, bag‘rikenglik, huquqiy madaniyat, mehnatsevarlik kabi muhim fazilatlarini bolalikdan boshlab bosqichma-bosqich shakllantirish va oshirish shu bilan birga ma‘naviy tarbiyani amalga oshirishda o‘z xalqining milliy, tarixiy, madaniy qadriyatlariga hurmat, atrof muhitga nisbatan ehtiyotkorona munosabatni kamol topishida ota-ona bilan birga tarbiyachi, o‘qituvchi muhim ahamiyat kasb etadi.

Vazirlar mahkamasining 2020-yil 6-iyundagi 422-qaroriga binoan umumiy o‘rta ta‘lim muassasalari o‘quvchilari uchun, „Tarbiya“ fani konsepsiyasi ishlab chiqildi. Ushbu konsepsiyada tarbiya darsligi yuzasidan ko‘plab vazifalarni belgilab berdi. “Tarbiya” fanining ahamiyatli jihati shuki, u bosqichma-bosqich bolada maqsad qo‘yish va unga intilish ko‘nikmasini shakllantirib boradi.

Muhokama va natijalar

Tarbiya — shaxsda muayyan jismoniy, ruhiy, axloqiy, ma‘naviy sifatlarni shakllantirishga qaratilgan amaliy pedagogik jarayon, insonning jamiyatda yashashi uchun zarur bo‘lgan xususiyatlarga ega bo‘lishini ta‘minlash yo‘lida ko‘riladigan chora-tadbirlar yig‘indisi. Tarbiya insonning insonligini ta‘minlaydigan eng qadimiy va abadiy qadriyatdir. Tarbiyasiz alohida odam ham, kishilik jamiyati ham mavjud bo‘la olmaydi. Chunki odam va jamiyatning mavjudligini ta‘minlaydigan qadriyatlar tarbiya tufayligina bir avloddan boshqasiga o‘tadi.

O‘zbekiston ta‘lim tizimida, jumladan, oliy ta‘lim jarayonida — Tarbiya fani asoslarini zamonaviy talablar asosida o‘qitish va o‘rganish zaruriyat hisoblanadi. Shu jihatdan bo‘lajak boshlang‘ich sinf o‘qituvchilarining mazkur fanni o‘zlashtirish va uni o‘qitishning metodikasini o‘rganish zaruriyati quyidagilar bilan belgilanadi:

- fanning asoslarini chuqur bilish;
- fanni o‘qitishning ilg‘or va zamonaviy pedagogik, innovatsion hamda axborot texnologiyalarini egallash;
- tarbiya masalasiga doir ilmiy-tadqiqotlarni o‘rganib borish;
- inson va jamiyat hayotida tarbiyaning tutgan o‘rnini to‘liq idrok etish;
- fan vositasida boshlang‘ich sinf o‘quvchilarini tarbiyalash metodlari va texnologiyalarini bilish;
- fanni o‘qitish bo‘yicha individual pedagogik tajribaga ega bo‘lish.

Boshlang'ich sinf o'quvchilari tarbiyasida metodlarni belgilash va ularga asoslanish muhim hisoblanadi. Buning uchun quyidagilarga e'tibor berish maqsadga muvofiq bo'ladi:

- boshlang'ich sinf o'quvchilarining jismoniy, yosh va ruhiy xususiyatlarini hisobga olish;

- oddiydan murakkablikka qarab rivojlanadigan metodlarni tanlash;

- imkon qadar ta'lim jarayoni va pedagogik tajribalardan o'tgan metodlarga tayanish;

- zamonaviy texnik jihozlarga mos tushadigan metodlarni kengroq qo'llash.

Bunday yondashuv boshlang'ich sinf o'quvchilari tarbiyasida oqilona metodlarni tanlash imkonini beradi.

Hozirgi kunda ta'lim jarayonida interfaol metodlar va axborot texnologiyalarini o'quv jarayonida qo'llashga bo'lgan qiziqish kundan-kunga ortib bormoqda. Bunday bo'lishining sabablaridan biri, shu vaqtgacha an'anaviy ta'limda o'quvchilar faqat tayyor bilimlarni egallashga o'rgatilgan bo'lsa, zamonaviy texnologiyalardan foydalanish esa ularni egallayotgan bilimlarini o'zlari qidirib topish, mustaqil o'rganish va fikrlash, tahlil qilish, xatto yakuniy xulosalarni ham o'zlari keltirib chiqarishga o'rgatadi. O'qituvchi bu jarayonda shaxs rivojlanishi, shakllanishi, bilim olishi va tarbiyalanishiga sharoit yaratadi va shu bilan bir qatorda boshqaruvchilik, yo'naltiruvchilik funksiyasini bajaradi.

Boshlang'ich sinflarda interfaol metodlar va ta'limiy o'yinlardan, zamonaviy axborot-kommunikatsiya texnologiyalaridan foydalanish o'quvchilarni mustaqil fikrlashga, ijodiy izlanish va mantiqiy fikrlash doiralarini kengaytirish bilan birga ularni darslarda o'rganganlarini hayot bilan bog'lashga, qiziqishlarini oshirishga yordam beradi. O'qituvchilarning bunday zamonaviy talablar asosida yaratilgan sharoitlardan samarali foydalanib, darslarni ilg'or pedagogik hamda axborot kommunikatsiya texnologiyalari asosida tashkil etilishi ta'lim-tarbiya jarayonini sifatini kafolatlaydi. Ana shunday darslarda mavzularni samarali o'zlashtirilishini ta'minlaydigan zamonaviy texnologiyalardan biri loyixalash metodidan foydalanish texnologiyasidir.

Loyixalash - aniq reja, asosiy va xususiy maqsadlar, ular asosida shaxs tomonidan o'zlashtiriladigan zaruriy bilim, ko'nikma-malakalar, maqsadning natijalanishini nazarda tutgan holda muayyan faoliyat mazmunini ishlab chiqishga qaratilgan harakat.

Loyixalash texnologiyasi jahon pedagogikasida yangilik hisoblanmaydi, chunki, u 1920- yillarda amerikalik faylasuf va pedagog J.Dyu va uning shogirdi V.X. Kilpatrik tomonidan ishlab chiqilgan loyihalash metodi asosida vujudga kelgan. Hozirgi kunda AQSH, Buyuk Britaniya, Belgiya, Isroil, Finlandiya, Germaniya, Rossiya, Italiya, Braziliya va Niderlandiya kabi rivojlangan mamlakatlarning ta'lim muassasalarida muvaffaqiyatli qo'llanib kelinmoqda.. Loyixalash hozirgi kunda pedagogik jarayonning muhim tomonlaridan bo'lib, malakali ishlab chiqilgan pedagogik jarayon texnologiyasi va boshqa ob'ektlar o'qituvchi tomonidan ta'lim oluvchilarni shaxs sifatida

shakllantirishda salbiy ta'sir etuvchi faktorni yo'qotib, shu bilan birga har bir ta'lim oluvchiga pedagogik tizim tomonidan qabul qilingan individual sharoitlar yaratadi.

Pedagogik obyektning loyixalashtirishning tartibi tayyorlov, loyixani ishlab chiqish, loyixa sifatini tekshirish jarayonlaridan iborat. Tayyorlov jarayonida obyektning tahlil etish, shakllarini tanlash, didaktik ta'minoti, ta'lim jarayonining joyi va vaqti, moddiy-texnika ta'minoti aniqlashtiriladi. Loyixani ishlab chiqish jarayonida uni tizimga keltiruvchi omillarni tanlash, tarkibiy qismlar orasidagi aloqalar va o'zaro bog'liqliklarni aniqlashtirish hamda hujjatni tayyorlashdan iborat bo'ladi. Loyixa sifatini tekshirish uni amalga oshirish jarayonini fikran tajribadan o'tkazish, ekspert bahosi, tahrirlash, loyixani amalga oshirish bo'yicha qaror qabul qilish jarayonlarini o'z ichiga oladi.

Loyixalash texnologiyasining asosiy g'oyasi amaliy yoki nazariy ahamiyatga molik bo'lgan muammoni hal etish jarayonida ko'zlangan natijaga erishishdir. Agar nazariy muammoni loyixalash lozim bo'lsa, uning aniq yechimi, agar amaliy muammo bo'lsa, amaliyotga qo'llash masalasi bo'yicha aniq tavsiyalar ishlab chiqish lozim. O'quvchilar ushbu natijaga erishish uchun mustaqil fikr yuritish ko'nikmalarini egallagan bo'lishlari, muammoni anglash va uni hal etish yo'llarini izlashlari bu borada avval o'zlashtirgan bilimlaridan foydalanishlari, fanning turli sohalarida izlanishlar olib borishlari, olinajak natijalarni bashorat qilish, turli yechimdagi variantlar ishlab chiqish, sabab-oqibat bog'lanishlarini tasavvur qilishlari zarur. Loyixalash texnologiyasidan foydalanish o'quvchilarga individual va differensial yondashish imkonini beradi. Har bir loyixa o'ziga xos xususiyatga ega bo'ladi.

Xulosalar

Xulosa o'rnida shuni aytish joizki, „Tarbiya“ darslarida loyixalash metodi va zamonaviy pedagogik texnologiyalardan samarali foydalanish boshlang'ich sinf o'quvchilarini mavzularni samarali o'zlashtirishlari uchun muhim omil bo'lib xizmat qilish bilan bir qatorda hozirgi kunda oliy ta'lim muassasalarida ta'lim olib kelayotgan bo'lajak boshlang'ich sinf o'qituvchilari uchun ham mavzularni o'quvchilar ongiga singdirish, ularning amaliy ahamiyatini tushuntirishda muhim omil bo'lib xizmat qiladi va yosh pedagog kadrlarga, shu jumladan boshlang'ich sinf o'qituvchilariga tarbiya darslarini samarali tashkil qilishda va darsdan ko'zlangan maqsadga erishishda muvaffaqiyatlar debochasi bo'lib xizmat qiladi hamda boshlang'ich sinf o'quvchilarida ushbu darsga bo'lgan qiziqish va talablarini ortishiga sabab bo'ladi.

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*Jumaniyozov Q.S.
p.f.n., dotsent, Oriental universiteti*

MATEMATIKADA IZCHILLIKDAN FOYDALANIB, TALABALARNING IQTISODIY TAFAKKURINI RIVOJLANTIRISH

Annotatsiya. Ushbu maqola talabalarning iqtisodiy tafakkurini rivojlantirishda matematikaning tadbqiqi bilan birga ularning bozor iqtisodiyoti sharoitida o'zlarini erkin his qilishlariga, o'z tafakkurlariga ishonishlariga, matematik bilimlari orqali hisob-kitoblarni to'g'ri hamda sistemali olib borishlariga imkon yaratadi. Asosiy maqsadlarimizdan biri dasturlar hajmida va undan foydalangan holda tengsizlik, hosila, chiziqli programmalashtirish qonun-qoidalari yordamida iqtisodiy-ekstremal masalalarni yechish asosida o'quvchilarning iqtisodiy tafakkurini rivojlantirishga qaratilgan.

*Jumaniyozov K.S., candidate of pedagogical sciences
associate professor
Oriental University*

DEVELOPMENT OF STUDENTS' ECONOMIC THINKING IN MATHEMATICS USING A CONSISTENT SYSTEM

Abstract. This article, together with the use of mathematics in the development of students' economic thinking, allows them to feel free in a market economy, believe in their own thinking, and correctly and systematically make calculations using their mathematical knowledge. One of our main goals is to develop students' economic thinking based on solving economic extreme problems using the laws of inequality, derivatives, linear programming in program sizes and their use.

Iqtisodiyot har bir kishining, har bir oilaning, jamoa va umuman jamiyatning hayotida muhim o'rin tutadi. Bozor iqtisodiyotining mohiyati shundan iboratki, u barcha jamiyat a'zolarini ishlab chiqarish va iste'mol orqali doimiy hamda to'xtovsiz musobaqaning ishtirokchilariga aylantiradi, shu boisdan bozor iqtisodiyoti ishlab chiqarishning kun sayin takomillashuviga, mahsulot sifatining yaxshilanib borishiga, miqdorining ko'payishiga sababchi bo'ladi. Bozor iqtisodiyoti xalqning, ommaning, ijodiy va mehnat imkoniyatlarini yuzaga chiqarib, tadbirkorlik va ishbilarmonlikka yo'l ochadi. Tadbirkorlik va ishbilarmonlik qobiliyatlarini rivojlantirishni esa yoshlikdan, ya'ni o'quv-tarbiya muassasalaridan boshlamog'imiz kerak. O'quvchilarning iqtisodiy tafakkuri bir necha xil fanlar asosida rivojlantiriladi. Ular orasida matematika fanining o'rni juda muhimdir. Bu muhimlikni biz tadqiqotimizda imkon qadar yoritib berishga harakat qilamiz.

Matematikaning izchillik xususiyati - bu matematikadagi mavjud qonun, qoida, fakt, formulalarning boshqa fan asosidagi mos qonun, qoida, fakt, formulalar bilan bir qiymatli, ko'p qiymatli yoki bir tomonlama (izchillik prinsipi asosida), ikki tomonlama bog'langan holda uquvchilarning bilish faoliyatini faollashtirishga, chuqurlashtirishga qaratilgan va ularni kunikma, malaka yoki tafakkurini rivojlantirishga bevosita yordam beruvchi jarayon sifatida qaraladi.

Shuning uchun, matematikani iqtisodiyot bilan aloqadorligi uzining faol tarkibiy qismini yaratish va bevosita ular orasida shunday bir strukturaviy integrallashgan qismini yaratadiki, u nafaqat iqtisodiyotni ichki va tashqi strukturasi yuzaga kelishini, u moddiy dunyoning iqtisodiy dinamikasini rivojlanishi tarkib topishi va rivojlanishida yuzaga keladigan har xil toifadagi nomutanosibliklarni bartaraf qilishda, hamda ularni uzaro mutanosiblikda ishlashiga imkoniyat yaratib beradi. Shu bois matematikaning iqtisodiy masalalarni yechishga tadbiri o'z navbatida ulardagi rivojlanishning yuqori saviyaga chiqishiga, ko'tarilishiga muhim imkoniyat yaratib beradi.

Shu bois fanlararo aloqadorlik, jumladan, matematikaning jamiyat iqtisodiy qonun-qoidalariga tadbiri bevosita pedagogik va metodik g'oyalarni rivojlanishi, takomillashishini ta'minlab qolmasdan, o'qitish jarayonini differentsiya, integratsiya qilishga, shu jumladan, iqtisodiy qonuniyatlarni ilmiy tushunishga, ta'sir tekisligini aniqlashga, jamiyat rivojiga singib ketishi yoki qorishib aralashishiga, shu bilan birga o'quvchilarning iqtisodiy tafakkuri rivojlanishiga o'zining muhim hissasini qo'shadi. Shuning uchun ham matematik qonun, qoida, fakt, formulalarni iqtisodiy qonun - qoida va formulalarga tadbiri foydalanib o'quvchilar:

- matematik bilimlar, ko'nikmalar, malakalarinishakllantiradilar, rivojlantiradilar;

- matematik qonun – qoida, fakt, formulalarni iqtisodiy qonun-qoidalarga tatbiq qilib, jamiyatning rivojida iqtisodiy tushuncha, qonun – qoida va boshqa asoslari bilan birgalikda moddiy dunyoning sirlarini, olamni moddiy birlikda ekanini, jamiyatdagi har bir o'zaklarning moddiy va iqtisodiy bog'likdigi va bu bog'lanish matematik qonuniyatlarga asoslanganligini;

- dunyoning moddiy va iqtisodiy birligi bevosita matematika qonuniyatlari tayanishi va bu tayanch o'zining strukturaviy quvvatiga ega ekanligi haqidagi fikrga ega bo'lishligi - bevosita o'quvchilarni nafaqat iqtisodiy tafakkurini, balki matematik falsafiy tafakkurini ham rivojlanishiga imkoniyat yaratadi. Shuning uchun, ham umumta'lim maktablarida matematika ta'limini iqtisodiy bilimlar sistemasi bilan aloqalarining bo'lishi o'quvchilarning matematik qonuniyatlarni faktlar, formulalarni keng ma'noda tushunish bilan birgalikda iqtisodiy qonun-qoida va formulalarni ham chuqurroq tushunish, ulardan amalda foydalanish va tegishli natijalarni olish va olingan natijalarnitahlil qilish, ularnihayotgatadbiq qilishni o'rganadilar.

Pedagogikada, jumladan, matematikani fanlararo aloqadorlik asosida o'qitishni takomillashtirish nazariyasi va amaliyoti bo'yicha ma'lum darajada yuqori saviyadagi pedagogik va metodik fikrlar to'planishi bilan birga o'qitish va o'rgatish jarayonini faollashtirishning asosiy komponentlaridan biri bu:

- o'quvchilarning ilmiy bilimlar sistemasini anglashi va aqliy rivojlanishida iqtisodiy va xuquqiy bilimlarni matematik bilimlar sistemasini bilan aloqadorligini bilishdir;

- o'qitiladigan fanlardagi bilimlar sistemasini tartibga solinishi va o'rganiladigan fanlar ketma – ketligidan foydalanish metodikasining yuzaga kelishi;

- o'qituvchining sistemali matematika bilan iqtisodiy bilimlar sistemasining aloqadorligini ishlab chiqishi va uni matematik iqtisodiyotni o'qitishda foydalanish metodikasini ishlab chiqish;

- umumta'lim maktab o'quvchilarining iqtisodiy tafakkuri rivojlanishida matematik modellashtirish va undan kelib chiqadigan natijalardan unumli foydalanishdan iboratdir.

Fanlararo aloqadorlik o'zining strukturaviy berilishi, tuzilishiga ko'ra uncha murakkab bo'lmagan strukturaga egadir, ya'ni, bizga P_1 predmet berilgan bo'lsin va u A_1, A_2, \dots, A_n tushunchalarga ega bo'lsin deylik. P_2 predmet esa B_1, B_2, \dots, B_n tushunchalarga ega deb qaraylik.

Demak, matematika tushunchalarining iqtisodiy tushunchalar bilan bog'lanish imkoniyati ko'p hollarda tadrijiylik asosida olib boriladi. Ma'lumki, bu bog'lanishni har doim ham sifatli deb bo'lmaydi. Uning sifatli bo'lishi uchun: A_i va B_j bilimlar orasidagi masofani $p(A_i, B_j) = j - i$ bilan belgilaymiz, hamda bog'lanish sifatli yoki sifatsiz bo'lishi o'qitish jarayonida $p(A_i, B_j)$ ga bog'liqdir, chunki A_i bilim bilan B_j bilim faqat dastur bo'yicha bitta mavzuga farq qilsa bog'lanish sifatli bo'ladi, agar 10 ta mavzuga farq qilsa o'quvchilarga tushuntirishda sifatli deb bo'lmaydi. Shu nuqtai - nazardan $p(A_i, B_j)$ da qatnashayotgan bilimlardan B_j ning sifatli o'zlashtirilishi ular orasidagi masofaga teskari proporsional ekanligini ko'rish mumkin, chunki i va j lar orasidagi farq qanchalik kichik bo'lsa, bog'lanish shuncha sifatli bo'ladi, qancha katta bo'lsa, shuncha sifatsiz bo'ladi.

Xaqiqatan ham, o'quvchilarni iqtisodiy tafakkurini matematikani iqtisodiy masalalarni yechishga tadbiri orqali rivojlantirish uchun avvalambor iqtisodiy tushunchalar majmuining tanlanishi, so'ngra bu tushunchalarni uzluksiz sistemali tarzda o'quvchilar ongida shakllantiruvchi sistema tanlanishi va bu sistemaning to'laqonli amalga oshirishini ta'minlovchi matematik tushunchalar sistemasining ajratilishi va uni metodik nuqtai – nazardan muvofiqlashtirilishi maqsadga muvofiqdir.

Shu bois ham hozirgi kunda bozor iqtisodiyoti sharoitida ishlatiladigan 10 ta iqtisodiy tushunchalarning ichidan o'quvchilarning kundalik hayotida uchraydigan, ularni o'zlashtirishlarida uncha qiyinchilik yuzaga keltirmaydigan,

mazmun jihatidan yuqoridagi tushunchalar asosiga qo'yilishi mumkin bo'lgan, iqtisodiy tafakkurni rivojlanishi uchun asosiy amallarni ishlatish imkoniyatini beradigan — iqtisodiy tushunchalar tanlanishi asosiy ilmiy izlanishimizning predmetini tashkil qilishini ko'rishimiz mumkin.

Shuning uchun ham iqtisodiyot tomondan asosan - daromad, foyda, tovar, tovar narxi, tovarni ishlab chiqish, rentabellik, ishlab chiqarish rejasi, marketing, menejment,... kabi 20 tadan ortiq tushunchalar bilan matematikaning protsent, murakkab protsent, tenglama, tengsizlik, tenglama va tengsizliklar sistemalari, hosila, ekstremum, maqsadli funksiya, pozinom, chiziqdi programmalash va xokazo tushunchalari bilan bog'lanishi bevosita o'quvchilarning ko'z o'ngida, haqiqatan ham integrativ kursni yuzaga kelishi Respublikamizda bozor iqtisodiyotining tezlashishi va uning qonuniyatlari takomillashishiga, hamda o'quvchilarimizning **xuquqiy** masalalarni bevosita shakllanishiga imkoniyat yaratib beradi. Shuning uchun xam quyida bir necha masalalarning yechilishiga namunalar keltiramiz:

a) hosila yordamida yechiladigan iqtisodiy masala;

Agar to'g'ri turtburchakli maydon dala yo'li bilan o'ralgan bo'lsa, u holda yetishtirilgan hosil avval dalaning ixtiyoriy nuqtasidan yo'lgacha bo'lgan eng qisqa yo'l bilan, so'ngra yo'l bo'yicha to'g'ri to'rtburchakning belgilangan uchigacha tashiladi. Agar yuk tashish yuk ishi

$$R(x) = k\left(\frac{6S^2}{x} + 9Sx - x^3\right)$$

formula bilan aniqlansa $x \in]0; \sqrt{S}]$ da $R(x)$ ni eng kichik qiymatini hosil qiluvchi x ni toping.

Yechish:

Buning uchun $R'(x) = -\frac{3k(x^2-S)(x^2-2S)}{x^2}$ ni topamiz.

So'ngra $x \in [0; \sqrt{S}]$ da $R(x) < 0$ bo'lgani uchun funksiya kamayadi. Shuning uchun funksiya $R(x)$ faqat $x = \sqrt{S}$ da o'zining eng kichik qiymatiga erishadi. Bundan qaralayotgan to'g'ri to'rtburchak figura kvadrat bo'lgandagina eng qisqa yo'l kam xarajat sarf bo'lar ekan. Bundan ko'rinib turibdiki, xarajat tushunchasi uchun bevosita matematikadan hosila tushunchasining tadbiqu bevosita iqtisodiy masalani hal qilish imkoniyatini yaratdi.

Iqtisodiy masalalar o'zining strukturaviy ko'rinishiga nisbatan turli-tuman bo'lishi mumkin. U daromadga, foydaga, pul massasiga, iqtisod qilishga va xokazoga bog'lik bo'lishi mumkin, lekin foyda deganda, uni har xil tushunish mumkin, masalan, matematik nuqtai-nazardan qaralsa, u yoki bu narsadan «eng ko'p», «eng qimmat» so'zlarining ichida ham foyda so'zi yashirinib yotganini ko'rish mumkin. Shu nuqtai-nazardan quyidagi masalalar ham iqtisodiy masalalar to'plamiga kiritiladi.

Masala:

Eng ko'p suv ketadigan sug'orish novi hosil qilish (yasash) uchun uchta bir hil taxtani bir-biriga qanday burchak ostida qoqish kerak?

Yechish:

Ma'lumki, eng katta ko'ndalang kesimga ega bo'lgan novga eng ko'p suv ketadi. Novning ko'ndalang kesim yuzi teng yonli trapesiyadir. Agar taxtalarning eni $AB = BC = CD = a$, $\angle BAD = x$ desak, u holda trapesiyaning balandligi $BE = a \sin x$ va uning katta asosi $AD = a(1 + 2 \cos x)$

Shuninguchun trapesiyaning yuzi $S(x) = a^2(1 + \cos x) \sin x$ ($0 \leq x \leq \frac{\pi}{2}$) bo'lib, $S(x)$ ning eng katta qiymatini topish uchun $S(x)$ ni x ga nisbatan hosilasini olamiz.

$S'(x) = a^2(1 + \cos x)(2 \cos x - 1)$ Hosila $0 \leq x \leq \frac{\pi}{2}$ intervalning faqat bitta $x = \frac{\pi}{3}$ nuqtasida nolga aylangani, $S(0) = 0, S(\frac{\pi}{3}) = \frac{3\sqrt{3}}{4} a^2$ bo'lgani uchun $S(x)$ o'zining eng katta qiymatiga $x = \frac{\pi}{3}$ yoki $\alpha = 120^\circ$ da erishadi. Bu masalaning mazmunidan shuni ko'rish mumkinki, o'quvchilar bunday nov yasash vaqtida olinadigan taxtalarni qanday tarzda olishni va ularni tayyorlashda eng kam chiqindi chiqishini ta'minlashni va eng katta sig'imli nov yasashni, sarflanadigan mehnatni va xomashyoni iqtisod qilishni o'rganadilar, kamda bu sarflangan mehnatdan kosal qilingan foydaning qanchalik oz yoki ko'p bo'lishiga qarab proporsional tarzda kunlik, oylik, yillik topiladigan daromad va foydani xomaki kisoblash imkoniyatiga ega bo'ladilar. Shundan ularda iqtisodiy tafakkur shakllanishini ko'rish mumkin.

Masala:

R radiusli doira shaklidagi yer maydonidan eng katta yuzali, teng yonli uchburchak ko'rinishidagi maydonni chegaralab olish uchun uning o'lchamlari qanday bo'lishi kerak?

Yechish:

Masala shartida berilganlarni taxlil kilib masala talabiga javob beradigan 4-chizmani chizib olamiz va unda $AS = SB, OA = OB = OC = R$ ekani masala shartidan ma'lum.

Endi CD balandlikni $DC = x$ deb belgilaymiz, u holda $OD = x - R$ bo'lib, $AB = 2AD = 2\sqrt{R^2 - OD^2} = 2\sqrt{R^2 - (x - R)^2} = 2\sqrt{2Rx - x^2}$ bo'lib, biz izlayotgan uchburchak yuzasi $S_{\triangle ABS} = S(x) = \frac{1}{2} AB \cdot CD = \frac{1}{2} \cdot 2\sqrt{2Rx - x^2} \cdot x = \sqrt{x^3(2R - x)}$ bo'ladi.

Bu yerda $0 < x < 2R$ bo'ladi. Endi bevosita $S(x) = \sqrt{x^3(2R - x)} \rightarrow \max$ savol qo'yiladi.

Ma'lumki, masalaning modeli $S(x) = \sqrt{x^3(2R - x)}$ da $0 < x < 2R$ bo'lgani uchun $S(x) > 0$ bo'ladi. Shuning uchun $S(x)$ va $S^2(x)$ funksiyalar bir xil nuqtada maksimumga erishishini hisobga olgan holda, biz avvalo $S^2(x)$ ning maksimumini topishga karakat qilamiz. Buning uchun $S^2(x) = \frac{1}{3} \cdot x \cdot x \cdot x(6R -$

3x) ko‘rinishda yozib olamiz, so‘ngra $x = x_1, x = x_2, x = x_3, 6R - 3x = x_4$ deb belgilashlar kiritib,

$$A_n = \frac{x_1 + x_2 + \dots + x_n}{n} \geq \sqrt[n]{x_1 \cdot x_2 \cdot \dots \cdot x_n} = \Gamma_n \text{ ga asosan,}$$

$$S^2(x) = \frac{1}{3} \cdot x \cdot x \cdot x (6R - 3x) \leq \frac{1}{3} \left(\frac{x+x+x+6R-3x}{4} \right)^4 = \frac{1}{3} \cdot \left(\frac{3}{2} \right)^4 \cdot R^4 \text{ bo‘lib,}$$

bundan $S^2(x) \leq \frac{27}{16} R^4$ bo‘ladi.

Demak, $S^2(x) \leq \frac{3\sqrt{3}}{4} R^2$ ekanidan, $x = \frac{3}{2}R$ da $S(x) = S\left(\frac{3}{2}R\right) \leq \frac{3\sqrt{3}}{4} R^2$ bo‘lib, bunda izlangan uchburchakning tomonlari $AB = BC = AC = \sqrt{3R}$ ekani kelib chiqadi.

Bu yechilgan masalaning mazmunidan ko‘rinib turibdiki, o‘quvchilar bilan bunday masalalarni yechish ularni nafaqat matematik tafakkurini rivojlantirishga yordam beribgina qolmasdan, balki ularning iqtisodiy tafakkurini rivojlantirishga, kamda shunday xayotiy iqtisodiy sharoitlar yuzaga kelgan vaqtda tegishli qarorga kelishga ham o‘rgatishi va bu qarorni kam iqtisodiy, ham matematik, ham mantiqiy nuqtai-nazaridan o‘ziga xos asosi borligi har bir shunday sharoitga tushgan o‘quvchi yoki insonni shunday iqtisodiy yechimlar borligi quvontiradi.

Bu yuqorida keltirilgan ma‘lumotlardan ko‘rinib turibdiki, matematikaning iqtisodiy fanlar bilan aloqasi bir tomondan o‘zining strukturaviy jixatidan ham murakkab, ham qiziqarli bo‘lishi, har bir iqtisodiy tushunchani atroflicha o‘rganilishi uchun muhimligi bo‘lsa, ikkinchi tomondan matematika ham o‘z navbatida nafaqat nazariy jixatidan, balki metodik jixatidan xam boyib boradi. Chunki, hozirgi masalani yechish uchun hosilaning tadbiqui yetarli edi, lekin yechimni chiroyli, tushunarli, o‘zining kuyi va yuqori yechim chegaralarini o‘zida aniqlab ko‘rsata oladigan yechimni ko‘rsatilishi nuqtai-nazaridan matematikani tekshirish metodlarining rang-barangligining o‘quvchilarga ko‘rsatilishi, ularning matematik tafakkuri shakllanishida muhim ahamiyatga ega ekan. Umuman matematikaning fanlararo aloqadorlik funksiyasi juda kuchli bo‘lib, ular o‘quvchilarning ham nazariy, ham amaliy bilimlarni takomillashtirishda, rivojlantirishda muhim ahamiyatga ega bo‘lar ekan.

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*Juraxujayev D.D.
Berdiqulov F.F.
Mirzaliyev S.R.
“Biologiya va geografiya” kefdasi o‘qituvchilari
O‘zbekiston-Finlandiya pedagogika instituti*

JIZZAX SHAHRI IJTIMOYIY-IQTISODIY RIVOJLANISHIGA TA’SIR ETUVCHI OMILLAR

Annotatsiya. Maqolada Jizzax shahrining geografik o‘rni, ijtimoiy-iqtisodiy holati va unga ta’sir etuvchi omillar haqida fikr yuritiladi.

Kalit so‘zlar: milliy iqtisodiyot, qulay geografik o‘rin, bozor iqtisodiyoti, sanoat tarmoqlari, demografik yuk, transport, maxsus industrial zona.

*Juraxujaev D.D.
teacher
Berdikulov F.F.
teacher
Mirzaliyev S.R.
teacher
“Biology and Geography” department
Uzbek - Finnish pedagogical institute*

FACTORS AFFECTING THE SOCIAL-ECONOMIC DEVELOPMENT THE CITY OF JIZZAKH

Abstract. The article discusses the geographical location of the city of Jizzakh, the social-economic situation and the factors affecting it.

Key words: national economy, convenient geographical location, market economy, industrial sectors, demographic load, transport, special industrial zone.

Har qanday mamlakatning milliy iqtisodiyotini shakllanishida uni tashkil etuvchi mintaqalarining ahamiyati katta. Raqamli iqtisodiyotga o‘tish, iqtisodiy islohotlarni yanada chuqurlashtirish va erkinlashtirish, barqaror rivojlantirishga erishish ko‘p jihatdan ana shu mintaqalarning, ya’ni mamlakatning turli ichki qismlarining salohiyat va imkoniyatlariga, faolligiga bog‘liq. Shu nuqtayi nazardan hozirgi davrda ishlab chiqarishni to‘g‘ri hududiy tashkil qilish, viloyat va iqtisodiy rayonlarning yer-suv, mineral xom-ashyo, yoqilg‘i va mehnat resurslaridan samarali foydalanishga muhim e’tibor qaratilmoqda. Erkin va ochiq iqtisodiyot, uning turli qatlamlarini vujudga keltirish, sog‘lom raqobat va investitsiya makonini shakllantirishdek dolzarb masalalarni hududlar xususiyatini hisobga olmasdan hal etib bo‘lmaydi. Tabiiyki, bunday sharoitda hududlarni

atroflicha o'rganish, ularning imkoniyat va muammolarini chuqur tahlil qilish, ustuvor yo'nalishlarni to'g'ri aniqlashga katta ehtiyoj tug'iladi [5].

Jizzax shahri ham ana shunday hududlar sirasiga kiradi. U o'zining ijtimoiy-iqtisodiy rivojlanishida qator qulayliklar bilan bir qatorda ayrim cheklovchi omillarga ham ega. Biroq, mintaqaning ijtimoiy-iqtisodiy rivojlanishini nafaqat uning qulay omillari (imkoniyatlari), balki zaif tomonlarini kuchaytirish, muammolarini maqsadli dasturlar doirasida hal etish orqali ham amalga oshirish mumkin. Chunki, har qanday muammo uni bartaraf etish uchungina muammodir, yoki boshqacha qilib aytganda, muammo, qisqa muddatli depressiv holat, turg'unlik navbatdagi rivojlanish, yuksalish bosqichini belgilab beradi [3].

Jizzax shahri tabiiy, iqtisodiy hamda siyosiy jihatdan qulay geografik o'rinda joylashgan. Bu esa o'z navbatida xo'jalik tarmoqlarining rivojlanishiga imkoniyat yaratadi. Shaharda ayniqsa sanoat tarmoqlarining rivojlanib borayotganligi boshqa tarmoqlarga qaraganda yuqori ko'rsatkichlarga ega hisoblanadi.

Bozor iqtisodiyoti sharoitida shaharda kechayotgan ijtimoiy-iqtisodiy o'zgarishlar oilalardagi farzandlar sonini ularning ketma-ketligini tartibga solishni, aholining sifat ko'rsatkichlarini yaxshilashni taqozo etadi. Statistika ma'lumotlari tahliliga ko'ra shahar aholisi tez suratlar bilan o'sib bormoqda [1]. Bu esa yaqin kelajakda shahardagi demografik yukning bir necha barobar ortishiga olib kelishi mumkin. Aholi sonining ortib borishi qo'shimcha ish o'rinlari va uy-joy bilan bog'liq muammolar ko'laminig kengayishiga sabab bo'ladi. Hududning ish bilan ta'minlash ko'rsatkichi esa mehnat resurslari bilan proporsional holatda emas. Ayniqsa davlat buyurtmasi va ish o'rinlari o'rtasidagi tafovutlar aholining oliy ma'lumotli bo'lsada ishsiz qolishiga sabab bo'lmoqda. Chunki yosh mutaxassislar ishlab chiqarish jarayoni bilan integratsiyasi ham ilmiy ham amaliy jihatdan bog'lanmagan. Natijada zamonaviy korxonalar rahbari bunday kadrlarga ehtiyoj sezmaydi. Biroq korxonalar malakali kadrlarga muxtoj. Shu sababdan mehnat yoshidagi aholi tarkibida xorijiy davlatlarga qora ishchi sifatida ishlashga ketish holatlari ko'p kuzatilmoqda.

Transport makroiqtisodiyotning asosiy tarmoqlaridan biri, iqtisodiyotning qon tomiri, harakatlantiruvchi kuchi hisoblanadi. U ishlab chiqarish bilan iste'molni bog'lab, ijtimoiy-iqtisodiy ishlab chiqarish jarayonlarining uzluksizligini ta'minlaydi.

Ta'kidlash joizki transport sohasi, sanoat va qishloq xo'jaligi nisbatan geografiyada kam o'rganilayotgan yo'nalish ekanligi bilan ajralib turadi. Vaholanki, transportsiz hech narsani tasavvur qilib bo'lmaydi, chunki transport harakat, masofani kesib o'tish, u yoki bu narsani tashish, jo'natish demakdir. Iqtisodiy geografiyada transport liniyalari, yo'l, yo'laklar sifatida o'zlashtirilganlik ko'rsatkichi, hududiy mehnat taqsimotini amalga oshiruvchi, iqtisodiy rayon va ishlab chiqarish majmualarini shakllantiruvchi muhim omilidir. Qolaversa, "arzon", "qulay", "noqulay" tushunchalarining zaminida transport

omili yotadi, transport geografik o‘rin esa iqtisodiy geografik o‘rinning asl mohiyatini aks ettiruvchi asos hisoblanadi [2].

Jizzax shahri respublikamizning boshqa viloyat markazlari hududiga nisbatan kichik hisoblanadi (100 ming km.kv). Bu esa o‘z navbatida transport tarmog‘ining shakllanishiga o‘z ta‘sirini ko‘rsatadi. Shaharda ikkita asosiy yo‘l mavjud bo‘lib (Sh. Rashidov va I.Karimov nomli ko‘cha) bu yo‘llar shaharni deyarli qamrab oladi. Ammo ularda harakatlanayotgan avtotransport vositalari, yo‘nalishli taksilar hamda mikroavtobuslarning salmog‘i bir-biridan sezilarli darajada farq qiladi. Xususan, Sh. Rashidov ko‘chasida harakatlanuvchi avtotransport vositalari soni juda ham ko‘p. Birgina shahar bo‘ylab yo‘lga qo‘yilgan yo‘nalishli avtobuslarning deyarli 90 foizi mazkur yo‘l orqali harakatlanadi. Bu esa o‘z navbatida tirbandlik holatlarini keltirib chiqaradi. Tirbandlikning ortib ketishi esa aholining o‘z manziliga kech yetib borishiga va eng asosiysi shahar ekologik holatining yomonlashuviga sabab bo‘ladi. Shu bilan birga, shovqinning yuqoriligi ham aholi o‘rtasida ayniqsa, qon aylanish tizimi kasalliklarining ortishiga sabab bo‘ladi. I.Karimov ko‘chasida esa holat aksincha tus olgan. Mazkur yo‘l orqali harakatlanuvchi avtotransport vositalari birmuncha kam. Ayniqsa yo‘nalish bo‘ylab harakatlanuvchi mikroavtobuslar soni hududdagi ijtimoiy holatga mutanosib emas. Mavjudlarida ham doimiy tarzda yo‘lovchilar soni ko‘pchilikni tashkil qiladi. Bu esa ushbu yo‘lda doimiy qatnovchi aholi qatlami uchun qator noqulayliklarni keltirib chiqarmoqda. Bunday tafovutga sabab bo‘luvchi omillar tahlil qilinganda hududdagi aholi soni hamda muassasa va tashkilotlarning joylashuvi asosiy sabablardan biri ekanligi namoyon bo‘ldi. Misol uchun Sh. Rashidov ko‘chasida joylashgan deyarli barcha muassasa va tashkilotlarda aholi soni ko‘pchilikni tashkil qiladi. Xususan, uchta oliy ta‘lim muassasasi, boshqaruv organlari, shifoxonalar, mehmonxona hamda xizmat ko‘rsatish uylari shular jumlasidandir. Ammo hozirgi kunda shahar iqtisodiyotini rivojlantirish maqsadida olib borilayotgan keng ko‘lamli islohotlar mazkur sohaga ham alohida e‘tibor qaratish lozim ekanligini talab qiladi. Ayniqsa “Jizzax” maxsus industrial zonasining barpo etilishi ishchi kuchi va “iste‘molchilar” qatnovining ortishiga sabab bo‘ldi. Shu sababdan mazkur hududga olib boruvchi yo‘l infratuzilmasini yaxshilash hamda yo‘nalishli avtotransport vositalarini ko‘paytirish har jihatdan maqsadga muvofiqdir.

Bizga ma‘lumki aynan bir tarmoqni rivojlantirish orqali ijtimoiy-iqtisodiy barqarorlikka erishib bo‘lmaydi. Shu sababdan ham hududlarni rivojlantirishda kompleks yondashish eng muhim omil hisoblanadi.

Jizzax shahri ijtimoiy-iqtisodiy rivojlanishi shahar landshaftining o‘zgarishi orqali namoyon bo‘lmoqda. Ko‘p qavatli uylarning qurilishi, aholiga xizmat ko‘rsatuvchi korxonalar va tashkilotlarning ko‘payishi hamda dam olish maskanlari aholi turmush shahroitining yaxshilanib borayotganligini ko‘rsatadi. Ammo mana shunday rivojlanish jarayonida ayrim korxonalar va tashkilotlarning hamkorlikda faoliyat olib bormasligi mamlakat budjetiga, shahar manzarasiga, qolaversa uning ekologik holatiga ham o‘z ta‘sirini ko‘rsatmoqda. Ayniqsa

shaharsozlik sohasida bu boradagi bir muncha oqsoqliklar ko‘zga tashlanmoqda. Shu sababdan amalga oshirilayotgan ishlarda har tomonlama puxta o‘ylangan reja asosida hamkorlikni to‘g‘ri yo‘lga qo‘yish lozim.

Shaharda madaniy muassasalarning yangi tizimi, xususan, madaniyat va istirohat bog‘lari, sport maydonchalari va suzish havzalari barpo etildi. Xizmat ko‘rsatish va servis yangi asosda tashkil qilindi. Ammo aholi sonining ortib borishi hisobiga bunday muassasalarga bo‘lgan talab ham kun sayin ortib bormoqda. Shu sababdan bugungi kunda shaharda zamonaviy sport inshootlari, suzish havzalari, sirk, zoopark va ekobog‘larni aholi soniga mos ravishda barpo etish maqsadga muvofiqdir. Chunki ma‘nan va jismonan baquvvat bo‘lgan inson o‘z mehnat faoliyatidan hech qachon charchamaydi va yangi g‘oyalar bilan jamiyat hayotiga o‘zining munosib hissasini qo‘shadi.

Xulosa o‘rnida shuni ta’kidlash joizki, hududni ijtimoiy-iqtisodiy rivojlantirish va uning imkoniyatlaridan keng foydalanish uchun hududni atroflicha o‘rganish, uning imkoniyat va muammolarini chuqur tahlil qilish hamda ustuvor yo‘nalishlarni to‘g‘ri aniqlash va amalga oshirish lozim.

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*Kalandarova Sh.
PhD student
Bukhara State University
junior teacher
Department of Media and Telecommunication
Uzbek State University of World Languages*

SHAPING THE FUTURE OF WORK: AUTOMATION, AI, AND NEW TECHNOLOGIES IN EMPLOYEE TRAINING AND DEVELOPMENT

Abstract. The influence of artificial intelligence (AI) on employee training and development is a profound game changer in the field of human resource development (HRD). The introduction of ChatGPT has not only accelerated the advancement of AI but also significantly magnified its impact on both organizations and employees. This study offers valuable insights and recommendations applicable to researchers, managers, HRD practitioners, and policymakers. Emphasizing the simultaneous development of both humans and machines is of utmost importance. A sole concentration on advancing AI technologies may carry the risk of jeopardizing the sustainability of employees' skills and their long-term career prospects.

Keywords: artificial intelligence (ai), employee training and development, human resource development (HRD), ChatGPT, impact, organizations, employees, skills, career prospects.

Introduction

Artificial Intelligence (AI), an amalgam of disciplines including computer science, engineering, mathematics, psychology, and linguistics (Dwivedi et al., 2023), is rapidly transforming the business and societal landscapes (Malik et al., 2022; Hamouche, 2021). Incorporating a range of cognitive technologies from robotic process automation to complex machine learning (Yorks et al., 2020), AI's chief objective is to create machines capable of tasks that mirror human intelligence, such as visual perception, speech recognition, decision-making, and language translation (Lund et al., 2023).

The field of AI is continually evolving, consistently birthing new subdomains like machine learning, natural language processing, and robotics (Ogurlu et al., 2021). In organizational contexts, AI has become instrumental in automating routine tasks, analyzing extensive data sets more efficiently than human capability (George and George, 2023), thereby augmenting decision-making processes (Rodgers et al., 2023) and enhancing business operations (Chowdhury et al., 2023).

The advent of ChatGPT, a generative pre-trained transformer, marked a significant milestone in AI development, bridging the gap between AI capabilities and human interaction (Budhwar et al., 2022). This innovation not only

highlighted the rapid progression of AI but also sparked discussions about its impact on job skills and employment. The International Labour Organization (ILO, 2023) posits that Generative AI like ChatGPT is more likely to complement jobs than to replace them. However, the demand for AI-related skills is surging, as evidenced by a Salesforce (2023) survey, which found that only a fraction of the workforce possesses these highly sought-after digital skills.

In the realm of human resource development (HRD), AI presents a significant transformative force. HRD, distinct from human resource management (HRM), concentrates on training design, delivery, and evaluation (Alagaraja, 2013), and is defined as a process aimed at developing and unleashing human expertise for performance improvement (Swanson, 1995). In contrast, HRM focuses on designing and managing human resource systems for organizational integration and employee commitment (Alagaraja, 2013). While HRM and HRD are closely related and complementary, the rise of AI necessitates a distinct exploration of its integration into HRD, especially given the evolving job and skill requirements in this era of rapid technological advancement (Budhwar et al., 2022).

Methodology

This article employs a comprehensive secondary research methodology to explore and analyze trends in training and development, particularly focusing on the implications of automation and artificial intelligence (AI). The methodology is structured as follows:

Literature Review: A systematic literature review forms the backbone of this research. This review encompasses a wide array of sources including academic journals, industry reports, white papers, and news articles. The aim is to gather relevant data and insights from established experts and organizations in the fields of automation, AI, and workforce training and development.

Data Collection and Analysis: The research involves collecting quantitative and qualitative data from secondary sources. This includes statistical information about automation's impact on the workforce, AI's role in training, and emerging trends in training methodologies. The data is analyzed to identify patterns, correlations, and potential future developments in training and development practices.

Expert Opinion and Industry Reports: To enhance the credibility and relevance of the research, the article incorporates opinions and findings from thought leaders and industry experts. Reports from prominent institutions and organizations provide a practical viewpoint and support the theoretical findings from academic literature.

Descriptive Analytical Approach: The methodology is primarily descriptive, aiming to present a detailed snapshot of the current state and anticipated future of training and development. It analyzes the gathered data to draw conclusions about evolving trends and their potential implications for practitioners in the field.

Results

The exploration into the future of training and development reveals several key findings essential for understanding the evolution of this field. These results integrate insights from training design and delivery, development and career management, and the role of training in social responsibility, diversity, and inclusion. Technological advances are likely to influence the future of training and development and your future as a trainer. Table 1 shows the future trends discussed in this chapter that will influence training.

Table 1: Future Trends That Will Affect Training



Automatization of Work

The use of automation to perform work previously done by employees is expected to increase quickly in the next decade. One survey found that robots and artificial intelligence (AI) are currently doing 12 percent of work but respondents report that their use will increase to 22 percent in just the next three years (Willis Towers Watson, 2018). Over 60 percent of companies today do not use automation to complete work; rather they use it to support employees in their work by helping them to avoid mistakes and errors in performing tasks that can be automated, freeing employees' time for more important high-value work. About one-third of human resource functions have started to change their activities to prepare for increases in automation by identifying new skill requirements and

matching talent to them. Twenty-five percent are planning to identify skill gaps in the future. However, 38 percent report they are unprepared to identify how to re-skill employees whose jobs are affected by automation. Table 11.2 highlights some of the potential impacts of automation on work.

Table 2: The Potential Impact of Automation on Work

<i>Six out of ten current occupations have more than 30 percent of work activities that can be automated using technology.</i>	<i>By 2030, 15 percent of the global workforce representing over 400 million workers could be potentially displaced by the adoption of automation. Three percent (75 million workers) of the workforce will need to change their occupation.</i>	<i>By 2030, up to one-third of the workforce in the United States and Germany and nearly 50 percent of the workforce in Japan may need to learn new skills and find jobs in new occupations (Manyika et al., 2017).</i>
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AI has helped the development of autonomous vehicles and robots. But depending on how robots are used, they don't necessarily eliminate jobs for humans, just change them. For some jobs, robots may be useful replacements for their human counterparts who are hard to find. For example, bricklaying contractors are unable to find enough bricklayers, but a semi-automated mason (SAM) can help perform some, though not all, of the human mason's tasks. SAM can't read blueprints, lay bricks on corners or curves, and other workers must load and refill its mortar and brick and clean up the joints on the bricks it lays. SAM helps alleviate the shortage of bricklayers, but at a cost of \$400,000 each (Bui & Kisby, 2018). Robots can also be used to perform some tasks done by employees. These include tasks that the robot can perform with equal if not more precision and consistency than humans (such as some forms of surgery), tasks that are potentially harmful to humans (e.g., painting and welding), and tasks that are simple and repetitive, enabling employees to spend their time on higher-value tasks. For example, BeeHex Inc. is building 3-D food printers that can decorate cookies or cakes. This means that pastry chefs can devote their time and energy to developing new flavors of cookies rather than spending their time icing dozens of cookies the same way. Humans still need to monitor the robots to ensure they are performing as expected, provide necessary maintenance, and refine their skills through reprogramming. Robots can also be used to perform entire jobs (not just tasks) previously done by employees. For example, robots with highly sensitive "hands" can pick up Peeps on Just Born's production line, enabling it to speed up production; or in a store, these robots can be used to locate and deliver merchandise to online shoppers (Neumann, 2018; Hernandez, 2018). Uber Technologies has been using self-driving robot cars in some markets but recently faced a setback when a pedestrian was killed in Arizona after being struck by an autonomous vehicle that failed to avoid the collision (Bensinger & Higgins, 2018).

Jobs involving physical activities in predictable environments such as operating equipment and machinery and preparing food are likely to be automated. Also, work activities that involve collecting and processing data that occur in banking, finance, accounting, and legal work (such as preparing mortgages and computing taxes) can be done more efficiently and effectively through automation. There are several activities where automation cannot replace human performance, including jobs in which work activities are unpredictable and jobs that involve managing other people, exercising creativity, applying expertise, and engaging in social interactions (e.g., plumbers, childcare workers, artists and performers, builders, and engineers and scientists). For example, one study of Ohio employees found that almost half of their jobs are likely to be automated in the future, including cashiers, truck drivers, fast-food workers, warehouse laborers, bookkeepers, accountants, and auditing clerks (Williams & Caruso, 2018). This would result in the loss of 2.5 million jobs due to automation.

From a training and development perspective, increases in automation mean that employees will need to be provided with job retraining at the national and company level to help them gain new skills and change careers if necessary (Manyika et al., 2017). Education and training will need to address science, technology, engineering, and math (STEM) skills and skills in leadership, managing others, collaborative problem solving, social reasoning, creativity, and learning to learn. Companies will need to become even more involved in partnerships with educational institutions to provide certificate programs, apprenticeships, and on-the-job training needed for skill development. While employees are retraining, they will need some type of income and benefit support and after retraining they will need help in finding new jobs. The United States may have to consider implementing a large-scale education initiative like the GI Bill of 1944 to help employees' re-skill. The GI Bill helped World War II veterans return to civilian life by providing them with tuition payments and living expenses to attend high school, college, or vocational or technical school. Over half of veterans took the benefits, creating demand for growth of U.S. universities and making college accessible to all not, rather than just the rich or elite.

Increased use of new technologies for training delivery and instruction

The use of social media, smartphones, and other new technologies will likely increase in the future for several reasons. First, the cost of these technologies will decrease. Second, companies can use technology to better prepare employees to serve customers and generate new business. Third, use of these new technologies can substantially reduce the training costs (e.g., travel, food, and housing) related to bringing geographically dispersed employees to one central training location. Fourth, these technologies allow trainers to build into training many of the desirable features of a learning environment (e.g., practice, feedback, reinforcement). Fifth, as companies engage in more nontraditional employment relationships (e.g., part-timers and consultants) and offer more alternative work arrangements (e.g., flexible work schedules and working from

home), technology will allow training to be delivered to any place and at any time. Sixth, new technologies will make it easier for training and performance support to be accessible to learners anytime and anyplace.

Table 3 shows technological advances that will likely influence training delivery and instruction.

Table 3: New Technological Advances That Will Influence Training

Wearables (smartwatches, smartbands, smart glasses)	Artificial Intelligence (AI)	Internet of Things (IoT)
Gamification	Immersive Learning Experiences (digital twins)	Tin Can API (or Experience API)
Learning Records Store (LRS)		

Artificial intelligence (AI) will become even more humanlike and accessible at a lower cost. There are several ways AI may influence learning in the future. One way is through providing every employee with a learning bot (Dhaliwal, 2017). A learning bot helps employees by identifying and recommending the most important knowledge to get work done. Sonic Automotive is studying the use of AI for training, potentially creating a Siri- or Alexa-like application that associates will be able to ask a job-related question and get an answer without having to attend an online or instructor-led training course (Freifeld, 2018). This type of application is especially important because it will be difficult for conventional training to be rapidly deployed to meet all the knowledge and skill needs related to the rapid changes in the automobile industry—including the introduction of autonomous driving vehicles and new types of electric cars. Learning bots can also be used by training managers to analyze matches (or mismatches) between roles and tasks and to identify learning needs.

AI will also increasingly be used for coaching and mentoring. For example, Butterfly AI's artificial intelligence coaching app uses anonymous employee feedback and current performance data to rate managers' performance and then provide advice and suggest training to improve their weaknesses (Gale, 2018). Apps are also available for employees to practice a conversation and get feedback to prepare for a face-to-face meeting. Other apps can monitor managers' speech

patterns, providing them with insights into their tone, filler words used, energy level, and speed, as well as recommendations on how to improve. Wequassett Resort and Golf Club uses a learning app, "Star Coach," to help improve its customers' experience (Training Top 125, 2018). Employees respond to videos of hotel guests' complaints, questions, and compliments. The app records employees' responses and analyzes their tone, speed, and emotion. It provides a calculation of the genuineness of the response and a score of the employee's confidence level, effort to connect with, and emotional involvement with the customer. It also provides the employee with improvement tips. Coaching apps will be especially valuable as supplements to traditional face-to-face coaching and mentoring, especially in situations where because of physical distance or work schedules employees and managers don't interact very often.

There are several risks or challenges inherent with the use of AI. One of the challenges of AI is that its feedback is based on what it has been taught. This means the burden is on AI developers to teach it what right behavior looks like or what right voice tone sounds like depending on the situation, as well as how to coach for improvement. Designers of AI-based apps caution that they do not have the same complex cognitive capacity that humans do for making judgments based on simultaneously considering the quality of content shared in a coaching session, eye contact, and body language. As a result, these apps should not be considered as a replacement for human mentors and coaches. Additional challenges of AI include determining who is liable if the wrong decision is made or the wrong action is taken—the employee using AI or the developer of AI?—and protecting the privacy of employee data used to make AI more intelligent (Srail, 2018).

Internet of things (IoT) devices will become increasingly part of the workplace. Internet of things (IoT) devices refers to "smart devices," that is, physical objects embedded with sensors and Internet connections (Moore, 2017). For example, apps on wearable devices can be used to track employees' locations and connect employees to seminars, courses, or available subject-matter experts who are in close geographic proximity to them. IoT helps make learning a continuous ongoing personalized experience that employees can engage in when it is needed. There is no need to wait for a formally scheduled class to learn!

The use of games and mobile learning is likely to increase as companies seek to make training fun, maximize the learning experience, and appeal to millennials' and other learners' expectations that learning should be quick, include short interactive lessons, be available at their fingertips, and allow them to ask their peers questions, share experiences, and seek advice (Castellano, 2015; Ford & Meyer, 2014; Bersin, 2015). The gamification experience might include advanced simulations based on digital twins, a digital representation of a real-world object or system that learners can explore in a three-dimensional environment (Gartner, 2017; Wright, 2018).

Conclusions

Several significant conclusions can be derived from the discussion surrounding the influence of artificial intelligence (AI) on training and development, as well as its wider implications for the workforce and human resource development (HRD). Below are the key takeaways:

AI's Transformative Role in Learning: Artificial intelligence is playing a transformative role in the realm of training and development. Its applications span personalized learning, recommendation systems, coaching, and mentoring. Learning bots and coaching apps driven by AI are reshaping the way employees acquire knowledge and skills.

Workplace Automation Redefining Roles: The growing integration of automation and AI within workplaces is redefining job roles and tasks. While it is expected to automate repetitive and routine functions, it also offers new opportunities. This automation is poised to impact a wide range of industries, necessitating a focus on reskilling, and upskilling the workforce to adapt to these changes.

Embracing New Training Technologies: Organizations are increasingly embracing emerging technologies for training delivery and instruction. This includes wearables, smart devices, gamification, and immersive learning experiences. These technologies are making training more flexible, accessible, and engaging for employees.

AI's Influence on HRD Practices: The field of HRD is undergoing significant shifts due to AI's influence. HRD professionals need to adapt to these technological advancements and incorporate AI into their training programs. AI can assist in identifying skill gaps, providing real-time feedback, and enhancing the overall training experience.

Growing Demand for AI-Related Skills: The demand for AI-related skills is on the rise across diverse industries. However, a substantial portion of the workforce lacks these digital competencies. Organizations must invest in training and development initiatives to bridge these skill gaps and ensure that employees can effectively collaborate with AI technologies.

Ethical and Privacy Considerations: Utilizing AI in training and development raises ethical and privacy concerns. AI's recommendations are based on the data it has been trained on, prompting questions about the ethical responsibility of AI developers. Additionally, safeguarding the privacy of employee data used for AI training is paramount.

Collaboration with Educational Institutions: Companies are forging partnerships with educational institutions to offer certificate programs, apprenticeships, and on-the-job training. These collaborations are essential to equip the workforce with the skills required for the evolving job landscape.

Emphasis on Continuous Learning: Given the evolving nature of work and the integration of AI, continuous learning and adaptability have become

imperative for employees. Beyond technical skills, employees need to develop soft skills such as leadership, problem-solving, and creativity.

Diverse Impact on Job Roles: The impact of automation and AI on job roles varies. While some jobs may be automated, others may undergo significant transformations, and entirely new roles may emerge. HRD professionals must prepare employees for changing job requirements and potential career transitions.

In summary, artificial intelligence is a catalyst for change in training and development, reshaping the learning process and organizational dynamics. To thrive in an AI-driven era, organizations must invest in reskilling and upskilling their workforce, leverage innovative training technologies, and address ethical considerations. HRD professionals play a pivotal role in navigating these changes and ensuring that employees remain adaptable and equipped with the skills needed for the future of

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Kalinina V.S.
Department of Exact Sciences and Information Technologies
Kazan (Volga Region) Federal University
Omonov S.R.
assistant
Department of Radioelectronics
Jizzakh Polytechnic Institute

DYNAMIC AND DISCRETE EVENTS MODELING

Annotation. This article provides an overview of dynamic and discrete event modeling, two key approaches to systems analysis. The article discusses the definition and application of these approaches in various fields such as industry, transportation, medicine and finance. The technologies used to implement modeling and the prospects for the development of this area are also discussed.

Keywords: Modeling, dynamic events, discrete events, systems, analysis, application, technology, artificial intelligence, Internet of things, distributed modeling.

Any management system consists of a set of interconnected elements. In order to study and control the physical properties of such a system, it is necessary to express it mathematically. The system is in motion during operation, and this motion characterizes its state. The state variables of the system are represented by interrelated equations. In this case, the state variables of the system can be different. For example: electrical quantities (current, voltage, power), mechanical quantities (displacement, deflection, sliding) and other quantities (temperature, level, time....) [1].

It is convenient to represent the system with one generalized parameter, where the system and its elements are called **signal converters**.

Dynamic system systems that are in motion and can change their state over time. Dynamic automatic control systems can generally consist of the following devices:

- Assignment device. 3. Implementation device.
- Manager device. 4. Management object.

Dynamic to systems example by doing manage Systematic projectiles, itself fly devices, chemical, thermodynamic and technological processes show can This systems analysis by doing common without automatic manage in systems dynamic processes mathematician in terms of to express trying we will see [2]. Of this for reverse connected the following dynamic to the system effect doer main indicators set we get:

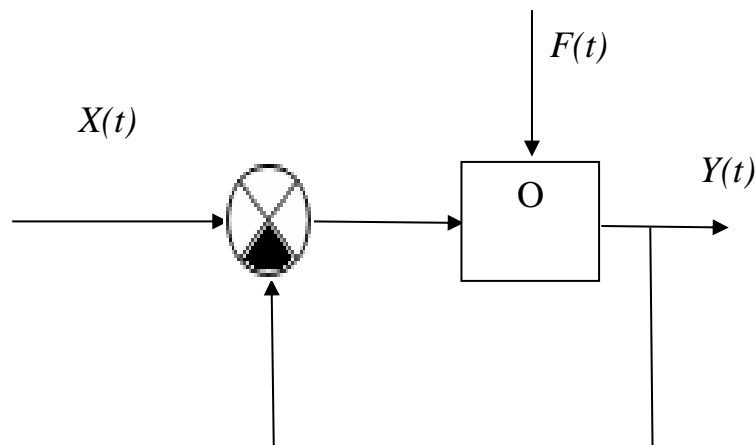


Figure 1 Management system structural scheme

here: _ _ _

$X(t) = \{x_1(t), x_2(t), \dots, x_n(t)\}$ - assignments vector; (1)

$Y(t) = \{y_1(t), y_2(t), \dots, y_n(t)\}$ - managed indicators vector;

$F(t) = \{f_1(t), f_2(t), \dots, f_n(t)\}$ - external impact _ _ vector.

This dynamic the system common without the following dynamic system with to express can:

$$F_1\left(y, \frac{dy}{dt}, \frac{d^2y}{dt^2}, \dots, \frac{d^ny}{dt^n}\right) = F_2\left(x, \frac{dx}{dt}, \frac{d^2x}{dt^2}, \dots, \frac{d^mx}{dt^m}, f, \frac{df}{dt}, \frac{d^2f}{dt^2}, \dots, \frac{d^yf}{dt^y}\right) \quad (2)$$

differen s ial equation dynamic systems expressive mathematician expression being his _ apparently looking dynamic systems one how many type to be can _ For example: differential in Eq F_1, F_2 functions linear functions if, then this linear differential equations with expressible systems **linear dynamic systems** is called If differen s ial in Eq F_1, F_2 functions non-linear to the character to e if, then differen s ial equation non-linear differen s ial equation with him expressible systems **non-linear dynamic systems** is called

Differen s ial in Eq x, y, f of from derivatives except their private Derivatives also participate can _ Such private derivative differen s ial equations with expressible systems **special dynamic systems** is called If the system expressive the mathematical model is finite different equations in the form of if, then such systems **impulsive or discrete dynamic systems** is called common without linear dynamic of systems mathematician model the following high in order linear differential equation in the form of to write can:

$$a_0 \frac{d^ny}{dt^n} + a_1 \frac{d^{n-1}y}{dt^{n-1}} + \dots + a_{n-1} \frac{dy}{dt} + a_{n-1} \frac{dy}{dt} + a_n y = b_0 \frac{d^mk}{dt^m} + b_1 \frac{d^{m-1}}{dt^{m-1}} + \dots + b_{m-1} \frac{dx}{dt} + b_m x + c_0 \frac{d^y f}{dt^y} + c_1 \frac{d^{y-1} f}{dt^{y-1}} + \dots + c_{y-1} \frac{df}{dt} + c_y f \quad (3)$$

This to Eq the following designations we enter:

$$p = \frac{d}{dt}, p^2 = \frac{d^2}{dt^2}, \dots, p^n = \frac{d^n}{dt^n} \quad (4)$$

In that case equation the following to look to e will be:

$$(a_0 p^n + a_1 p^{n-1} + \dots + a_{n-1} p + a_n) \cdot y = (b_0 p^m + b_1 p^{m-1} + \dots + b_{m-1} p + b_m) x + (c_0 p^y + c_1 p^{y-1} + \dots + c_{y-1} p + c_y) \cdot f \quad (5)$$

This equation for the following designations we enter:

$$a_0 p^n + a_1 p^{n-1} + \dots + a_{n-1} p + a_n = A(p) \quad (6)$$

$$b_0 p^m + b_1 p^{m-1} + \dots + b_{m-1} p + b_m = B(p)$$

$$c_0 p^y + c_1 p^{y-1} + \dots + c_{y-1} p + c_y = C(p)$$

This expression P to relatively a lot that if we get equation the following to look will come:

$$A(p) \cdot Y(t) = B(p) \cdot x(t) + C(p) \cdot f(t) \quad (7)$$

equation is an expression of linear dynamic equations in the form of Laplace operator [3,4].

Another feature of linear dynamic systems is that the principle of superposition is appropriate for them. The meaning of this principle is that if the input of a linear dynamic system receives a signal formed from a linear combination (addition, subtraction) of several signals, the system reaction, that is, the output signal, $Y(t)$ gives the signals separately to the system input, the sum or difference of the resulting reaction must be equal to each other [5].

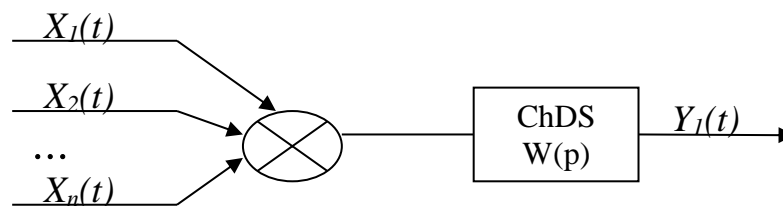


Figure 2. Linear dynamic systems.

Systems with the principle of superposition are called **linear dynamic systems**. Systems where the principle of superposition is not appropriate **non-linear dynamic systems** is called From this except automatic manage systems in theory non-stationary systems are also available they are _ _ the following differen s ial equations in the form of is represented by:

$$a_0(t) \frac{d^n y}{dt^n} + a_1(t) \frac{d^{n-1} y}{dt^{n-1}} + \dots + a_n(t) y(x) = b_0(t) \frac{d^m x}{dt^m} + b_1(t) \frac{d^{m-1} x}{dt^{m-1}} + \dots + b_m(t) x + c_0(t) \frac{d^y f}{dt^y} + c_1(t) \frac{d^{y-1} f}{dt^{y-1}} + \dots + c_y(t) f \quad (8)$$

This from Eq visible _ is non- stationary of systems dynamic indicators equation coefficient e nts time during changed will go yes _

If the system in the composition never 1 signal if not time according to if it is a quantizing element, it is like this to systems **impulsive dynamic** are called

systems. For example: Key. Non-linear dynamic systems in the composition never if not one is a nonlinear element, and their mathematician model non-linear differential equations in the form of is written [6]. For example: Relay.

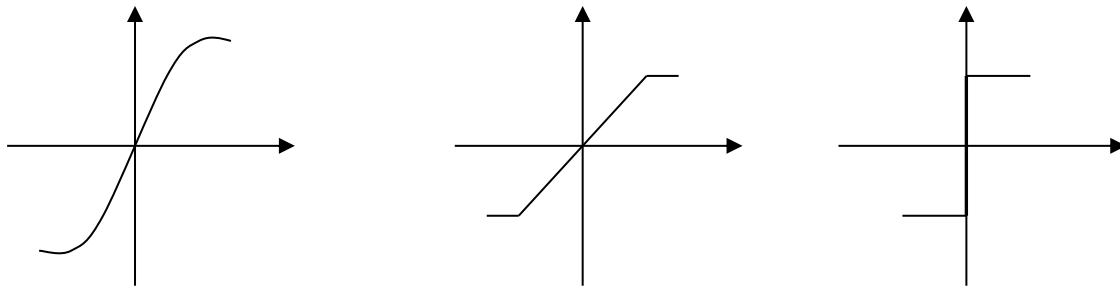


Figure 3 is pulsed dynamic systems

Static characteristics are algebraic equations through, dynamic characteristics by differential equations is expressed.

Suppose that the state of the system is written by differential equations.

$$F\left(\ddot{y}, \dot{y}, y, \dot{x}, x\right) + f = 0 \quad (9)$$

The static view of the equation is as follows.

$$F(0,0, y,0, x) + f = 0$$

In real systems, its static and dynamic characteristics are written by nonlinear equations. Solving nonlinear equations is more complicated [7,8].

Converting nonlinear equations into linear equations is called **linearization**.

Linearization is usually done relative to the equilibrium state. In this case, the deviation is very small. For this, the nonlinear equation is expanded into a Taylor series, and each variable is multiplied, that is:

$$x = \Delta x + x_0 \quad (10)$$

$$y = \Delta y + y_0$$

$$f = \Delta f + f_0$$

If we look at the expressions in relation to the deviation, the equation is written as follows:

$$F(\Delta \ddot{y}, \Delta \dot{y}, \Delta y + y_0, \Delta \dot{x}, \Delta x + x_0) + \Delta f + f_0 \quad (11)$$

we expand the equation into a Taylor series based on the equilibrium equation:

$$F(0,0, y_0,0, x_0) + \left(\frac{dF}{d\ddot{y}}\right)_0 \Delta \ddot{y} + \left(\frac{dF}{d\dot{y}}\right)_0 \Delta \dot{y} + \left(\frac{dF}{dy}\right)_0 \Delta y + \left(\frac{dF}{dx}\right)_0 \Delta x + \dots = 0 \quad (12)$$

Then the equation will look like this:

$$a_0 \Delta \ddot{y} + a_1 \Delta \dot{y} + a_2 \Delta y = b_1 \Delta x$$

example:

RC Let the chain be given. The differential of the circuit given in Fig. 1 let the equation be formed.

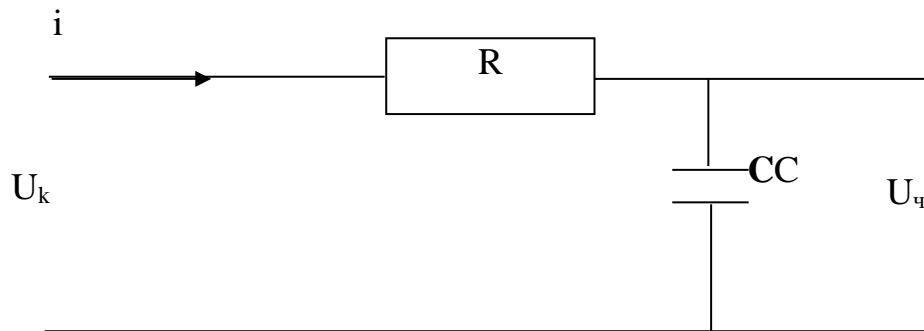


Figure 4 RC circuit diagram.

$$U_{ch}(t) = A \cdot U_k(t) \quad (13)$$

$$A = \frac{U_{ch}(t)}{U_k(t)}$$

$$U_k(t) = i(t) \cdot R + \frac{1}{c} \int_0^t i(t) dt$$

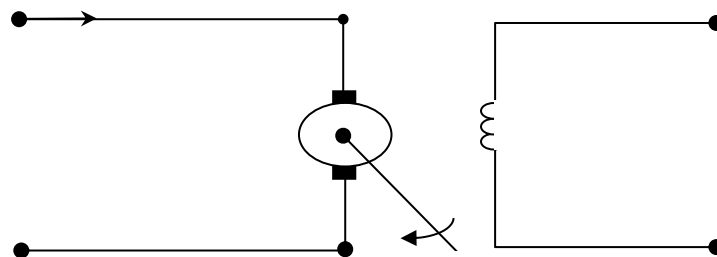
$$U_{ch}(t) = \frac{1}{c} \int_0^t i(t) dt$$

$$\frac{dU_{ch}(t)}{dt} = \frac{1}{c} i(t)$$

$$i(t) = c \cdot \frac{dU_{ch}(t)}{dt}$$

$$U_k(t) = R \cdot C \frac{dU_{ch}(t)}{dt} + U_{ch}(t) \quad R \cdot C = T$$

$$T \cdot \frac{dU_{ch}(t)}{dt} + U_{ch}(t) = U_k(t)$$



Let's build the mathematical model of the DC motor shown in Figure 5.

5 - picture. DC motor.

$$J \frac{d\omega}{dt} = M_g - M_q \quad (14)$$

where ω is the engine speed, M_g is the engine torque, and M_q is the resistance torque.

In this case, the engine torque:

$$M_g = M_g(\omega, u) \quad M_q = M_q(\omega, t); \quad (15)$$

In the equilibrium state, the engine torque $M_{g_0} = M_{q_0}$ is

$$\begin{aligned} u &= u_0 + \Delta u \\ \omega &= \omega_0 + \Delta \omega \end{aligned} \quad (16)$$

Based on the above, we write the engine torque as follows [9,10]:

$$M_g = M_{g_0} + \left(\frac{dM_g}{d\omega} \right) \Delta \omega + \left(\frac{dM_g}{du} \right) \Delta u \quad (17)$$

$$M_q = M_{q_0} + \left(\frac{dM_q}{d\omega} \right) \Delta \omega + \Delta M_q$$

These expressions to Eq let's say the following equation harvest will be:

$$J \frac{d\omega}{dt} = M_g - M_q = J \frac{d\omega}{dt} = \left(\frac{dM_g}{d\omega} \right) \Delta \omega + \left(\frac{dM_g}{du} \right) \Delta u - \left(\frac{dM_q}{d\omega} \right) \Delta \omega - \Delta M_q \quad (18)$$

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*Karimov Q.M.
Qarshi davlat universiteti
Algoritmlar va dasturlash texnologiyalari
kafedrasi professor vazifasini bajaruvchi
Omonova S.M.
Qarshi davlat universiteti
Algoritmlar va dasturlash texnologiyalari kafedrasi magistri*

O‘QUVCHILARGA INFORMATIKA VA AXBOROT TEXNOLOGIYALARIGA OID BILIMNI O‘RGATISHDA INTERNETDAN FOYDALANISH

Annotatsiya: mazkur maqolada talabalarda informatika va axborot texnologiyalariga oid bilimni o‘rgatishda internetdan foydalanish ko‘nikmalari o‘rganilib chiqilgan, hamda xorijiy davlatlar malakari o‘rganilib chiqilgan.

Kalit so‘zlar: informatika va axborot texnologiyalari, internet resurlari, Janubiy Koreya tajribasi, axborot madaniyati, WWW, kasbiy pedagogika, interaktiv metodlar.

*Karimov K.M.
acting professor
Department of Algorithms and Programming Technologies
Karshi State University
Omonova S.M.
master student
Department of Algorithms and Programming Technologies
Karshi State University*

USE OF THE INTERNET IN TEACHING STUDENTS KNOWLEDGE OF COMPUTER AND INFORMATION TECHNOLOGIES

Abstract. In this article, the skills of using the Internet in teaching informatics and information technologies to students were studied, as well as the skills of foreign countries were studied.

Keywords: informatics and information technologies, Internet resources, South Korean experience, information culture, WWW, professional pedagogy, interactive methods.

O‘zbekiston Respublikasi maktabgacha, umumiy o‘rta, professional va oliy ta’lim tizimlarida Informatika va axborot texnologiyalari fanini o‘qitishni rivojlantirish konsepsiyasida Informatika fani umumiy ta’limning asosiy bo‘g‘ini hisoblanish tajribasidan milliy xususiyatlarni va mamlakatda amalga oshirilayotgan islohotlarni hisobga olgan holda jahon bozoriga malakali kadrlar

tayyorlashga qo'yiladigan xalqaro talablarga muvofiqligini ta'minlash maqsadida Informatika ta'limining me'yoriy hujjatlarini (DTS, malaka talablari, o'quv reja va fan dasturlari) ni ishlab chiqish va joriy etish belgilab berilgan.

Ishlab chiqarish jarayonlari yuqori darajada sanoatlashgan Buyuk Britaniya, Fransiya, Germaniya, AQSh, Isroil, Janubiy Koreya, Xitoy Xalq Respublikasi va boshqa rivojlangan davlatlarning ta'lim tizimida ham Informatika fani umumiy ta'limning asosiy bo'g'ini hisoblanadi. Xususan, Janubiy Koreya axborotlashtirish va kompyuterlashtirish darajasi bo'yicha dunyoning eng rivojlangan davlatlaridan biri bo'lib, maktablarda informatika o'qitishning azaliy an'alariga ega. Ko'p yillar davomida respublikada o'quv jarayoniga axborot texnologiyalarini joriy etishga alohida e'tibor berib kelinmoqda.

Janubiy Koreya boshlang'ich maktablardan universitetlarga qadar barcha ta'lim muassasalariga yuqori tezlikdagi Internet tarmog'ini taqdim etgan birinchi mamlakat bo'ldi. 2015 yildan boshlab Janubiy Koreya maktablarda elektron darsliklardan ommaviy foydalanishga o'tildi. Kelajakda informatika va axborot texnologiyalari (IT) sohasida yuqori ko'rsatkichlarni ta'minlash va aqlli jamiyatga o'tishni osonlashtirish maqsadida Janubiy Koreya maktablarida eng so'nggi axborot texnologiyalari o'rganilmoqda. Shuning uchun Janubiy Koreya maktablarida informatika va axborot texnologiyalari fanini o'qitish tajribasi biz uchun juda qiziq.

Mavzuning dolzarbligi informatika va axborot texnologiyalari fanini o'qitishdagi Janubiy Koreya tajribasining yetarli o'rganilmaganligi, Janubiy Koreyaning informatika fanini o'qitishdagi yondashuvlari, sohaga yo'naltirilgan informatika fanini rivojlantirishning eng dolzarb yo'nalishlari, Janubiy Koreyada boshlang'ich va o'rta maktab uchun informatika zamonaviy darsliklarning mazmuni yetarli darajada o'rganilmaganligi bilan belgilandi.

O'qituvchilar o'quvchilar uchun darslikning barcha sahifalarini to'liq qisqartirilgan holda taqdim etadilar va chekkalarida darslikdagi matnni hoshiyalashda o'qituvchilar uchun ko'rsatmalar berilgan (3-rasm). Shuningdek, har bir mavzudan oldin o'qituvchining kitobida bo'lim ko'rib chiqilayotgan mavzuning dolzarbligini asoslaydi, tuzilishini tavsiflaydi ushbu tematik bo'limda materialni joylashtirish, tematik rejalashtirish bilan berilgan darslarning qisqacha mazmuni keltiriladi.

«Kompyuter bilan o'sish» darsligida to'rtta tematik bo'lim: «Axborot ratsion jamiyati», «Amaliy dasturiy ta'minot», «Axborot taqdimoti» va «Algoritmlar»lar mavjud. «Axborot ijtimoiy jamiyat» hisobga oling o'zgarishlar bilan bog'liq savollar, ostida bo'lgan odamlar hayotida sodir bo'lgan axborot texnologiyalarining ta'siri ma'lumot va ma'lumot olish uchun yangi imkoniyatlar milliy jamiyat.

«Axborot jamiyati» tematik qismida axborot texnologiyalarining ta'siri ostida odamlar hayotida yuz bergan o'zgarishlar va axborot jamiyatining yangi imkoniyatlari bilan bog'liq masalalar ko'rib chiqiladi. Zamonaviy dunyoda axborotni tezkor yetkazish jarayonlarini tushunishga erishish - bu ma'lumotni

yetkazib berishning o'tmish va zamonaviy usullarini taqqoslash, darslikda axborot jamiyatidagi hayotning ijobiy va salbiy tomonlari, yangi kasblarning paydo bo'lishi va ilgari an'anaviy bo'lgan ba'zi kasblarning yo'q bo'lib ketishi haqida so'z boradi. Odob-axloq qoidalariga katta e'tibor beriladi.

Ta'limda axborot texnologiyalari fanini o'qitishda mavzularni o'zlashtirish jarayonidagi qo'llanilgan innovatsion texnologiyalar orqali talabalarning fanga bo'lgan motivatsiyalarini rivojlantirishda quyidagi jihatlar muhim ahamiyat kasb etadi:

- talabalarning faoliyati davomida muvaffaqiyatga erishishlarini ta'minlovchi muhitni yaratish, ya'ni ularga berilayotgan topshiriqlarning murakkabligiga e'tiborni qaratish va albatta natijalarni baholash;

- talabalarning qiziqishlarini orttirish uchun muammolar qo'yish, mustaqil fikrlashlarini faollashtirishga nisbatan bo'lgan o'quv materiallarning barcha imkoniyatlaridan foydalanish;

- talabalarga darsda hamkorlik qilish, o'zaro yordamni tashkil etish, umumiy holda mavzuni o'zlashtirish jarayonida ijobiy munosabatni o'rnatish;

Albatta, talabalarda fanga, uni o'zlashtirishga nisbatan motivatsiyalarini shakllantirish orqali ularda olgan bilim va malakalarini o'zining kasbiy faoliyatlarida qo'llash ko'nikmalarini asosan amaliy, laboratoriya mashg'ulotlarida hamda mustaqil ta'lim jarayonlarida amalga oshirish mumkin. Amaliy, laboratoriya, mustaqil ta'lim kabi mashg'ulotlar, talabalar ijodiy faoliyatini rivojlantirishning interfaol metodlari, o'quv jarayonida metodologik bilimlarini faol qo'llashni rejalashtirgan ilmiy-tadqiqot faoliti, talabalarni fikrlash qobiliyatini, shaxsiy imkoniyatlarini yorituvchi psixologik bilimlar innovatsion darsning asosiy elementlari hisoblanadi. Shunga ko'ra ham amaliy, laboratoriya mashg'ulotlarini tashkil etishga e'tiborni kuchaytirish, ularni innovatsion dars ko'rinishida tashkil etish asosiy masalaga aylanmoqda.

Bugungi kunda barcha sohalarida axborot kommunikatsiya texnologiyalari borasida yetarli darajada bilimga ega bo'lish har qanday kasb egasining asosiy mezoni hisoblanishi lozim. Shuning uchun ham ta'limda axborot texnologiyalari fanini o'qitishni innovatsion dars ko'rinishida tashkil etish talabalarda nafaqat fanga bo'lgan qiziqish, balki olgan bilim va malakalarini o'zlarining kasbiy sohalarida qo'llash borasida ijodiy fikrlash, loyihalar tayyorlash motivatsiyalarini shakllantirishga erishiladi.

Masalan, mutaxassis bo'lmagan yo'nalishlarda ta'limda axborot texnologiyalari fani bo'yicha dasturlash tillarini o'zlashtirishga doir mavzulardan biri bo'lgan "HTML dasturlash tili" mavzusini amaliy va laboratoriya mashg'ulotlari orqali o'zlashtirishni amalga oshirishning ayrim jihatlarini ko'rib chiqaylik. Albatta, mavzuni o'zlashtirishning eng optimal variantlaridan biri innovatsion texnologiyaning tabaqalashgan o'qitish texnologiyasidir. Shuning uchun ham talabalar bilan hamkorlikda amalga oshirilayotgan jarayonlar soddalikdan murakkablikka yo'naltirilgan bo'lishi zarur. Bu jarayonni "Kim

tezroq?”, “Kim ko‘proq” va “Kim tezroq va ko‘proq? texnologiyalari asosida amalga oshirish ham amaliyotda yaxshi natijalar berdi.

Birinchi bosqichda Internetning www, http xizmatlari, veb-sahifa, veb-sayt, teg va atributlar yuzasidan assisment ko‘rinishdagi tarqatma material yoki slayd orqali talabalarning mavzu bo‘yicha bilimlari faollashtirib olinadi. So‘ngra auditoriya ikkita guruhga ajratilgan holda HTML tilining “Kim tezroq?” texnologiyasi yordamida sarlavha qismi o‘zlashtiriladi

Ikkinchi bosqichda HTML tilining masalan html, title, head, body, br, hr teglari bilin bog‘liq kichik bir veb-sahifa Bloknot dasturida talabalar ishtirokida katta monitor(ekran) orqali yaratiladi.htm yoki.html kengaytmasi bilan saqlanadi, natijasi muhokama qilinadi.Bu yerda talabalarga HTML da veb-sahifalar yaratish faqat <body> </body> teglari(konteynerlari) ichida amalga oshirilishini hamda ayrim teg va atributlarning bir necha bor takrorlanishlarini, shunga ko‘ra dastur kattaligidan qo‘rqmasliklarini eslatib o‘tish xam muhim ahamiyat kasb etadi

Mashg‘ulot so‘ngida esa talabalarga o‘rganilgan teglar va atributlar asosida “HTMLda....teg(atribut) qanday vazifani amalga oshiradi?” yoqi “Vebsahifada...ni hosil qilish qaysi teg orqali amalga oshiriladi?” ko‘rinishida “Kim ko‘proq?” texnologisi asosda sodda testlar xamda dastur tuzib kelish vazifasi ham ularni o‘z ustida mustaqil ishlashga undaydi. Natijaga ko‘ra esa talabada til bo‘yicha yanada ko‘proq ma’lumotlar olish, veb-sahifalar yaratish motivatsiyalari shakllana boradi.

Navbatdagi mashg‘ulotlarda qo‘llanilayotgan teg va atributlar sonini ortirib borgan holda guruh-guruh bo‘lib o‘yin, musobaqa ko‘rinishda “Kim ko‘proq va tezroq” texnologiyasi asosida tashkil etish lozim bo‘ladi. Bu yerda o‘rganilayotgan bloklar bo‘yicha masalan, matn, jadval va ranglar, veb-sahifani taqsimlash, boshqa sahifalarga murojaat, videotasvirlar o‘rnatish bilan bog‘liq bo‘lgan teg va atributlarni o‘zlashtirish bosqichma – bosqich uslubida amalga oshirilsa, talabalarning bevosita va bilvosita mavzuni o‘zlashtirishga nisbatan motivatsiyasi ortib boradi.

Shu bilan birga mashg‘ulotlarda talabalarni veb-sahifalar yaratishga mo‘ljallangan HTML5 va CSS3 tillarining imkoniyatlari, afzalliklari, style selektori elementlari va vazifalari haqida ma’lumotlar berish orqali ham ularda nafaqat mavzuni o‘zlashtirishga nisbatan motivatsiyalarini balki bu borada amaliy ishlar tayyorlashga yo‘naltirish ham amalga oshiriladi. Masalan, CSS3 tilining quyidagi afzalliklarini talabalarga yetkazish bilan ham ularda dastur tuzishlga bo‘lgan qiziqishlari yanada ortadi:

- CSS3 tilining selektorlari orqali HTML5 kodining katta hajmda qisqarishiga hamda saytni yuklashga, qidiruv tizimlariga murojaatlarga nisbatan tezlikning ortishiga;

- Veb-sahifalardagi xar bir teglar vazifalarini boshqarishni CSS3 stilining imkoniyatlariga ko‘ra saytni oson yangilash;

- Yaratilayotgan veb-saytlarni taqsimlash va jihozlashda keng imkoniyatlarni yaratish kabilar.

Eng aosiysi HTML tiling CSS3 tili bilan bog‘lab o‘rganilishi orqali talabalarni Java, JS, PHP, Node veb-dasturlash tillarini o‘rganishga bo‘lgan motivatsiyalari shakllantiriladi.

Albatta, bu jarayonlarni takroran ta’kidlagan holda amaliy va laboratoriya mashg‘ulotlarida amalga oshirilishini eslatib o‘tmoqchiman. Chunki, faqat amaliyot orqali ularda fikrlash hamda ijod qilish motivatsiyalari shakllanadi. Bu jarayonning yana bir muhim jihatlari shundan iboratki, talaba olgan bilimlarini ayrim omillarga ko‘ra amaliyotda qo‘llash darajasiga ega bo‘lmaydi yoki mavzu yuzasidan olgan bilimlarini amaliyotda qo‘llamaganligi uchun mavzu o‘zlashtirilmaydi. Shuning uchun ham talabalarining fanga nisbatan yoki mavzuni o‘zlashtirishga nisbatan motivatsiyalarini shakllantirish tanlab olinayotgan vazifalarning soddalikdan murakkablikka qarab yo‘naltirilganligidadir

Bugungi kunda axborot olamida internet, internet-televidenie, internet-radio, elektron pochta, onlayn-video kabi ko‘plab yangi axborot tarqatish texnologiyalari tez sur‘atlar bilan rivojlanib, ularning auditoriyasi va ta’sir doirasi tobora kengayib borayotganligiga guvoh bo‘lmoqdamiz. Bunday axborot vositalariga asosan yoshlar juda katta qiziqish bilan qarashi va ulardan keng foydalanishini hisobga olsak, haqiqatdan ham, bu masalaning naqadar ulkan ahamiyatga ega ekanini anglash qiyin emas.

Axborot kommunikatsiya va rakamli texnologiyalardan foydalanish madaniyati o‘quvchini mustaqil fikr yuritishga, ijodkorlik faoliyatlarini rivojlantirishga, axborot olish, uni qayta ishlash, umumlashtirish, xulosa chiqarishga o‘rgatib, yoshlarning dunyoqarashi, intellektual salohiyatining rivojlanishiga va kamol topishiga zamin yaratadi. Yoshlarimizning axborot bilan ishlash, axborot qidirish, turli yolg‘on ma’lumotlarga aldanib qolmaslik, zarur axborotlarni ajrata bilish, qayta ishlash, tartibga keltirish, axborot mazmunini tushunish, do‘stlarga xolis manbalarni uzatish, mantiqiy fikrlay olishni o‘rganish asosida axborot madaniyati shakllanadi. Axborotning kim uchun va nima maqsadda tayyorlanganligini tushuna bilish muhim ahamiyatga ega. Har bir o‘quvchi aloqa sohasida qanday texnik vositalar ishlatilishi to‘g‘risida umumiy tasavvurga ega bo‘lishi kerak.

Xulosa o‘rnida takidlash jo‘izki, raqamli texnologiyalar islohotlar jarayonining ochiqligini ta’minlash, davlat va jamiyat o‘rtasida samarali axborot almashish mexanizmini o‘rnatishda muhim vosita sanaladi. Ayni paytda hukumat, vazirlik va idoralar, shuningdek, parlament a’zolarining aholi bilan samarali muloqot o‘rnatish uchun maxsus virtual qabulxonalari tashkil etilgani, avvalo, jahon amaliyotiga uyg‘un holda sohada qonun hujjatlarini muttasil takomillashtirib borish, yangi qonunlarning mazmun-mohiyatidan keng jamoatchilikni xabardor qilish va ularni amaliyotga samarali tatbiq etishga xizmat qiladi.

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Karimova G.B.
*O'zbekiston davlat jismoniy tarbiya va sport
Universiteti Farg'Ona filiali yakkakurash sport turlari nazariyasi va
Uslubiyati kafedrasi assistent o'qituvchisi*

DARSLARDA YANGI PEDAGOGIK TEXNALOGIYALARDAN FOYDALANISH

Annotatsiya. Mazkur maqolada ta'limda innovatsion pedagogik texnologiyalardan foydalanishning mohiyati va ta'lim sifatini oshirishdagi o'rni, hamda ahamiyati yoritib berilgan. Shuningdek, mazkur maqolada ta'lim jarayonida innovatsion pedagogik texnologiyalarni qo'llash samarasi haqida fikr yuritilgan va oliy ta'lim muassasalarida ta'lim jarayoniga yangicha yondashish borasida takliflar berilgan.

Kalit so'zlar: innovatsiya, pedagogik texnologiya, ta'lim sifati, IT mutaxassislari, innovatsion yondashuv.

Karimova G.B.
*assistant teacher
department of martial arts theory and improvement
State physical education and sports of Uzbekistan
Ferg'Ona University branch*

USE OF NEW PEDAGOGICAL TECHNOLOGIES IN LESSONS

Abstract. This article describes the essence of using innovative pedagogical technologies in education and its role and importance in improving the quality of education. Also, this article discusses the effectiveness of using innovative pedagogical technologies in the educational process and offers suggestions for a new approach to the educational process in higher education institutions.

Key words: innovation, pedagogical technology, quality of education, IT specialists, innovative approach.

Kirish

Hozirda ta'lim texnologiyasi yordamchi vosita bo'lib qolmay balki, o'quv jarayonining rivojlanishida katta rol o'ynab, uning tashkiliy shakllari, metodlari, mazmunini o'zgartiradigan yangi sistema deb tushunilmoqda. Bu esa, o'z navbatida, o'qituvchi va o'quvchining pedagogik tafakkuriga o'z ta'sirini ko'rsatmoqda.

Pedagogik texnologiya — ta'lim va tarbiya jarayonida zamonaviy pedagogik texnologiyalarni qo'llash, texnologik yondashuv asosida ta'lim va tarbiya jarayonining samaradorligini oshirish muammolarini o'rganadi.

Innovatsion ta'lim jarayonida qo'llaniladigan texnologiyalar innovatsion ta'lim texnologiyalari yoki ta'lim innovatsiyalari deb yuritiladi. O'qituvchi innovatsion texnologiyalarga asoslanib darsni tashkil etar ekan, turli texnik vositalardan ham (kompyuter, proyektor, elektron doska va hokazo) foydalanishi, interfaol metodlar asosida dars o'tishi ham mumkin. O'qituvchining faoliyatida innovatsiyalar qanchalik ko'p bo'lsa, mazmun shunchalik oshadi. Ta'limda innovatsion texnologiyalar va interfaol metodlar haqidagi tasavvurlar barqaror va mukammal shaklga ega emasligini ham e'tirof etish lozim. Har bir o'qituvchi ta'limda individual ravishda yangilik kiritishi mumkin. O'z fanining mazmun-mohiyati, mavzulari, shu sohadagi yaratilgan ilm-fan yutuqlari va innovatsiyalar haqida yangi ma'lumotlarni o'rgangan holda o'qitish jarayonida ularni qo'llab, misollar keltirib, ta'limda yangi metodni yaratishi, hamda shu asosida dars o'tishi mumkin. Innovatsion texnologiyalar o'qituvchi o'z faoliyatidan qoniqmasligidan kelib chiqadi, uni yaxshilashga doir yangilik kiritishga harakat qiladi.

Innovatsion pedagogik texnologiya - bu o'quv jarayonini zamonaviy tashkil etish tizimi bo'lib, u ta'limning zaruriy sifatini ta'minlaydi va jadallashgan ilmiy-texnik taraqqiyot talablariga javob beradigan, ta'lim shakllarini takomillashtirish vazifasini ko'zlagan o'qitish jarayonlarini texnika va inson omillarida, ularning birgalikdagi harakatlari vositasida yaratish, tadbiiq etishning izchil metodidir. Ta'lim jarayonida innovatsion pedagogik texnologiyalardan foydalanish davr talabi bo'lib hisoblanadi.

Ta'lim jarayonida yangi innovatsion texnika-texnologiyalardan foydalangan holda dars o'tish, so'ngi texnikalar bilan jihozlangan o'quv xonalaridan foydalangan holda mashg'ulotlar o'tkazish, mutaxassislik bo'yicha, masalan jismoniy tarbiya sohasidagi so'nggi innovatsiyalar haqida ma'lumotlar keltirib, jahon tajribasidan namunalarni keltirib o'tish, talabalarni yangilik yaratish ruhida tarbiyalashga turtki bo'ladi

O'qituvchi innovatsion texnologiyalarga asoslanib darsni tashkil etar ekan, turli texnik vositalardan ham (kompyuter, proyektor, elektron doska va hokazo) foydalanishi, interfaol metodlar asosida dars o'tishi ham mumkin. O'qituvchining faoliyatida innovatsiyalar qanchalik ko'p bo'lsa, mazmun shunchalik oshadi. Ta'limda innovatsion texnologiyalar va interfaol metodlar haqidagi tasavvurlar barqaror va mukammal shaklga ega emasligini ham e'tirof etish lozim. Har bir o'qituvchi ta'limda individual ravishda yangilik kiritishi mumkin. O'z fanining mazmun-mohiyati, mavzulari, shu sohadagi yaratilgan ilm-fan yutuqlari va innovatsiyalar haqida yangi ma'lumotlarni o'rgangan holda o'qitish jarayonida ularni qo'llab, misollar keltirib, ta'limda yangi metodni yaratishi, hamda shu asosida dars o'tishi mumkin. Innovatsion texnologiyalar o'qituvchi o'z faoliyatidan qoniqmasligidan kelib chiqadi, uni yaxshilashga doir yangilik kiritishga harakat qiladi.

Ma'lumki, har qanday texnologiya ta'limning yangi mazmunini shakllantiruvchi ta'lim tamoyillariga asoslanadi va ta'lim oluvchi shaxsini tarbiyalash, unda mehnat va muayyan yo'nalishlarda kasbiy ko'nikmalarni hosil

qilishga yo'naltiriladi. Ta'lim jarayonining faol sub'ektlari o'qituvchi va o'quvchilar bo'lib, ularning hamkorlikdagi faoliyatlari muayyan mavzu (yoki fanlar asoslari) bo'yicha kam kuch va vaqt sarflangan holda nazariy va amaliy bilimlarni chuqur o'zlashtirish imkonini beruvchi jarayonning umumiy mohiyatini tavsiflaydi.

O'qituvchining faol, samarali faoliyat ko'rsatishiga yo'naltirilgan ta'lim jarayonining metodik ishlanmasidan farqli ravishda, ta'lim jarayonini faollashtirish va jadallashtirishga yo'naltirilgan pedagogik texnologiyalari ta'lim oluvchilarga qaratiladi, shuningdek, ularning shaxsiy va o'qituvchi bilan birgalikdagi faoliyatini hisobga olgan holda o'quv materiali o'zlashtirishga sharoit yaratadi, ta'lim-tarbiyasi butun mashg'ulot davomida o'quvchilarning faolligi va qiziquvchanligini muntazam ravishda rivojlantirib borish maqsadini ko'zda tutadi, o'quv omillarini yaratishga asoslangan pedagogik texnologiya talablarini o'quv yoki ishlab chiqarish faoliyatiga tezkor jalb qilish imkonini beradi. Aks holda, zaif, yetarli darajada tushunarli bo'lmagan yoki aniq natijani ko'zlanmagan topshiriqlar mashg'ulotning samarasiz yakunlanishiga olib kelishi mumkin.

Bugungi kunda dunyo miqyosida axborot kommunikatsiya tizimining yuksak darajada rivoj topib borayotganligi va bu boshqa sohalar qatorida ta'lim jarayoniga ham kirib kelib, uni yanada sifatli tashkil etishga o'z ta'sirini ko'rsatayotganligi barchamizga ma'lum. Bunday sharoitda inson faoliyatining nazariy va amaliy qirralari ham uzluksiz yangilanib turishi tabiiydir. Pedagogik faoliyat ham alohida va murakkab mehnat turi sifatida bundan mustasno emas. Pedagoglar o'z faoliyatlarida kafolatlangan natijalarni qo'lga kiritishga urinmoqdalar.

XXI asrni olimlarimiz tomonidan axborot texnologiyalar asri deb tan olinganligi pedagogik va axborot texnologiyalari kun sayin barcha sohalarda rivojlanayotgani, jumladan, ta'lim sohasida ham yangi axborot texnologiyalaridan keng foydalanish an'anaviy o'qitish usullaridan ko'ra samarali va yuqori natijalarga olib kelmoqda. "Kadrlar tayyorlash milliy dasturi"da ko'zda tutilganidek, pedagogik va axborot texnologiyalari, komputerlashtirish va komputer tarmoqlari negizida ta'lim jarayonini yangi axborotlar bilan ta'minlash rivojlanib bormoqda.

Bolaning o'quv faoliyatini rivojlantirishda turli o'yinlardan foydalanish katta ahamiyat kasb etadi. Bolalar o'yin orqali o'z bilimlarini mukammallashtiradilar va uni chuqur o'zlashtiradilar. Shu jihatdan qaraganda, ta'lim jarayonida qo'llanadigan didaktik o'yinlarning roli beqiyosdir. Didaktik o'yinlar ta'lim jarayoni samaradorligini oshiradi, ta'lim jarayonida o'quvchilar faolligini, o'qish motivlarini rivojlantiradi. O'qish motivlari ta'lim jarayonini pedagogik texnologiyalar asosida tashkil etishda ham muhim o'rin tutadi.

Pedagogik texnologiyalardan foydalanishda ta'limning mazmunini belgilash, ta'lim-tarbiyaning shakllari va vositalarini tayyorlash, o'quvchilarning bilimlarni keng egallashi va ma'naviy fazilatlarini o'zlashtirishga yo'naltirilgan

topshiriqlar tizimini ishlab chiqish, ta'limning natijasi va o'zlashtirish darajasini aniqlash, ularni ob'ektiv baholash uchun test vazifalarini tayyorlash kabilar tashkil qiladi.

Pedagogik texnologiyalarning mazmuni, shakl va vositalari, ta'lim berishda pedagogik texnologiyalardan to'g'ri va unumli foydalanish uslublari, kafolatlangan natijaga erishish uchun olib borilayotgan ta'lim sohasidagi yangiliklarni o'rganish, amaliyotda foydalanish ishning amaliy ahamiyatini belgilaydi. Ta'lim jarayoni nihoyatda murakkab jarayon bo'lganligi uchun ta'lim samaradorligi pedagog va o'quvchi faolliligiga, ta'lim vositalarining mavjudligiga, ta'lim jarayonining tashkiliy, ilmiy, metodik mukammalligiga bog'liq.

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Karimova N.O.
lecturer
Center for Life Safety Training of the Department
of Emergency Situations of the Jizzakh region

ORGANIZATION OF HUMAN PROTECTION IN THE EVENT OF A FIRE

Annotation: in this article, you can familiarize yourself with the methods of practical protection against possible fire disasters in buildings and the study of their requirements for new innovative Fire Protection Systems, taking into account drastic changes in the design of story buildings, analysis of problems, methods that need to be applied in a modern fire safety system on possible problems, and recommendations for

Keywords: Fire Protection, Safety re-equipment of the system, fire safety.

It is known that today, on the territory of our Republic, along with developed countries, multi-storey skyscrapers are growing in the number of building objects with a variety of complex designs and structural parts. This in turn creates the need for buildings to take the safety system to a level that meets the requirements of The Times and to use innovative method technologies in the fire safety system. It is the issues of fire suppression in high - rise buildings that require the complexity of rescue work, comprehensive knowledge of the processes and features of the development of fires in high-rise buildings from employees of rapid fire departments, high professional skills, physical training and psychological training.

The calculation of the consumption of Fire Protection Forces and tools, water and other fire fighting substances necessary for the effective execution of fire fighting and rescue work is also an issue if current information technologies are not yet effectively introduced into the activities of fire protection bodies, the level of automation of the management of rapid fire and rescue units remains very low, The purpose of the study: consists in conducting a structural analysis of the problem of automating the processes of fire suppression and rescue work in multi-storey buildings and developing functional, mathematical and simulation models in the corresponding system shell of new data. By its nature, multi-storey buildings cause unusual fire safety problems. For designers, builders, operators and owners of these structures, it is necessary to solve a number of fundamental problems in order to ensure a reasonable level of safety from fire and its effects. The structure of the building must be resistant to the effects of fire for a long time.

The fire and its consequences spread vertically, affecting a large number of building residents. Active fire systems can be disconnected from utilities and must be self-sufficient. It is very difficult to completely evacuate the building. Only on-site protection strategies with selective evacuation are required from the fire zone.

Passengers who need to be evacuated must be away from the ground and rely on vertical escape vehicles. Fire suppression operations occur internally and often away from underground sources.

Recommendations for the introduction of modern technologies for fire safety in high-rise buildings make the following special requirements for high-rise buildings. Structural fire resistance and passive protection measures, automatic sprinkler systems, stand pipes (wet lifts) voice communications from passengers and the fire department, unlock the stairs to allow people being evacuated to re-enter the building below the fire. Most of these regulations are included in high-rise buildings around the world.

Modern high-rise buildings must meet the requirements of a fire safety Ridge: active and passive fire protection features to control fire growth and reduce the impact of fire on the structure and its building population. Active systems include automatic sprinkler protection for fire control subjugation in a small area and smoke control systems for smoke movement control to safely evacuate passengers. Passive elements include a fire-resistant structure and fire barriers to prevent the vertical spread of fire. All active and passive systems must be maintained throughout the life of the building in order to function properly as needed.

Exit tools that facilitate the evacuation of passengers in the event of a fire. Residents of the building must be protected from the effects of the fire in the building when evacuated from the area of the fire. Fire-resistant closed and mechanical pressure stairs protect passengers from the effects of fire and smoke during evacuation. Fire detection, alarms, and communications systems alert building staff to a fire and must provide guidance for the evacuation of passengers. Fire suppression support systems employ operations that take place primarily from within a building, often far from fire-fighting service facilities and ground handling. Fire support systems include vehicle access, firefighter lifts (lifts), fire control command center, fire tube (wet lift) systems, and fireman communications. In addition, construction response plans and procedures must be closely coordinated with the first responders. Operations carried out during a fire-high-floor fire safety strategies rely heavily on active fire systems and complex evacuation sequences. Therefore, the operational aspects of high-rise buildings are important. To ensure their reliability in emergency situations, active fire systems must be monitored, maintained and tested continuously.

Another important operational aspect is emergency planning and training. This starts with an Emergency Management Plan, which shows all foreseeable emergency scenarios and the responses of construction personnel to these emergencies. The emergency management plan must define all threats, whether natural disasters, terrorism and security or systemic emergencies. They should include pre-planned response procedures for each event, and they should include staff training and exercises. Future directions in multi-storey fire safety will be more important than all requirements for future multi-storey fire safety design and

operation, a number of Fire Control, Smoke control, evacuation and fire suppression increasingly complex active fire systems, building fire resistance and strength gain, ensuring that buildings are standing, reliability of important building characteristics.

Based on this article, the brief consisted in a systematic analysis of the problem of automating the processes of fire fighting and rescue work in buildings and the development of functional, mathematical and simulation models in the corresponding system shell of new information, and recommendations were considered to achieve the development of a scientific and methodological apparatus based on new information technologies to improve the effectiveness of fire In the study presented in the article: a structural analysis of the problem of fire suppression control and automation of rescue work in high-rise buildings was carried out. On the basis of the Simulink modeling system, the development of mathematical models of the processes of organizing firefighting in multi-storey buildings and managing the conduct of rescue work was studied.

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Karimova N.O.
lecturer
Center for Life Safety Training of the Department
of Emergency Situations of the Jizzakh region

ELIMINATION OF PROBLEMS CAUSED BY NATURAL DISASTERS

Annotation: the consequences of negative anthropogenic influences on the surrounding natural environment and the directions for their elimination are analyzed. Socio-philosophical aspects of minimizing the Global environmental crisis have been analyzed. Sustainable Development Goals and priorities for the Prevention of environmental degradation are covered socio-philosophically.

Keywords: environmental safety, risks, anthropogenic impact, global environmental crisis, man-made systems risk, environmental risk assessment, socio-cultural factors.

A natural disaster is a natural phenomenon that has an extraordinary character and leads to a violation of the normal functioning of the population, the death of people, the destruction and destruction of material goods.

Natural disasters can occur both independently and interdependently: one of them can lead to another. Some of the disasters are often the result of human activity (e.g. forest and peat fires, industrial explosions in mountainous areas, construction of dams, laying (mastering) quarries, which often lead to landslides, snow avalanches, collapse of glaciers, etc.

The 2030 Sustainable Development Programme, which includes 17 Sustainable Development Goals adopted by all UN member states in 2015 and planned to be implemented by 2030, aims to minimize the existing economic, environmental and social problems in the world. In addition to the three global social inequalities, the implementation of a strategy to reduce the negative impact of human activity on nature to zero, through which the elimination of the damage to nature of anthropogenic influences that led to an unprecedented large-scale degradation of the environment consists of priorities.

The shortage of food and other resources, inversely proportional to the increase in population density, on the contrary, the high consumption of food and fossil fuels is the basis of environmental and socio-political problems in the world today. In this regard, it is necessary to take into account the dynamics of factors such as biodiversity conservation, food security and climate change in order to achieve the goals of the Sustainable Development Agenda until 2030. Just as a person's impact on the environment has negative consequences, on the contrary, it manifests itself in the form of global problems that negatively affect the environment, reflecting negative indicators in a person's life.

One of the Global risks is considered an environmental risk, on the example of which we can see all the main features of the risk. All countries of the world

are exposed to it, and only with their joint activities can this problem be solved. In the event of an environmental disaster, no state in the world can defend itself.

Environmental risk is the possibility of adverse changes resulting from negative anthropogenic impacts on the environment, or the consequences of these changes. They are divided into: sociogenic, related to the development, activities of society; geopolitical, based on the doctrine of totalitarian society; environmental, arising from environmental influences; and derived from the domination of ideological theories over cultural phenomena.

At the end of the 20th century, nature became a product of history. U. Beck believes that nature cannot be understood without society, and vice versa. Consequently, his threats became social threats. Due to common fear, there is solidarity between the whole organic world, that is, between animals and nature, and between people. But, nevertheless, modern states are characterized by "alienation of the environment." Officially, they own and manage the economic and social sphere, but in fact they are not controlled, since there is a global threat to life on earth that destroys trade. Hence, there is a contradiction between the desire to maintain production and the desire to get more profit.

Where the risks are recognized as true, the social, political and economic structure of powers is disrupted, politics expands its influence. What was previously outside the sphere of influence of politics fell into this sphere today. Even self-elimination of risks becomes political in nature. The importance of emergency policy is growing. Responsibility must be redistributed. Totalitarianism to protect oneself from danger manifests itself in a management trend. As the risk increases, completely new demands on democracy are being created to prevent this trend. But at the present stage, the risk society is dominated by the trend of post-sanation. Environmental Protection is manifested only at the end of the production process, when harmful substances act.

People react differently to risks. A. V. Baranov identified four types of environmental concern carriers. The first species has a high level of environmental concern that actively protects nature. The second type cares about the ecological situation, but does nothing to change it. The third type is concerned about the state of the environment, but believes that the environmental situation will improve, so he sometimes allows himself to violate environmental regulations. The fourth type does not pose a threat in the state of the environment and does not think about environmental problems.

Currently, there are very few people of the first type, so it is very important to develop an ecological culture. A. K. Marshak distinguishes two types of it: universal and functional-consumer. The first is characteristic of a society with a long historical tradition. In it, the ecological situation is considered as a holistic system, at the level of civilization as a whole. The second type is characteristic of new states, it arose in contrast to the deviant, and appeared at the beginning of the period of destruction of civilization. According to the stages of civilization of the development of society, ecological culture is classified into tribal, collective,

ethnic, religious, individual, planetary and institutional forms. Also, A. K. Marshak defines two types of ecological culture: reproduction, which attempts to preserve society in this ecological culture, and the development of a developing, ecological culture. These species indicate the structure and dynamics of ecological culture.

As a conclusion, it can be said that it is impossible to completely get rid of environmental risks, but you can try to reduce them and prevent the appearance of new ones. This can happen if all states combine their efforts and act in the interests of the whole world. This is important because currently, developed countries are trying to protect only their territories by moving harmful production to developing countries.

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LINGUISTIC AND STYLISTIC FEATURES OF EUPHEMISMS IN MODERN ENGLISH

Abstract. Man has always attempted to accomplish his or her objectives through the use of diverse weapons. But language's powers shouldn't be taken for granted. Euphemisms are one of the numerous tools that language has at its disposal for a variety of purposes. Even the fact that one exploits them in conversation may go unnoticed. The purpose of this thesis is to examine how euphemisms function in ordinary speech.

Key words: euphemisms, meanings, linguistic, lexical, definition, language, style, character, classification.

Introduction. The everyday language that one employs varies depending on the circumstance, and word choice is never random. Words acquire unique meanings, have unique purposes, and can even reveal something personal about the speaker. As a result, linguists categorize words according to different standards and assign them distinct characteristics. Thus, certain words are classified as euphemisms; nevertheless, linguists and researchers disagree over what constitutes a euphemistic phrase, just as they differ among historical times.

Definition of euphemisms. Modern linguists have resurrected the study of euphemisms, however it should be noted that many academics in the past did consider euphemisms and attempted to describe them based on rhetoric or some other subject.

While euphemisms were recognized as a language occurrence in antiquity and the Middle Ages, various rhetoricians classified them in different ways. Quintilian saw them as a unique kind of allegory, Cicero called them *verbatecta* ("covered words"), and Aristotle saw them as a sort of metaphor. The euphemisms of the English Renaissance were prophets of a happy finish.

However, these definitions are too vague for research conducted today. The definitions of euphemisms given above are imprecise and unsuitable for the thesis's objectives. In line with the definition of euphemism given by Longman's Dictionary of Contemporary English, which is "a polite word or expression that you use instead of a more direct one to avoid shocking or upsetting someone," modern linguists Allan and Burridge define euphemisms as "an alternative to a dispreferred expression, in order to avoid possible loss of face: either one's own face or, through giving offense, that of the audience, or of some third party".

Main part. According to Burridge, they have been there from the beginning of human language, meaning that they were utilized by preliterate humans.

According to Rawson, "even those who pride themselves on being plainspoken, ever get through a day without using them" these days.

Lexical and syntactic euphemisms

The speaker can decide how much of a euphemism to use—one word, a compound word, a phrase, the entire sentence, or even the entire compound sentence—whenever the occasion calls for it. In light of this, euphemisms might be lexical or syntactic.

Syntactic euphemisms, according to Burkhardt, are "whole sentences that are formulated in a way that warrants that unpleasant truths are hidden or at least played down, by means of words or phrases with no or relatively few negative connotations." They are partial accounts of current events that withhold undesirable facts from their intended recipient."

Politics and other contexts where referential ambiguity is used are rife with instances of syntactic euphemisms. Referential vagueness is used in situations where someone is accused of guilt, and its main goal is to avoid naming the author of a particular fact or action, even when participants in the relevant discourse are familiar with their name. For example, in the sentence "Some people will never learn to behave," the target is not specified; it could be anyone, but it is clear who the statement is directed towards.

Conversely, lexical euphemisms rely on the meaning of certain words, or more precisely, on the selection or construction of words within the speech. These might be positivizing or abstracting.

Abstracting euphemisms, such as "action" for "a military attack", "economically disadvantaged" for "the poor," etc., substitute the traditional name of an undesirable item "by an abstract hyperonym in which the negative features are absent".

Positively oriented euphemisms eliminate negative connotations from words by substituting positive ones. Examples of such euphemisms are "old people" for "senior citizens," "recession" for "negative growth," and so on. According to their degree of lexicalization, Fernandez (2008) claims that three types of euphemisms can be found:

a) lexicalized, whose figurative meaning is shed and regarded as the normal or literal meaning;

b) semi-lexicalized, i.e. substitute which is associated with the euphemized object because of "its inclusion in a conceptual domain traditionally tied to the forbidden concept" (Fernandez 2008:98);

c) creative, which is the result of a novel association with the subject to be euphemized, it is relevant only in a specific context

Certain euphemisms are compiled in dictionaries in relation to this category, while others are not. Lexicalized euphemisms, which are often easily understood, have come to be included in dictionaries and other sources, like Holder's Dictionary of Euphemisms, and have become established. "Conventional euphemisms" is another term for them. Other euphemistic terms, like inventive

euphemisms, are seldom set in a language's vocabulary and are not instantly recognized. "An instant product, and its efficiency is measured by the rapidity with which it comes to existence and almost immediately vanishes again" (Abrantes 2005:88) is what these so-called official euphemisms are.

The distinction between official and ordinary euphemisms stems from the prior knowledge and comprehension required to grasp their actual meaning. It doesn't take much to decipher traditional euphemisms like "pass away" to indicate that someone has passed away. However, the speaker cannot rely on the favorable meaning of the term "friendly" while using an official euphemism, such as "friendly lire." He or she must understand that characterizing fire as friendly does not, in and of itself, lessen its threat.

With regard to the situation in which a euphemism is used and its function thereupon, two types of euphemisms are recognized - veiling and concealing euphemisms. According to Burkhardt, veiling euphemisms express what ought not to be uttered explicitly. "They are used in the realm of religious or social taboo, i.e. in the context of divine or evil powers on the one hand and death, disease, excretion and sexuality on the other. Therefore, a magical and a social subtype of veiling euphemisms must be distinguished".

This results in calling God by Lord or He (magical euphemism), speaking of a dead person as the deceased and referring to cancer as the big C (social euphemisms). Concealing euphemisms, by contrast, are used deliberately to deceive others. These euphemisms are dominantly used in the realm of politics, military and advertising.

This means that, for instance, calling a car pre-owned blocks unwelcome thoughts about it being used, or second-hand; calling military attack a mission also hides unwelcome aspects of reality. Differentiating between veiling and concealing euphemisms is crucial for determining the situations when euphemisms are used and functions they fulfill in the language. The subdivision into veiling and concealing euphemisms is thus closely related to the notion of primary and secondary functions of euphemisms.

Every society has its own rules and laws. Each member should be aware of them and always follow them. The behavior which is not in accordance to the prescribed rules of the society is thus prohibited and often referred to as taboo.

Allan and Burrige claim that taboos usually arise when "the individual's acts can cause discomfort, harm or injury to him- or herself and to others." Taboo, however, is not only the matter of behavior but also the way people speak. Because of the fact that talking straight about the issues which are tabooed in the realm of society is not desirable, language is "constantly subject to censoring: individuals who do not censor their language, and so normally say whatever first enters their heads without considering the circumstances of utterance, are deemed mentally unstable". Speaking of the censoring of language, it is important to draw the line between censoring and the censorship of language. The term the censorship of language is used only for institutional suppressions of language by

governing classes, supposedly in order to stabilize the nation and to enhance the common good. The censoring of language, on the other hand, includes both "the institutionalized acts of the powerful and those of ordinary individuals".

Conclusion. Euphemisms are linguistic strategies that speakers of many languages employ on a daily basis. Instead of using derogatory terms, Allan and Burridge suggest using them to avoid offending anybody. Aside from Allan and Burridge, a number of linguists have proposed additional applications of euphemisms, such as masking the truth, hiding a deception, or influencing other people's perceptions. These linguists include Barker, Burkhardt, Duda, Keyes, and Zhao.

It has been determined that euphemisms do serve these types of purposes as well after looking at definitions and use contexts. In the past, euphemisms were mostly employed to avoid offending people while discussing taboo topics like sex, death, or religion.

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USING INNOVATIVE METHODS IN TEACHING ENGLISH

Abstract. In today's fast-paced and constantly evolving world, the need for innovative methods in teaching English has become more apparent than ever. With the rise of technology and the increasing globalization of society, educators are faced with the challenge of engaging students in the learning process and equipping them with the necessary skills to thrive in a globalized world. In response to this challenge, educators have turned to innovative methods in teaching English, which have proven to be effective in enhancing students' language proficiency and fostering a deeper understanding of the English language.

Keywords: foreign language, game, innovative technology, technological tools, methods.

Introduction: In the ever-evolving landscape of education, the teaching of English has undergone a remarkable transformation, driven by the advent of innovative methods that have revolutionized the learning experience. These methods have not only enhanced the effectiveness of English instruction but have also fostered a deeper engagement and understanding among learners.

One of the most significant innovations in English teaching is the use of technology. The integration of digital tools and resources has opened up a world of possibilities for educators and learners alike. Interactive whiteboards, multimedia presentations, and online learning platforms have made lessons more dynamic and engaging, capturing the attention of students and facilitating a more immersive learning experience.

Moreover, technology has enabled the personalization of learning. Adaptive learning software tailor instruction to the individual needs and pace of each student, providing them with a customized learning path. This approach ensures that students receive targeted support in areas where they struggle and are challenged appropriately in areas where they excel.

Another innovative method that has gained traction in English teaching is project-based learning. This approach shifts the focus from rote memorization to active learning, encouraging students to engage in hands-on projects that require them to apply their knowledge and skills in real-world contexts. Project-based learning fosters critical thinking, problem-solving, and collaboration skills, preparing students for the demands of the 21st-century workplace.

After the freedom of our nation, interest in showing unknown dialects expanded, setting out many open doors for youngsters. As our most memorable president Islam Karimov said, "right now, extraordinary significance is connected

to showing unknown dialects in our country. This, obviously, isn't for no good reason by the same token.

Today, there is compelling reason need to evaluate the significance of fantastic information on unknown dialects for our kin, who are building their extraordinary future in collaboration, as one with our unfamiliar accomplices, for our nations, where the world local area looks to possess a commendable spot." As a coherent continuation of these thoughts, the Official Declaration "on measures to additionally work on the means of educating" unknown dialects", embraced on December 10, 2012, extended the potential outcomes of learning unknown dialects.

Today, it is turning into a practice in schools to take classes through intelligent games. It is realized that the entry of the example based on different games guarantees that understudies exhibit their capacities, concentrate, work on their insight and abilities, and become solid.

The reason for the utilization of Game Innovation is the movement that actuates and speeds up the per user.

Clinicians note that the mental systems of lively action depend on the central necessities of the person to show himself, track down a steady spot throughout everyday life, restraint, understand his capacities.

The for the most part acknowledged instructive standards, strategies ought to lie in the means of any game. Instructive subjects for instructive games ought to be taken as a premise. During the time spent games, the understudy adopts a more fascinating strategy to this movement than in a customary illustration and works openly.

It ought to be noticed that the game is the most first, an approach to educating. Understudies take part in perky classes with interest, endeavoring to win, the educator through them likewise gives training to the understudy. The per user is intrigued, accepting that I can play an English game, talk, tune in and comprehend, compose.

Experience shows that in any game, no matter what the capabilities and age of the members, they fall into a wanton state.

In this manner, prior to applying the game to instructive practice, addressing the accompanying educational mental issues is essential. Every understudy ought to realize the accompanying while planning for the game:

the objective of the game;

the capability of the game;

what topic The Game worries in the arrangement;

the capacity to apply the abilities and abilities shaped in past games in later games too.

We realize that in the ongoing instructive design, the understudy should be a subject.

In doing as such, zeroing in on additional intuitive strategies increments instructive viability. One of the main prerequisites for English illustrations is to

show autonomous reasoning. Today, English educators in the US, depending on the experience of English teachers, utilize the accompanying imaginative strategies:

The " issue circumstance arrangement " (Innovative critical thinking) utilizes this technique to utilize the start of the story to peruse How to end per users, regarding the judgment of understudies;

"Happy conundrums" (Joyful questions) showing understudies enigmas is significant in showing English, they learn words that are new to them and find a composing reply;

Fast responses (speedy responses) assists with working on the viability of the illustration referenced;

"Tickle expressed" (Warm-up works out) involving various games in the homeroom to keep understudies inspired by the illustration;

"Emulate" (Emulate) this strategy can be utilized in an illustration where extremely challenging themes should be made sense of, or when composed practices are performed and understudies are drained;

The " story chain " (a chain story) strategy assists with expanding understudy verbal discourse and fortify memory;

"Pretending games" (Acting characters) this strategy can be utilized in a wide range of classes. To show the specialty, individuals in callings, for example, "Mediator", "Interpreter", "Essayist", "Writer" can partake in the illustration and converse with understudies;

Masterminds meeting U. Shakespeare, A. Navoi, Poets and essayists, for example, consumes can be "welcomed". The utilization of the shrewd words that they expressed at such a period in the illustration will assist with instructing youngsters as wonderful individuals; the " when they give pictures "(When pictures talk) strategy is significantly more advantageous and will help in showing English, in the improvement of understudy, understudies ' oral discourse, for which utilizing pictures on the topic is important;

"Test Cards" are managed cards in light of the quantity of understudies, and permit all understudies to take part in the class simultaneously saving time.

The motivation behind these intuitive games, collaboration between the educator and the understudy, the dynamic development of the understudy in the instructive cycle, and the most compelling thing is to dominate the illustration in a fascinating manner and keep it with regards to mind.

Even in the lesson, more communication is encouraged to master the words faster. Reading more fairy-tale books, memorizing poems in English also makes speech fluent while watching cartoons in English also encourages the correct pronunciation of English words. For this reason, the main thing in knowing the language is to repeat it by ear. It's just that the organization of methods according to the topic depends on the dexterity of the teacher, his experience and in what case what methods he uses. The use of technologies such as" role-playing game

“,” Attack of thoughts “,” BBB “,” rounded snow " in the course of the lesson will provide an effective result.

Language teaching programs on computers, phones also help well to teach language in the primary and secondary stages. Examples include Talk (English speaking practice), Daily English, Learn English (English master), How to speak real English. These programs are structured in such a way that the reading(reading), listening(hearing),test sections are all included. Another good way to get used to hearing learned new words in free time by typing them on a phone Dictaphone. In addition, showing more films with subtitles in English, cartoons are also considered effective methods in teaching the language.

Furthermore, the use of gamification has emerged as a powerful tool in English teaching. By incorporating game elements such as points, badges, and leaderboards into the learning process, gamification makes learning more enjoyable and motivating for students. It taps into their natural competitive instincts and encourages them to actively participate in the learning process.

In addition to these technological and pedagogical innovations, there has been a growing emphasis on learner-centered education in English teaching. This approach places the learner at the center of the learning process, recognizing that each student has unique needs, interests, and learning styles. Learner-centered education encourages teachers to adapt their teaching methods and materials to accommodate the diverse learning styles of their students, ensuring that all learners have the opportunity to succeed.

The adoption of innovative methods in English teaching has had a profound impact on the learning outcomes of students. Research has consistently shown that students who are exposed to innovative teaching methods perform better academically, develop stronger critical thinking and problem-solving skills, and are more engaged and motivated in the learning process.

Conclusion

In conclusion, the use of innovative methods in English teaching has transformed the learning experience for students, making it more engaging, effective, and personalized. Technology, project-based learning, gamification, and learner-centered education have all contributed to a more dynamic and interactive learning environment, fostering a deeper understanding of the English language and preparing students for the challenges of the modern world. As the field of English teaching continues to evolve, we can expect to see even more innovative methods emerge, further revolutionizing the way English is taught and learned.

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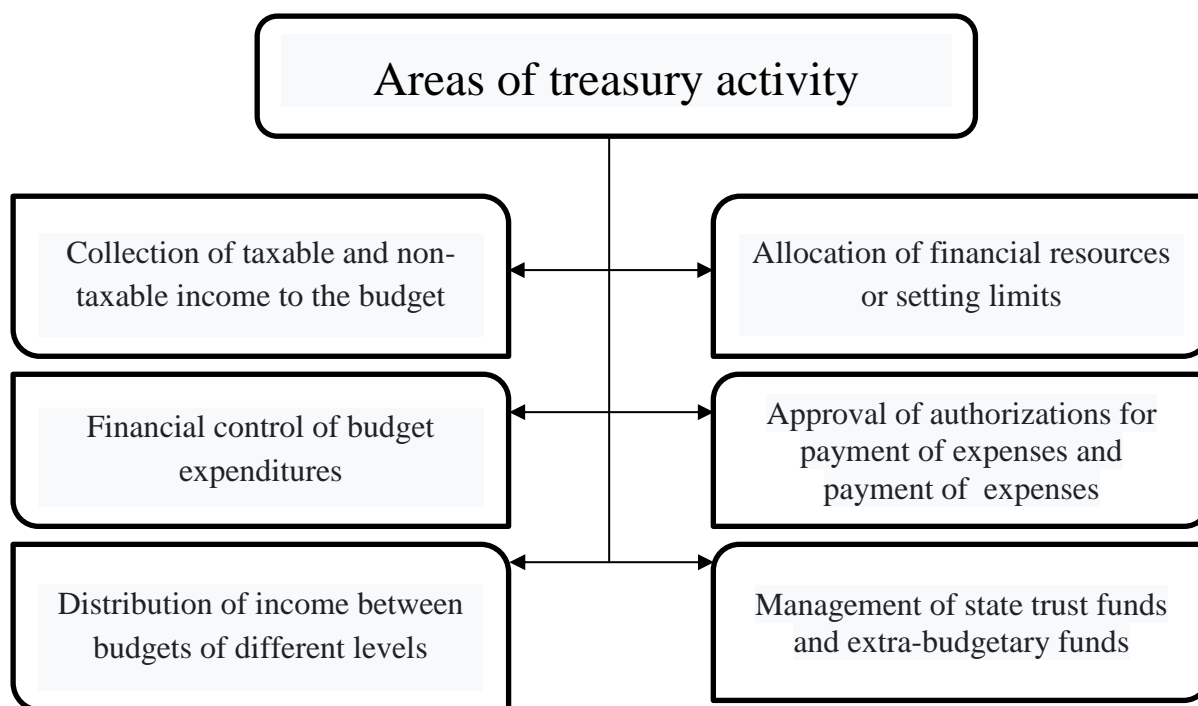
*Kasimova G.A., candidate of economic sciences
professor
Department of "Budget Accounting and Treasury Work"
Tashkent Financial Institute
Yuldasheva N.V., Ph.D
associate professor
"Budget Accounting and Treasury Work"*

IMPROVING TREASURY PERFORMANCE IN PAYING SOCIAL SECTOR COSTS

Annotation. The article examines the procedure for financing the health care system from various sources and the need for a mechanism of state health insurance, private medical services and voluntary health insurance in the health care system of foreign countries. The classification of the health care system budgetary, insurance and private models in foreign countries has been studied. Theoretical approaches to protecting the economic and social interests of health insurance subjects have been studied. The issues of reforming the healthcare system, creating a healthcare system that ensures the quality and popularity of medical care to the population, and forming a conceptually new financing model in the Republic of Uzbekistan are covered.

Key words: Cash execution of the budget, social sphere, healthcare system, education, treasury system, budget obligations, payment.

"Cash execution of the state budget is the collection, storage and distribution of budget funds in the process of budget execution, accounting and preparation of reports on operations carried out with these funds. In other words, "treasury execution of the budget is the organization of execution of state budget expenditures and budget revenues." It is the effective management of budget funds and the single budget account by the state authority (treasury), which is the cashier of all budget organizations, recipients and distributors of funds from the budget. The following figure shows the directions of treasury activities.



1-picture. Areas of treasury activity

Treasury implementation of the State budget of the Republic of Uzbekistan consists of entering all revenues into the Unified treasury account, as well as paying the expenses of the State budget from this account. The Unified Treasury Account was opened in the Central Bank of the Republic of Uzbekistan on December 1, 2011 by the Treasury Department, and from January 1, 2012, the balances of all regional treasury accounts were transferred to the Unified Treasury Account. From the date of transfer of the balances of all regional treasury accounts to the Unified treasury account, cash outages in the regions were eliminated and the sequence of payments was fully achieved. In the current conditions, "In order to ensure the completeness, reliability and strategic orientation of the State budget, measures should be taken to include the funds in the non-budget personal treasury accounts of all state special funds and budgetary organizations to the State budget, as well as to include in the budget report the consolidated total financial indicators of the State budget and state special funds in a single form. must be submitted"¹⁹.

At the request of budget organizations, recipients of budget funds, and recipients of funds from the budget of the Ministry of Finance, treasury units shall send extracts from their personal treasury accounts for relevant expenses no later than the next business day after the day of operations, according to the order of the Minister of Finance of the Republic of Uzbekistan dated March 24, 2016 "Personal treasury in the information system of the Ministry of Finance of the

¹⁹ Ўзбекистон Республикаси Вазирлар Маҳкамасининг "2020-2024 йилларда Ўзбекистон Республикаси давлат молиясини бошқариш тизимини такомиллаштириш стратегиясини тасдиқлаш тўғрисида"ги 506-сон Қарори. 2020 йил. 24 август.

Republic of Uzbekistan" submits in the form in accordance with the Rules "On approval of the Rules for keeping accounts". Budget organizations connected to "UzASBO" SC can receive extracts from "UzASBO" SC in the form of electronic documents. Extracts and annexes submitted in electronic document form are equivalent to paper documents and have the same legal force as them. The most important aspects of the implementation of the "electronic document circulation" system between budget organizations and the treasury are as follows:

- transfer of documents through "electronic" communication networks using electronic digital signature to pay budget obligations and obtain relevant statements;

- "electronic" authorization of payments from budget funds (scanned samples of primary documents);

- development of technologies for receiving cash funds by corporate plastic cards by budgetary organizations.

To sum up, in the treasury, it is necessary to put an end to debtor and creditor indebtedness of budget organizations, to improve reports on budget execution, to control the spending of funds approved in budget organizations' budget classification according to the budget classification, through tenders and competitions to ensure the quality of the purchase of goods, works and services for budget organizations. drawing up contracts and controlling the use of budget funds for specific purposes on the basis of state procurement are the requirements of the treasury system.

The advantage of the state budget treasury execution over the banking system is that the state budget treasury execution follows a step-by-step implementation sequence, and payments are made on the condition that debtor and creditor debts are not allowed.

Treasury activities have a positive effect on the planning of State budget revenues and expenditures, the implementation of expenditure payments, the preparation of financial reports on budget execution, and the performance of financial control tasks. "There is no need to wait for budget funds in the cash execution of the state budget, because a stable fund will be established for quick financing of budget expenses in this area on the basis of receipts in the form of income in the Unified Treasury account.

Treasury execution of the budget is the organization of treasury execution of state budget expenditures and budget revenues. As "cashiers" of budget organizations, treasury bodies organize the Unified treasury account and manage the calculation of funds. State social policy is implemented through the expenses of budget organizations, social allowances are paid to the population, and social sector expenses are financed from the budget. Other than the Treasury Service Committee under the Ministry of Economy and Finance of the Republic of Uzbekistan, no other body has the authority to ensure the timely and targeted delivery of State budget funds to budget organizations. The results of the Treasury Service Committee are important for society.

Issues such as the effectiveness of budget funds use, transparency of expenses, transparency, and the presence of corruption in procurement are of particular importance in organizations belonging to the social sector. The effectiveness of purchasing goods, work, and services depends on the quality and timely performance of public services. It would be appropriate to improve the state procurement system, which provides the interests of the state customer (budget organization) as much as possible.

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Kayumov T.Kh.
senior lecturer
Department of Use of Electric Energy and Pumping Stations
Andijan Institute of Agriculture and Agro-Technology

TECHNICAL SERVICE OF BIOGAS DEVICES

Abstract. The article provides recommendations for the organization of technical service work aimed at ensuring long-term quality operation of biogas extraction devices. Also the sequence of work in the technical services of an organization of the map the sequence is clearly defined. There are listed possible inconveniences and measures to eliminate them.

Key words: biogas, bioreactor, startup, conditioning, scheduled maintenance, periodically examination, repair, maintenance.

Introduction. In the decision of the President of Uzbekistan dated May 26, 2017 No. 3012 "On the program of measures for the further development of renewable energy in 2017-2021, measures to increase energy efficiency in economic sectors and the social sphere" "expanding the use of renewable energy sources, reducing the energy capacity of production, implementing national scientific and technical developments and targeted implementation of tested international energy-saving advanced technologies".

The demand for energy is increasing day by day, and along with this direction, there is a demand to find a solution to environmental problems, to fully meet the modern requirements of energy production in the world. It is known that during the aerobic treatment of organic waste, there are no natural ways to capture the toxic gases and gels released into the atmosphere, and the work that is being done requires a long time. Anaerobic treatment of organic waste is one of the only possibilities today to obtain alternative energy and protect nature from pests and harmful gases, as well as to obtain high-quality organic fertilizer. Harmful gases released from any organic waste treated with this technology lose their power up to 100 times, and organic waste turns into high-quality organic fertilizer in a short time.

The above-mentioned Decisions of the President, aimed at ensuring the increase of devices for obtaining biological gas from organic waste in most cases, pave the way for the introduction of devices for obtaining alternative fuel in each of the Republic's production organizations and farms with organic waste.

Modern biogas plants incorporate mixing, heating, biogas absorption and gas retention systems. So, it can be seen that there is a need for maintenance of parts and assemblies of devices. The fact that the liquid mass involved in the process of biomass digestion in biogas plants is non-Newtonian liquids requires the establishment of a maintenance system for the plant. In the analysis of the literature, the service of biological gas extraction devices is presented in different

ways, but if they are not carried out in the sequence of scheduled maintenance and periodic inspection and repair, the anaerobic process in the device will cause artificial breakdown.

Based on this, at first, all parts of the device are examined. A complete inspection of damaged rubber seals, expired rubber seals and moving parts in need of lubrication is carried out. Connections of gas suction and collection containers are checked with soapy foam or special liquids. Non-repairable parts, parts and assemblies that cannot be repaired or completely used are identified. Depending on their condition, the technical condition is assessed and spare parts that do not need repair are found. According to the determined results, the need for current and capital repairs is determined.

The elements of device repair and maintenance can be listed as follows:

- Launch
- Refreshment;
- Provision of planned technical service;
- Periodic inspection;
- Repair;
- Save.

Start-up refers to the actual state of the gas volume when the bioreactor is filled with liquefied biomass of 92% humidity and the heating system is started. In most cases, the actual state of the gas volume is stated.

Conditioning is a technological process aimed at preparing the biogas plant for normal operation at the time of restart, during which all the parameters of the plant are adapted to the environment by gradually increasing. The purpose of this is that all new details and systems should be able to transition normally to the loaded state.

Scheduled technical service (maintenance) is the basis of all systems, which ensures high efficiency of the device, prevents premature wear and tear of parts, as well as increases in operational costs. It is forbidden to continue using the device without carrying out the next planned technical service on the biogas device. Scheduled technical service mainly cleans the external appearance of the device, i.e. heat protection devices, dust and mud. Loose systems are reinforced, liquid dripping or leaks in the heating system are stopped if detected, biogas leakage into the atmosphere is checked, filter media is cleaned, and monitoring instruments are checked for proper operation.

Periodic inspection works should be carried out mainly in accordance with the period of change of seasons. In addition to paying more attention to the heating system, a number of scheduled maintenance works are carried out. parts that are ending their service life will be replaced.

In the repair of biological gas extraction devices - individual parts are repaired in an aggregate way. In this case, the parts are replaced with completely new ones. Due to the composition of biological gas and organic matter, which consists of highly variable and aggressive substances, rubber gaskets and fast-

expanding-condensing parts are destroyed (all faucets). Taking this into account, the parts and links named above will be completely replaced.

In the storage of bioreactors, it is required to be filled with biomass in a constant state of operation. When the bioreactors are kept in the state of receiving pure organic (100%) fertilizer from the biological gas mode, it is necessary to maintain its hermeticity, or when it is stopped for a long time, the parts and the bioreactor should be washed completely free of biomass and measures should be taken to prevent rusting of the walls. The gas holder is degassed and the sediments are completely drained and washed in soapy water and dried.

Summary. Timely and high-quality implementation of the above agrotechnical requirements will create a thorough basis for long-term (35...50 years) operation of devices for obtaining biological gas from organic waste. This, in turn, prevents unpleasant performance indicators such as premature bending and breakage of parts and eliminates the occurrence of excess costs. As a result of improving technical service literacy, it helps to partially eliminate the common defects of devices in our country, i.e., "Unsuccessful start-up".

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*Khalikova L.N., doctor of economics
Samarkand institute of economics and service*

ECONOMIC IMPORTANCE OF FOOD SAFETY AND PROBLEMS OF ITS PROVISION

Abstract. The article analyzes approaches that reveal the essence of food safety. The theory of food insecurity has improved according to organizational economic mechanisms.

Keywords. Food safety, food problem, agricultural organization, agro-industrial production.

Nowadays, food security is a very broad concept, which refers to the provision of consumer goods to the needs of the population in accordance with physiological standards. However, it is worrying that the growth of the production volume of food products lags behind the increase in the population and needs, especially in countries where there are insufficient conditions for the development of agriculture and processing industry.

According to the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization, more than 840 million people in the world do not have the opportunity to eat enough. This means almost one in eight of the world's population. In addition, more than 30 percent of the planet's population is experiencing the problem of malnutrition, the lack of the most basic microelements and vitamins, which clearly shows how urgent the issue of ensuring food safety is.

It is highly recognized by the international community that Uzbekistan, in addition to ensuring its own food security, makes a worthy contribution to the food supply of foreign countries by exporting fruits and vegetables and other agricultural products. At the 39th conference of the UN Food and Agriculture Organization held in Rome, Italy in June 2015, at the ceremony of awarding the countries that have achieved the Millennium Development Goals, Uzbekistan was among 14 countries with unparalleled achievements in ensuring food security.

In recent years, the ecological factors arising due to climate change around the world are putting new demands on the breeders. Science-based, experimentally tested, adaptable to water shortage and drought conditions, resistant to various pests and diseases, high-yield varieties are required by life itself.

Despite the fact that the average number of the permanent population of the republic will increase by 800 thousand people in 2020, the regular growth of the population's income over the last 20 years has ensured the strengthening of financial opportunities and the increase in the consumption of basic food products by the population. In particular, by the end of 2020, wheat imports amounted to 1.2 billion dollars, an increase of 28% compared to the same period of last year.

In 2020, daily consumption products made up 2.8 million tons of food products and increased by 12%. Meat and meat products increased twice or 19 thousand tonnage.

It should be noted that in the first years of our independence, potatoes, meat and dairy products and other products necessary for consumption were brought from abroad. And today more are being exported to foreign countries.

Before independence, our compatriots could not even imagine today's medical days, comfortable life, incomparable opportunities and cares. After all, they used to work in the fields all their lives, and their cups did not overflow, but they only made a living. And today the peasants and farmers who use the created favorable conditions rationally and selflessly work not only bring benefits to our society, but also encourage themselves. Their earned income serves as a guarantee of a comfortable life of family members, a full table, and the development of our country.

The production of food products for people has been an eternal problem in the world and will always be relevant. Food production is the first condition of life. Therefore, it should be done constantly and in growing volumes, because the population of our planet is increasing.

A threat to food safety means a set of conditions and factors that lead to changes in the unfavorable situation for end consumers in the food market. Food security is affected by external and internal threats. External conditions of threats to food safety are related to the factor of openness of the economy. Internal threats arise under the influence of internal factors that imply changes in public demand and public supply that are formed within the country's economy. One of the important factors affecting the market situation in terms of the supply of agricultural products is the unstable functioning of the agrarian sector of the economy and its negative impact on food security.

The agro-industrial complex is one of the priority sectors of the economy, and its activity largely depends on increasing the welfare of the people, becoming a developed country, and strengthening the political unity of the people.

Food security plays a key role in ensuring people's lives it primarily reflects the social direction aimed at realizing the basic human right to ensure its existence. Food security is an important component of national security, as it ensures the sustainable production of basic food products and their availability to the population.

It is known that there is an important political feature of modern agricultural reform in independent Uzbekistan. Taking into account this characteristic, today it is better to understand that the effectiveness of the renewal of our society in general, the level of development of democratic processes in our country depends on how successful the agricultural reform is, how deeply this process penetrates into all aspects of rural life. As part of the above-mentioned political factor of agricultural reform influencing the formation of civil society foundations, it is

possible to distinguish the issues of ensuring food security and improving the well-being of the people.

Increasing the amount of support for the agricultural sector through the state budget and extra-budgetary funds and expanding the directions, as well as strengthening the mechanisms of indirect support in the form of various privileges and preferences, the country's food support helps to strengthen supply and security

It is known that "food safety" is one of the fundamental concepts of modern economic, legal and political sciences. This concept is synonymous with the concept of "food security", and at the same time, according to the official terminology of the UN, "food policy", "food planning", "food supply", "food needs", "food reserves", and "food resources" are closely related terms. It can be seen that the scope of ensuring food safety is quite broad.

What is the participation of civil society institutions in food supply? Here are some examples.

Uzbekistan has had an irrigation system since ancient times. Irrigated agriculture is the basis of our republic's food independence and the main source of export products. In our country, especially in the years of independence, systematic, consistent and step-by-step attention has been paid to improving land reclamation, increasing their productivity, and improving financing mechanisms.

In the process of re-production, relations between agriculture and industry have a special place. The main function of agriculture is to satisfy the population's need for food, and for raw materials – industry. The uniqueness of agriculture – its management is related to the use of land – the main means of production and the natural environment.

It is known that in the program of measures to support the enterprises of the real sector of the economy, it is envisaged to ensure their stable operation, increase the export potential, and expand the scale of production of their products. The additional measures taken will allow the formation of reliable reserves to ensure the food security of our country at the expense of domestic sources. This is especially important in the context of the increase in the prices of basic food products in the world markets. In turn, these create new, additional obligations to strengthen the education of patriotism and increase the economic culture of the population, especially the youth.

Measures to modernize agricultural production. In recent years, special attention has been paid to modernization of production, technical and technological renewal in the real sectors of our country's economy. Unfortunately, when we say modernization, we are often used to understand the modernization of industrial sectors. However, in addition to industry, there is a great need to modernize the leading sector of our economy, such as agriculture, and to carry out technical and technological work in the entire complex of almost all branches and production areas that are part of it. Therefore, the issues of modernization and promotion of agricultural production to a new level are

becoming one of the urgent tasks of today. In this regard, it is necessary to study and apply the experiences of advanced countries in the fields of cattle breeding, grain breeding, potato breeding, modern irrigation systems, modern energy-saving technology and agro-technologies, which are extremely important in our climate. A complex of specific measures was developed to study, further improve seed-breeding works and increase the productivity of agricultural production.

In the Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis: "It is known that more than 51 percent of the population of our country lives in rural areas. However, the share of agricultural products in the country's gross domestic product does not exceed 17 percent. The processing volume of agricultural products does not even reach 10%. However, in developed countries, this figure is more than 50 percent. In this regard, it is necessary to develop a comprehensive program for further agricultural reform.

In particular, it is necessary to pay special attention to solving the problem of food safety, establishing strict control over the cultivation of genetically modified products. The fact that imported fruit and vegetable products are increasing in the markets of our country in recent years should certainly call us to be vigilant. In order to prevent such a situation, first of all, it is necessary to restore ancient varieties that are disappearing, to start selection works rationally and effectively, and to widely introduce scientific achievements and innovative developments in the field.

As for the livestock sector, it is necessary to create sufficient conditions to increase the number of cattle and poultry, to achieve quality and productivity in this regard. In the near future, specialized breeding complexes, high-tech poultry factories, as well as greenhouse farms should be established in each district.

We currently export fruit and vegetable products worth 1.5-2 billion dollars. However, there is an opportunity to export products worth 10-15 billion dollars per year in this field. "Uzagroexport" joint-stock company, stock exchanges, agro-firms and wholesale companies should play a major role in the production and export of products.

Conclusions and suggestions.

- Improving the functioning mechanism of the socio-economic system of ensuring food safety.

- Ensuring the optimal share of food products in the composition of population consumption expenses, in this regard, preventing sharp fluctuations in prices under the influence of various factors

- Foreign trade policy consists of ensuring a positive balance between export and import volumes of food products.

Effective sale of agricultural products is a very important issue. For this purpose, it is necessary to create a single database of information on the size and quantity of products grown on farms.

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*Khidirov Kh.I., Ph.D.
associate professor
"Social Sciences" department
Jizzakh Polytechnic Institute
Majidov F.I.
teacher
Department of Social Sciences
Jizzakh Polytechnic
Institute*

ERADICATION OF POVERTY AND POVERTY-CORRUPTION OBJECTIVE FACTOR OF PREVENTION

Annotation. The article discusses the fact that poverty, which is a negative state of society, is an important factor in ending corruption in the process of preventing poverty.

Keywords: State, poverty, poverty, corruption, society, absolute poverty, relative poverty, poverty, etc.

The lack of the minimum amount of food that every person needs every day creates the risk of poverty and destitution no less than other risks for the development of the countries of the modern world. After all, at the heart of this are the foundations of sustainable development of the individual, society and state today and tomorrow. At the same time, elimination of poverty and poverty, creation of necessary conditions and opportunities for this will practically ensure the transition of the country's development to a new stage.

According to the UN, there are 700 million people on Earth. more than 100,000 people live in poverty. Combating poverty and poverty is one of the main issues on the UN agenda. In this regard, a number of important works have been carried out by the organization. In particular, in 1992, on the basis of UN General Assembly resolution 47/196, October 17 was designated as the International Day for the Eradication of Poverty.

Based on the relevant resolutions, 1997-2006, 2008-2017. and 2018-2027. It has been designated as the UN Decades of Action against Poverty. Fight against poverty and poverty of the organization

It is reflected in documents such as the Millennium Declaration (2000), the Addis Ababa Program of Action (2015) and the Sustainable Development Goals until 2030 (2015). At the same time, paragraph 1 of the Millennium Development Goals sets the task of combating extreme poverty. In these documents, among other things, it is determined that each country should implement the necessary measures in the field of poverty and poverty eradication at the national and global level, ensure gender equality, take social protection measures, and other issues. It is also clear from the tasks defined in the documents that the eradication of poverty

and poverty is a long and complex process that requires an institutional and systematic approach.

So, the question arises, what is meant by poverty and poverty? Poverty is defined as the poor lifestyle of people living in conditions of social inequality due to lack of income and resources necessary for a normal life of a person due to unfair distribution, unjustified restrictions on the use of health care, education or other basic services, lack of housing for living.

Poverty is a characteristic feature of the economic situation of a person or a social group who cannot satisfy the most necessary minimum needs, which are important for life, cannot be able to work and continue their offspring.

Poverty is a relative concept and depends on the general living standards in a given society. The basis of known poverty standards is the generalization of indicators of monetary supply, for example, the minimum amount of family income or consumption expenditure that can be afforded at the minimum level.

Absolute poverty is explained by the fact that the income of various groups of the population does not reach a certain minimum value, which is now officially the minimum wage.

Relative poverty, or in Soviet terminology, relative poverty of workers, is understood as the fact that the income of a person or family is lower than the average income or expenses of a given country. That is, people do not starve, but live "below average" and feel deprived of many things.

The poverty rate is the ratio of the number of people with low subsistence income per capita to the total population.

The bottom line of poverty is the level at which poor families fall below the minimum subsistence income.

The poverty line is a per capita income that does not exceed 50% of the poverty line, that is, the consumption minimum.

Measuring poverty is not easy. There are three main approaches. One of them is the assessment of the population's consumption of basic food, basic needs and clothing.

The second approach is to determine poverty through statistical surveys, "mini-censuses", public opinion surveys, but only with the practical side of the issue, that is, how much you earn, how much you spend, etc.

Finally, a third approach is public surveys that assess material wealth, material problems and lifestyle indicators rather than physical indicators of income and expenditure.

Poverty is a way of life of poor, poor, needy people who do not have enough of what they need for living, do not have the ability to work and continue their generation, and there are three concepts for its definition. They consist of:

1. Absolute concept of poverty. This concept is closely related to the concept of poverty line. The poverty line is the level of disposable income, gross income, or consumption below which a person is considered poor. Absolute poverty is often measured by the number of people or households with

consumption or income levels below the poverty line. The World Bank has set the absolute poverty line at \$1.25 per day (calculated at purchasing power parity).

2. Relative concept of poverty. The relative poverty line defines the relative poverty line and compares the actual income of the population against this level. If the distribution does not change in the face of rising real incomes of society, relative poverty will remain the same. It can be concluded that the concept of relative poverty is a component of the concept of inequality. However, this does not mean that the lower the inequality, the lower the relative poverty or vice versa. English sociologist P. Townsend, the founder of the concept of relative poverty, defined this category as the lack of economic resources, the inability to continue the usual lifestyle for the majority of members of this society.

3. Subjective poverty. According to this concept, only the individual can define poverty. There are different approaches to determining the level of subjective poverty. It is also possible to determine the threshold of subjective poverty based on social opinion, after which it can be compared with the income of the population.

The absolute level of poverty is considered the lowest level of living, and it is determined by the food products, clothing, housing, etc., which are necessary for the satisfaction of a person's basic needs.

According to the recommendation of the UN, in world practice, the following population groups with different material support according to the level of income are distinguished based on the minimum amount of living expenses and the minimum amount of the consumer budget:

- poor families - in such families, the per capita income is lower than or equal to the minimum amount necessary for the population to live;

- low-income families - in such families, the per capita income is between the minimum amount necessary for the population to live and the minimum consumption budget amount;

- well-off families - in such families, the per capita income is between the minimum consumption budget of the population and the reasonable consumption budget;

- rich families - their per capita income is higher than the level of reasonable consumption budget.

Ending the causes listed above and their consequences by the general public and state authorities is one of the most reliable objective factors to prevent corruption in our country.

It can be concluded from the above points that if there is poverty in any country, it is definitely an objective factor that opens the way to corruption and ensures its viability. Because, the fact that people are responsible for the scourge of poverty and poverty depends, firstly, on the position of corruptors in public life, secondly, on the availability of sufficient opportunities to fight against corruptors, and thirdly, on the quick and effective work of organizations that fight against corruptors.

Ending poverty and poverty is one of the reliable strategic goals and tasks of transforming Uzbekistan into a uniting factor of our entire society on the basis of turning it into a corruption-free country.

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Khomidov B.N.
senior teacher
Chair of "Foreign languages"
Karshi University of Economics and Pedagogy
Uzbekistan

EDUCATIONAL POTENTIAL OF INNOVATIVE TECHNOLOGY IN TEACHING SENIOR LANGUAGE STUDENTS SPECIALISTS

Abstract. The article explores the potential applications of information and communication technology in teaching international students. An example of the development of an electronic training course in the Hemis distance learning system is given.

Key words: e-learning course; Hemis system; information and communication technologies; international students.

The foundation of contemporary education is the idea that every person must undergo extensive personal growth in order to ensure that he or she will be able to reach their full potential in a given field. Given the ongoing development and improvement of social and sociocultural relations as well as political and economic ties, it is imperative that teaching in general and foreign language instruction in particular move beyond antiquated stereotypes and traditions. Informatization, computerization, and digitization are the three primary paths leading to the development of the contemporary educational system. These domains enable numerous approaches to enhance the caliber and efficiency of education. Discovering the world of digital technologies, integrating local and distant learning programs into the information and educational environment, facilitating student-teacher contact, and promoting self-education are all aspects of digitalization.

Teachers are working with more and more information and communication technologies on a daily basis. These days, linguistic information resources play a crucial role in information and communication technologies. Among them are the outcomes of group creativity, which can be both passive and active.

Information and communication technologies are used to create electronic training databases with the goal of organizing a continuous educational process [2]. In order to close any potential "gaps" in students' knowledge and produce high-caliber knowledge, we provide remote participation in conferences and the formation of ongoing scientific circles.

The most widely utilized ICT tools in education include: - computer-assisted electronic textbooks and manuals; - electronic encyclopedias and reference books; - simulators and testing programs; - online educational resources, - CDs and DVDs featuring artwork and illustrations; - equipment for audio and video; - projects and research works.

ICT tools are divided into various categories. Thus, all ICT tools utilized in the educational system can be categorized into two groups based on the first classification: software (which includes electronic textbooks, simulators, test environments, information sites, Internet search engines, etc.) and hardware (which includes computers, printers, scanners, cameras, video cameras, audio and video recorders, etc.). (4).

The current advances in information and communication technology (ICT) require us to reevaluate how we organize information support for educational activities. We can therefore examine the potential applications of information technologies in educational activities thanks to the second classification of funds for ICT [2]:

Furthermore, the question of motivation to study specialized disciplines is still relevant for full-time students. For students who have never engaged in the production processes for running oil production facilities, implementing strategies for boosting oil inflow, boosting oil recovery, etc., these disciplines can be very challenging to understand.

While encyclopedias, terminological dictionaries, and books are examples of passive resources, models, programs, and knowledge bases are examples of active resources [1].

New perspectives on translation are compelled by the realities of the modern world, and the translator's professional model grows increasingly intricate.

According to A. Manyan, the translator is in charge of accurately conveying ideas that are present in some languages but not in others, in addition to acting as a bridge between speakers of various languages and cultural backgrounds [1:19]. The training process for aspiring translators should take into account everything mentioned above; if not, the qualifications needed for actual professional work will be very different from what university students are taught.

A wide range of academic subjects are taught using innovative teaching technologies, but it should be highlighted that university students' language instruction offers the greatest opportunity to modernize teaching methods and, most importantly, to yield noticeably better outcomes. Teaching interpretation makes use of cutting-edge technologies like business games, non-gaming simulations, infocommunication training, and the Internet.

Simulation exercises that "help to simulate the real working conditions of an interpreter in the educational process: the one-time presentation of the material, limited time, the real speech of the speaker and its pace" [2: 70] are used in the interpreting training process to incorporate non-gaming simulation technologies. A multilingual training conference and one-sided and two-sided consecutive translation systems stand out among the imitation business games that are utilized to teach interpretation.

When teaching interpretation, infocommunication technologies give students the chance to take part in online discussion boards, watch and listen to

instructional videos, interact with experts in a variety of subject areas, and use real-world audio and video resources. These days, a number of Internet platforms and technologies—like Hemis and flipped classroom technology—are also frequently utilized in translation training.

An online platform called Hemis serves as a collaborative workspace for educators and learners. This environment offers computer support for the execution of autonomous training of multiple forms of interpretation as part of the interpretation training, including: translation from a sheet, translation of precision vocabulary, and sequential and synchronous translation of audio or video segments.

With the use of flipped classroom technology, students can study theoretical content on their own while engaging in hands-on activities in the classroom to strengthen and expand their skills and abilities. During extracurricular hours, students can access lectures on the theoretical underpinnings of interpretation as well as exercises designed to strengthen and hone their skills in a variety of interpretation and translation scenarios.

Hemis is a type of distance learning that combines open access to the Internet with interactive teacher and student participation. Tests, assignments, lectures, films, and presentations are all possible in these courses. You can hone your skills in creating translation strategies, translating notation, translating by ear, and more by working in this setting.

As a result, when teaching interpretation, new technologies enable students to learn more while working independently and under a teacher's guidance to improve their translation abilities. This boosts student autonomy and motivation.

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*Kuzmina S.N.
Sankt-Peterburg davlat elektrotexnika universiteti
Iqtisodiyot fanlari doktori
professor
Saloxitdinov Sh.F.
Jizzax politexnika instituti erkin tadqiqotchisi*

TA'LIM XIZMATLARIDA MARKETING BOSHQARUVI

Annotatsiya. Ushbu maqolada mamlakatda faoliyat ko'rsatayotgan davlat va nodavlat ta'lim markazlarining aholiga xizmati darajasini takomillashtirishda ya'ni jahon standartlariga moslashtirishda butun jahonda ayniqsa rivojlangan mamlakatlarning ta'lim sohasidagi marketing faoliyatini o'rganish natijasiga tayanib yechimlar va xulosalar bayon etildi. Ushbu yo'nalishga oid izlanishlar, ilmiy ishlar muhokama qilingan.

Tayanch so'zlar: marketing, marketing strategiyasi, raqobatbardoshlik, ta'lim tizimi, ta'lim sifati, ta'lim xizmatlari bozori, xizmatlar sohasini rivojlantirish, xalqaro a'loqalar.

*Kuzmina S.N., doctor of economics
professor
Saint Petersburg State Electrotechnical University
Salokhitdinov Sh.F.
independent researcher
Jizzakh Polytechnic Institute*

MARKETING MANAGEMENT IN EDUCATIONAL SERVICES

Abstract. In this article, solutions and conclusions were presented based on the results of the study of marketing activities of especially developed countries in the world in improving the level of service to the population of state and non-state educational centers operating in the country, that is, adapting them to world standards. Researches and scientific works related to this direction were discussed.

Keywords: marketing, marketing strategy, competitiveness, educational service, quality of education, education services market, development of services, international relation.

Ta'lim muassalarida, o'z xizmatlari darajasini yaxshilash uni jahon standartlariga moslashtirish asosiy maqsad va vazifalardan biri hisoblanadi. Ma'lumotlarga qaraganda bugungi kunga Surxondaryo viloyatida 6 ta oliy ta'lim muassassasi, 20 ta o'rta maxsus, kasb – hunar ta'lim muassassalari, 300 dan ortiq davlat va nodavlat o'rta ta'lim maktablari (sport va ixtisoslashgan maktablar

shular jumlasidan), 1000 ga yaqin o'quv markazlari faoliyat yuritmoqda. Eslatib o'tish joizki, 2017-2021 yillarda O'zbekiston prezidenti tomonidan ishlab chiqilgan, O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishiga asoslangan harakatlar strategiyasida "uzluksiz ta'lim tizimini yanada takomillashtirish, sifatli ta'lim xizmatlari imkoniyatlarini oshirish, ta'lim va o'qitish sifatini baholashning

xalqaro standartlarini joriy etish asosida oliy ta'lim muassasalari faoliyatining sifatini hamda samaradorligini oshirish"²⁰ ka'bi yoshlar va ayniqsa talabalar uchun ustuvor vazifalar belgilab o'tilgan. O'zbekiston Respublikasida ta'lim tizimini takomillashtirish davlat siyosati darajasida qaraladi. Bunga misol tariqasida ta'lim to'g'risidagi qonun va bir nechta ta'limga aloqador qarorlarning qabul qilinishini ko'rsatib o'tishimiz mumkin. Ushbu qarorlar va qonunlar nafaqat ta'lim sifatini va uning xizmatini oshirish va yaxshilash, balki O'zbekistonda ta'lim oluvchilarning huquqini yanada kengaytirish maqsad qilingan. Eslatib o'tamiz, O'zbekiston prezidenti Shavkat Mirziyoyevning 23.09.2020 yildagi O'RQ- 637 sonli, Qonunchilik palatasi tomonidan 2020-yil 19-mayda qabul qilingan Senat tomonidan 2020-yil 7-avgustda ma'qullangan, ta'lim to'g'risidagi qonunda quyidagilar keltirib o'tilgan.

"Jinsi, irqi, millati, tili, dini, ijtimoiy kelib chiqishi, e'tiqodi, shaxsiy va ijtimoiy mavqeyidan qat'i nazar, har kimga ta'lim olish uchun teng huquqlar kafolatlanadi.

Ta'lim olish huquqi:

ta'lim tashkilotlarini rivojlantirish;

ta'lim tashkilotlarida innovatsion faoliyatni qo'llab-quvvatlash va o'quv dasturlarini innovatsion texnologiyalarni qo'llagan holda amalga oshirish;

ishlab chiqarishdan ajralgan (kunduzgi) va ajralmagan holda (sirtqi, kechki, masofaviy) ta'lim olishni tashkil etish;

kadrlarni tayyorlash, qayta tayyorlash va ularning malakasini oshirish;

umumiy o'rta, o'rta maxsus ta'limni va boshlang'ich professional ta'limni bepul olish;

oilada yoki mustaqil o'qish orqali ta'lim olgan fuqarolarga, shuningdek umumiy o'rta ta'lim olmagan shaxslarga akkreditatsiyadan o'tgan davlat ta'lim muassasalarida eksternat tartibida attestatsiyadan o'tish huquqini berish orqali ta'minlanadi."²¹

Ta'lim olishga bo'lgan huquqlarning kengayishibu albatta yaxshi natijalarga olib keladi, shu bilan bir qatorda ta'lim xizmatlari sifatini oshirishga ha turtki bo'ladi.

Bundan tashqari T.I.Avdeeva, A.D.Kuliklar Zamonaviy jamiyatda oliy ta'lim o'rniga o'ziga hos qarasnigini keltirib o'tgan unga ko'ra ta'lim xizmati

20 ПФ-4947-сон 07.02.2017. Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида. (2022). Retrieved 24 March 2022, from <https://lex.uz/docs/3107036>

21 O'RQ-637-сон 23.09.2020. Ta'lim to'g'risida. (2022). Retrieved 24 March 2022, from <https://lex.uz/docs/-5013007>

davlatning ajralmas iqtisodiy bo‘lagidir, shu sababli davlat har bir yoshda yoki ish jarayonida shaxslardan ma’lum bir ilmiy darajani talab qiladi²² [4]. Bu ham iqtisodchilar qarashlaridan bir lavha, bu o‘z navbatida shuni anglatadiki, aholi bolaligidan jamiyatda o‘z o‘rnini topish uchun ham ta’limga muhtojdir. O‘zining ijtimoiy- iqtisodiy mohiyatiga ko‘ra ta’lim davlat tovari bo‘lib, fan, madaniyat va sog‘liqni saqlash bilan bir qatorda xalq xo‘jaligining aralash sektoriga kiradi.

O‘z navbatida so‘ngi yillarda barcha oliy ta’lim muassasalari bosqichma bosqich jahon standartlariga mos kredit modul tizmiga va raqamli universitet loyihasi asosida o‘qituvchilar va talabalar uchun qulay bo‘lgan HEMIS (Oliy ta’lim jarayonlarini boshqarish axborot) dasturiga ulana boshlashdi. Eslatib o‘tamiz, Shavkat Mirziyoyev tomonidan 2020-yil 8-oktyabr kuni imzolangan”O‘zbekiston Respublikasi oliy ta’lim tizimini 2030- yilgacha rivojlantirish konsepsiyasini tasdiqlash to‘g‘risida”gi farmonda Respublika kamida 10 ta oliy ta’lim muassasasini xalqaro e’tirof etilgan tashkilotlar (Quacquarelli Symonds World University Rankings, Times Nigher Education yoki Academic Ranking of World Universities) reytingining birinchi 1000 ta o‘rindagi oliy ta’lim muassasalari ro‘yxatiga kiritish va oliy ta’lim muassasalarida o‘quv jarayonini bosqichma – bosqich kredit modul tizmiga o‘tkazish” belgilab berilgan edi. Shu bilan bir qatorda mamlaktimizdagi barcha universitetlar raqamli universitet loyihasi asosida universitetlarning barcha a‘zolari o‘qituvchilar, talabalar va boshqa xodimlari ham HEMIS dasturiga ulana boshlashdi. Ushbu axborot tizimi “Ma’muriy boshqaruv”, “O‘quv jarayoni”, “Ilmiy faoliyati” va “Moliyaviy boshqaruv”axborot tizimlarini o‘ ichiga oladi. HEMIS axborot tizmi oliy ta’lim muassasalarining asosiy faoliyatlarini avtomatlashtirish hisobiga ma’muriy xodimlar, professor o‘qituvchilar va talabalarga elektron ta’lim xizmatlarini taqdim etadi. Dunyo tan olgan barcha oliy ta’lim muassasalari va hattoki o‘rta maxsus ta’lim maskanlari ham shu kabi maxsus boshqaruv tizmiga ega. Bu kabi boshqaruv tizimi ta’lim muassasasi strukturasi, fakultetlar, kafedralar, xodimlar va talabalarni, ular haqidagi ma’lumotlar, talabalarning o‘zlashtirish jarayonlari va natijalarini boshqarishga yordam beradi. Shu o‘rinda bu kabi yaqona boshqaruv tizmi talabalar uchun qulaydir, har bitta talaba o‘z moliyaviy holati, o‘zlashtirish darajasini, dars jadvalini va boshqa shu kabi ma’lumotlarini bitta ilova orqali bilishi mumkin. Bu kabi qisqa yillardagi keskin o‘zgarishlarning barchasi mamlakatdagi oliy ta’lim muassasalarining reytingini ko‘tarishga qaratilgan chora tadbirlardir.

O‘zbektonda faoliyat yuritayotgan barcha ta’lim muassasalarida o‘z faoliyatlari jarayonlarida albatta marketing faoliyatini va o‘zlari taklif etayotgan ta’lim xizmati sifatini jahon darajasida standartlatish ustida ishlar olib borilmoqda.

22 Викторова, Ш., & Мурадович, А. (2022). ПЕРСПЕКТИВЫ РАЗВИТИЯ ВЫСШЕГО ОБРАЗОВАНИЯ: МИРОВОЙ АСПЕКТ. Retrieved 24 March 2022, from <https://cyberleninka.ru/article/n/perspektivy-razvitiya-vysshego-obrazovaniya-mirovoy-aspekt>

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FEATURE IRON DEFICIENCY ANEMIA IN CHILDREN

Abstract. The article describes various types of prevention: at the population level (fortification), in groups at risk of developing IDA (supplementation), primary and secondary prevention. Pediatric recommendations for the prevention of IDA in the most vulnerable group of the population—infants and young children—are provided.

Keywords: children, iron deficiency anemia, adolescents, treatment, diagnosis, iron supplements.

INTRODUCTION

In childhood, IDA accounts for 90% of all anemias. It is found in all countries of the world, but its prevalence depends on socio-economic conditions, income, diet and other factors. Infants and young children, adolescents, women of childbearing age, pregnant and lactating women are at greatest risk of developing IDA [1]. In table Figure 1 shows the prevalence of anemia when diagnosed by reduced hemoglobin (Hb) concentration in various age groups in developed and developing countries. According to WHO experts, when IDA is detected in more than 40% of the population, the problem ceases to be a medical one and requires a decision at the state level [1].

MATERIALS AND METHODS

The main cause of iron deficiency in the human body, according to WHO experts, is improper (poor) nutrition. Much less frequently, IDA develops as a result of helminthic infestations or as a result of chronic posthemorrhagic anemia.

The main reasons for the development of IDA in children and adolescents:

- iron deficiency at birth (fetoplacental transfusion);
- nutritional iron deficiency due to unbalanced nutrition;
- increased body needs for iron (rapid growth of a child aged 1–3 and 14–16 years, professional sports, pregnancy);
- loss of iron from the body that exceeds physiological (bleeding of various etiologies, including heavy menstrual blood loss, postpartum anemia).

Table 1. Prevalence of anemia (%) in different age groups based on Hb concentration determination

Population group	The developed countries	Developing countries
Children aged 0 to 4 years	20,1	39
Children aged 5 to 14 years	5,9	48,1
Pregnant women	22,7	52
All women aged 15 to 59 years	10,3	42,3
Men aged 15 to 59 years	4,3	30
Persons aged 60 years and older	12	45,2

RESULTS AND DISCUSSION

The causes of the development of chronic posthemorrhagic anemia in men can be various diseases of the gastrointestinal tract - gastrointestinal tract (ulcerative bleeding, colon polyps, ulcerative colitis, intestinal angiomatosis, Meckel's diverticulum, bleeding from hemorrhoids, stomach and intestinal tumors); In women, among the causes of chronic posthemorrhagic anemia, uterine bleeding is in first place, and gastrointestinal diseases take second place.

Clinical manifestations

The development of IDA is preceded by latent iron deficiency, which does not have an independent code according to ICD-10, but is characterized by the presence of sideropenic syndrome (Table 2). Clinical manifestations of IDA are a combination of two syndromes: sideropenic and anemic [3, 4] (see Table 2). It is believed that the presence of 4 or more of these symptoms is pathognomonic for latent iron deficiency and IDA [5]. Anemic syndrome is associated with a decrease in Hb concentration and accompanies anemia of any origin. Clinical manifestations depend on the severity of anemia. In patients with mild or moderate anemia, significant symptoms are often absent. With the rapid development of anemia, compensatory mechanisms do not have time to form, which means clinical manifestations will be more pronounced than with a disease of the same severity, but developing gradually.

Table 2. Symptoms of sideropenia and anemia characteristic of latent iron deficiency and IDA

Symptoms of sideropenia	Symptoms of anemia
<ul style="list-style-type: none"> • Perversion of taste (addiction to clay, chalk, raw meat, dough, dumplings) • Perversion of the sense of smell (addiction to strong odors of perfume, varnish, paint, acetone, car exhaust) • Dysphagia • Drowsiness • Skin changes (dryness, appearance of small café au lait pigment spots) • Hair changes (dryness, brittleness, split ends, hair loss up to alopecia areata) • Changes in nails (cross-striations of the nails of the thumbs, in severe cases, toenails, brittleness, softness, thinning) • Changes in the mucous membranes (angular stomatitis, cheilosis, glossitis, atrophic esophagitis and gastritis) • Dyspeptic symptoms, tendency to constipation • Menstrual irregularities • Low-grade fever • Pain in the calf muscles 	<ul style="list-style-type: none"> • Weakness • Lethargy • Decreased appetite • Decreased performance • Decreased exercise tolerance • Irritability • Dizziness • Noise in ears • Headache • Fainting • Shortness of breath • Paleness of the skin and mucous membranes • Arterial and muscular hypotension, including hypotension of the bladder muscles with the development of urinary incontinence • Tachycardia • Expansion of the boundaries of the heart • Muffled heart sounds • Systolic murmur at the apex of the heart

Differential diagnosis of IDA The differential diagnosis of IDA should be carried out, first of all, with other “deficiency” anemias, which (in addition to IDA) include megaloblastic anemia due to deficiency of folic acid and vitamin B12. Clinical manifestations of these anemias are glossitis, premature graying of hair, signs of severe anemia, bleeding, jaundice, depression or psychosis, subacute degeneration of the spinal cord (only with vitamin B12 deficiency). The main distinguishing sign of folic acid and vitamin B12 deficiency is the macrocytic nature of anemia (MCV > 120 fL). In addition, there is a decrease in the concentration of Hb, the number of erythrocytes, hematocrit (Ht), pancytopenia (decrease in the number of erythrocytes, leukocytes, platelets), hypersegmentation of neutrophil nuclei (5- and 6-lobed nuclei), the presence of megaloblasts in the bone marrow and its hypercellularity [4]. In difficult cases, it is necessary to determine the concentration of folic acid in blood serum (norm: 7.2–15.4 ng/ml) and red blood cells (norm: 125–600 ng/ml), as well as the concentration of vitamin B12 in blood serum. (normal range is 208–964 pg/ml). Differential diagnosis is also carried out between IDA and anemia in chronic diseases (ACD). The main causes of the development of ACB: chronic infections (tuberculosis, sepsis, osteomyelitis, HIV/AIDS); autoimmune diseases (rheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel diseases - ulcerative colitis, Crohn's disease); diabetes; chronic liver diseases (hepatitis, cirrhosis), kidneys; malignant neoplasms [2]. The key mediator of ACB

is hepcidin, a humoral regulator of iron metabolism. Inflammation causes macrophages to produce a pro-inflammatory cytokine, interleukin 6, which stimulates the production of hepcidin by hepatocytes. This protein, in turn, blocks the absorption of iron in the small intestine and the release of iron from the depot, promoting its accumulation in macrophages, which leads to a decrease in serum iron concentration and the development of anemia [3].

Disease prognosis

The prognosis of the disease is favorable: cure occurs in the vast majority of cases.

So-called “relapses” of the disease are possible:

- when using low doses of iron supplements;
- ineffectiveness of oral iron supplements, which is rare;
- reducing the duration of treatment for patients;
- treatment of chronic posthemorrhagic anemia with an unidentified or unresolved source of blood loss.

It is extremely rare that a cure cannot be achieved with standard iron therapy. American scientists have found that a poor response to therapy with iron supplements in IDA is due to the presence of a mutation in the *TMPRSS6* gene, which leads to excessive production of hepcidin, which blocks the absorption of iron in the intestine and prevents its release from macrophages [5]. This is why anemia in such patients cannot be treated with either oral or intravenous iron supplements.

CONCLUSION

Unfortunately, such scientifically based recommendations for the prevention of iron deficiency in various population groups have not yet been formulated by domestic scientists. The development of national recommendations for the prevention and treatment of iron deficiency conditions and their approval at the state level will make it possible to solve a complex medical and social problem.

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Malikova G.T.
Namangan muhandislik-texnologiya institutining
“Moliya, pul muomalasi, kredit” ixtisosligi bo‘yicha doktorant (phd)

TIJORAT BANKLARDA INVESTITSION FAOLIYATDAGI MUAMMOLAR TAHLILI

Annotatsiya: ushbu ilmiy maqolada moliyaviy sektorning muhim yo‘nalishlaridan biri bo‘lgan tijorat banklarida investitsion faoliyatning kamchiliklari muammolari va ularni yechimlari tahlil qilingan. Jahon iqtisodiyoti uzluksiz o‘zgarishlarni boshdan kechirar ekan, tijorat banklari turli investitsiya faoliyatlari yordamida mablag‘larni strategik joylashtirish orqali iqtisodiy o‘sishni rag‘batlantirishda hal qiluvchi rol o‘ynaydi. Maqolada tijorat banklarida investitsiya faoliyatining kelib chiqishi va hozirgi tendensiyalari ko‘rib chiqilgan.

Kalit so‘zlar: moliya, bank, qimmatli qog‘ozlar, investitsiya, aktiv.

Malikova G.T.
Doctoral student (Phd)
Namangan Institute of Engineering and Technology majoring in finance,
money transactions, credit

ANALYSIS OF PROBLEMS IN INVESTMENT ACTIVITY IN COMMERCIAL BANKS

Abstract. This scientific article analyzes the problems of the shortcomings of investment activity in commercial banks, which is one of the important directions of the financial sector, and their solutions. As the global economy undergoes continuous changes, commercial banks play a crucial role in stimulating economic growth through strategic deployment of funds through various investment activities. The article examines the origin and current trends of investment activity in commercial banks

Keywords: finance, banking, securities, investment, asset.

Kirish

Tijorat banklari iqtisodiyotni pul bilan ta‘minlashda investitsiya omili sifatida muhim ro‘l o‘ynar ekan, bu uning moliyaviy holati barqaror bulishini taqozo etadi. Shuning uchun respublikamizda tijorat banklari fond bozorida qimmatli qog‘ozlar bilan investitsion faoliyatni olib borishi banklar uchun daromad va likvidlik manbai, hamda fond bozori ishtirokchilarining barqaror investitsiya resursi hisblanadi. Ushbu maqola tijorat banklarida investitsiya faoliyatining rivojlanishga har tomonlama yechim berish, qarorlar qabul qilish, jarayonlariga ta‘sir etuvchi ko‘p qirrali jihatlarni yoritishga qaratilgan

Jahon tizimlarida bank amaliyotining ikkita asosiy turi mavjud:– taqsimlash yoki markazlashgan bank tizimi, bunda davlat banklarning yagona monopoliya egasi hisoblanadi;– banklarning turli mulkchilik shakllarini o‘z zimmasiga oladigan bozor bank tizimi. davlat monopoliyasining yo‘qligi. Bozor iqtisodiyoti ikki bosqichli bank tizimining ishlashini o‘z ichiga oladi:

I daraja - Milliy bank;

II daraja - xususiy va davlat mulkidagi tijorat banklari.

Bank tizimining elementlari uning tarkibiy qismlari bo‘lib, birlik tizimning o‘ziga xosligini ifodalash bilan birga, uning xususiyatlarining tashuvchisi hisoblanadi. bank tizimining elementlari quyidagilardir: banklar; ba‘zi maxsuslari: moliya institutlari bank operatsiyalarini amalga oshiradilar, lekin bank maqomiga ega emaslar; bank infratuzilmasini tashkil etuvchi va kredit tashkilotlarining hayotiyiligini ta‘minlovchi institutlar. bank tizimi banklar asosiy tarkibiy yoki markaziy element bo‘lgan tizimdir. Markaziy bank pul-kredit funksiyalarini bajaradi hamda butun mamlakat bo‘ylab kredit hajmi va narxini bevosita yoki bilvosita tartibga soladi.

Bank tizimi bozor iqtisodiyoti infratuzilmasining asosidir. Iqtisodiyotning normal faoliyat yuritishiga banklarning investitsion faolligi ta‘sir qiladi. Bank tizimining rivojlanish darajasi investitsiya jarayoni uchun muhim omil hisoblanadi, chunki banklar investor va investitsiya oluvchi o‘rtasida vositachi hisoblanadi. Bank - bu ishlab chiqarish sohasida bevosita ishtirok etmaydigan, lekin pul muomalasini tartibga soluvchi maxsus toifadagi korxonalar, pul instituti (Gukevich, 2012).

Adabiyotlar tahlili va metodologiya

Kengroq ma‘noda xalqaro investitsiya jarayonlariga quyidagilar ta‘sir ko‘rsatadi: jahon iqtisodiyotining rivojlanish holati, xalqaro omil va investitsiya bozorlari; jahon valyuta tizimining barqarorligi; xalqaro investitsiya infratuzilmasini rivojlantirish va boshqalar. Globallashuv sharoitida xalqaro investitsiyalarga transmilliylashtirish va mintaqaviy iqtisodiy integratsiyaning o‘zaro ta‘sir qiluvchi jarayonlari ta‘sir ko‘rsatadi. Global iqtisodiy omillarning ta‘siri, bir tomondan, mamlakatlar o‘rtasidagi tafovutlarning bir qismini bartaraf etsa, ikkinchi tomondan, xalqaro sub‘ektlar va investitsiya institutlarining keng ko‘lamli faoliyati uchun makro muhit yaratadi

Tijorat banklarining qimmatli qog‘ozlar bozoridagi investitsion rolini aniqlash uning amaliy-nazariy asoslarini taqiqlash zaruriyatini yuzaga keltiradi. Bunda yurtimiz hamda horijlik iqtisodchi olimlar kuplab nazariyalarni ilgari suradi. J.M, Keynes (1997) Uning fikricha, “investitsiyalar ishlab chiqarish iste‘molini kengaytirish, izdan chiqqan umummilliy proporsiyalarni tiklash vositasidir. Investitsiyalar qiymati bilan milliy daromad o‘rtasidagi miqdoriy bog‘liqlik multiplikator tamoyilini qo‘llash asosida aniqlanadi.

Shunga ko‘ra, investitsiyalarning har qanday o‘sishi iste‘molning katta solishtirma hissasi va o‘shish sur‘atlariga qaraganda daromad, bandlik va ishlab chiqarishning ko‘proq darajada yanada proporsional o‘shishini ta‘minlaydi. Shu

sababli investitsiyada mujassam bo'lgan talab iqtisodiy taraqqiyotni davlat harajatlarini kengaytirish, shuningdek, taqchilli byudjetdan moliyalash yo'li bilan tartibga solish va rag'batlantirishning asosiy ob'yekti tarzida e'tirof etiladi.

Tijorat banklarida investitsiya faoliyatini rivojlantirishni shakllantirishda me'yoriy-huquqiy bazaning samaradorligi aniq tartibga solish choralarini har tomonlama tahlil qilishni talab qiladi. Keyn [6, 233–260b] tartibga solish choralarini chuqur o'rganish uchun barcha hujjatlarni qayta ko'rib chiqib, ularning banklarning tavakkalchilik xatti-harakatlariga, kapitalning yetarliligiga va muvofiqlik xarajatlariga ta'sirini tahlil qilgan.

Natija va muhokamalar

Bankning investitsion faoliyatini yaxshilash bir qancha asosiy jihatlarga e'tiborni qaratishni talab qiladi. Quyida bank duch kelishi mumkin bo'lgan muammolar va ularni tahlili keltirgan

Portfelning diversifikatsiyasi yetarlimas, muammo bank ma'lum tarmoqlar yoki aktivlarga investitsiyalarning konsentratsiyasi tufayli risklarga duch kelishi mumkin. Xatarlarni samarasiz boshqarish, xatarlarni noto'g'ri boshqarish yo'qotishlarga olib kelishi mumkin, shuning uchun risklarni boshqarish strategiyalarini ishlab chiqish, xedjlash vositalaridan foydalanish va portfel risklarini muntazam ravishda baholash zarur.

Bozor monitoringi va tahlilining yo'qligi, iqtisodiyot va moliya bozoridagi o'zgarishlarga yetarlicha e'tibor berilmayapdi. Shaffoflik va hisobotning zaifligi, investitsion operatsiyalarda shaffoflikning yo'qligi mijozlar va tartibga soluvchi organlarning noroziligiga olib kelishi mumkin. Texnologik bazaning yetarli emasligi, zamonaviy texnologiyalarning etishmasligi qaror qabul qilishni sekinlashtirishi va aktivlarni boshqarish samaradorligini kamaytirishi mumkin, xodimlarning malakasining etarli emasligi yoki ularning salohiyatidan etarli darajada foydalanilmasligi.

Strategiyaning nomuvofiqligi investitsiya strategiyasida izchillik yo'qligi noaniqlik va yomon ishlashga olib kelishi mumkin. Ushbu muammolarni hal qilish bankning investitsiya faoliyati samaradorligini oshirishga va uni tashqi ta'sirlarga chidamliligini oshirishga yordam beradi.

Banklar investitsiya operatsiyalarini amalga oshirayotganda ularning rentabellik darajasini kuzatib boradilar, chunki investitsiya qilingan mablag'larning daromadliligi investitsiyalar xavfiga mutanosib bo'lishi kerak. Faoliyat tahlili shuni ko'rsatdiki, bugungi kunda banklarda, boshqa xo'jalik yurituvchi sub'ektlar singari, aniqlik bilan muddati o'tgan debitorlik qarzlarni undirishning samarali mexanizmlari, shu jumladan qarzdorning bankrotlik tartibi.

Bundan kelib chiqqan holda, umumiy kreditorlik qarzlari kabi, to'lovga qodir bo'lmaslik yoki kreditlarning qaytarilmasligi xavfi qayta-qayta oshib boradi va boshqa barcha korxonalar o'rtasida taqsimlanadi, shuning uchun ham tijorat banklari kredit stavkalarini oshirishga va shuning uchun kreditlash hajmini kamaytirishga majbur. Investitsiya sohasida bank institutlari quyidagi funktsiyalarni bajaradilar:

– kredit va hisob-kitoblar;– kassa xizmatlari;– depozit operatsiyalari;– tadbirkorlik subyektlariga xizmat ko‘rsatish.;– investitsiya bozorini tahlil qilish;– samarali investitsiyalar bo'yicha axborot va maslahat xizmatlari

Soha mutaxassislarining fikricha, investitsiya faoliyatini shakllantirishda texnologiya ahamiyatlidir. Raqamlilashtirish risklarni baholash, savdo va mijozlarni jalb qilishda inqilob qildi. Tadqiqotlar investitsiya qarorlarini qabul qilish jarayonlarida sun'iy intellekt va mashinani o'rganish algoritmlarining ortib borayotgan integratsiyasini ko'rsatdi, bu banklarning portfelni boshqarishga yondashuvivo'zgarishidan dalolat beradi.

Tartibga solish dinamikasini tahlil qilish bozor voqeliklarining o'zgarishiga javoban uzluksiz evolyutsiyani ko'rsatdi. Murakkab me'yoriy-huquqiy bazalar, ayniqsa, moliyaviy inqirozlardan so'ng, tavakkalchiliklarni boshqarish amaliyotini takomillashtirish bilan bog'liq edi. Biroq, tadqiqotlar bozor dinamikasida moslashuvchanlik zarurati bilan tartibga solish muvofiqligini muvozanatlash muammolarini ochib berdi.

Natijalar iqtisodiy, texnologik va tartibga soluvchi omillarning uyg'unligi ta'sirida tijorat banklarida investitsiya faoliyatining dinamik xususiyatini ko'rsatadi. Tijorat banklari rivojlanayotgan bozor muhitini o'zgartirar ekan, tadqiqot natijalari risk va daromadni muvozanatlashtiradigan moslashuvchan strategiyalar muhimligini ta'kidlaydi. Tadqiqotlarda siyosatchilar, bank rahbarlari va tadqiqotchilar uchun ushbu natijalarning ta'siri tahlil qilingan va muammolarni hal qilish va bank investitsiyalarining doimiy o'zgaruvchan muhitida paydo bo'ladigan imkoniyatlardan foydalanish uchun faol yondashuv zarurligini ta'kidlaydi.

Tijorat banklarida investitsiya faoliyatining hozirgi holatini tushunish uchun uning tarixiy yo'nalishini o'rganish zarur. Dastlab kreditlar va depozitlar kabi an'anaviy bank funktsiyalari bilan chegaralangan banklar asta-sekin o'z rolini kengaytirib, turli xil investitsiya vositalarini qamrab oldi. XX asrning ikkinchi yarmida moliyaviy bozorlarning globallashuvi va murakkab moliyaviy mahsulotlar paydo bo'lishi bilan yanada keng qamrovli investitsiya yondashuviga o'tish kuchaydi.

Tadqiqotlar shuni ko'rsatdiki, tijorat banklarida investitsiya faoliyatini amalga oshirish, ularning strategiyalari va portfellarini shakllantirishga bir qancha omillar ta'sir qiladi. Iqtisodiy sharoitlar, foiz stavkalarining o'zgarishi, texnologik innovatsiyalar va tartibga soluvchi o'zgarishlarning barchasi investitsiya qarorlariga ta'sir qilishda hal qiluvchi rol o'ynaydi.

Investitsiyalar bilan bog'liq bo'lgan xatarlarni hisobga olgan holda, tijorat banklari o'z aktivlarini himoya qilish va moliyaviy barqarorlikni saqlash uchun ko'plab risklarni boshqarish strategiyalaridan foydalanadilar. Tijorat banklarida investitsiya faoliyatining rivojlanishi ularning faoliyatini tartibga soluvchi me'yoriy-huquqiy bazalar bilan chambarchas bog'liqdir. Nazorat qiluvchi organlar ham milliy, ham xalqaro darajada oqilona investitsiya amaliyotini

ta'minlash, omonatchilarni himoya qilish va umumiy moliyaviy barqarorlikni saqlash bo'yicha ko'rsatmalarni ishlab chiqilgan.

Xulosa

Korxonalarining mustaqilligini oshirish va ularning o'zini o'zi moliyalashtirishga o'tishi sharoitida moliya bozorini yaratish zarurati tug'ildi. Korxonalar qo'shimcha moliyaviy resurslarga muhtoj bo'lgan iqtisodiy asos va bozor. Aylanma mablag'larning etishmasligi ishlab chiqarishning rivojlanishiga va moddiy resurslarning o'zlashtirilishiga to'sqinlik qiladi. korxonalarining moliyaviy resurslarini ta'minlash ishlaridagi kamchiliklarni ko'p jihatdan tushuntiradi. Moliyaviy bozorga aylanish faqat moliyaviy va moddiy resurslar o'rtasidagi nomutanosiblikni bartaraf etish bilan mumkin.

Xulosa qilib aytadigan bo'lsak, ushbu ilmiy maqolada tijorat banklarida investitsiya faoliyatining rivojlanishdagi kamchiliklarni har tomonlama tahlil qilingan. Tijorat banklarida risklarni boshqarish amaliyotini shakllantirishda tartibga solish dinamikasi hal qiluvchi rol o'ynadi. Murakkab me'yoriy-huquqiy bazalar moliyaviy barqarorlikni ta'minlashga qaratilgan bo'lsa-da, bizning tadqiqotimiz moslashuvchanlikni va bozor dinamikasiga javob berishni ta'minlash uchun zarur bo'lgan nozik muvozanatni ta'kidlaydi. Ushbu muvozanatni saqlash murakkab tartibga solish muhitini boshqarish va mustahkam va moslashuvchan bank tizimini rivojlantirish uchun juda muhimdir.

O'zbekiston bank amaliyotida kredit tashkilotlarining amaliyotida kredit tashkilotlarining aktivlari tarkibi qimmatli qog'ozlar ulushini oshirish bank daromadining oshishiga xizmat qilibgina qolmasdan ularning likvidligini oshirib, aktivlarni diversifikatsiyalashiga xizmat qiladi. Banklarning investitsiya portfelida davlat qimmatli qog'ozlarining bo'li juda yuqori likvidli aktiv sifatida tan olinishi bilan birgalikda mamlakatda fond bozori va bank tizimini bir-biri bilan raqobatlashadigan darajaga yetishi iqtisodiyotda resurs muammosini hal qilib jamiyatni jadal sur'atlarda rivojlanishini ta'minlaydi.

Xulosa qilib aytganda, bizning keng qamrovli tahlilimiz tijorat banklari uchun investitsiya faoliyatining doimiy o'zgaruvchan sharoitida boshqarishda tezkorlik, moslashuvchanlik va uzoqni ko'ra bilish muhimligini ta'kidlaydi. Siyosatchilar tartibga solish choralarining innovatsiyalar va risklarni boshqarishga ta'sirini ko'rib chiqishlari kerak, shu bilan birga sanoat manfaatdor tomonlari yangi imkoniyatlardan foydalanish uchun paydo bo'layotgan tendentsiyalarga e'tibor berilishi kerak. Ushbu tadqiqot tijorat banklarida investitsiya faoliyatidagi kamchiliklar ustida ishlab yechimlari bilan bog'liq qarorlar qabul qilish uchun asos bo'lib, bank sohasini investitsiy faoliyatini umumiy tushunishga yordam beradi.

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ORGANIK TOZA MAHSULOTLAR YETISHTIRISH VA ISHLAB CHIQRISHDA XALQARO ISO 45001 STANDARTIDAN FOYDALANISH

Annotasiya: mazkur maqola mamlakatimizda xalqaro standartlar asosida muvofiqlikni baholash faoliyatida toza organik mahsulotlar yetishtirish haqida ifodalaydi. Bu tartibni bajarish uchun ISO 45001 yegulik mahsulotlarini hayotga xafsizligini taminlash standart ifodalangan.

Kalit so'zlar: organik, oziq-ovqat, fermer, kimyoviy moddalar, ingredientlar, halqaro standartlashtirish tashkiloti (ISO), iste'mol, ozuqaviy moddalar.

*Mamatkulov Sh.J.
assistant
Jizzakh Polytechnic Institute*

USE OF THE INTERNATIONAL ISO 45001 STANDARD IN THE CULTIVATION AND PRODUCTION OF ORGANIC CLEAN PRODUCTS

Annotation: this article describes the cultivation of pure organic products in our country in accordance with international standards. The ISO 45001 food safety standard is defined to fulfill this procedure.

Keywords: organic products, food, farmer, chemicals, ingredients, international Organization for Standardization (ISO), consumption, nutrients.

Ko'pgina iste'molchilar "organik" so'zini "sog'lomroq" oziq-ovqat bilan tenglashtiradi. Biroq, hozirda organik oziq-ovqatlarni iste'mol qilish va umumiy salomatlikni yaxshilash o'rtasida hech qanday bog'liqlik yo'q. Organik oziq-ovqatlar sintetik pestitsidlarga ta'sir qilishni kamaytirishi mumkin. Va ular toza dehqonchilik usullaridan foydalangan holda etishtiriladi.

"Organik" atamasi AQSh Qishloq xo'jaligi Departamenti (USDA) tomonidan belgilanadi va nazorat qilinadi. U USDA tekshiruv va sertifikatlash talablariga asoslanadi. Bular organik yorliqni olib yurish uchun fermerlar, kompaniyalar va oziq-ovqat mahsulotlariga javob berishi kerak bo'lgan talablardir. Ularga quyidagilar kiradi:

Organik mahsulotlar kimyoviy yoki pestitsidlardan foydalanmasdan yetishtirilishi kerak. Fermerlar hasharotlar va begona o'tlarga qarshi kurashish uchun tabiiy vositalardan foydalanishlari kerak. Faqat kompost kabi tabiiy

o'g'itlarga ruxsat beriladi. O'rim-yig'imdan keyin fermerlar oziq-ovqat mahsulotlarini konservantlar bilan davolasholmaydi. Bunga mum ham kiradi.

Organik oziq-ovqatlar olimlar tomonidan o'zgartirilmagan.

Organik dehqonchilik amaliyotlari erni uzoq vaqt davomida foydali bo'lishiga ishonch hosil qilish uchun uni himoya qilishi kerak.

Organik go'sht va hayvonot mahsulotlari tabiiy muhitda o'stiriladigan chorva mollaridan olinishi kerak. Fermerlar ularga organik ozuqa, toza uy-joy va ochiq havoga kirishlari kerak. Fermerlar o'sish gormonlari yoki antibiotiklardan foydalana olmaydi. Bu mahsulotlar noorganik chorva mollariga beriladi.

Organik dehqonchilikning ikkita asosiy maqsadi bor. Birinchisi, atrof-muhitga salbiy ta'sirni kamaytirishdir. Ikkinchisi - barqarorlikni oshirish.

Sizning dietangizni o'zgartirish: ozuqaviy moddalarga boy ovqatlarni tanlash

Yaxshilangan farovonlik yo'li.

Ba'zi odamlar organik mahsulotlarni sog'lom, yashilroq variant deb bilishadi. Esingizda bo'lsin, hech qanday oziq-ovqat turi yoki modasi sog'ligingiz uchun sehrli o'q emas. Organik oziq-ovqatlar siz va oilangiz uchun to'g'ri yoki yo'qligini o'ylab ko'rishingiz kerak.

USDA organik yorlig'i tabiiy dehqonchilik va qayta ishlashni ifodalaydi. Bu ozuqaviy tarkib yoki qiymatni kafolatlamaydi. Har doim qadoqdagi oziqlanish yorliqlarini tekshiring. Oziq-ovqat bilan ishlashda xavfsiz tartib-qoidalarga rioya qilishni davom eting [1]. Mahsulotingizni sovun bilan yuving. Xom go'shtni pishirishdan oldin uni boshqa ovqatlardan ajratib turing.

Organik va noorganik mahsulotlar haqida ma'lumotni bilish yaxshi. Bu sizga ma'lumotli va sog'lom qarorlar qabul qilishingizga yordam beradi.

Organik oziq-ovqatlar turli xil ozuqaviy qiymatlarga ega. Ba'zilar noorganiklarga qaraganda ko'proq to'yimli, lekin har doim ham emas. Boshqalar bir xil qiymatga ega. Misol uchun, organik meva va sabzavotlar ko'proq minerallarga ega bo'lishi mumkin. Bu organik mahsulotlar yetishtirilishi bilan bog'liq. Biroq, ba'zi noorganik oziq-ovqatlar organik oziq-ovqatlarga qaraganda boyitilgan va to'yimli bo'lishi mumkin.

Sun'iy ingredientlar. Bu organik va noorganik oziq-ovqat o'rtasidagi asosiy farq. Oziq-ovqatlarda o'sish gormonlari, sintetik ingredientlar va pestitsidlar keng tarqalgan. Ular sog'liqqa uzoq muddatli ta'sir ko'rsatishi mumkin, ammo shifokorlar hali aniq aytish uchun etarli ma'lumotga ega emaslar. Ba'zi odamlar organik oziq-ovqatlarni iste'mol qilish kelajakdagi sog'liq muammolari xavfini kamaytirishi mumkin deb hisoblashadi. Biroq, hozirda buning ilmiy isboti yo'q.

Organik oziq-ovqatlarda konservantlar mavjud emas. Mahalliy paxtakorlar ularni ishlab chiqaradilar, shuning uchun ular odatda yangi bo'ladi. Ularda kimyoviy moddalar va sun'iy lazzatlar ham yo'q. Organik yorliq yaxshiroq lazzat yoki yangilikni kafolatlamaydi. Ammo siz ularning ta'mini yaxshiroq ko'rishingiz mumkin.

Organik dehqonchilik atrof-muhit uchun foydali bo'lishi kerak. Bu ifloslanishni kamaytiradi, suv va resurslarni tejaydi va tuproq eroziyasini kamaytiradi. Organik fermerlar pestitsidlardan foydalanmaydi. Ular chorva mollarini yanada insoniy yashash sharoitlari bilan ta'minlaydi. Organik mahsulotlar ko'pincha mahalliy do'konlarda sotiladi. Bu butun mamlakat bo'ylab yuk tashishning ifloslanishini kamaytiradi.

Organik mahsulotlar noorganik oziq-ovqatlar kabi uzoq davom etmaydi. Buning sababi shundaki, ular tarkibida konservantlar mavjud emas. Organik oziq-ovqatlar, ayniqsa mahsulotlar, tezroq yomonlashishi mumkin.

Organik oziq-ovqatlar noorganik oziq-ovqatlarga qaraganda qimmatroq. Bu organik dehqonchilikning yuqori narxi va cheklangan ta'minot bilan bog'liq. Ko'proq odamlar organik mahsulotlardan foydalansa, narxlar pasayishi mumkin.

Organik mahsulotlarni olish uchun ISO 45001 standarti mavjud bo'lib, yuqori boshqaruvga qaratilgan ISO 45001 korxonaga o'z xodimlari va ish joyiga tashrif buyurgan har bir kishi uchun sog'lom va xavfsiz mehnat muhitini ta'minlashga yordam berishdan iborat. Ushbu maqsadga shikastlanish, kasallik va ekstremal holatlarda hatto o'limga olib kelishi mumkin bo'lgan omillarni nazorat qilish orqali erishish mumkin. Natijada, ISO 45001 ishchilarning jismoniy va/yoki ruhiy farovonligiga zararli yoki xavf tug'diradigan har qanday omillarni yumshatish bilan bog'liq.

Afsuski, har kuni minglab ishchilar ish joyidagi noqulay sharoitlarning oldini olish mumkin bo'lgan holatlar tufayli hayotlarini yo'qotadilar. Haqiqatan ham, ISO va Xalqaro Mehnat Tashkiloti yoki XMT ma'lumotlariga ko'ra, butun dunyo bo'ylab ishlab chiqarishdagi baxtsiz hodisalar tufayli 2,7 milliondan ortiq o'lim sodir bo'ladi. Bundan tashqari, har yili 374 million o'limga olib kelmaydigan jarohatlar mavjud bo'lib, bu 4 yoki undan ko'p kunlik ishdan ketishga olib keladi.

Agrosanoat majmuasining qishloq xo'jaligi mahsulotlarini sotish samaradorligi asosan tovar-pul munosabatlari asosida ularni taqsimlashning maqbul tuzilishini tanlash bilan belgilanadi. Shu munosabat bilan ushbu mahsulotni sotishning mavjud tuzilishini tahlil qilish zarur ko'rinadi [2].

Sog'liqni saqlash va xavfsizlik bo'yicha ko'plab mutaxassislar, jumladan ISO qo'mitasida ishlagan mutaxassislarning fikriga ko'ra, ISO 45001 muhim yutuqdir. Xalqaro miqyosda birinchi marta barcha o'lchamdagi korxonalar endi yagona tizimga kirishlari mumkin, bu ularga yaxshi va mustahkamroq mehnatni muhofaza qilish va xavfsizlik choralarini ishlab chiqish uchun aniq yo'lni taklif qiladi.

ISO 45001 OHSAS 18001 tomonidan ko'p ma'lumotga ega - oddiy qayta ko'rib chiqish yoki qisqacha yangilanish emas. Muvofiqlikni saqlab qolish va ISO 45001 sertifikatiga erishish uchun barcha turdagi va o'lchamdagi tashkilotlar nima qilishlari kerakligini ko'rish uchun o'qing.

Asosiy tarkibiy qismlardan biri bu dasturiy-uslubiy, axborot va didaktik ta'minot orqali professional muammolarni hal qilishning integral vositasi bo'lib xizmat qiladigan elektron ta'lim texnologiyalari [3]. Matematik modelga bo'lgan

ehtiyoj, xususan, avtomatik tartibga solish nazariyasida keng qo'llaniladigan strukturaviy sxemalarda barcha elementlarning xususiyatlarini bilish kerakligi bilan bog'liq [4].

Ijtimoiy-iqtisodiy sohada amalga oshirilayotgan islohotlarning muvaffaqiyati yuqori ma'lumotli va malakali mutaxassislariga bog'liq. Oliy ta'lim tizimidagi fundamental islohotlarning yakuniy maqsadi ta'lim sifatini oshirish, iqtisodiy rivojlanishning strategik vazifalarini amalga oshirishga qodir malakali kadrlar tayyorlashdir [5].

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*Maqsudov U.Q., PhD
associate professor
Department of Pedagogy
Fargona State University
Abdullaev R.A.
1st stage master's student
Department of Pedagogical Theory and History (by type of activity)
Fergana State University*

THE SPIRITUAL-MORAL EDUCATIONAL SIGNIFICANCE OF JADID MARIFATPARVARI ABDULLA AVLONI'S WORKS

Annotation. This article provides information about the spiritual and moral educational significance of the works of the modern enlightener Abdulla Avloni, the high level of glorification of intelligence and knowledge in Abdulla Avloni's pedagogical views is directly connected with the glorification of man.

Key words: Fiction, works of art, spirituality, morality, education, pedagogy, modernism.

Such activities of Abdulla Avloni in the field of expressive flow of artistic works quickly penetrated the old and modern schools of Tashkent. In such a situation, a programmable guide was needed for newly opened schools to train teachers who can meet the requirements of the times, to create textbooks and sets with a national spirit for schools. Therefore, Abdulla Avloni's work Turki Gulistan or Ethics was created at the suggestion of Munavvarqori Abdurashidkhanov, the leader of Turkestan moderns, and advanced pedagogues. Indeed, while thinking about ethical categories in Abdulla Avloni's work, he considers the students first, but assigns the task of inculcating them in children's education to the teachers. So, you can be sure that the work was created for teachers rather than students. From this point of view, the following words of Abdulla Awlani to the teachers fully express the purpose of the work of Turki Gulistan or Ethics: Thought education is the most necessary, sacred task that has been honored since time immemorial, and is entrusted to the teachers' attention and conscience. Thought is the reason for a person to be kind and enthusiastic. This education needs the help of teachers to a certain extent, because the strength, ornamentation, and breadth of thought depend on the education of the teacher. It is not difficult to understand that these words are not addressed to students, but to adults, especially teachers. Because in the future they have to instill these in the minds of children. In this way, Turki Gulistan... was created as a reference to the Gulistan work of the great thinker Sheikh Muslihiddin Sadi. Bringing up a perfect person, encouraging them to do good, and turning them away from evil is done through education. Avloni's description of pedagogy is also very similar to the current description: Tarbiya means Pedagogy, that is, the science of child

education. In this way, the work of Turki Gulistan or ethics was created according to the recommendations and suggestions of many pedagogues. It is being carried out in close connection with all spheres of life. Neighborhood, family, public organizations and educational institutions play a special role in the development of our youth. Caring about the future generation, striving to raise a healthy, well-rounded person is one of the national characteristics of our people. In fact, a mature generation is first born in the family, they grow up as good or bad people in the family environment. To raise the family spirituality, each family member has a certain spiritual world based on the relationship between them. In the family, the spiritual qualities of the father and mother determine the level of humanity and morality of the Eastern traditions of marital relations. It is important that the spiritual world of the family embodies such spiritual values as mutual respect, appreciation, cooperation, reconciliation, kindness, compassion, kindness, patience, humanity, nobility, respect for elders, respect for children. Instilling such values in the family and following them creates such a spiritual atmosphere in the family. Family upbringing is such a stage of the universal human process, which serves as the basis and ground for the knowledge and life lessons that will be learned throughout life. Every parent, realizing their duties, must try to fully observe all the features that ensure the stability of the family, understand its tasks and goals. As stated by President Shavkat Mirziyoyev in his speech at the 4th congress of Kamalot youth social movement, it is becoming more and more widespread in our country today.

Conclusion:

The family is the source of education that ensures the continuity of the eternity of life, preserves our sacred traditions, and at the same time has a direct impact on how future generations will become human beings. Systematic organization of spiritual and educational work in our country, increasing the efficiency of the measures implemented in this regard, raising the intellectual potential of the population, especially the youth, their thinking and worldview, strengthening their ideological immunity, paying special attention to raising a mature generation that lives with a sense of patriotism, love and loyalty to the people being directed.

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*Matchanov X.K.
Xorazm viloyati Gurlan tumani
1-son kasb-hunar maktabi
Yo'l harakati qoidalar va harakat xavfsizligi fani o'qituvchisi*

YO'L HARAKATI XAVFSIZLIGINI BOSHQARISH BO'YICHA XALQARO TAJRIBALAR

Annotatsiya: ushbu maqolada, yo'l harakati xavfsizligini boshqarish, qoidalarga bo'ysunish, yo'l harakati xavfsizligi bo'yicha xalqaro tajribalarni o'rganish masalalari haqida ma'lumotlar yoritilgan.

Kalit so'zlar: yo'l harakati xavfsizligi, boshqaruv, xavfli, transportning rivojlanishi, innovatsion usullar.

*Matchanov H.K.
teacher of traffic regulations and traffic safety
Vocational school No. 1
Gurlan District, Khorezm Region*

INTERNATIONAL EXPERIENCES IN TRAFFIC SAFETY MANAGEMENT

Abstract. This article provides information on issues of traffic safety management, compliance with rules, study of international experiences on traffic safety.

Key words: traffic safety, management, dangerous, development of transport, innovative methods.

Bizga ma'lumki butun dunyoda yo'l harakati xavfsizligi (YHX) sohasida juda ko'plab kamchiliklar hamda muammolar mavjud. Jahon tajribasi shuni ko'rsatadiki, inqiroz davrida, ayniqsa xavfli faoliyat sohalarida, qo'llaniladigan boshqaruv usullari yaroqsiz deb tan olinadi hamda tub o'zgarishlarni ta'minlaydigan innovatsion usullar bilan almashtirildi. Boshqaruvning yangi usullarini joriy etish bilan vazifalarni tezroq, osonroq va shuning uchun arzonroq va yaxshiroq hal qilish kerakdir.

Jahon amaliyotida yo'l-transport hodisalarini "nolga" tushirish muammosini hal qilish uchun hali ham yetarli darajada innovatsion usullar mavjud emas.

Xorijiy mamlakatlarda, qoida tariqasida, yo'l harakati xavfsizligini kafolatlash masalalari yo'l harakati qoidalarini tartibga soluvchi barcha turdagi normativ-huquqiy hujjatlarni tasdiqlash, shu jumladan qoidabuzarliklar uchun javobgarlikni belgilash hamda ushbu sohada yig'ma standartlarni o'rganish va tatbiq etish yo'li bilan hal etiladi. Shubhasiz, innovatsion jamiyatda transport

vositalarining ahamiyatini qayta ko'rib chiqish qiyin, ular nafaqat aholining iqtisodiy, balki ijtimoiy ehtiyojlarini ham qondirish uchun juda katta ahamiyatga egadir. Ko'p hollarda, turli xil transport vositalari bo'lmagan taqdirda, sanoat korxonalarini faoliyati, savdo faoliyati, tibbiy va boshqa turdagi xizmatlar amalga oshirilmaydi. Bu transportlarsiz, dam olish va odamlarning o'zaro aloqasi mumkin emasligi bilan bevosita bog'liq jarayondir. Jahon hamjamiyatining mutlaqo barcha davlatlarida transportning rivojlanishi umuman olganda iqtisodiyotni shakllantirishga turtki bo'ldi.

Shu bilan birgalikda, avtomobillashtirish jarayoni ham salbiy tomonlarga ega. Avtomobillashtirishning asosiy va bizning fikrimizcha, salbiy natijasi yo'llarda yo'l-transport hodisalarining juda ko'p sodir bo'lishi hisoblanadi. Yo'l harakati xavfsizligi jamoatchilikni tashvishga soladigan birinchi darajali jamoat masalasi bo'lib qolishni to'xtatmaydi. Xalqaro hamjamiyatning istiqbolli tajribasi shuni ko'rsatadiki, yuqoridagi masalani faqat davlat darajasida kompleks hal qilish mumkindir.

Ko'pgina davlatlar yo'l harakati xavfsizligini muvofiqlashtirish muammosini umumiy darajada qabul qilingan me'yorlarga kamaytiradi. Bolgariya, Ispaniya, Daniya, Finlyandiya va boshqa ko'plab mamlakatlarni ijobiy misollar sifatida ko'rsatishimiz mumkin. Fransiyaning tajribasi alohida e'tiborni jalb qilmoqda, unda Yo'l harakati qoidalari, jumladan 5 jildli, yo'l belgilari va signallari bo'yicha idoraviy ko'rsatmalar, yo'llarni saqlash va saqlash qoidalari hamda Jinoyat kodeksi asosiy hujjati hisoblanadi. Fransuz yo'l harakati qoidalarining beshta jildi qonun chiqaruvchi va tartibga soluvchi qismlarga bo'lingan bo'lib, ular tarkibida istisnosiz yo'lda vaziyat bilan bog'liq barcha masalalarni barqarorlashtiradigan qoidalar to'plami ham mavjud.

Estoniya ham transportning har qanday turiga oid qonunlar, shuningdek to'g'ridan-to'g'ri yo'llar to'g'risidagi qonunlar qabul qilingan.

Germaniyada asosiy qonun - "Yo'l harakati xavfsizligi to'g'risida", "Yo'l harakati qoidalarini buzish to'g'risidagi qonun" dan tashqari, haydovchining huquqlari va manfaatlariga daxldor muammolarni tartibga soluvchi Yo'l harakati qoidalari kodeksi alohida ishlaydi. Kodeksda haydovchilik guvohnomasi to'g'risidagi ma'lumotlar, shuningdek qoidabuzarliklar va transport vositalari to'g'risidagi ma'lumotlar mavjud bo'lib, bundan tashqari, unda jarima katalogi deb ataladigan yo'l harakati qoidalarini buzganlik uchun jarimalar tizimining juda to'liq tavsifi mavjud.

Italiya, Xitoy, Ozarbayjon, Turkiya, Yaponiya kabi ba'zi mamlakatlarda yo'l harakati qoidalari yo'l harakati to'g'risidagi qonunning ajralmas qismi hisoblanadi yoki qonunchilik darajasida qabul qilingan.

Shuni ta'kidlash kerakki, Finlandiyada to'g'ridan-to'g'ri yo'l muassasalarida sharoitlar sifatini yaxshilash uchun, Finlandiyaning Texnik tadqiqotlar markazi tomonidan yaratilgan "TARVA" maxsus kompyuter dasturi keng qo'llaniladi. Bunday dastur sizga yo'l harakati xavfsizligi darajasini aniqlashga imkon beradi, chunki yo'l uchastkasidagi turli xil ma'lumotlarni ya'ni transport intensivligi va

avtohalokat darajasi baholash zarurdir. Bizningcha, yo'l harakati qoidalarini buzganlik uchun jazolarning kuchaytirilishi dunyoning ko'plab mamlakatlarida qiziqish uyg'otmoqda. Turli xil adabiyotlarni o'rganish shuni ko'rsatadiki, yo'l harakati qoidalari qat'iyroq bo'lsa va qoidalarga rioya qilmaslik uchun jazo choralari aniqroq bo'lsa, baxtsiz hodisalar, shu jumladan jarohatlanish darajasi ancha past bo'ladi.

Masalan, biz Buyuk Britaniyani misol keltirishimiz mumkin, bu yerda politsiya xodimi qoidalarni buzgan holda to'xtab turgan mashinani ochib, uni jarima maydoniga olib borish imkoniyatiga egadir.

Hozirgi paytda Norvegiyada barcha manfaatdor tomonlarga bir-birining vakolati va ijobiy tajribasini o'zaro ta'sir o'tkazish yo'li bilan, axborot tarqatish orqali samarali qo'llash huquqini beruvchi Milliy yo'l harakati xavfsizligi forumi mavjud bo'lib, yuqoridagilar ba'zi xulosalar chiqarishga imkon beradi:

- dunyodagi aksariyat mamlakatlar yo'l harakati xavfsizligini tartibga soluvchi tarqoq hujjatlarni qo'llash imkoniyatidan voz kechishdi va amaldagi qonunchilikni kodlashdi. Rossiyada, aksincha, tegishli normativ-huquqiy hujjatlar tizimlashtirilmagan va ularning rivojlanishi yetarli darajada tartibga solinmagan. Ushbu sohadagi mavjud qonun hujjatlarida yetarlicha kelishmovchiliklar va huquqiy kamchiliklar mavjud;

- Rossiya Federatsiyasida yo'l harakati sohasi, qoida tariqasida, huquqning turli sohaslariga yoki qonunchilikning turli sohaslariga tegishli normativ-huquqiy hujjatlar bilan tartibga solinadi, bu esa ayrim hollarda jamoat munosabatlarini tartibga solishda o'xshash bo'lmagan terminologiya bilan farq qiladi;

- bundan tashqari, normativ-huquqiy hujjatlar tarkibiga yo'l harakati sohasini muvofiqlashtiruvchi qonun hujjatlarida, qonunosti hujjatlarida va idoraviy hujjatlarda qo'llaniladigan juda ko'p miqdordagi murakkab atamalar va huquqiy tuzilmalar mavjud;

Xulosa qilib aytishimiz mumkinki, uzoq va yaqin chet ellarda ham yo'l harakati xavfsizligini ta'minlash bo'yicha amaliy tadbirlar xorijiy qonunchilikda asosiy e'tibor huquqbuzarlarning moddiy javobgarligiga berilganligini tasdiqlaydi.

Davlatning ijtimoiy-iqtisodiy rivojlanish darajasi va boshqa muhim ko'rsatkichlarni hisobga olgan holda, biz qonunchilikning ijobiy Yevropa tajribasini qo'llashni va yo'l harakati xavfsizligini ta'minlashga qaratilgan davlat organlarining boshqaruv faoliyatining aralash modelidan foydalanish zarur deb hisoblaymiz.

Yo'l harakati xavfsizligini boshqarish bo'yicha xalqaro tajriba muhokama qilingan ya'ni xulosa qilib aytish kerakki, uzoq va yaqin chet ellarda ham yo'l harakati xavfsizligini ta'minlash bo'yicha amaliy tadbirlar xorijiy qonunchilikda asosiy e'tibor huquqbuzarlarning moddiy javobgarligiga berilganligini tasdiqlaydi.

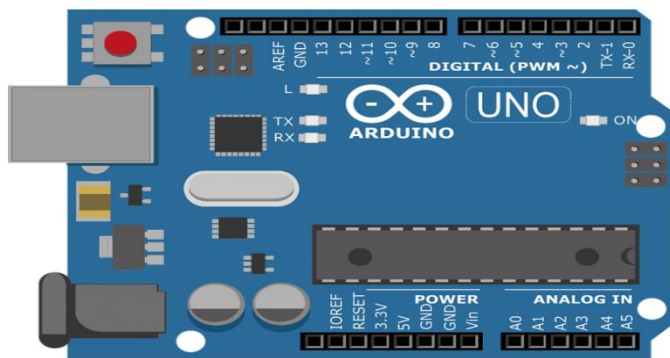
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GETTING TO KNOW THE ARDUINO UNO BOARD AND LEARNING HOW TO PROGRAM IT

Abstract. Nowadays, the field of automation is developing very quickly with pictures, and it is very convenient and cheap to do it with Arduino. The most convenient of Arduino devices is Arduino UNO, so let's get acquainted with this device.

Keywords: Arduino Uno, LED, resistor, breadboard, and source.



Arduino UNO is a small board with its own processor (microcontroller) and memory.

Arduino Uno is a collection of software and hardware for non-professional robotics enthusiasts. Arduino is a completely open architecture. All parts of the projects in it

(mainly software) are freely distributed. It has its own board and IDE-programming environment. Arduino was discovered in 2003 by Italian scientists Massimo Banzi, David Mellis and David Quartiller [1].

The word "Uno" means one in Italian. It is not for nothing that the creators of the Arduino Uno tried to create a new twist and a new flagship in the Arduino controller family with this new controller, and they succeeded. The reason is that Arduino Uno is more compact, convenient, fast, simple and certainly cheaper than other "brothers" in the family of Arduino controllers [1].

Arduino can be used in all areas of our life, for example: lights, sensors, relay modules, networks (Wi-Fi, Bluetooth, Internet), sensors, motors, magnetic door locks and everything that works with electricity.

-Using Arduino we can work with digital and analog signals [2,3].

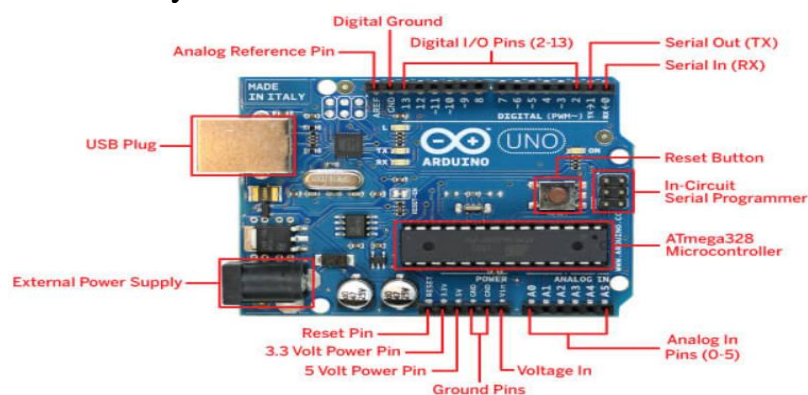
- Control of DC motors, servo motors and displays and various actuators. - Implementation of data exchange between wireless Arduino platforms using radio modules[2].

Technical indicators of the Arduino Uno platform

- Microcontroller: ATmega328;
- Operating voltage: 5 V;
- Input voltage (recommended): 7-12 V;

- Input voltage (highest): 6-20 V;
- Digital I/O: 14
- Analog input: 6;
- Constant current through input/output: 40 mA;
- Constant current for 3.3 V input: 50 mA;
- Flash memory: 32 KB (ATmega328) of which 0.5 KB is used as a bootloader;
- Fast memory: 2 KB (ATmega328);
- EEPROM: 1 KB (ATmega328);
- Frequency: 16 MHz; [4]

In addition, the Arduino Uno can receive power from a USB or external source connected to it. In this case, if there are several sources, one of them will be selected automatically.



It uses `pinMode()`, `digitalWrite()` and `digitalRead()` functions. Each output can pass 20-50 kOhm resistance and up to 40 mA current [5,6].

Arduino Uno controller is programmed using Arduino software. To do this, in the Arduino program, in the menu Tools>Board and from there select "Arduino Uno".

As mentioned above, this controller has very compact dimensions, its sides are 6.9 and 5.3 cm. This in turn makes it more interesting[7].

Arduino software includes two main functions:

- `void setup()`
- `void loop()`

You can use the `void setup()` function to start the program. This function is executed only once when the program is launched.

The `void loop()` function is executed after the `void setup()` function completes, and unlike the `void setup()` function, it runs continuously.

To install the Arduino IDE on your computer, you must first download it from <https://www.arduino.cc/en/software> [8].

Program keywords:

Below is a list of the most commonly used functions in Arduino programming:

- `pinMode` - sets the pin to enter or exit the mode;

- digitalRead - reads the digital input pin value;
- digitalWrite - sets the value of a digital output pin high or low;
- analogRead - reads the analog voltage on the analog input pin;
- analogWrite - writes the analog voltage to the analog output pin;
- delay - hold, hold (wait)
- Serial.print - writes data to the serial port as human-readable ASCII text.

Arduino libraries are a collection of functions that allow you to control these devices. Some of the most common libraries are [9]:

- EEPROM - read and write "permanent" storage;
- Ethernet - to connect to the Internet using the Arduino Ethernet Shield board;
- Firmata - to communicate with applications on a computer using a standard serial protocol;
- GSM - to connect to the GSM / GRPS network using a GSM board;
- Liquid Crystal - for controlling liquid crystal displays (LCD);
- SD - for reading and writing SD cards;
- Servo - for controlling servo drives;
- SPI - for communication with devices using the SPI bus;
- SoftwareSerial - for serial communication through any digital pins;
- Stepper - for controlling stepper motors;
- TFT - for drawing text, images and shapes on Arduino TFT screens;
- WiFi - to connect to the Internet using Arduino Wi-Fi;
- Wire is a two-wire interface (TWI / I2C)[5] for transmitting and receiving data through a network of devices or sensors [10].

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*Meyliva N.O.
1 kurs 101- 23 guruh talabasi
Iqtisodiyot va pedagogika Universiteti
Xolmirzaev T.R.
Iqtisodiyot va pedagogika Universiteti
Iqtisodiyot kafedrası stajyor o'qituvchisi*

KICHIK BIZNES VA XUSUSIY TADBIRKORLIKNI RIVOJLANTIRISHNING BUGUNGI KUNDAGI DOZLARBLIGI

Annotatsiya. Ushbu maqolada kichik biznes va xususiy tadbirkorlikni rivojlantirish yo'nalishlari, kichik biznesni milliy iqtisodiyotdagi o'rni va ahamiyati iqtisodiy ko'rsatkichlar orqali yoritilgan. Kichik biznes va xususiy tadbirkorlik bozor muhitiga tez moslasha olishi, bandlikni ta'minlash, daromadlarni shakllantirish va shu orqali uning tengsizligini yumshatish hamda o'rta mulkdorlar qatlamini qaror toptirishdagi afzalliklari ochib berilgan.

Kalit so'zlar: kichik biznes, mulk, investitsiya, ishsizlik, rag'batlantirish, raqobat.

*Meyliva N.O.
101-23 group student
University of Economics and Pedagogy
Kholmiraev T.R.
intern teacher
Department of Economics
University of Economics and Pedagogy*

THE ESSENCE OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP DEVELOPMENT TODAY

Abstract. This article describes the directions of small business and private entrepreneurship development, the role and importance of small business in the national economy through economic indicators. The advantages of small business and private entrepreneurship in quickly adapting to the market environment, providing employment, generating income and thus reducing its inequality, as well as finding a solution for the middle class of owners have been revealed.

Key words: small business, property, investment, unemployment, incentives, competition.

Kichik biznes va xususiy tadbirkorlik bozor muhitiga tez moslasha olishi, bandlikni ta'minlash, daromadlarni shakllantirish va shu orqali uning tengsizligini yumshatish hamda o'rta mulkdorlar qatlamini qaror toptirishdagi afzalliklari bilan

birga xususiy va shaxsiy mulkni ro'yobga chiqarishda xo'jalik yuritishning eng samarali shakllaridan hisoblanadi.

Tadbirkorlik faoliyatining erkinligi, xususiy mulk dahlsizligini amalda ta'minlash bundan buyon ham davlat siyosatida ustuvor yo'nalish bo'lib qoladi.

Kichik biznes bozor iqtisodiyotida xo'jalik yuritish shakli sifatida mulkchilikning har qanday shaklini inkor etmaydi. Kichik biznes mulkiy tavsifiga ko'ra murakkab xo'jalik yuritish shakli hisoblanib, mulkchilikning mavjud barcha shakllariga asosan tashkil qilinib, faoliyat yuritishi mumkin. Bozor iqtisodiyotida rivojlangan mamlakatlar tajribasi turli mulk shakllariga asoslangan kichik biznes sub'ektlaridan faqat xususiy mulkchilikdagi shunday korxonalar faoliyati birmuncha samarali ekanligini ko'rsatadi.

Aynan shu sababli, 2017–2025 yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishlari bo'yicha harakatlar strategiyasida kichik biznes va xususiy tadbirkorlik rivojlanishini rag'batlantirishga qaratilgan institutsional va tarkibiy islohotlarni davom ettirish ustuvor yo'nalish sifatida qaraladi. [2,4b.]. Xususiy tadbirkorlik kichik biznesdan farq qilib, moliyaviy mablag'lari va iqtisodiy resurslarini shakllantirish (tadbirkorning o'z mulki, meros qoldirilgan, qarz yoki ijaraga olingan mulk va boshqalar) qat'iy xususiy mulkka asoslanadi va xo'jalik yuritishda shaxsiy tashabbuskorlik ustuvor o'rin egallaydi.

Respublikamizda iqtisodiy rivojlanishning hozirgi bosqichida kichik biznesni yanada rivojlantirishni rag'batlantirish bilan birga, uning tarkibida xususiy mulkka asoslangan sub'ektlar ulushini to'xtovsiz oshirib borishga alohida e'tibor qaratilmoqda. Islohotlarimiz natijasida o'tgan yili 93 mingta yoki 2018 yilga nisbatan qariyb 2 barobar ko'p yangi tadbirkorlik sub'ektlari tashkil etildi. Jahon bankining "Biznes yuritish" reytingida 7 pog'ona ko'tarilib, biznesni ro'yxatga olish ko'rsatkichi bo'yicha dunyoning 190 ta davlati orasida 8 o'rinni egalladik va eng yaxshi islohotchi davlatlar qatoridan joy oldik

Mamlakatimizda kichik biznes va xususiy tadbirkorlik sohasining iqtisodiyotda band bo'lganlardagi ulushi 2018 yilda 2010 yilga qiyosan 74,3 % dan 78,2 % ga, YaIM ni shakllantirishdagi salmog'i 52,5 % dan 59,4 % ga, sanoat mahsulotlari ishlab chiqarishdagi shunday ko'rsatkichi 18,8 % dan 34,7 % ga ortgan. Bu davrda kichik biznes sub'ektlarilari soni 1,3 barobarga, ularning eksportdagi ulushi 2 martaga yaqin ko'paygan.

Respublika hududlarida kichik biznesning yalpi hududiy mahsulot, tarmoqlar mahsuloti, asosiy kapitalga qo'yilgan investitsiyalar, chakana tovar aylanmasi va xizmat ko'rsatish hajmi hamda boshqa makroiqtisodiy ko'rsatkichlardagi ulushida ham katta ijobiy o'zgarish ro'y bergan va ayrim nomutanosibliklar ham kuzatiladi. Jumladan, respublikaning deyarli barcha hududiy sub'ektlarda kichik biznes va xususiy tadbirkorlikning yalpi hududiy mahsulotdagi ulushi 2010 yilga qiyosan 2018 yilda turli xil darajada ortgan bo'lsa, ayrimlarida bu ko'rsatkich bir muncha kamaygan. Uning eng yuqori o'sishi 11,3 % ni (Andijon vil.), eng ko'p pasayishi esa 8,7 % ni (Sirdaryo vil.) tashkil qilgan.

2018 yilga kelib kichik biznes va xususiy tadbirkorlikning YaHM dagi eng yuqori ulushi Jizzax va Namangan (80,9 %) va eng past salmog‘i Navoiy (37,6 %) viloyatiga tegishli bo‘lgan.

2010–2018 yillarda kichik biznesning YaIM dagi salmog‘i yiliga o‘rtacha 0,4 % ga ortgan bo‘lsa, sanoat mahsulotida esa uning ulushi 2010 yilda 19,6 %ni, 2016 yilda 45,0 %, 2018 yilga kelib esa 34,7 foizni tashkil etgan yoki 2016 yilga nisbatan 10,3 % pasayish kuzatilgan. Qurilish sohasida kichik biznesning ulushi 2010 yilda 52,3 % ni, 2016 yilda 67,2 %, 2018 yilda 66,6 %ni tashkil etgan bo‘lsa, xizmatlar soxasida esa mos yillar bo‘yicha 36,6 %; 60,5 % va 55,2 %ni tashkil etmoqda.

Birinchi marta tadbirkorlarga ichki bozorda sotgan mahsuloti bo‘yicha qo‘shilgan qiymat solig‘ining bir qismini qaytarish tartibi joriy etilmoqda. Hozirgacha bu tartib faqat mahsulot eksport qilinganda qo‘llanar edi. Buning hisobidan tadbirkorlar ixtiyorida 3,4 trillion so‘m yoki o‘tgan yilga nisbatan 2,5 barobar ko‘p mablag‘ qoladi.

Chunonchi, mamlakatimizda kichik biznes va xususiy tadbirkorlikni rivojlantirish orqali:

- o‘rta mulkdorlar sinfi shakllanadi;
- makroiqtisodiy beqarorlik, ishsizlik va taqchilik kabi iqtisodiy muammolar barham topadi;
- sog‘loq raqobatchilik muhitining yaratilishi orqali YaIMning miqdor va sifat jihatidan o‘sishi kuzatiladi;
- ichki bozor zarur tovar (xizmat)lar bilan to‘yinadi va ularning sifati oshadi;
- va pirovardida aholi turmush darajasining o‘shishiga erishiladi.

Kichik biznes va xususiy tadbirkorlikni rivojlantirish nafaqat davlat va jamoat taraqqiyotida, balki xar bir insonning yuksalib borayotgan xayotiy extiyojlarini qondirishda muhim ahamiyatga ega, ya‘ni xizmat ko‘rsatish, chakana savdo, oziq-ovqat maxsulotlarini ishlab chiqarish kabi soxalarda ushbu faoliyat yaqqol namoyon bo‘ladi.

Ayni paytda kichik biznes va xususiy tadbirkorlikni jadal o‘shishini ta‘minlash, xususiy mulkni ximoya qilish, tadbirkorlikni rivojlantirish yo‘lidagi ba‘zi ma‘muriy to‘siqlarni bartaraf etish, respublikamizda investitsiya va ishbilarmonlik muhitini sifat jixatidan yangi bosqichga ko‘tarish orqali xalqaro me‘yorlarga to‘liq javob berishini ta‘minlashda o‘z aksini topadi.

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Mirzaeva M.M.
Andijon davlat tibbiyot instituti
Andijon shahri, Yu.Otabekov ko'chasi 1-uy

BOLALARDA VITAMINLI PROFILAKTIKANING ASOSIY QOIDALARI

Izoh. Bolalar va o'smirlarning ratsionini to'g'rilash uchun vitamin va vitamin- mineral preparatlardan foydalanganda, vitamin va minerallarni uzoq vaqt davomida nafaqat etarli emas, balki ortiqcha iste'mol qilish ham hisobga olinishi kerak (birinchi navbatda, A vitaminlari, D va mikroelementlar) organizmdagi metabolik jarayonlarning buzilishiga hissa qo'shadi, organizmning antioksidant va immunitet holatini pasaytiradi. Bu uning salbiy ekologik omillarga chidamliligiga salbiy ta'sir qiladi. Shuning uchun profilaktika maqsadida oziq-ovqat ratsionini qo'shimcha boyitish uchun vitaminlarning terapevtik dozalarini o'z ichiga olgan preparatlarni qo'llash mumkin emas. Bolalar va o'smirlar uchun vitamin va vitamin-mineral preparatlardan foydalanish ularning uyg'un o'sishini, turli organlar va to'qimalarning morfologik tuzilmalari va funktsiyalarini o'z vaqtida etukligini, psixomotor va intellektual rivojlanishning optimal parametrlarini ta'minlashning eng muhim shartlaridan biridir. tananing infeksiyalarga va boshqa noqulay tashqi omillarga chidamliligi. Bolalarning mustahkamlangan ovqatlanishi, shuningdek, ularning sog'lig'i holati davlatning alohida e'tiborida bo'lishi kerak.

Kalit so'zlar: vitaminlar, minerallar, muvozanatli ovqatlanish, boyitish, parhez, dorilar, profilaktika.

Mirzaeva M.M.
Andijan State Medical Institute
Uzbekistan, Andijan

BASIC PROVISIONS FOR VITAMIN PROPHYLAXIS IN CHILDREN

Abstract. When using vitamin and vitamin-mineral preparations for the purpose of correcting the diets of children and adolescents, it should be taken into account that not only insufficient, but also excessive consumption of vitamins and minerals over a long period of time (primarily vitamins A, D and microelements) contributes to the disruption of metabolic processes in the body, reduces the antioxidant and immune status of the body. It negatively affects its resistance to adverse environmental factors. Therefore, to carry out additional fortification of food rations for preventive purposes, it is unacceptable to use preparations containing therapeutic doses of vitamins.

Keywords: vitamins, minerals, rational nutrition, vitaminization, diet, drugs, prevention.

Muvofiqlik:

Bolalar uchun qo'shimcha vitamin qo'shimchalari noyabr dan aprelgacha, shu jumladan, ekologik jihatdan noqulay hududlarda uzoqroq muddatlarda - oktyabr dan maygacha amalga oshirilishi kerak.

Ishning maqsadi:

Hozirgi vaqtda bolalar salomatligiga salbiy ta'sir qilish darajasining etakchi omili "mikroelementlar" - vitaminlar, mikroelementlar, individual ko'p to'yinmagan yog'li kislotalar va boshqalarning etishmasligi bo'lib, bu organizmning salbiy ekologik omillarga chidamliligini keskin pasayishiga olib keladi. antioksidant himoya tizimlarining ishlashi va immunitet tanqisligi holatlarining rivojlanishi. Butun dunyoda ob'ektiv sabablarga ko'ra ovqatlanish muammolariga alohida e'tibor qaratilmoqda. Aholining aksariyat guruhlari, jumladan, bolalar, o'smirlar va yoshlar energiya sarfini minimal darajaga tushirdi. Bu tsivilizatsiya foydalari uchun insonning qasosidir. Energiya sarfining keskin kamayishi energiyaga bo'lgan ehtiyojning keskin kamayishi bilan birga keladi va shuning uchun uning yagona manbai oziq-ovqat hisoblanadi. Shu bilan birga, boshqa muhim oziq moddalarga, xususan, mikroelementlarga bo'lgan ehtiyoj biroz o'zgardi va dietaning ozuqaviy zichligi, ya'ni. uning foydali moddalar, shu jumladan mikroelementlar bilan to'yinganligi deyarli o'zgarishsiz qoldi. Bu zamonaviy inson oddiy tabiiy mahsulotlardan nazariy jihatdan etarli ovqatlanish bilan ham kerakli miqdorda mikroelementlarni ololmasligining ob'ektiv sababidir. Shunday qilib, mikroelementlar etishmasligi dasturlashtirilgan. Tashqi muhitda barqaror yod etishmasligi tufayli bolalarda yod tanqisligi holatlarini bartaraf etish va oldini olish uchun doimiy yodni o'z ichiga olgan vitamin preparatlarini yoshga qarab sutkalik dozada (kuniga 150 mkg dan ko'p bo'lmagan) davriy ravishda qo'llash tavsiya etiladi.

Materiallar va usullar.

Poligipovitaminozning oldini olish va bolalar va o'smirlarni vitamin va minerallar bilan ta'minlashni yaxshilash maqsadida boyitish o'tkazilayotganda, ovqatlanish paytida yoki undan keyin (yaxshisi kunning birinchi yarmida) tegishli vitamin va vitamin-mineral preparatlarini olish kerak. Efervesan tabletkalar va granulalardan mustahkamlangan ichimliklar iste'mol qilishdan oldin darhol tayyorlanadi. Multivitaminli yoki vitamin-mineral preparatlarni qabul qilgan bolalar va o'smirlarda nojo'ya ta'sirlarning paydo bo'lishi har bir alohida holatda ushbu dori-darmonlarni qabul qilish imkoniyati to'g'risida qaror qabul qilish uchun mutaxassislar bilan maslahatlashishni talab qiladi. Hayotning birinchi yilidagi bolalar uchun vitamin va vitamin-mineral preparatlarning qo'shimcha retsepti alohida hollarda shifokor nazorati ostida ko'rsatmalarga muvofiq, vitamin va minerallarni yoshga bo'lgan ehtiyojga qarab qat'iy tanlashni hisobga olgan holda amalga oshiriladi. hayotning birinchi yilidagi bolalar uchun bozorda mavjud bo'lgan sut va boshqa ozuqaviy formulalar moslashtirilgan va bolaning rivojlanishining ushbu davri uchun zarur bo'lgan muhim moddalar majmuasi bilan boyitilgan. Hayotning ikkinchi va uchinchi yilidagi bolalar uchun ovqatlanishni

vitaminlash xuddi shunday ehtiyot bo'lishi kerak. Ta'lim muassasalarida qo'shimcha vitaminlash faqat ishlab chiqilgan sxemalar va usullardan foydalangan holda tibbiyot xodimlarining nazorati ostida amalga oshirilishi mumkin.

Natijalar va uning muhokamasi:

Respublikamiz bolalarining aksariyatida surunkali ekologik zo'riqish sindromining shakllanishi profilaktika tibbiyotini zudlik bilan rivojlantirishni taqozo etadi. Moslashuv jarayonlari evolyutsiyasi jarayonida ularni faollashtirish biologik, psixologik va ijtimoiy tadbirlar yordamida mumkin. Asosiysi, harakatlaringizni kimyoviy moddalarni buyurish bilan boshlamaslikdir. Bolalar populyatsiyasini tizimli yaxshilash detoksifikatsiya va yo'q qilish, hujayra metabolizmini tuzatish va barqarorlashtirishning tabiiy terapevtik texnologiyalariga asoslangan bo'lishi kerak. Oziq moddalarning yangi manbalarini izlash va oziq-ovqat ishlab chiqarishni kengaytirish muammosi muhim ahamiyat kasb etmoqda. Aholining ovqatlanish tarkibini yaxshilash zarur - bu oziq-ovqat sanoatida yuqori texnologiyalardan foydalanish va o'zgartirilgan (oldindan belgilangan) kimyoviy tarkibdagi tabiiy mahsulotlarning keng assortimentini yaratishdir. Bu sohaning eng yuqori yutug'i - bu xalqning kelajakdagi salomatligini ta'minlash uchun zarur bo'lgan ixtisoslashtirilgan bolalar oziq-ovqat mahsulotlari. Oziqlanishni yaxshilash, xususan, mikroelementlar etishmasligini bartaraf etish uchun biologik faol oziq-ovqat qo'shimchalari keng qo'llaniladi.

Xulosalar

Oziq-ovqat qo'shimchalari - bu vitaminlar, minerallar va iz elementlari, individual yog' kislotalari, fosfolipidlar va boshqalar kabi tabiiy kichik oziq-ovqat komponentlarining konsentratlari. Oziq-ovqat qo'shimchalaridan foydalanish muhim ozuqa moddalarining etishmasligini qoplash, tananing noqulay ekologik omillar ta'siriga o'ziga xos bo'lmagan qarshiligini oshirish, immunokorreksiyaning amalga oshirish va ovqatlanishni iloji boricha individuallashtirish imkonini beradi.

Atrof-muhit sharoitida yashovchi bolalarning endogen mudofaa tizimlarini tuzatish bo'yicha taklif etilayotgan dastur rehabilitatsiya yo'llarini belgilashga imkon beradi va ma'lum darajada jamiyatimizning qaytarilmas depopulyatsiyasi rivojlanishining oldini olishga yordam beradi.

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*Mizrabov U.B.
Jizzax politexnika instituti asestenti
Abdukarimov Sh.O.
Bulung'ur tumani kasb-hunar maktabi fan o'qituvchisi*

TRANSPORT VOSITALARINING EKOLOGIYAGA TA'SIRI BO'YICHA MUAMMOLARINI ASOSLASH

Annotatsiya. Transport vositalari sonining ko'payishi, shuningdek, tezlik va transport intensivligining oshishi atrof muhitga ajraladigan zaharli gazlar miqdorining ko'payishi muammoni yanada dolzarb bo'lishiga olib keladi.

Kalit so'zlar: avtomobil, xaydovchi, tizim, xavfsizlik, axborot, baxolash, transport.

*Mizrabov U.B.
assistant
Jizzakh Polytechnic Institute
Abdukarimov Sh.O.
science teacher
Bulungur District Vocational School*

JUSTIFYING THE PROBLEMS OF THE ENVIRONMENTAL IMPACT OF TRANSPORT VEHICLES

Annotation: an increase in the number of vehicles, as well as an increase in speed and traffic intensity, will lead to the fact that the amount of toxic gases released into the environment will make the problem more relevant.

Keywords: car, driver, system, security, information, transportation.

Kirish: Ekologik xavfsizlik. Atrof-muhitning ifloslanishiga o'sib borayotgan avtomobillar soni yanada katta ta'sir ko'rsatmoqda. Jahonda avtomobillar yiliga 2,1 mlyard tonna yonilg'i ishlatadi va atmosferaga 700 mln tonna atrofida zaharli moddalar chiqaradi, shu jumladan 420 mln tonna CO, 170 mln tonna C_xH_y, 60 mln tonna NO_x, 17 mln tonna qurum va 0.6 mln tonna qo'rg'oshin (bir dona o'rtastatistik avtomobil uchun yiliga o'rtacha 1.3 tonna chiqindi to'g'ri keladi). Natijada rivojlangan davlatlarda atmosferaning umumiy zaharlanishida avtomobil transportining ulushi 45-50% ga yetmoqda. Rossiyada 40%, shu jumladan shaharlarda 50-60%, megapolislarda 85-90%.

ATM raxbarlari va mutaxassislarining ekalogik ma'lumoti darajasi va malakasi.

Haydovchi xavfsizlik talablariga rioya etishi va buni bajarishda harakatlanishdan oldin transport vositasining texnik sozligini, tozaligini va to'liq jihozlanganligini tekshirishi va harakatda keskin to'xtash va manyovrlar

bajarishda yo'lovchi tan jarohati olmasligini ta'minlashi zarur Boshqa mamlakatlarda ham shunga o'xshash ma'lumotlar olingan. Masalan, Finlyandiya harakatlenganda



3-rasm. Avtomobillarning ekologiyaga ta'siri

chiqadigan chiqindilarning 77% i yengil avtomobillarga to'g'ri keladi; AQSh da 67%, yuk avtomobillari va avtobuslarga esa 33%, shu jimladan kam yuk ko'taruvchi va kam sig'imli, benzinlilarga 22%, o'rta va katta yuk ko'taruvchi benzinlilarga 4%, dizelli yuk avtomobillari va avtobuslarga 7% Priborlar panelida biron–bir indikator signal bersa, darhol harakatni to'xtatib, uni bartaraf qilish choralarini ko'rishi kerak.

ATE ning ushbu masalani yechishdagi hissasi 20-25% deb baholanadi va u, birinchidan, avtomobillar va ularning agregatlarini texnik xolati sozligini ta'minlash va uni saqlab turishdan iborat bo'lib, asosiy zararli chiqindilar miqdorini belgilaydi; ikkinchidan, avtomobillarni texnik xizmat va ta'mirlash, saqlash, yonilg'i bilan to'ldirish jarayonlarida muhim ifloslanishni kamaytiradi; uchinchidan, resurslarni (yonilg'i, moy, elektr quvvati, suv, extiyot qismlar, shina, akkumulyatorlar, texnik suyuqliklar va boshqalar) tejamli sarflaydi; to'rtinchidan, sanoat chiqindilarini kamaytirish, yig'ish, qayta ishlash va ikkilamchi foydalanishni o'z ichiga oladi.

Asosiy qisim: n - yo'ldagi bo'lak soni, unda transportning harakati amalga oshiriladi. Bunda n – bo'laklar soniga (turganlaridan tashqari), S – engil avtomobillar harakat miqdori, G – og'ir yuk avtomobillarining harakat miqdori, A – relsuz jamoat transportlarining harakat miqdori.

Bunda umumiy Q – birlikdagi harakat miqdori shunday belgilanadi:

$$Q = k_c * C + k_G * G + k_A * A,$$

Bunda k_c , k_G , k_A – engil, yuk va jamoat transport koeffitsienti.

Jamoat transport harakati bo‘lagini aniqlashda asosiy oqim qolgan bo‘laklarga aralashadi. Shunda quyidagi chegaralanish amalga oshiriladi:

$$(S - S_1) > (Q - q),$$

Bunda S – magistralning o‘tkazish qobiliyati, harakat bo‘laklari sonini o‘z ichiga oladi; S_1 – bir bo‘lakdaga magistralning o‘tkazish qobiliyati; q – jamoat transportining harakat miqdori.

So‘ngra qolgan harakat bo‘laklarining o‘tkazish qobiliyatini solishtirish kerak bo‘ladi.

$(S - S_1)$ - jamoat transporti uchun harakat bo‘laklarini hisoblamasdan va $(Q - q)$ - jamoat transport harakatini hisoblamasdan umumiy oqim harakat tezligini tekshirish amalga oshiriladi. Agar qolgan bo‘laklarni o‘tkazish qobiliyati umumiy oqim harakat miqdoridan kam bo‘lsa, jamoat transport uchun alohida bo‘lak ajratish mumkin emas.

Umumiy oqim harakat tezligini hisoblashda jamoat transportiga alohida bo‘lak ajratish quyidagi formula asosida bajariladi:

$$V = (V_d / 2) * (1 - [1 - (S - S_1) * ((S - S_1)^2 - (S - S_1) * (Q - q))]^{1/2})$$

Bunda V_d – berilgan joydagi transport vositalarining harakat tezligi KYT, km/s.

Jamoat transporti uchun maxsus bo‘lakni uzaytirishni hal qilishda chorahadagi o‘tkazish qobiliyati hisobga olinadi va svetofor boshqaruv tartibi amalga oshiriladi.

Yo‘l harakatini tashkil etishda yo‘l-transport hodisalarini tizimli tahlil qilish talab etiladi. Yo‘l-transport hodisalari oqibatida kelib chiqadigan ko‘plab sarflarni kamaytirishda mukammallashgan qaror qabul qilishga imkon beradi. Ushbu tahlillar har xil iqtisodiy sarflardan tejash va harakatini tashkil etishni yaxshilashning birinchi navbatdagi texnik-iqtisodiy asoslangan tadbirlarini aniqlash imkonini beradi.

Shahar ko‘cha va yo‘llarida harakat xavfsizligini oshirish bo‘yicha shahar ko‘cha-yo‘l tarmog‘ini boshqarishda samarali tadbirlar foydalanuvchilar uchun ko‘proq qulayliklarni aks ettirishi lozim.

Harakat xavfsizligini oshirish bo‘yicha tavsiya etilgan tadbirlarda har xil kapital sarflar keltiriladi va YTHning ortishiga ta’sir darajasi aniqlanadi.

A.Navoiy ko‘chasida engil avtomobillar $V=65$ km/soat ta’minlangan tezlikda $S=100$ m masofa uchun ketgan vaqtni hisoblaymiz:

$$t^{\text{engil}} = \frac{S}{V} = \frac{100\text{m}}{18,4\text{m/c}} = 5,5 \frac{\text{m}}{\text{c}}$$

$$\begin{aligned} \text{yuk avtomobillari uchun } t^{\text{yuk}} &= \frac{S}{V} = \frac{100\text{m}}{11\text{m/c}} = 9 \frac{\text{m}}{\text{c}} \\ \text{avtobuslar uchun } t^{\text{avtobus}} &= \frac{S}{V} \\ &= \frac{100\text{m}}{13\text{m/c}} = 7,7 \frac{\text{m}}{\text{c}} \end{aligned}$$

Ko‘chalar uchun hisoblangan qiymatlarni 1-jadvalga kiritamiz:

1 -jadval

№	Ko'chalar	Vaqt t, s		
		Engil	yuk	avtobus
1	A.Navoiy	5,5	9	7,7
2	Sh.Rashidov	5,4	8,1	7,5
3	Mustaqillik	5,1	8,1	7,5
4	I.Karimov	5,3	6,9	7,2

Olib borilgan tadqiq ishlari va statistik ma'lumotlarga asosan Sh.Rashidov ko'chasida tezlikning va o'tkazuvchanlik qobiliyatining yuqoriligi hamda YTHlari nisbatan kamligini hisobga olib, Sh.Rashidov ko'chasini etalon qilib olamiz va A.Navoiy ko'chasida yo'qotilgan vaqtni hisoblaymiz:

$$\Delta t = t_{eng}^{navoiy} - t_{eng}^{A.Temur} = 5,5 \text{ c} - 5,4 \text{ c} = 0,1 \text{ c}$$

$$\Delta t = t_{avt}^{navoiy} - t_{avt}^{A.Temur} = 7,7 \text{ c} - 7,5 \text{ c} = 0,2 \text{ c}$$

$$\Delta t = t_{yuk}^{navoiy} - t_{yuk}^{A.Temur} = 9 \text{ c} - 8,1 \text{ c} = 0,9 \text{ c}$$

Shuningdek, Mustaqillik ko'chasida yo'qotilgan vaqt hisoblangan va qiymatlar 2-jadvalda kiritilgan:

2-jadval

№	Ko'chalar	Yo'qotilgan vaqt Δt , s		
		Engil	yuk	avtobus
1	A.Navoiy	0,1	0,9	0,2
2	Mustaqillik	0,3	0	0
3	I.Karimov	-0,2	1,2	0,3

Xulosa

Demak, tavsiya etilayotgan tadbirlarimiz samarador hisoblanar ekan. Avtomobillar va jamoat transportlari harakatlanadigan boshqa ko'chalarda ham yuqorida keltirilgan harakat tezligini aniqlab, uni kamayishi sababli kuzatiladigan yo'qotish vaqtini hisoblab, shuningdek, YTH statistik ma'lumotlariga asoslanib, harakat xavfsizligini ta'minlash maqsadida belgilangan tavsiyalarni samaradorligini aniqlanishi mumkin.

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*Mo'minjonov N.N.
Namangan Muhandislik Qurilish instituti stajyor-o'qituvchisi
To'ychiyev A.X.
Abdualiyev E.R.
Akbarov D.S.
Anvarov Sh.F.
Namangan Muhandislik Qurilish instituti talabalari*

ISHLAB CHIQUARISH KORXONALARIDAN CHIQUAYOTGAN ZARARLI MODDALARNI AHOLI TURMUSH TARZIGA TA'SIRI

Annotasiya. Ushbu maqolada ishlab chiqarish korxonalaridan chiqayotgan zararli moddalarni aholi turmush tarziga ta'siri atmosfera havosini turli zavod va fabrikalardan chiqayotgan zaharli gazlar, og'ir metall qoldiqlarini atmosfera va azon qatlamiga bevosita tasiri. Respublikamiz hududidagi zavod va fabrikalarning atmosferamizga chiqarayotgan zararlari gazlar va ularni bartaraf qilish yo'llari shaharlarda kuzatilayotgan kislotali yomg'irlar haqida qisqacha ma'lumot keltirib o'tilgan.

Kalit so'zlar: Ekologik xavf, Global footprint network, global iqlim o'zgarishi, karbonat angidrid, kimyoviy va toksik moddalar, ekologik inqiroz, suvlarini tuzsizlantirish, mahsulotga rang berish, maishiy va qattiq chiqindilar, rekultivatsiya, poligonlar.

*Mominjanov N.N.
trainee-teacher
Namangan Engineering and Construction Institute
Toychiyev A.Kh.
student
Abdualiyev E.R.
student
Akbarov D.S.
student
Anvarov Sh.F.
student
Namangan Engineering and Construction Institute*

THE EFFECT OF HARMFUL SUBSTANCES EMITTED FROM MANUFACTURING ENTERPRISES ON THE LIFESTYLE OF THE POPULATION

Abstract. In this article, the impact of harmful substances emitted from production enterprises on the lifestyle of the population directly affects the atmospheric air, toxic gases emitted from various plants and factories, heavy

metal residues on the atmosphere and the ozone layer. Brief information about acid rain observed in cities and the ways to eliminate them from harmful gases emitted by plants and factories in the territory of our republic.

Key words: Environmental risk, Global footprint network, global climate change, carbon dioxide, chemical and toxic substances, environmental crisis, water desalination, product coloring, household and solid waste, reclamation, landfills.

Kirish Aholi sonining o'sishi, fan va texnika taraqqiyoti, inson ehtiyojlarining ortishi oqibatida er yuzida qator ekologik muammolar yuzaga keldi. Shu bois, bugungi kunda sof tabiat haqida gap yuritish mushkul. Yer yuzidagi o'rmonlar ko'payish o'rniga tobora qisqarib bormoqda, katta-katta tabiiy hududlar dehqonchilik qilish maqsadida o'zlashtirildi, tabiat va havo har xil chiqindi hamda gazlar hisobiga ifloslandi. Bundan tashqari, tabiatda toshqinlar, o'rmon yong'inlari, chang bo'ronlari va boshqa tabiiy jarayonlar yuz bermoqda. Bularning barchasi pirovardida tabiat muvozanatiga putur etkazyapti. Shu bois, davlatimiz rahbari Birlashgan Millatlar Tashkiloti Bosh Assambleyasining 75-sessiyasida jahon hamjamiyati e'tiborini yana bir bor davrimizning o'tkir muammolaridan biri — Orolbo'yi hududidagi ekologik holatga qaratib jumladan, bugungi kunda har bir mamlakat bu jarayonning salbiy ta'sirini his etmoqda. Ming afsuski, bunday o'zgarishlar Markaziy Osiyo taraqqiyotiga ham katta xavf tug'dirmoqda [1].

Muayyan geografik hududning o'ziga xos iqlimi, ijtimoiy-ekologik, etnografik xususiyatlari tabiat bilan inson o'rtasidagi o'zaro aloqa va munosabatlar xarakterini belgilab beradi.

Asosiy qism: 2023-2024-yillarda 190 gektardan ortiq maydondagi 29 ta ekologik talablarga javob bermaydigan chiqindi poligonlari yopiladi. Shuningdek, qo'mitaning ma'lum qilishicha, 2023-2024-yillarda qattiq maishiy chiqindi poligonlarini rekultivatsiya qilish bo'yicha manzilli dastur tasdiqlandi [2].

Ushbu manzilli dastur doirasida:

– Davlat ekologiya qo'mitasi maishiy chiqindi poligonlarini rekultivatsiya qilish ishlariga buyurtmachi hisoblanadi;

– xarajatlar Qoraqalpog'iston Respublikasi budjeti va viloyatlar mahalliy budjetlari hamda Ekologiya, atrof-muhitni muhofaza qilish va chiqindilar bilan bog'liq ishlarni amalga oshirish jamg'armasi mablag'lari hisobidan teng miqdorda moliyalashtiriladi;

– rekultivatsiya qilingan hududlar mahalliy ijro etuvchi hokimiyat organlarining yer zaxiralariga qaytariladi.

Ma'lumot uchun bugungi kunda respublika hududida 1 000 ga yer maydoniga yaqin 197 ta maishiy chiqindi poligonlari mavjud bo'lib, ularning faoliyatini 2028-yilgacha to'xtatish belgilangan [3].

Rekultivatsiya (lot. re - qaytarish, tiklash; cultivo - ishlov beraman, yetishtiraman) — foydali qazilmalarni qazib olish, suv inshootlari qurish, shaharlar qurilishi va boshqa sabablarga ko'ra foydalanishga yaroqsiz bo'lib qolgan yerlarni qayta tiklash, atrof-muhit sharoitlarini, ekologik holatlarni yaxshilashga qaratilgan tadbirlar majmui.

Respublika bo'yicha 181ta korxonalar atmosferaga ma'lum miqdorda zarar keltiradi va ulardan yiliga atrof-muhitga 808 ming tonna tashlanmalar chiqariladi.

Havoni ifloslantirish darajasi bo'yicha sanoat korxonalarining statistikasi juda keng qamrovli bo'ladi. Bu bo'yicha aniq reyting tuzilmaydi. Lekin bir necha yil oldingi ma'lumotlarga tayanadigan bo'lsak, bu OTMK (Olmaliq tog'-metallurgiya kombinati), yirik kimyo zavodlari, jumladan, Navoiy azot zavodini misol qilib keltirsa bo'ladi [4].

Yuqorida aytilganidek, bu bo'yicha maxsus reyting tuzilmagani uchun aniq ma'lumot berish qiyin.

Ma'lumot uchun, 5ta korxonalar atrof-muhitga sezilarli darajada salbiy ta'sir o'tkazgani aniqlangan. Qoraqalpog'istonning «Titan cement» QKda 1,06–4,6 marta, «Karakalpak cement» QKda 6,06 marta, Farg'ona viloyatidagi «Turon eco cement group» korxonasida 1,68–1,8 marta, «Yaypangips» korxonasida 1,7–1,86 marta va «Fergana sement» QKda 1,16–1,36 marta ruxsat etilgan me'yordan yuqori chang miqdori borligi ma'lum bo'lgan.

Sanoatlashtirish va aholining tezkor o'sishi bilan bog'liq bo'lgan bu tahdidlar orasida eroziya, zaharli chiqindilar, tabiiy resurslarning kamayishi, ekologik muvozanatning yomonlashishi, biologik xilma-xillikni kamaytirish, issiqxona ta'siridan kelib chiqqan iqlim muvozanatining oldini olish, global isish va ozon qatlamining ingichkalashi kuzatiladi.

Xulosa

Xulosa qilib aytganda, O'zbekiston Respublikasi Konstitutsiyasida mustahkamlanayotgan asosiy ekologik-huquqiy normalar eng ilg'or xorijiy davlatlar tajribasiga mos bo'lib, mamlakatimizda barqaror rivojlanishni ta'minlashga, atrof-muhit musaffoligini saqlashga, tabiatni hamda aholi salomatligini muhofaza qilishga qaratilgan. Asosiy Qonunimizda belgilab berilgan normalarning hayotga keng ko'lamda joriy etilishi atrof-muhit muhofazasi, tabiiy resurslardan oqilona foydalanish, yurtimizda ekologik holatni sog'lomlashtirish nafaqat davlat va jamiyat, shu bilan birga, har bir fuqaroning vazifasi bo'lishiga erishishida muhim ahamiyat kasb etadi.

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*Muhamedov A.A.
Alfraganus universiteti dosenti*

SHARQ RENESSANSINING VUJUDGA KELISHIDAGI IJTIMOIIY OMILLAR

Annotatsiya. Ushbu tadqiqotda Renessans tushunchasi, uning ijtimoiy-falsafiy jihatlari, shuningdek, Sharqda Renessans ro'y berishining falsafiy tomonlari tahlil qilinadi.

Kalit so'zlar: Renessans, Uyg'onish, Musulmon Renessansi, Birinchi Uyg'onish.

*Muhamedov A.A.
associate professor
Alfraganus University*

SOCIAL FACTORS IN THE RISE OF THE EASTERN RENAISSANCE

Annotation: this study analyzes the concept of the Renaissance, its socio-philosophical aspects, as well as the philosophical aspects of the Renaissance in the East.

Keywords: Renaissance, Renaissance, Muslim renaissance, first Renaissance.

Dastlab, Renessans atamasining lug'aviy ma'nosi hamda uning ijtimoiy-falsafiy mazmun-mohiyatini yoritib o'tmoqchimiz. Renessans – “Bu “tiklanish” degan ma'noni anglatadigan fransuzcha so'zdir. Renessans Yevropada XIV—XVI asrlarda bo'lib o'tgan Uyg'onish davridir. Uyg'onish davridan oldingi o'rta asrlarda hayotdagi ko'p narsalar rad etilgan. Uyg'onish davrida esa ta'lim jonlangan, savdo, san'at, musiqa, adabiyot va fan rivojlangan. Uyg'onish davri Yevropaning butun turmush tarzini o'zgartirgan”²³. Bu Yevropada yuz bergan Renessans tushunchasining ta'rifi. Ammo, bu tushuncha faqat Yevropaga taalluqli emas tarixiy ma'lumotlar va olib borilgan tadqiqotlardan ma'lumki, “Osiyo markazida joylashgan Movarounnahr, Xuroson va Eronda Italiyaga qaraganda bir necha asr oldin (9—12-asrlar) ulkan madaniy ko'tarilish yuz bergan, ilm-fan, falsafa, adabiyot kuchli rivojlanib, ilg'or insonparvarlik g'oyalari jamiyat fikrini band etgan, aqliy va ijodiy faollik gurkiragan. Bu davr dunyo ilmida “Musulmon Renessansi” (A. Mets) yoki “Sharq Uyg'onishi” (N. I. Konrad) nomi bilan atalib kelinmoqda. Sharq Uyg'onish davrida Yevropa Uyg'onish davrining asosiy belgilari mujassam: jo'shqin ijodiy faoliyat, ulkan bunyodkorlik ishlarining amalga oshirilgani, aqlni hayratga soluvchi bemisl

²³ <https://sinaps.uz/bilasizmi/12423/>

asarlarning yaratilgani shundan dalolat beradi. Sharq Uygʻonish davri ham ulugʻ allomalar, qomusiy bilim sohiblari, mashhur mutafakkirlarni yetishtirdi”²⁴.

“Bugungi kunda Yangi Oʻzbekistonda jadal ilgari surilayotgan Uchinchi Renessans gʻoyasi koʻp jihatlari bilan qadimdan davom etib kelaётgan milliy va maʼnaviy qadriyatlarimizga taalluqlidir. Shuning uchun ham ana shu davrda olib borilgan Sharq renessansi davri allomalarining ilmiy-falsafiy merosini oʻrganish borasidagi tadqiqotlarda asosan materializm ruhi ustuvorlik qilib, tarixiy haqiqatlar buzib koʻrsatildi”²⁵. Shu sabali ham, ota-bobolarimizning dunyo tamadduniga qoʻshgan hissasini xolisona oʻrganish, xalqimizning boy maʼnaviy merosidan foydalanish maqsadida Oʻzbekistonda Uchinchi Renessans atamasi qoʻllanila boshlandi. Bu borada Birinchi Prezidentimiz Islom Karimovning quyidagi fikrlari oʻrinlidir: “Ajdodlarimiz tafakkuri va dahosi bilan yaratilgan eng qadimgi tosh yozuv va bitiklar, xalq ogʻzaki ijodi namunalaridan tortib, bugungi kunda kutubxonalarimiz xazinasida saqlanayotgan ming-minglab qoʻlèzmalar, ularda mujassamlashgan tarix, adabièt, sanʼat, siyosat, axloq, falsafa, tibbiyot, matematika, mineralogiya, kimè, astronomiya, meʼmorchilik, dehqonchilik va boshqa sohalarga oid qimmatbaho asarlar bizning buyuk maʼnaviy boyligimizdir”²⁶. Shu oʻrinda, Uchinchi Renessansga poydevor boʻlib xizmat qilgan Birinchi va Ikkinchi Uygʻonish davrlarigaham qisqacha toʻxtalib oʻtish joizki, zero busiz Uchinchi Renessansni ijtimoiy jihatdan tadqiqi etish jarayoni tugal boʻlmay qoladi.

Birinchi Uygʻonish davri Oʻrta Osiyoda IX-XI asrlarda roʻy bergan juda katta ijtimoiy, iqtisodiy, maʼnaviy, maʼrifiy, diniy, madaniy jarayon hisoblanadi. Ushbu davr toʻgʻrisida Davlatimiz Rahbari Sh.Mirziyoyev quyidagi fikrlarni bildiradi: “Insoniyat tarixi shundan dalolat beradiki, har qaysi xalq hayotidagi maʼnaviy uygʻonish jarayonlari milliy oʻzlikni anglashga olib keladi hamda mamlakatning iqtisodiy, madaniy taraqqiyotini yangi bosqichga koʻtaradi. Bunday noyob hodisa “Renessans” – uygʻonish, qayta tiklanish, yuksalish deb atalishi barchamizga ayon”²⁷. Uygʻonish davriga sabab boʻlgan omillar haqida toʻxtalib oʻtgan holda, dastlabki sabab sifatida mutaxassislar tomonidan dinning oʻrni va ahamiyati katta ekanligini taʼkidlaydilar. VIII asrdan boshlab, islom dini mamlakatimiz hududiga kirib kelgan boʻlsa, arab tili aholi orasidagi muloqot hamda madaniy taraqqiyot vositasiga aylandi. Abbosiylar hukmronligi davrida halifalik ulkan hududni oʻziga birlashtirgan, lekin xalqlarning milliy-ozodlik harakatlari natijasiga parchalanib ketgandi. Arablar tomonidan olib borilgan ijtimoiy siyosatamda xalq madaniy hayotiga olib kirilgan yangilik va oʻzgarishlar natijasida arab tili Xitoydan Misrga qadar choʻzilgan ulkan hududlarda asosiy til sifatida hurmat qozondi.

24 https://uz.wikipedia.org/wiki/Uyg%CA%BBonish_davri

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Ikkinchi omil sifatida shuni ta'kidlash mumkinki, Bag'dodda "Bayt ul-hikma" tashkil etilib, unda juda ko'plab olimu-ulamolar, fozilu-fuzalolar ilm va ijod bilan shug'ullandilar. Antik davr olimlarining kitoblari arab tiliga tarjima qilindi. Halifalik hududidagi barcha asarlar arab tili va yozuvida yozila boshlandi. Ushbu omil Arab xalqlarida madaniyat, ilm-fanning bksalishi, ma'naviy-ma'rifiy yangilanish hodisasining yuz berishiga sabab bo'ldi. O'sha davr tarixchilaridan bioi bo'lgan Abu Mansur as-Salibiy xalifalik shaharlaridan biriga shunday ta'rif bergandi: "...shon-shuhrat makoni, saltanat ka'basi va zamonasining ilg'or kishilari jamlangan, yer yuzi adiblarining yulduzlari porlagan hamda o'z davrining fozillari yig'ilgan joy"²⁸. Ushbu ta'rifdan ko'rinib turibdiki, shaharlar faqatgina savdo-sotiq markazlari sifatida emas, ilm-fan markazi sifatidashuhrat qozongandi. "Bu davrda Markaziy Osiyodan Xorazmiy va Farg'oniy, Ismoil al-Buxoriy va Termiziy, Abu Nasr Forobiy, Abu Ali ibn Sino, Abu Rayhon Beruniy, Ismoil Jurjoniy, Marg'inoniy, Zamaxshariy, Mahmud Qoshg'ariy kabi ulkan olimlar yetishib chiqdi. Ular o'z ijodlari, asarlari bilan o'z xalqlarini dunyoga mashhur qildilar"²⁹.

Birinchi Renessansga sabab bo'lgan omillardan yana biri – bu mustaqil markazlashgan davlatlarning shakllanishidir. Yusuf Xos Hojibnig "Qutadg'u bilig" asari o'sha mamlakatlarning o'ziga xos ijtimoiy konstitutsiyasi bo'lib xizmat qilgandi. Negaki, Xitoyning sharqiy hudularidan tortib to Movarounnahrqa qadar cho'zilgan o'ta katta hududdagi Qoraxoniylar davlati (995-1055 yy.) ijtimoiy-iqtisodiy, ma'naviy, ma'rifiy, madaniy masalalrini tartibga soluvchi, davlat rahbarlari, amaldorlari, shaxzodalariga dasturul-amal sifatida asqotgan ushbu asar ushbu davr uchun zaruriy ehtiyoj edi. Ushbu asar qariyb ming yillar avvalgi ijtimoiy-siyosiy voqea-hodisalar to'g'risida ma'lumot beradi va asosiysi, o'sha davr taomili, qadriyatleri, urf-odatleri haqida xulosa chiqarishimizga yordam beradi. Asardan ma'lum bo'ladiki, Qoraxoniylar sulolasining ham boshqa dinatsiyalar kabi markazlashgan kuchli davlat barpo etish orzu-istagi mavjud edi. Ushbu maqsadga erishtirish uchun esa harakat dasturini o'zida ifodalovchi asar zamirida "Qutadg'u bilig" asaryozilgan edi.

Tadqiqotchilardan biri Q.Karimov bu haqda shunday yozadi: "...davlatni idora qilish usuli, siyosati, qonun-qoidalari, shuningdek, xalqning rasmu odatlarini, axloq pritsiplarini o'zida mujassamlashtirgan nizomnoma, qomus sifatida "Qutadg'u bilig" yuzaga keldi"³⁰. Qoraxoniylar davridagi ijtimoiy-siyosiy muhit "Qutadg'u bilig" asarining yozilishiga muhim omil bo'lib xizmat qilgan. "Mahmud Qoshg'ariyga zamondosh Yusuf xos Hojib (XI asr) ijodi ham o'ziga

xos badiiy sayqali, yuksak mahorati bilan ajralib turadi. Adib nomini yurtlararo,

28 Абдуллаев И. Абу Мансур ас-Салибий – Тошкент: Ўзбекистон, 1992. – Б. 50.

29 <https://ziyouz.uz/ilm-va-fan/tarix/manaviyat-yulduzlari/markaziy-osiyoda-ix-xx-asr-boshida-madaniyat-rivoji-tarihidan/>

30 Юсуф Хос Ҳожиб. "Қутадғу билиг" (Саодатга йўлловчи билим). Транскрипция ва ҳозирги ўзбек тилига тавсиф. Нашрга тайёрловчилар филол.фан.кан. Каримов. – Тошкент: Фан, 1971. – Б. 7.

xalqlararo mashhur qilgan narsa, bu uning “Qutadg'u bilig” (“Baxt va saodat eltuvchi bilim”) asaridir. Ushbu kitob turkiy xalqlar, elatlar hayoti haqida yozilgan asar bo'lib, unda davrning juda ko'p o'ta muhim muammolari, axloq, odob va ma'rifat masalalari katta mahorat bilan yoritilgan. Bu kitobni chinliklar “Adabul muluk”, mochinlar – “Oyinul mamlakat”, Sharq eli ulug'lari “Ziynatul umaro”, eronliklar “Shohnomai turkiy”, turonliklar – “Qutadg'u bilig”, boshqalar “Pandnomai muluk” deb ataganlar”³¹. Ushbu iqtibosdan ko'rinib turibdiki, mazkur asar nafaqat O'rta Osiyo, balki butun Sharq xalqlari uchun ham birdek ahamiyatli va qadrlil hisoblanadi. “Ushbu asar dunyoning juda ko'p tillariga tarjima qilindi, har qaysi xalq asarni turlicha nomladi. Bulardan:

Chiniylar “Adab ul muluk” deb atar,
Mochinlar “Anis ul mamolik” deyar.
Bu mashriq elining donishmandlari
“Ziynat ul- umaro” deyishdi bari,
Eronlik “Shohnoma” dedi belgilig,
Turonlik nom qo'ydi: “Qutadg'u bilig”³².

“Qutadg'u bilig” asari bo'yicha lib borilgan izlanishlar mazkur bebah xazinaning tarixiy, madaniy, adabiy, lingvistik jihatdan qqanchalar qimmatli ekanni ko'rsatib berdi. Jumladan, uning ahamiyatini o'rganish borasidagi tadqiqatlardan ma'lum bo'ladiki, asar quyidagi omillarga ko'ra nihoyatda nodir asarlar ro'yxatiga kiriadi:

“ - Tilshunoslik: “Qutadg'u bilig” o'rta turk tilining muhim namunasini beradi. Tilshunos olimlar asarning til tuzilishi, lug'at tarkibi, til o'zgarishi va til evolyutsiyasini o'rgangan. Bu tadqiqotlar o'rta turk tilining rivojlanishi haqidagi tushunchamizga ma'lum miqdorda o'z hissasini qo'shdi.

- Axloqiy va ijtimoiy tadqiqotlar: ish axloqiy qadriyatlar, ijtimoiy tartib va boshqaruv tamoyillari kabi masalalarni ko'rib chiqilgan. Tadqiqotchilar “Qutadg'u bilig”dagi axloqiy ta'limot va ijtimoiy me'yorlarni o'rganib, Markaziy Osiyodagi mentalitetni tushunishga harakat qilganlar. Adabiy sharhlar: Asar O'rta Osiyo turkiy adabiyotining muhim qismi sanaladi. Adabiyotshunoslar asarning adabiy uslubi, she'r birliklari va adabiy motivlarini o'rganib chiqdilar. Bu mulohazalar asarning adabiy qimmatini ta'kidlaydi.

- Tarixiy mazmun: “Qutadg'u bilig” asari yozilgan davrdagi siyosiy, madaniy va ijtimoiy sharoitni o'zida aks ettiradi. Tarixchilar asar davridagi voqealar va Qoraxoniylar saltanatining tuzilishini tushunish uchun asarni tadqiq qilganlar.

- Madaniy aks ettirishlar: Asar O'rta Osiyo turk madaniyatining muhim aksidir. Madaniyatshunos olimlar “Qutadg'u bilig”dagi an'anaviy ta'limotlar,

31 Sulaymonova, Shahnoza Nodirovna (2023). IX-XI ASRLARDA MUSULMON SHARQIDA MADANIY – MA'NAVYI TARAQQIYOT. Oriental renaissance: Innovative, educational, natural and social sciences, 3 (6), 1064-1076.

32 Yusuf Xos Hojib. Qutadg'u bilig (Saodatga boshlovchi bilim). // T - “O'zbekiston” nashriyot-matbaa ijodiy uyi 2019. 240 bet

marosimlar va madaniy qadriyatlarni o'rganib, Markaziy Osiyoning boy madaniy merosini tushunishga harakat qildilar. Binobarin, "Qutadg'u bilig"ga oid tadqiqotlar shuni ko'rsatadiki, bu asar turkiy adabiyot va tilshunoslikning muhim namunasi bo'lishdan tashqariga chiqadi. Asar Markaziy Osiyo tarixi, madaniyati va mentalitetini tushunishga qaratilgan sa'y-harakatlarga katta hissa qo'shadi. Qolaversa, bu tadqiqotlar Turk va Markaziy Osiyo tarixini tushunishimizga yordam beradi va bu qimmatli merosni kelajak avlodlarga yetkazish imkonini beradi."33.

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**VIRTUAL TA'LIM TEXNOLOGIYALARI ASOSIDA BO'LAJAK
MUHANDISLARNI KASBIY FAOLIYATGA TAYYORLASHNING
TASHKILY-TUZULMAVIY MODELINI YARATISH**

Annotatsiya: ushbu maqolada virtual ta'limning metodik imkoniyatlarini shakllantirishning mazmuni va vazifalari, virtual ta'lim muhiti va virtual texnologiyalar vizual tasvirlarni ob'ektiv haqiqat bilan bog'lash uchun yangi omillarni yaratib, bular makon ko'lami, vaqt ko'lami, vaqtning teskari aylanishi, real bo'lmagan vaziyatlarni modellashtirish singari omillar bilan tavsiflanadi.

Kalit so'zlar: virtual ta'lim texnologiyasi, virtual ta'lim muhiti, virtual o'quv muhiti, interaktivlik, virtual ta'lim jarayonini boshqaruvchi tizimlar.

*Murodova A.Yo.
supporting doctoral student
JizPI*

**CREATION OF AN ORGANIZATIONAL-STRUCTURAL MODEL OF
PREPARING FUTURE ENGINEERS FOR PROFESSIONAL ACTIVITY
BASED ON VIRTUAL EDUCATIONAL TECHNOLOGIES**

Abstract: in this article, the content and tasks of the formation of methodological possibilities of virtual education, virtual educational environment and virtual technologies create new factors for connecting visual images with objective reality, these are the scale of space, the scale of time, the reversal of time, characterized by factors such as modeling unrealistic situations.

Keywords: virtual educational technology, virtual educational environment, virtual educational environment, Interactivity, virtual educational process management systems.

Talabalar an'anaviy usuldagi har qanday ta'limga qaraganda ancha boy va murakkabroq bo'lgan yangi aloqa vositalari tomonidan yaratilgan "o'ziga xos" bilim maydonida yashaydilar. Axborotlashuv ustuvorliklarining paydo bo'lishi bilan virtual ta'lim asta-sekin o'z-o'zini tarbiyalashga qaytishi mumkin. Multimedia ta'lim mahsulotlarini joriy etish nafaqat ta'lim muassasalari tomonidan amalga oshiriladi, shuning uchun o'quv jarayoni bevosita ijtimoiy muassasadan tashqarida, balki "kompyuter bilan" yakka tartibda amalga oshirilishi mumkin.

Virtual ta'lim masofaviy ta'lim bilan chambarchas bog'liq, lekin u bilan cheklanib qolmaydi. U o'qituvchilar, talabalar va o'rganilayotgan ob'ektlarning

odatiy yuzma-yuz muloqotida paydo bo'lishi mumkin (va sodir bo'ladi). Masofaviy ta'lim texnologiyalari talabalar, o'qituvchilar, mutaxassislar va bir-biridan uzoqda joylashgan axborot majmualarining o'zaro foydalanish imkoniyatini oshirish orqali kunduzgi ta'lim imkoniyatlarini kengaytirish imkonini beradi.

Virtual ta'limning, shuningdek, umuman insonni tarbiyalashning asosiy maqsadi - insonning real dunyoda o'z taqdirini, shu jumladan virtual tarkibiy qismini aniqlash va unga erishishdir [1].

Avvalo, ushbu kontseptsiyani tushunish va talqin qilishni chalkashtirib yuboradigan "virtual ta'lim" atamasining ikki tomonlama tushunilishini ta'kidlash kerak. Virtual ta'lim deganda nafaqat masofaviy telekommunikatsiya ta'limi, balki "ta'lim sub'ektlari va ob'ektlarining o'zaro ta'siri jarayoni va natijasi, ularni yaratish bilan birga, o'ziga xosligi ushbu ob'ektlar va sub'ektlar tomonidan aniq belgilanadi" [2]. Tasavvur qilish mumkinki, birinchi tushuncha virtual muhit tomonidan olib boriladigan "virtual ta'lim" ning tor ma'nosini o'z ichiga oladi.

"Virtual ta'lim"ning ikkinchi tushunchasi keng ma'noda virtual maydon, o'zaro ta'sir sub'ektlarining o'zaro ta'sirini belgilovchi virtual ta'lim maydoni, tashuvchisi turli xil elektron va og'zaki, bosma aloqalar bo'lgan virtual ta'lim maydoni sifatida ta'riflanadi. Agar biz ta'limni ijtimoiy o'zaro ta'sir jarayoni deb hisoblasak, u virtual jarayon bo'ladi: "Agar bir yoki bir nechta o'zaro ta'sir qiluvchi ob'ektlar (talaba, o'qituvchi) faoliyatning o'zaro ta'siri sub'ektlari sifatida harakat qilsalar, u holda bu o'zaro ta'sir ularning virtual manbai bo'ladi. Bir xil sub'ektlarning ushbu o'zaro ta'sirdan oldingi holatidan farq qiladigan holat" [3].

Ya'ni, ta'lim jarayonini amalga oshirish virtual muhitni qayta qurishdir. Ammo, haqiqiy jamiyatdagi ta'lim haqiqiy institutning barqaror maqomiga ega bo'lganligi sababli, bizning vazifalarimiz faqat zamonaviy tadqiqotlarda ta'limni virtualizatsiya qilish deb ataladigan mavjud virtual jarayonni virtualizatsiya qilish tavsifini o'z ichiga oladi.

Virtual ta'lim sohasi - tashqi dunyoga keng tarqalib, hissiy, intellektual va intellektual qobiliyatini ishlatadigan o'quvchining faoliyati orqali o'zining tashqi sohalarini kashf eta oladigan makondir.

Virtual o'quv muhiti: o'quv jarayonining barcha ishtirokchilari tomonidan ta'lim maqsadlarida tashkil etilgan va foydalaniladigan mahalliy, korporativ va global kompyuter tarmoqlarining axborot mazmuni va kommunikativ imkoniyatlarini o'z ichiga oladi;

o'quv jarayonining barcha ishtirokchilarini samarali muloqot qilish uchun yaratilgan va ishlab chiqilgan ta'lim olishning an'anaviy usullaridan farqli o'laroq, ta'lim kommunikatsiyaning tabiati, bilvosita, ham uzoq, ham an'anaviy tarzda "ko'zdan-ko'zga" olib boriladi.

Virtual ta'lim muhiti tezkor o'sib borayotgan, ko'p bosqichli va ko'p funksional tizim birlashtiradi:

1) asinxron individual ta'limning ochiq modeli doirasida o'quv jarayonida ishtirokchilarning o'zaro aloqalariga xos innovatsion va an'anaviy texnologiyalar;

2) axborot resurslari: ma'lumotlar bazalari va ma'lumotlar, kutubxonalar, elektron o'quv materiallari va h.;

3) zamonaviy dasturiy ta'minot: dasturiy ta'minot kabinalari, elektron aloqa.

Virtual ta'lim muhiti vazifalari:

– ma'lumot va trening (turli xil ta'lim ma'lumotlarining shakllarida taqdim etilgan); aloqa (o'quv jarayoni ishtirokchilari bilan muloqotda bo'ladi);

– nazorat va ma'muriy (bilim, ko'nikma va boshqaruv darajasini nazorat qilish bo'yicha kompleks chora-tadbirlar ko'rilmogda).

Virtual ta'lim muhitida informatika va axborot texnologiyalari fani o'qituvchisining o'rnini quyidagilardan iborat: informatika va axborot texnologiyalari fani o'quv jarayonining tashkilotchisi, bilim oluvchisi va o'quvchilarning ijodiy faoliyatini baholaydi, innovatsion texnologiyalardan foydalangan holda virtual o'qitish muhitida o'qitish ishlarini olib boradi [4].

Virtual ta'lim muhitining afzalliklari. O'quvchi moslashuvchanligi quyidagicha ko'rsatib o'tilgan:

– barchasi trenajor Internet texnologiyalari orqali amalga oshirilganligi uchun qulay joyga joylashadi. O'quvchilar ta'lim muassasalariga joylashtirilishidan masofa samarali o'quv jarayoni uchun to'sqinlik qilmaydi;

– o'zlari uchun qulay vaqtda qatnashadi. har bir inson o'z biologik "soatiga" ega va ularga qarab sinflar vaqtini tanlashi va o'zgartirishi mumkin;

– o'z didaktikasini qurish orqali o'tilgan nazariy va amaliy mashg'ulot jarayonlarini qayta ko'rib chiqadi, avvalgi darslardagi saqlangan materiallarga murojaat qila oladi va o'qituvchi bilan virtual makon orqali bog'lana oladi;

– muayyan bo'limlarga konsentratsiyalash, har bir bo'limni, modulni va zarur bo'lgan vaqtni blokirovkalash. shunday qilib, uni tezroq qilish orqali vaqtni tejash mumkin;

– o'quv mashg'ulotlarini amalga oshirish uchun talaba va ta'lim tizimining xarajatlari ta'lim sohasi, vaqt va texnik resurslardan samarali foydalanish maqsadida kamayadi [5,10].

O'qituvchining yangi roli. Yangi xususiyatlar:

– o'quv-uslubiy majmuani tayyorlash, virtual o'quv muhiti atrofidagi materiallarni joylashtirish;

– o'quv jarayoni virtual o'quv muhitida qanday amalga oshirilishini, o'qituvchilar dars materiallari bilan qanday tanishishi, topshiriqlarni qanday topshirishlari, forumlarda ishtirok etishlari, muloqot qilishlari va boshqalar bilan tanishishlari uchun tanishtiruvchi tashkiliy darsni o'tkazish;

– kelajakdagi professional faoliyat muhitida o'rganish - o'quv muhitida ta'lim olish; Kurs materiallari samaradorligini kuzatish;

– o‘quvchilarning mustaqil ishi bo‘yicha topshiriqlarni bajarilishini nazorat qilish; kollektiv muhokamalarda ishtirok etish, forumlar va suhbatlar, veb-seminarlar, veb-kvestlar;

– munozaralarni, yuzaga kelgan savollarga javoblarni umumlashtirish;

– o‘qituvchilar bilan forum, lahzali xabar almashish tizimi, Skype va boshqalar orqali muloqot qilish.

Virtual o‘quv muhitining innovatsion salohiyatidan amaliy foydalanish: o‘quv jarayonlarini zarur o‘quv materiallari bilan ta‘minlash; o‘qituvchi va o‘quvchi o‘rtasidagi munosabatlar; trening tizimidagi boshqaruv axborotlarini almashish; aloqa uchun xalqaro axborot tarmoqlaridan foydalanish, professional pedagogik yordamni amalga oshirish, axborotni o‘zlashtirishni nazorat qilish; virtual ta‘lim muhiti, birinchi navbatda, mehnat muhiti va innovatsion ta‘lim faoliyatiga aylanadi: “Doingle learning!” – “Doing o‘rganing!” (Dewey printsipi, XIX asr); amaliyoti davomida o‘z tajribangizni qurish; O‘qituvchini malakasini oshirish, nou-xauga ega bo‘lish va o‘z faoliyatining natijalarini tezda baholash va zamonaviy asbob-uskunalar va texnologiyalarni qo‘llash orqali o‘qitishning afzalliklarini o‘rganish imkoniga ega bo‘lganligi sababli o‘qituvchini muvaffaqiyatli vaziyatga qo‘yish [6,8]

Interaktivlik. O‘qituvchilar, murabbiylar, ma‘murlar bilan muntazam aloqada bo‘lish jarayonida yangi ta‘lim shakliga moslashish va kasbdagi virtual ta‘lim muhiti innovatsion salohiyatidan foydalanish jarayonlarini tushunish; Talaba va umuman tizim o‘rtasida axborot almashinuviga tayanish; Ko‘p tomonlama o‘zaro ta‘sirni amalga oshirish.

Hosildorlik va samaradorlik. O‘qituvchining mustaqil va ongli ravishda o‘qitish kursini tanlaganligi, o‘z kasbiy malakasi bo‘yicha o‘z baholariga asoslanib, pedagogik amaliyotda qo‘llaniladigan ma‘lum professional bilimlar va ko‘nikmalarga, hosildorlik va o‘quv samaradorligining boshqa ta‘lim shakllariga nisbatan taqqoslanadigan darajada ortib borishi zarurligiga asoslantirilgan holda belgilanadi.

Virtual ta‘lim muhitida o‘qituvchi virtual o‘quv muhiti metodikasi.

Virtual ta‘lim muhitida o‘qituvchi, uning roli:

– yangi aloqa shaklida - asenkron “suhbat”da virtual munozaralar boshqacha tarzda amalga oshiriladi va muloqotda aks ettirish qobiliyatini rivojlantirish uchun qo‘shimcha vosita sifatida xizmat qiladi, talabalarning mantiqiy va mavhum fikrlash darajasini oshiradi;

– zamonaviy texnologiyalardan foydalanish (masalan, loyiha metodologiyasi) - virtual uyushmalarni o‘rganish uchun muhim bo‘lgan nazariy asoslardan biri sifatida;

– zamonaviy ta‘lim asoslarini qo‘llash (individualizatsiya - bugungi kunda o‘rganishning ustuvor yo‘nalishi sifatida, amaliy mashg‘ulotlar - uzluksiz ta‘lim tizimi va malakali rivojlanish tizimining o‘quvchilarning amaliy ko‘nikmalari bilan samarali kombinatsiyasi sifatida, virtual jamoalarning har bir a‘zosi uchun innovatsion ish uchun o‘ziga xos traektoriya yaratish imkonini beradi);

– texnologik, ma'muriy va moliyaviy imkoniyatlarni hisobga olgan holda pedagogik Internet muhitini yaratishda;

– o'quvchilarning shaxsiy ehtiyojlarini hisobga olgan holda, individual farqlarga moslashish va yangi kontsepsiyani va o'qitish metodologiyasini ishlab chiqishni talab etadigan virtual moslashuv muhitini yaratish jarayonida;

– ushbu yangi virtual maydonlarning professional faoliyatini yo'naltirish va pedagogik qo'llab-quvvatlash uchun virtual assotsiatsiyalar va an'anaviy jamoalarning turli shakllari bilan bog'liq.

Virtual ta'lim muhitida o'qituvchi (virtual o'qituvchi), an'anaviy muhitda o'qituvchilik faoliyati o'rtasidagi farqlar [7, 11]. Ular asta-sekinlik bilan an'anaviy ishlarga olib keladigan axborot-kommunikatsiya texnologiyalarini o'zlashtirish orqali o'zlarining ham, o'quvchilarning nazarida ham pedagogik vakolatini oshiradilar. Tezkor seminar real vaqtda o'tkaziladi: o'qituvchi va talabalar bir vaqtning o'zida suhbatga kirishadi va muhokama (yoki o'qituvchi taklif qilayotgan qo'shma faoliyatning boshqa turi) barcha ishtirokchilar tomonidan odatda bir soat ichida o'tkaziladi. Belgilangan vaqtda ishtirokchilar bir-biriga "kirish", "ko'rish" va real vaqtda muloqot qilishlari mumkin. Shunday qilib, har bir ta'lim guruhida ishlash hissi bor.

Davlat ta'lim standartlarining joriy etilishi zamonaviy jamiyat ehtiyojlariga javob beradigan o'quv jarayonining maqsadlariga erishish uchun professor-o'qituvchilar va o'qituvchilarga yangi talablarni qo'ydi. Ta'lim tizimida yuzaga keladigan chuqur jarayonlar ta'limning yangi mafkurasi va metodologiyasini, masalan, innovatsion ta'lim mafkurasi va metodologiyasini shakllantirishga olib keladi. Innovatsion ta'lim texnologiyalari yangi ta'limni amaliy qo'llash vositasi sifatida qaralishi kerakligi ko'rsatilgan. O'zbekiston Respublikasi Milliy dasturida taqdim etilgan uzluksiz ta'lim strategiyasi zamonaviy bilimlarga ega, faol fuqarolik pozitsiyasiga ega, mustaqil fikrlashga qodir barkamol avlodni tarbiyalashga qaratilgan va ongli qarorlar qabul qilish. Zamonaviy oliy ta'lim universitetlarning o'quv jarayonida interfaol o'qitish usullari va innovatsion texnologiyalardan (kompyuter simulyatsiyalari, biznes o'yinlari, ish bosqichlari va boshqalar) keng foydalanishni o'z ichiga oladi [8,11].

Muammolarning ko'p qirrali ekanligini, shuningdek talabalarni muvaffaqiyatli o'qitishni hisobga olgan holda, ularning kasbiy tayyorgarlik darajasini aniqlash, Rossiya universitetlarida o'qishning birinchi yilida o'qiyotgan talabalarni so'roq qilish va anketa ma'lumotlari asosida talabalarni Rossiya universitetida o'qishga tayyorlashda muammolarni aniqlash va tizimlashtirish tavsiya etiladi, bu erda ko'rsatilgan holatlar bilan bir qator tashkiliy va uslubiy muammolarni hal qilish zarur universitet rahbariyati, psixologlar va o'qituvchilar uchun ta'lim bilan bog'liq muammolarni bosqichma-bosqich hal qilish va moslashish. Zamonaviy ta'limni rivojlantirishning dolzarb tendentsiyasi transmilliy modellarni shakllantirishdir nafaqat ta'lim mazmuni va shakllarini maksimal darajada birlashtirish, ammo yagona ijtimoiy-madaniy makon, shuningdek, muayyan muammolarga yo'naltirilgan moslashishni qo'llab-

quvvatlash zarur va qiyinchiliklar, o'quv jarayonining mazmuni va xususiyatlari to'g'risida [9,10].

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ECONOMIC- GEOGRAPHICAL CHARACTERISTICS OF THE RURAL POPULATION OF KASHKADARYA REGION

Abstract. The article analyzes the location of settlements of rural residents of Kashkadarya region, the number, composition, and density of the population of rural settlements. The classification of rural settlements is studied.

Key words: population settlement, population settlements, selected area, city, village, town, population, population density.

Studying the location of the population is one of the important geographical and demographic tasks. Population settlement creates a system and type of population settlements with various forms of a certain size and type. Settlements are places where people live, centers of production and consumption of material and spiritual wealth, centers of social life where generations are repeated. Population settlements are areas where a certain number of people live, with mutual differences according to the level of social and economic development. Population settlements are also called populated areas or selected areas and are one of the main scientific concepts of population geography.

The form of territorial organization of the population is population settlements. S.A. Kovalyov (1963) defines the location of the population and population settlements as the location of the population living in a certain area with material conditions necessary for the life of people created by human.

The basis of society's life is the production of material wealth by man. Any production activity serves as a basis for the creation and development of a certain population settlement. Population settlements of different sizes, their complex systems are forms of territorial organization of the population. Its forms of social organization include associations of people of different ages and genders, nationalities, ethnicities, and professions. Settlements play an important role in the socio-economic development of the country. It performs the task of connecting natural resources, social production and infrastructure in the national economic regional system.

Population settlements located in groups are in the form of urban and rural settlements of different sizes. Therefore, the settlements of such a group of residents are divided into two - urban and rural settlements.

Urban and rural settlements are closely related to each other, and a clear border cannot be drawn between them. However, despite this, there are also separate criteria that separate the city and the village from each other. These criteria have their own characteristics in different countries.

Villages are a more ancient form of inhabited places than cities. Villages are mainly agriculturally developed areas, where seasonal unemployment related to agriculture is characteristic. Rural settlements differ from urban settlements in terms of the number of employees, their geographical location, and the function they perform.

The development of rural settlements is closely related to the agricultural sector. However, there are also mixed-function rural settlements, whose inhabitants are not engaged in agriculture, but work in industry, transport and other sectors. For this reason, rural settlements are divided into 3 main groups depending on the function they perform:

- 1) settlements related to agriculture;
- 2) settlements not related to agriculture;
- 3) mixed rural settlements;

In this regard, the population is divided into "agricultural population" and "rural population not employed in agriculture" groups.

When classifying rural settlements, they are divided into three main classes (small, medium and large villages), in special studies, it is appropriate to group villages according to the population as follows (Soliyev, Nazarov, 2009):

- Tiny villages - population up to 500 people;
- Small villages - 500-1000 people;
- Medium villages - 1000-3000 people;
- Large villages - 3000-5000 people;
- Massive villages - more than 5000 people.

However, based on the requirements of the decision of the President of the Republic of Uzbekistan No. PQ-120 dated July 14, 2005, in 2009, villages with a population of at least 2,000 people and more were transferred to the group of towns.

There were 1064 villages, 12 cities and 4 towns in Kashkadarya region until 2009; In 2009, 945 villages, 12 cities and 123 townships (city-type settlements) were created due to the decision of the Cabinet of Ministers to grant the status of towns to large villages. At the beginning of 2010, there are 945 villages, 12 cities and 123 towns (town-type settlements) in Kashkadarya region. The total population of the village at the beginning of 2009 is 1892.4 thousand people.

It is known that settlements are the main training ground for population activities. Industrial development in the country and its regions is determined by the composition and size of the population living in it. For example, in countries where the industrial industry is poorly developed, the rural population is the main one, on the contrary, the number of urban residents is large in industrially developed countries.

Due to the low level of industrial development in Kashkadarya region until the 70s of the last century, most of its population consisted of villagers. After the 1970s, due to the exploitation of the Karshi desert and the use of underground resources, some industrial development was revived. This affected the living

conditions and composition of the population. As a result, 86.7% of the population of the region in 1959, 75.4% in 2006, 43.4% in 2010, and 57.0% in 2023 were rural residents.

Despite the rapidly developing urbanization process in the world, including the increasing role of cities in the life of Uzbekistan, 63.9% of the population of the country and 75.4% of the southern regions live in rural areas. depends on economic conditions, location of agriculture, transport and national economic sectors. Therefore, Kashkadarya region has sufficient natural, economic and geographical opportunities for the solution of rural problems. Especially, the climatic conditions are favorable for the development of irrigated and dry farming, vegetable farming in agriculture. This influenced the fact that the majority of the population was engaged in agriculture during the historical period. Consequently, 87.5% of the population settlements in Kashkadarya region are villages, and the remaining 12.5% are urban settlements.

With the development of the Karshi desert, the number of villagers increased rapidly. The average annual growth rate of the rural population of the region was 5.60% in 1959-1996 and 3.52% in 1989-1996. These indicators were equal to 3.26% and 2.98% in our country, 6.08% and 3.52% in Surkhandarya region. In general, the region ranks second in the country after Surkhandarya in terms of the growth rate of the rural population. However, since the 1990s, the growth rate of the rural population has been increasing compared to the urban population in our country and most of its regions. As a result, in 1959, the number of rural residents in the region was 441,000 people, and in 2023, this figure reached 1,990,700 people.

In the future, industrial enterprises in our country will be built mainly in rural areas. This will significantly affect the development of the urbanization process in the villages in the next ten years. The increase in the population of this village will lead to positive changes in the composition of the general population. As a result, villages with a population of more than 3,000 people can turn into towns and cities (Table 1).

Table 1.

Grouping of rural settlements of Kashkadarya region by population

T/r.	Village settlements by population	Village settlements		Population	
		Number	%	Person	%
1	Up to 250 people	46	4,4	7693	0,5
2	251-500 people	129	12,3	51284	3,6
3	501-1000 people	310	29,6	230546	15,9
4	1001-2000 people	369	35,3	515064	35,6
5	2001-3000 people	105	10,1	255893	17,7

6	3001 and more than it	87	8,3	386418	26,7
	Total	1046	100,0	1446898	100,0

In the composition of the population of Kashkadarya region, the rural population has always been higher than the urban population in all periods. Also, the natural growth of the rural population was more. In 1991, 1,251,900 people lived in rural areas, in 2000, this figure was 1,615,800, and in 2010, it was 1,512,800. In 2023, this figure was 1,990,700. per person, i.e. 57.0% of the total population lives in villages (Fig. 1).

Also, the natural growth of the population was more in the villages. In 1990, 1,210,700 people lived in villages, while in 2000, this indicator was 1,615,500 people, and in 2006, it was 1,859,000 people. It made up 75.4% of the population of the region. After 119 villages with a large population in the region were granted the status of towns, the number of rural residents of the region reached 1455.7 thousand people or 57.7%.

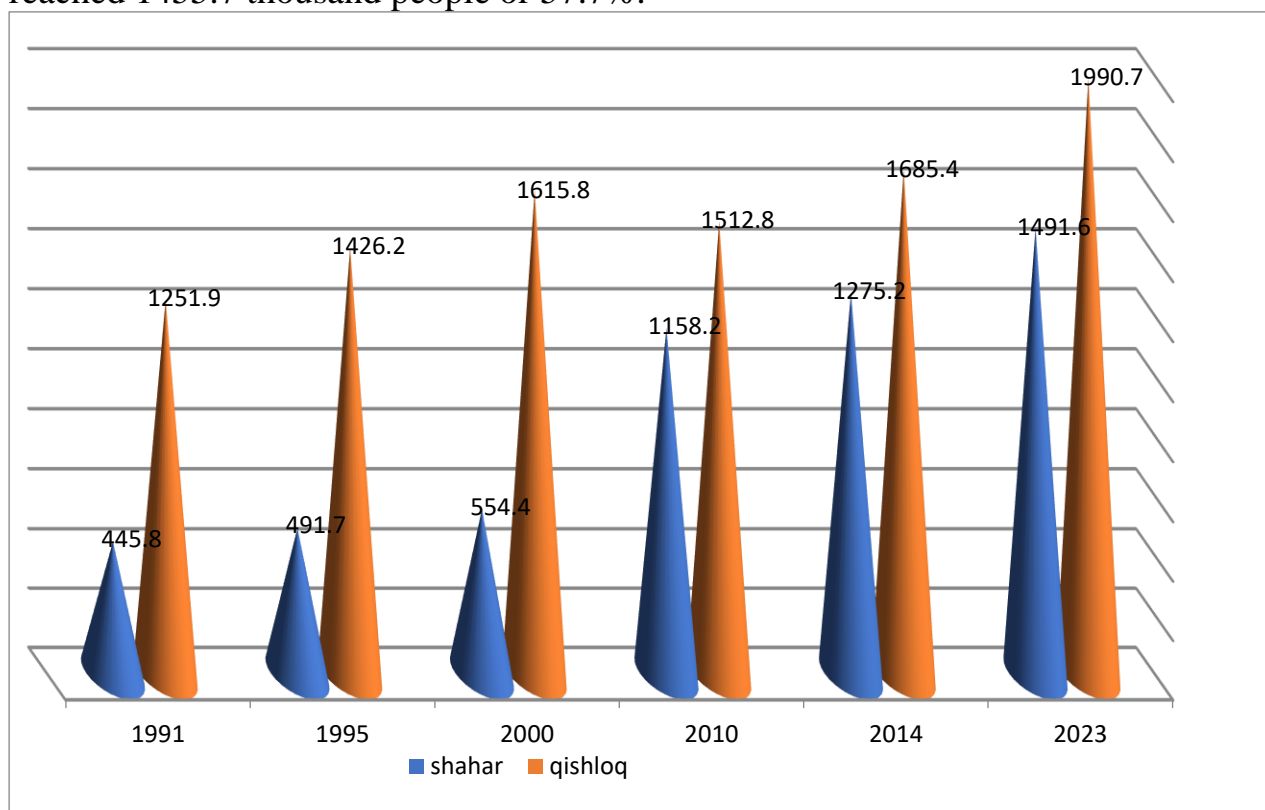


Figure 1. Dynamics of urban and rural population of Kashkadarya region (thousands of people)

In terms of population, Koson district is leading in the region (257,000 people in 2001, 304,600 people in 2023). 8.7% of the population of the region live in this district (Fig. 2). The population of Shahrisabz district (including the city of Shahrisabz) will be 376,000 people (10.8%) in 2023. The districts of Qamashi (286.8 thousand people), Yakkabog (276.7 thousand people), Kitab (276.3 thousand people) are in the next places.

The lowest figure applies to the districts of Mubarak (91.9 thousand people), Mirishkor (126.8 thousand people), Dehkanabad (156.3 thousand people).

Analyzing the location of the population by regional regions, 27.0 percent of the total population of the region is concentrated in Upper Kashkadarya (Kitob, Shahrisabz, Yakkabog), and in Middle Kashkadarya (Dehkanabad, Guzor, Qamashi, Chiraqi). this indicator is 30.0 percent, and in Lower Kashkadarya (Karshi, Koson, Kasbi, Mirishkor, Mubarak, Nishon) it is 35.0 percent. 8.0% of the total population of the region is concentrated in the city of Karshi, the regional center (Fig. 2).

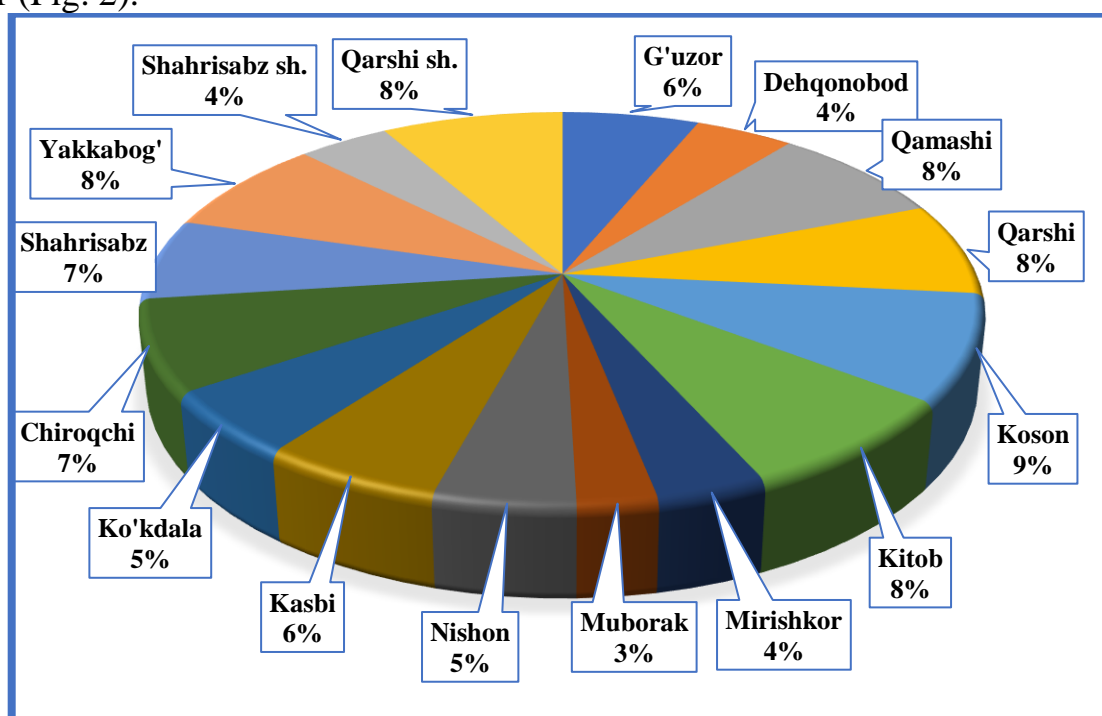


Figure 2. Location of the population of Kashkadarya region (01.01. 2023, in percent)

The demographic potential of the largest districts of Kashkadarya region - Dehkanabad (4.0 thousand km²), Mirishkor (3.21 thousand km²) and Mubarak (3.07 thousand km²) is relatively small. 156.3 thousand people live in Dehkanabad district, 126.8 thousand people live in Mirishkor district, and 91.9 thousand people live in Mubarak district. Thus, districts in the mountainous and desert areas of the region are the least populated districts.

In general, the upper region (Shahrisabz, Yakkabog and Kitob districts) is similar to densely populated oases and valleys of our Republic. However, it is worth noting that the density is much higher in some districts of the lower region (Kasbi, Karshi), i.e. it is equal to 190-200 people.

The population density in the Kashkadarya region is 124.4 people per square kilometer. In turn, Kashkadarya region ranks second in terms of population density in the Republic after Fergana Valley, Tashkent and Samarkand regions.

Until the 70s of the last century, small villages were the majority in Kashkadarya region. Due to the improvement and irrigation of the Karshi desert, the increase in the level of use of underground resources, the development of production, the expansion of villages took place. Secondly, it was influenced by the relocation of the population from the small villages in the mountain area to the Karshi desert, and the transfer of the villagers to other areas in the place of water reservoirs. Therefore, new villages were established in the Karshi desert. However, the number of villages did not increase at the regional level, on the contrary, it decreased. In 1970, there were 1,211 villages in the region, in 1979, the number of villages was 1,014, and in 1989, it was 1,080. According to the data of 2023, there are 1042 villages in the region.

The decrease in the number of villages is also related to the annexation of villages adjacent to cities to cities. In 1979-1992, 33,000 rural residents received the status of urban residents due to the incorporation of villages into cities. During these years, 17 villages near the city of Karshi (Aralovul, Arabkhana, Qavali, Khudoyzot, Tutak, Yakkabog, Kamandi and other villages); In connection with the construction of Chimkurgan, Pachkamar and Hisorak reservoirs, the village in their place was moved. Also, 15 villages were added to the city of Shahrisabz and 3 villages to the city of Kitab. Due to this, 31 villages were formed in new territories. Chamanzor, Navbahor, Gulistan, Abad, Cholkuvar in Mirishkor district in Karshi desert; Shortan, Chilgiz and 8-March in Guzor district; Gulistan, Mirzadala in Kamashi district; Bogabad, Yangiabad, Haqiqat in Karshi district; Gulbog in Koson district; Yangiyer, Gulshan, Zarbulok in Mubarak district; Aydin, Dustlik, Nuristan, Kochatzor, Navruz, Oqoltin, Pakhtakor, Yulduz, Shirinabad, Gulistan in Nishan district; Navruz and other villages were formed in Chirakchi district. Also, new villages were formed on the banks of ditches (canals) and old ones were enlarged due to the specialization of farms specialized in cattle breeding on the basis of new irrigation facilities.

The opening and use of underground natural resources in the region, a number of transport infrastructures were used - Karshi, Yakkabog, Kamashi - Chirakchi, Kamashi - Langar, Karshi - Samarkand, Karshi - Bukhara highways and Karshi - Amudarya, Karshi - Samarkand railway; Due to the start of the construction of the Guzor-Boysun-Kumkurgan railways, small villages began to grow. As a result, the number of villages decreased to 121 in 1970-1989, and to 16 in 1996-2004. However, the number of inhabitants in the villages of the region grew rapidly in 1970-1989 and 1996-2004. In 1970, on average, 552.8 people lived in each village, in 1979, 808.7 people and in 1989, 1098.8 people lived in each village. Currently, with the expansion of villages in the region and the formation of new villages, the distance between villages is also significant. changed. For example, in 1989, the distance between the villages of the region was 5.4 km, and in 2023 it was 5.1 km. Therefore, villages are densely located in Kitab, Shakhrisabz, Yakkabog, Kamashi, Chirakchi, Kasbi, Karshi districts of the region.

Among the villages of the region, those with a population of 100 and 101-500 people are decreasing. For example, as a result of the expansion of villages in recent years, while their number decreased, the number of villages with a population of 501-1000 people increased from 310 to 369, villages with a population of 1001-3000 people increased by 161, and villages with a population of more than 3000 people increased by 36%. The density of villages and the number of people living in them differ sharply in regional districts.

Therefore, it is advisable to preserve villages with a population of 101-500 people in the mountainous part of the region in the future. Because even now, along with the increase in the population in the plains, problems have started to arise in providing the population with drinking water.

There are more villages with 101-500 people living in the mountainous areas of the province. The majority of villages with 500-1000 and 1001-3000 people live in the Chirakchi, Kamashi, Yakkabog districts in the mountainous hills.

There are many villages with 1001-5000 people in the Karshi desert districts, 101-500 and 501-1000 people in the mountainous regions of Qamashi, Dehkanabad, Shahrisabz, Chirakchi, Yakkabog districts. In general, there are few large villages in the mountain zone of the region due to the low economic coefficient of land reserves and water shortage, inconvenience of transport connections, and the unevenness of the earth's surface, but the expansion will continue.

In many villages of the region, due to the rapid increase in population, economic opportunities are decreasing year by year, surplus labor resources are emerging. The number of villages with a population of more than 1,000, or even more than 3,000-5,000 people is increasing. This situation accelerated especially in 1996-2023.

In 49 villages with a population of 3,000-9,000 people, in these large villages with a population density of 4,000-12,000 people, industrial enterprises for the processing of raw materials have not been significantly built, and as a result, the economic, social and ecological situation in these villages is worsening.

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Musabekova M.N.
o'qituvchi
Ingliz tili tarjima nazariyasi kafedra
Tarjimonlik fakulteti
O'zbekiston davlat jahon tillari universiteti
ChDPI kafedra mudiri, p.f.d N.Sanaqulov taqrizi asosida

SCIENTIFIC STYLE AND ITS SPECIFICITY

Abstract. The object of this research is the specificity of English-language scientific texts.

The subject of the study are lexico-grammatical techniques used in translating a scientific text.

Key words: scientific style, linguistic, grammatical norms, specificity, logical parts, translation, consistency, nominality, objectivity, accuracy.

Intoduction. The scientific style is one of the functional styles characterized by the communication of new information in a strict, logically organized and objective form. This style is defined as such an organization of linguistic material that serves, first of all, a consistent and systematic presentation of scientific issues; accurate transmission of the results of observation, experiment and analysis; disclosure of general patterns governing the life of nature and society; proof of correctness (or error) one or another theory, concept, etc.

The indication that the scientific style, first of all, is characterized by reflecting the mental activity of a person, and all its genres serve a single purpose of scientific description of the subject of research, is presented in many works.

The sphere of social activity in which the scientific style functions is science. The purpose of the scientific style is to transmit scientific information. The scientific style belongs to the number of book styles, since in most cases the scientific style is implemented in writing. With the development of mass media, with the increasing role of science in society and the growth of various kinds of scientific contacts (congresses, conferences, symposiums), the role of the oral form of scientific speech is also increasing.

The written version of the text is represented by such genres as scientific monographs, scientific articles, dissertations, various genres of educational and scientific and technical literature, speeches in scientific debates, scientific reports, lectures, popular science messages and genres of popular science literature. These genres differ mainly in the compositional structure of the texts. The subsystem of linguistic means, which manifests itself in the texts of these genres, is quite uniform.

Highlighting the main features or main functional features of the style is associated with extralinguistic reasons. Their presence determines compliance with the functional task of this style. Therefore, the main functional features of

the style are universal, they are inherent in all languages that distinguish this functional style.

Translation of scientific and technical literature is a special discipline that arose at the junction of linguistics, on the one hand, and science and technology, on the other hand.

This type of translation should be considered from both linguistic, scientific and technical positions.

Research Methodology. In recent years, an attempt has been made to linguistically study the language and style of English and Russian scientific and technical literature. As a result of the conducted research, it was found that the language and style of this type of literature are based on the norms of a written language with certain characteristics.

The vocabulary of scientific and technical literature differs in the following features:

- a large number of special terms are used
- words are selected with great care to maximize accurate transmission of thought
- official words (words) have a large share,
- providing logical connections between individual elements statements; words expressing the author's attitude to a statement)

The grammar of scientific and technical literature is characterized by:

- use only firmly established in writing
- grammatical norms:**
- widespread use of passive, impersonal and vaguely personal constructions:
 - the use of mostly compound and compound sentences:
 - predominance of nouns, adjectives and non-personal verb forms.

It has been proven that personal forms of the verb are found 2 times less often in scientific and technical literature, and passive constructions 5-6 times more often than in fiction. This is explained by the fact that, unlike fiction (the main task of which is the creation of images), scientific and technical literature strives to describe and explain certain facts as accurately as possible.

Regarding the method of presentation of scientific and technical literature:

- the main emphasis is on the logical rather than the emotional side of information;
- the presentation is usually not in the first person, but a special “collective” style is used;
- there is no categorical presentation.

Acquaintanceship with the original. It is necessary to read the entire text, using working sources of information as necessary: dictionaries, reference books, specialized literature. You can start working with specialized literature before reading the text, if it is clear in advance what you need to prepare for in advance.

You can start working with specialized literature before reading the text, if it is clear in advance what you need to prepare for in advance.

Identification of logical parts of the original. Dividing the text into complete semantic segments - sentences, paragraphs, periods.

The size of the portion of text to be translated depends on three factors:

- semantic completeness of the passage;
- complexity of content;
- translator's memory capabilities.

This part of the text can be a sentence, a group of sentences, a paragraph, etc., but this part must be complete in meaning.

Rough translation of the text. Consistent work on logically selected parts of the original. After the content of the highlighted part of the text is understood and assimilated, it must be expressed in written form, completely distracting from the original (i.e. without looking at it) and constantly monitoring the style, that is, the quality, uniformity and logic of the presentation.

Re-reading the original, checking it with the completed translation in order to control the correct transmission of the content. It is necessary to verify the translated part of the text with the appropriate place of the original in order to make up for the missing. It is necessary to ensure that there is a logical connection between each subsequent and previous part of the translation.

Final editing of the translation with amendments. When editing a translation, we should adhere to the following principles:

- a) if the same idea can be expressed in several ways, then preference is given to the shorter one;
- b) if a word of foreign origin can be replaced without damage to the meaning by a word of origin, then the translator is obliged to do this;
- c) all terms and names must be strictly unambiguous.

Translation of the title. This is done last of all, taking into account all the features of the text, since the title should reflect the essence of the entire text content.

Now consider the scientific style, which is characterized by the following features:

Analysis and results

Consistency.

To achieve a logical presentation of the material in a scientific style, syntactic techniques such as simple sentences with complicating structures are used: introductory words and phrases (however, on the one hand, according to, etc.).

For example: "There are two fundamental problems of knowledge at the center of the book. First, we have the problem of induction, that is the fact that although we are only able to observe a limited number of events, science nevertheless advances unrestricted universal statements. Second is the problem of demarcation, demanding a separating line between empirical science and non-

science. This book means a major contribution to the philosophy of science and is therefore essential reading for anyone interested in the field"³⁴

Nominality.

The next feature of the scientific style in English that is worth paying attention to is nominality. This means that modern scientific writing has tended to use more nouns and relatively less verbs.

– Most people would agree that proper nutrition is important (General English).

– There is a widespread agreement about the importance of proper nutrition (Academic English).

– The only way to diagnose the disease accurately is to obtain a blood sample. An accurate diagnosis of the disease depends on obtaining a blood sample.³⁵

Objectivity.

The modern scientific style is not characterized by subjective value judgments, which can only be used to express a purely personal point of view of the author (*from my perspective, my point is that, etc*). On the contrary, this style is characterized by an impersonal manner of presenting the material, because the main attention in the work is not paid to the personality of the author and his opinion, but to the information and arguments that the author presents to the reader.

Cohesion.

Cohesion represents lexical and grammatical connections both within the whole text and in a separate sentence. In English there are several types of connectives between parts of an academic text.

– Reference – *“it”, “he”, “him”, “this”, “that”, “here”, “there”, etc.,*

– Ellipsis – *“A writer is a person who cares what words mean, what they say, how they say it ... and so they use them with care, with thought, with fear, with delight.”*³⁶

– Substitution – *“Any people anywhere, being inclined and having the power, have the right to rise up, and shake off the existing government, and form a new one that suits them better” (Lincoln 1848)*³⁷

Accuracy as a characteristic of scientific style lies in the wide use of special vocabulary and terminology, especially that which is similar in many languages and is international (*expert, specialist, function, etc*). When referring to statistics, precise figures and facts are often used (*15 % of budget, 6 million people, etc*).

³⁴ <https://pdfcoffee.com/academic-style-4-pdf-free.html> Academic style

³⁵ Scientific Writing in English for International Publication: From Text to Context.

adapted from O’Connell, S. – Focus on IELTS. Pearson <https://www.eslwriting.org/wp-content/uploads/nominalization-worksheet.pdf> <http://www.tutorvista.com/content/english/english-ii/workbook/nominalisation.php#adjectives-into-nouns>

³⁶ A Few Words to a Young Writer: Ursula K. Le Guin. <https://shortattentionspanpress.wordpress.com/2013/01/18/a-few-words-to-a-young-writer-ursula-k-le-guin/>

³⁷ Speech on War With Mexico (January 12, 1848). <https://housedivided.dickinson.edu/sites/lincoln/speech-on-war-with-mexico-january-12-1848/>

Conclusion/Recommendations. In general, the English education system pays great attention to the development of academic writing. Over time, a whole range of lexical and grammatical techniques have been formed in the English language, aimed at observing the basic principles of scientific discourse. Thus, scientists from other countries should be especially attentive to the way they express scientific style in English in order to feel fully competitive in the international market.

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SCIENTIFIC AND THEORETICAL VIEWS ON THE PROMOTION OF HIGHER EDUCATION SERVICES

Abstract. Development of higher education services and increasing their efficiency is currently one of the main priorities of the state policy in the field of higher education of Uzbekistan. Competitive mechanisms of resource allocation among higher education institutions are increasingly being used. In particular, the granting of academic and financial independence to higher education institutions, the establishment of admission quotas, and independence in creating and offering educational programs leads to a sharp development of the market of higher education services.

It is important to accelerate promotional activities aimed at including higher education institutions in international rankings and ensuring the competitiveness of national higher education services. The process of promotion of educational services is important in attracting potential consumers to educational services, organizing the interaction of the participants of the educational process in the market and the offer of services. This article describes the theoretical issues of promotion of higher education services.

Keywords: higher education services, marketing service, promotion, promotion tools, target audience, potential consumers, advertising, public relations.

INTRODUCTION. Based on the priorities of socio-economic development and the requirements of the labor market, which have been implemented in Uzbekistan in recent years, the following important tasks are being solved by HEIs. Including:

- forming and increasing admission quotas based on necessity;
- digitalization of higher education services;
- To improve the quality of education in HEIs;
- training of highly qualified personnel for economic sectors and branches, etc.

We can see that state HEIs are working in the following 4 main priority directions in solving the above tasks:

The first direction is to gradually increase the role of management boards of state higher education institutions and expand the powers of departments.

The second direction is to adapt the educational process to market requirements, to ensure integration with production, and to create an environment for students to work on themselves.

The third direction is to increase the scientific potential of higher education institutions, to develop science and innovation.

The fourth direction is to reduce red tape for faculty and students, drastically reduce bureaucracy and corruption by digitizing the field.

In recent years, as a result of significant work in these areas, we can see that financial and academic independence has been granted to many state higher education institutions, and healthy competition between higher education institutions has arisen as a result of the entry of the private sector into the market of higher education services. Therefore, the issue of increasing the competitiveness of higher education institutions operating in our country is becoming urgent. We know from world experience that the only way to increase competitiveness in all spheres of production and service is the wide use of marketing opportunities.

THE MAIN PART. Today, as a result of putting an end to the state monopoly of higher education services, a healthy competitive environment is emerging. As a result, today many higher education institutions are re-examining the activity of their "Marketing" department and realizing the need to organize it effectively. Because the marketing department is basically the main link that ensures constant interaction of higher education institutions with the market, that is, with potential consumers (applicants, students and their parents, employers, buyers of scientific developments, etc.). At this point, it would be appropriate if we dwell in detail on the meaning of the concept of marketing service in higher education and give a definition to this concept.

Marketing service in higher education is a special body that is engaged in tasks such as studying the demand for educational fields and specialties in the labor market and forming admission quotas corresponding to these educational fields and specialties, strengthening the position of higher education institutions in the market and increasing their competitiveness, and promoting educational services. is considered.

In general, if we pay attention to when marketing and its tools were first used in the higher education system, in the mid-1980s, the first theories were put forward by foreign expert scientist Tom Hayes. According to him, "...marketing in higher education was viewed as part of marketing in health care in the mid-1980s." We can agree with this opinion in terms of achievements. Because consumers make their decisions based on their results and achievements in the field of health care or OTMs. In such a situation, other marketing elements such as price of services, location become secondary. But if we look at it from the point of view of today's increased competition, the given definition does not quite match today's demand. This is because healthcare marketing and higher education marketing and promotion processes differ. For example, the health sector attracts customers with health complaints, or sells medicine to a healthy person who cannot be cured. In this case, promotion and advertising activities require specific

approaches. If this approach is used in the field of education, the expected results may not be achieved.

Another foreign expert, Graeme Drummond, suggested that "marketing in higher education institutions will become a necessary activity after having to compete for funding and attracting more students." Generally speaking, any business owner wants to sell their product or service at a high price. Or they don't want any of their HEIs to fall short of their allocated quotas. Therefore, this given definition is appropriate, but it does not mean that it fully corresponds to the marketing activities of HEIs today.

According to Philip Kotler, a leading marketing expert, "marketing in the higher education system is the analysis, planning, implementation, control, informing and motivating of potential consumers, effective pricing of services, and educational programs designed to meet the needs and wants of target markets. and extensive use of marketing communications. This definition corresponds to today's demand and reflects the marketing activities in the field of higher education. Because marketing activities in the higher education system mainly consist of tasks such as analysis, acceptance and approval of educational programs, its implementation, control, informing and motivating potential consumers, effective pricing for services and extensive use of marketing communications.

Promotion of higher education services, participating in various exhibitions, organizing open-door days, holding conferences in various directions, using direct marketing opportunities, carrying out work to communicate educational services to potential consumers on web pages and social networks. enters.

Also, many researchers have conducted their research on the promotion of higher education services. In particular, O.S. Batalova put forward such an opinion in his research. "As a result of the development of the educational services market, competition between higher education institutions appears and continues to increase. Consumer demands and target audience are always changing. This increases the need to advertise and promote their services in higher education institutions." In fact, this theory was also observed in the field of higher education of our country. Since 2016, the increased focus on education has resulted in healthy competition among higher education institutions. The requirements of learners are changing day by day. That is, if earlier, due to the small number of admission quotas, they did not apply for the fields of study they were interested in, but instead applied for the fields of study with high admission opportunities, today's applicants want to study at the HEIs of their interest, which provide prestigious and high-quality education. This increases the need for higher education institutions to promote and promote their services.

According to M. N. Krivtsova, "the world market of educational services is rapidly developing and growing year by year. All educational institutions, institutes, universities, academies are direct participants in market relations.

Increasing competition in the educational services market is increasing the demand for advertising and PR. Because in order to operate stably in a competitive environment, any higher education institution should form positive opinions about its services. This opinion is reasonable from the point of view of market economy, it can be added. However, higher education institutions must first be financially and academically independent and pay serious attention to the activities of the marketing department in their HEIs in order to form positive opinions about their services. Because, if the activity of the marketing department in HEIs is not given serious attention and the necessary funds are not allocated to it, there will not be enough opportunity to form positive opinions among the consumers of higher education services and bring them to the brand level.

Currently, higher education institutions around the world are paying great attention to promoting their services. Because, future students began to pay attention to the choice of a higher educational institution and the direction of education. G. Krayukhina describes promotion as follows: "promotion is a set of activities aimed at informing potential consumers about the advantages of the product and inducing their desire to buy". In the promotion of higher education services, attention should be paid to strengthening the communication and promotion of information aimed at drawing the attention of potential consumers to the advantages of higher education services.

In the promotion of higher education services, it is necessary to pay serious attention to increase the effectiveness of sales through various promotional activities aimed at the interested parties of higher education institutions mentioned by F. Kotler and Fox, that is, to the audience that can be contacted.

E. I. Bulin-Sokolova in her research on the issue of promotion of higher education services states that "the main achievements of marketing in higher education are related to the use of modern technologies for advertising and promotion of educational services." In its research, Hanover Research, "Despite the fact that HEIs place great importance on open days and other similar events in attracting new students, the means of promoting higher education services through digital technologies show that they are the most effective". Another foreign expert, C. Maslowsky, believes that "the website remains a very important tool for marketing promotions among higher education institutions and their various stakeholders, while focusing on the effective use of social media marketing (SMM) opportunities. necessary". From the opinions of these researchers, it can be concluded that in today's era of advanced information and communication technologies, it is necessary to widely use digital technologies, that is, Internet marketing, digital marketing opportunities, in the promotion and promotion of higher education services.

Our local scientists and young specialists are also conducting their scientific research on the current issues of promotion of higher education services based on digital technologies and digitization of higher education services. For example, according to the opinions of S.S. Gulyamov, R.Kh. Ayupov, M.Q.

Abdullaev, "... at present, the tasks of transition to the digital economy before universities and other higher education institutions are transverse: directions and specializations announced in advance One of the most urgent tasks is to expand the set of programs along with the preparation of bachelor's and master's degrees and create the necessary conditions for students to acquire the skills and knowledge required by the digital economy. From this we can conclude that it was mentioned that higher education institutions should pay attention to the fact that the graduates of higher education institutions not only have thorough knowledge of their specialty, but also master the skills and knowledge required by the digital economy.

CONCLUSION. The characteristics of the educational process in higher educational institutions and their tasks before the society and the economy are changing. Currently, HEIs in the world are competing with each other to attract students, leading professors and financial resources. In such a healthy competitive environment, the SOEs that keep up with the times, choose their development path and take advantage of digital marketing opportunities are gaining an advantage over other SOEs. I. Rustambekov expressed the following opinion in this regard. That is, "Digitalization creates new opportunities for education and management, facilitating data collection and analysis, interaction and communication. The benefits of digitization include increased productivity, increased student engagement, personalized learning, and the use of new teaching methods. In addition, digitization facilitates the management of universities, curricula, faculty, staff, and resources. One of the main advantages of digitization in HEIs is to further increase student engagement. By using digital tools such as online learning platforms, social networks and mobile applications, universities can further increase students' interest in learning. Digitization also provides opportunities for universities to use new teaching methods such as games and virtual reality. These methods are easily used in interactive learning experiences to explain complex concepts and theories to students.

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Musayev B.Sh.
independent researcher
Samarkand Institute of Economics and Service

MARKETING TOOLS IN PROMOTING HIGHER EDUCATION SERVICES

Abstract. All higher education institutions are real participants of market relations, subjects of educational services market and labor market. The modern interpretation of market orientation is based on the strategic and integrative role of marketing in the HEI management system. In addition, within the modern concept of relationship marketing, emphasis is placed not only on the consumer, but also on other partners and target audiences. This necessitates the use of modern marketing tools in the activities of OTMs. The issue of using advertising, public relations, sales promotion, and personal selling as the most important marketing tools is discussed in this article.

Keywords: advertising, sales promotion, public relations, personal selling, target audience, "7P" marketing-mix model, business partners, services marketing-mix model.

INTRODUCTION. Development of higher education services and increasing their effectiveness is currently one of the main priorities of the state policy in the field of higher education. Competitive mechanisms of resource allocation among higher education institutions are increasingly being used. In particular, the granting of academic and financial independence to higher education institutions, independent determination of admission quotas, academic independence in creating and offering educational programs leads to a sharp development of the market of higher education services. In such conditions, it is becoming urgent for higher education institutions to focus on the content of their educational programs, methods of organizing the educational process, formation of corporate culture, formation of demand for educational services and promotion of sales of educational services.

Also, it is important to accelerate promotion activities aimed at including higher education institutions in international ratings and ensuring the competitiveness of national higher education services. The process of promotion of educational services is important in attracting potential consumers to educational services, organizing the interaction of the participants of the educational process in the market and the offer of services. The organizational processes of promotion of higher education services, the personnel responsible for them, the implementation of promotional materials, the organization of the process of their preparation and delivery to the target audience also have a great impact on efficiency. A number of principles should be followed when promoting higher education services from a marketing point of view.

Promotion of higher education services is becoming an important activity of educational institutions. Promotion of higher education services should be reflected in the strategy of development of higher education institutions. Each higher education institution should develop its promotion programs and implement them together with the provision of educational services, that is, promotion programs should take place in the operational system of HEIs. The higher management body of higher education institutions develops a strategy for the development of HEIs. The strategy of developing HEIs consists of two major strategies. That is, the strategy of forming a portfolio of educational programs and the strategy of promoting educational programs.

The marketing department, international relations department, digital education technology center, press service, and gifted students departments play a key role in the development of the strategy for the promotion of educational programs.

MAIN PART. Marketing mix theory became very popular in 1964 after Neil Borden and DJ McCarthy published their article on the four main P's. Today, these are known as the "4P's" in marketing worldwide (product, price, place, promotion).

Taking into account the specific characteristics of educational services, F. Kotler and Foxlar developed the marketing-mix model for the educational system and adapted it by proposing the "7P" marketing-mix model. These are: program, price, place, promotion, processes, physical facilities, and people.

One of the main elements of marketing, both in the classic marketing-mix model and in the educational services marketing-mix model, is promotion. In higher education institutions, promotion is used to effectively organize a continuous process of communication with applicants, students and their parents, employers, professors and teachers, and other interested parties. In their research, F. Kotler and Foxlar mentioned the following 16 types of interested parties of higher education institutions, that is, the audience with which communication can be established, the public:

- 1) existing students;
- 2) potential (future) students;
- 3) professors and teachers;
- 4) parents of students;
- 5) administration and employees of the educational institution;
- 6) graduates;
- 7) suppliers;
- 8) competitors;
- 9) state agencies;
- 10) business partners;
- 11) mass media;
- 12) various financial funds;
- 13) trustees;

- 14) accreditation organizations;
- 15) local communities;
- 16) general public.

In general, each HEI should have an understanding of their target audience. Because in organizing and carrying out promotional activities, it should be based on their interests, wishes and demands. That's why we offer the following 14 types of contactable audiences:

1. existing students and their parents;
2. potential (future) students (applicants) and their parents;
3. professors and teachers;
4. the administration and employees of the educational institution;
5. those engaged in scientific research;
6. graduates;
7. suppliers;
8. competitors;
9. state agencies;
10. business partners;
11. mass media;
12. Various financial funds;
13. accreditation organizations;
14. general public.

The information that HEIs prepare and transmit to the target audience must meet the following requirements:

- information should be relevant to the interests, wishes and requirements of the target audience;
- it is necessary to take into account the coverage of the audience with which communication can be established;
- transmitted information must be reliable;
- information should be presented easily, simply, clearly and quickly;
- information should be complete, that is, neither missing nor increased;
- it is necessary to avoid re-transmission of information.

V. According to Hewitt and Clayton, the most important stakeholders of higher education are "those who are learning, those who are likely to study in the future". In fact, this idea is appropriate, if there are no students and prospective students (applicants) in higher education, other interested parties mentioned by F. Kotler and Fox, that is, the audience with which communication can be established (professors, teachers, administration and staff of the educational institution, suppliers, competitors, government agencies, business partners, various financial funds, the general public, etc.) will not be. According to Y. Vissema, "when moving educational services, it is necessary to first identify the customers of educational services, that is, the target segment." Consumers of educational services include not only students, their parents, professors, and employers, but also applicants, mass media, manufacturers and suppliers of

educational materials (publishers, stationery, educational furniture, etc.). When promoting educational services, it is necessary to promote educational services aimed at these consumers.

In order to attract the attention of a specific target audience, higher education institutions should widely use the following four main means of promotion (Table 1):

- advertising;
- sales promotion (in the higher education system, incentives are used for students, professors, and employers);
- public relations (PR);
- personal selling.

Table 1

Means of promotion of higher education services and their features

Promotional tools	The main goal	Conveyor of information source	Target audience	Content of promotion
Advertising	To interest potential consumers (applicants and their parents) in choosing HEIs and educational fields	Mass media, social networks, TV, external advertising media	Prospective students, their parents	Focuses on the selection of HEIs and its educational directions and specializations
Sales promotion	Attracting students, academic staff and professors to various educational programs, grants and supporting the winners	On the website and pages of the Higher Education Institution on social networks, on specialized sites, on social networks, on TV and radio channels	Students, doctoral students, professors	Incentives specific to specific educational programs, various contests, grants
Personal selling	Conducting roundtable discussions and meetings with potential clients by professors and teachers of HEIs	Customers, stakeholders, partners	International communication department, marketing department	Providing direct information about educational programs
Public Relations (PR)	To increase the market position and positive reputation of HEIs	Press, press conferences, individuals	Wide community, customers	Providing all information about HEIs

CONCLUSION. Today, in order to successfully promote OTM, it is necessary to make extensive use of the communication resources of various advertising technologies. The following elements of marketing communication are the most important from the point of view of promoting OTM: advertising, public special events (meetings with employers, roundtables, etc.), direct

marketing, participation in exhibitions, use of electronic corporate communication opportunities, strong brand creation, corporate culture and corporate style, informal communications.

PR is an important tool in promoting HEI services. PR is the tools used in establishing relations with the public to achieve the established communication goals. Such PR tools that are most often used in HEIs include:

- 1) open day;
- 2) celebration of the jubilee day of the educational institution;
- 3) publishing a series of articles and theses about the educational institution;
- 4) organization of a problem discussion open to the press;
- 5) competitions and various contests;
- 6) roundtable discussions;
- 7) conducting master classes;
- 8) active participation in meetings of public organizations;
- 9) organizing presentations of educational programs;
- 10) press conferences;
- 11) briefing;
- 12) special awards;
- 13) seminars, meetings;
- 14) online conference;
- 15) teleconference;
- 16) tour of educational institutions;
- 17) media coverage of the conducted experiments;
- 18) book of comments and suggestions; special event (inviting VIPs and media representatives) and others.

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*Mustofogulov J.
associate professor
Radioelectronics Department
Hamzayev A.I.
senior teacher
Department of Radioelectronics
Jizzakh Polytechnic Institute*

DESIGN OF THE OPTOPAIR SWITCH SCHEME IN "PROTEUS" SOFTWARE

Anotation. In this paper presents the schematic design of the optocoupler electronic switch circuit in the virtual modeling program "Proteus", the stages of transferring the circuit to the printed circuit board, as well as the methods of simulating the created circuit.

Keywords: inverter, virtual modeling, printed circuit board, simulation.

Introduction

Today, the rapid development of the electronics industry puts tasks such as designing and simulating electronic devices in computer programs on the agenda. When modeling electronic circuits of devices, first its principle scheme is created and analyzed with the help of virtual programs. The element library of virtual modeling programs contains a virtual model of any measuring instrument, and special laboratory equipment is not required to check a device. After the electronic circuit of the device is created, the printed circuit board and design of the created device can be designed in the next step [1-4].

This article shows the stages of designing an optocoupler electronic switch circuit in the "Proteus" virtual modeling program.

It is convenient to design different key schemes in Proteus software. Because the element library of the Proteus program includes real and virtual models of key elements provided by many manufacturers. Examples of such models are optoelectronic switch elements. Optoelectronic switch circuits are widely used in industrial electronics. The most commonly used optoelectronic switches include optrons or optocouplers consisting of a photo transmitting and receiving element [5, 6]. According to the design of optocouplers, both elements are placed in one housing and are made so that light does not enter from the outside environment. A transmitting element converts electrical energy into light when an electrical signal (current) is applied to it. In the receiving element, the light energy is converted back into an electrical signal. In this case, the stability of the output voltage is achieved by changing the input voltage without electrical contact between the high-voltage part and the low-voltage part of the electrical device [7]. This feature of optocouplers is widely used to ensure stable operation

of pulsed power supplies. Optocouplers are also widely used as switching elements in digital and analog electronic circuits. "LED" (light-emitting diode) is used as a transmitting element in optocouplers. Photoresistor, photodiode, phototransistor, photothyristors can be used as a receiving element, depending on where it is used and its function. Phototransistor optocouplers are widely used in electronic circuits [8]. To study the principle of operation of optoelectronic switch circuits, the following circuit is assembled in the Proteus program (Fig 1).

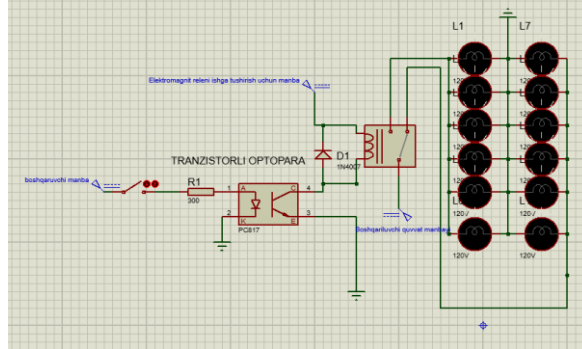


Figure 2. A simple scheme of controlling a high-power circuit using a low-voltage circuit using an optoelectronic switch

In the scheme shown in Fig. 2, an electrical signal is given to the input element of the transistor optocoupler - the photodiode by means of a switch using a 5V DC source. The coil of the electromagnetic relay is connected in series to the collector of the receiving element of the optocoupler (contact 4 in the case) [9]. The operating voltage of the relay is 24V. There are three working contacts of the relay:

1. The common contact is connected to the positive pole of the main source.
2. Normally open contact.
3. Normally closed contact.

In the power circuit of the electromagnetic relay, a group of high-voltage incandescent lamps is connected in parallel to the normally open contact as a consumer. A group of such consumers is also connected to a normal open contact. When a 5V voltage signal is applied to the control contact, the electromagnetic relay connects the main power supply to the normally open contact. When the control switch is not connected, the transistor, which is the receiving element of the optocoupler, is closed, and current does not pass through the coil of the electromagnetic relay [10].

The Proteus program can also be used to design the printed circuit board and 3D view of the device [7]. The printed circuit board and 3D view of the device are shown in pictures 2-3

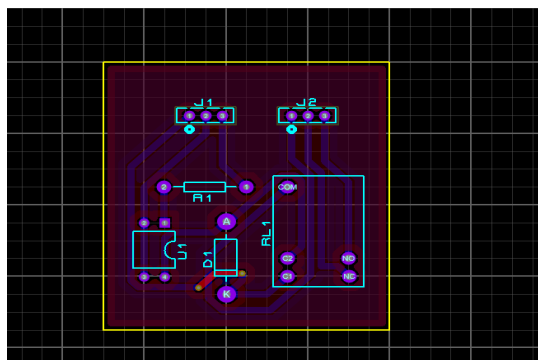


Figure 2. Optocoupler switch circuit printed circuit board

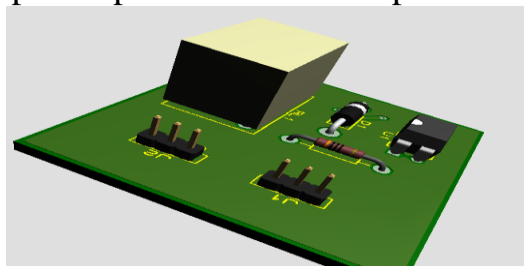


Figure 3. 3D view of the building

In conclusion, it is possible to design devices and place orders for their printed circuit boards by modeling analog and digital electronic circuits at various levels in Proteus software. Learning the stages of designing electronic devices with the help of various virtual programs and acquiring the skills to apply it in practice is an important task facing future industrial electronics engineers today [11].

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*Narzullayeva O.Q.
Samarqand iqtisodiyot va servis instituti
Bank ishi kafedrasi assistenti
Toshmurodov T.A.
Samarqand iqtisodiyot va servis instituti
Bank ishi va auditi yo'nalishi talabasi*

MAMLAKATIMIZ IQTISODIYOTINI RIVOJLANTIRISHDA XORIJIY INVESTITSIYALARNING AHAMIYATI

Annotatsiya. Mazkur maqolada mamlakatimizning iqtisodiy rivojlanishida tashqi iqtisodiy faoliyatning oqilona tashkil etilishi, investitsiyalar, xususan, xorijiy investitsiyalari haqida tushuncha va ularning ahamiyati, chet el investitsiyalarini jalb etish bo'yicha olib borilayotgan ishlar, mamlakatimizning jahon savdosida o'z o'rniga ega bo'lish uchun qilinayotgan sa'y harakatlar haqida keltirib o'tilgan.

Kalit so'zlar: tashqi savdo, investitsiyalar, eksport, import, xorijiy investitsiyalar, investitsiya muhiti, iqtisodiy islohotlar.

*Narzullayeva O.K.
Samarkand Institute of Economics and Service
Toshmurodov T.
student of banking and auditing
Samarkand Institute of Economics and Service*

THE IMPORTANCE OF FOREIGN INVESTMENTS IN DEVELOPING THE ECONOMY OF OUR COUNTRY

Abstract. In this article, the rational organization of foreign economic activities in the economic development of our country, the understanding of investments, especially foreign investments and their importance, the work carried out to attract foreign investments, which has its place in the world trade of our country efforts are mentioned.

Key words: foreign trade, investments, exports, imports, foreign investments, investment climate, economic reforms.

Kirish

Xozirgi globallashuv sharoitida milliy iqtisodiyotimizni jadal rivojlantirish hamda mamlakatimiz iqtisodiyotida makroiqtisodiy barqarorlik va iqtisodiy o'sishning yuqori sur'atlarini ta'minlashda investitsiyalar, shu jumladan, xorijiy investitsiyalar muhim o'rin tutadi. Investitsiyalarga e'tiborning kuchayishi bugungi kunga kelib, mamlakatimizdagi investitsion faoliyat rivojlantirilishiga olib keldi.

Iqtisodiyotni rivojlantirishda va tashqi iqtisodiy faoliyatni yanada jadallashtirishda milliy va xorijiy investitsiyalarning o'rnini beqiyosdir.

O'zbekiston va jahon iqtisodiyotining kelgusi taraqqiyoti, asosan, investitsiyalarga bog'liqligini bugungi kunda yanada aniq namoyon bo'lmoqda. Shu sababli ham, hozirgi kunda respublikamiz iqtisodiyotiga investitsiyalarni, xususan, xorijiy investitsiyalarini kengroq jalb etish, ularning mamlakatimizda o'tkazilayotgan iqtisodiy islohotlarning samarali ijrosini ta'minlashning muhim asosiga aylangan. Mamlakatni ijtimoiy, iqtisodiy va siyosiy rivojlanishida investitsiyalarining jumladan, xorijiy investitsiyalarning ahamiyati kattadir.

Mamlakatimiz rahbari ikkinchi Toshkent xalqaro investitsiya forumida quyidagilarni keltirib o'tdi: "Islohotlar natijasida O'zbekistonning mintaqadagi iqtisodiyoti eng yuqori diversifikatsiya qilingan mamlakat sifatidagi maqomi yanada mustahkamlangani qayd etildi. Bir yilning o'zida 100 mingga yaqin yangi korxonalar tashkil qilindi, kiritilgan xorijiy sarmoyalarning yillik hajmi 10 milliard dollarga yetdi yoki islohotlar boshlangan 2017-yilga nisbatan 3 barobar oshdi, 1 millionga yaqin aholi kambag'allikdan chiqarilib, kambag'allik darajasi 17 foizdan 14 foizga tushirildi. Islohotlar boshlangan davrda bu ko'rsatkich 30 foizdan yuqori edi." 38 Davlatimiz rahbari ana shunday yutuqlarga munosib hissa qo'shayotgan barcha xorijiy va mahalliy investorlarga, hamkor davlatlar hukumatlariga, xalqaro moliya institutlariga chuqur minnatdorlik hamda yuksak hurmat va ehtiromini bildirdi.

Jahonda globallashtirish jarayonlarining tezlashib borishi hozirgi davrda mamlakatlar iqtisodiyotida xorijiy investitsiyalarni jalb etish imkoniyatini oshirishni taqozo etmoqda. Bu borada davlatimizda ham qator chora-tadbirlar amalga oshirilmoqda. Xususan, O'zbekiston Respublikasining 2025-yilgacha investitsiya siyosati strategiyasida iqtisodiyotning raqobatbardoshligi va muvozanatini oshirish, ishlab chiqarish va eksport salohiyatini rivojlantirish, hududlarni rivojlantirish va aholi farovonligini oshirish, 2025-yil yakunigacha markazlashgan investitsiyalar hajmi YaIM dagi ulushi 37,5% ga'ni, 1002,5 mlrd so'mga yetkazish investitsiya siyosatining asosiy maqsadi etib belgilangan.³⁹

Davlatlar o'rtasidagi xalqaro savdoning rivojlanishi, ishlab chiqarish integratsiyasining kengayishi va takomillashuvi tashqi iqtisodiy faoliyatni yanada erkinlashuviga sabab bo'lmoqda.

O'zbekiston Respublikasi prezidentining PF-158 sonli farmoniga ko'ra "O'zbekiston – 2030" strategiyasi ishlab chiqildi. Unga ko'ra, mamlakatimizning investitsion jozibadorligini yanada oshirish, Mamlakatimizda 250 milliard dollarlik investitsiyalarni o'zlashtirish, jumladan 110 milliard dollar xorijiy investitsiyalar va 30 milliard dollar davlat-xususiy sheriklik doirasidagi investitsiyalarni jalb qilish, Hududlarning investitsion reytingini yuritish, har bir

38 O'zbekiston Respublikasi Prezidentining ikkinchi Toshkent investitsiya forumida so'zlagan nutqidin. 27.04.2023.

39 O'zbekiston Respublikasining 2025-yilgacha investitsiya siyosati strategiyasi.

hududning imkoniyatlaridan kelib chiqib, uning investorlar uchun jozibadorligini yanada oshirish kabi asosiy maqsadlari belgilab qo'yildi. 40

Mamlakatimiz iqtisodiyotiga xorijiy investitsiyalarning jalb etilishi uning iqtisodiy imkoniyatlarining kengayishini tezlashtirib, barcha sohalarda ichki imkoniyat va rezervlarni ishga solish hamda davlatimiz iqtisodiy rivojlanishini ta'minlashda muhim ahamiyat kasb etadi.

Adabiyotlar tahlili

Bugungi kunda xalqaro iqtisodiy munosabatlarni yanada yaxshilash hamda xorijiy investitsiyalar masalasi iqtisodiy tadqiqotlarning muhim yo'nalishlaridan biriga aylangan. Ushbu sohada bir qator olimlar iqtisodiy tadqiqotlar olib borganlar.

Iqtisodchi olim F. Xenius xorijiy investitsiyalarga quyidagicha ta'rif bergan: "Xorijiy investitsiyalar – bu bir mamlakat hududidan ikkinchi mamlakat hududiga kiritilgan, eksport qilingan investitsiyalar".

Iqtisodchi E.R. Orlovaning ilmiy izlanishlarida "Mintaqaning investisiya jozibadorligi investisiyalashning dastlabki ob'ektiv omillarini o'zida aks etiradi va mintaqaning o'ziga xos investisiya salohiyati va notijorat investisiya tavakkalchilik darajasidan kelib chiqqan holda shu mintaqaga jalb qilingan kapital qo'yilmalar hajmida miqdoriy tomonlama aks etadi", deb ta'riflanadi. [4]

Bundan tashqari, professor D.G'ozibekovning xorijiy investitsiyalar to'g'risidagi nazariy qarashlarida quyidagi fikrlar bayon etilgan: "Chet el investitsiyalari bir iqtisodiyot subyekti kapitalini o'zga iqtisodiyotga muayyan muddatga bog'lash bo'lib, ichki investitsiyalardan risklar kengligi bilan farqlangan holda, huquqiy sharoitlarning, investisiya muhitining o'zgarishi bilan tavsiflanadi va natijada mamlakatlar va mintaqalar bo'ylab kapital ko'chishi yuz beradi".[5] Ushbu fikrlardan shunday xulosa qilish mumkinki, xorijiy investitsiyalar bir mamlakat iqtisodiyotidan mutloq boshqa davlat iqtisodiyotiga ko'chuvchi kapital bo'lib, u risklar doirasi kengligi bilan ichki investitsiyalardan farqlanadi.

Iqtisodchilar G.M. Galeeva and E.N. Kadeevalarning fikrlariga ko'ra: To'g'ridan-to'g'ri xorijiy investitsiyalarni jalb qilishning asosiy omillari bozorlar va resurslarga kirishdir. Chet el kapitalining faqat ayrim mintaqalarda va ayrim tarmoqlarda kontsentratsiyasi boshqa mintaqalar iqtisodiyotining rivojlanishini cheklaydi, birinchi navbatda sanoati rivojlanmagan mintaqalar iqtisodiyotiga ta'sir qiladi. [6]

Shuningdek, iqtisod fanlari doktori N. Qo'ziyevaning ilmiy ishlarida xorijiy investitsiyalarning mohiyati to'g'risida: "Kelgusida foyda olish maqsadida kapitalni eksport qiluvchi xorijiy davlatlar, yuridik va jismoniy shaxslarning kapitalni qabul qiluvchi mamlakatlarga turli ko'rinishdagi boyliklar (ko'char, ko'chmas mol-mulk, intellektual boyliklar va boshqalar) va ulardan olingan daromadlar (foйда, foizlar, dividendlar, litsenziya va komission mukofotlar,

40 O'zbekiston Respublikasi Prezidentining «O'zbekiston – 2030» strategiyasi to'g'risidagi farmoni. 11.09.2023. PF-158.

royalti, texnik ta'minot va boshqa mukofotlar)ni qo'yilishiga xorijiy investitsiyalar deyiladi"[7] degan ta'rif keltirilgan.

Tadqiqot metodologiyasi

Mazkur maqolada mamlakatimiz iqtisodiy rivojlanishida hamda tashqi iqtisodiy faoliyatni oqilona tarzda olib borishda bajarilishi lozim bo'lgan ishlar, uning asosiy yo'nalishlaridan biri respublikaga chet el investitsiyalarini jalb etish ekanligi o'rganilgan. Chet el investitsiyalarini jalb etish bo'yicha olib borilayotgan ishlar, mamlakatimizning xalqaro maydondagi darajasi, mamlakatimizning jahon savdosida o'z o'rniga ega bo'lishi uchun amalga oshirilayotgan chora-tadbirlar tahlil qilingan.

Ushbu maqolani yozish jarayonida statistik va analitik tahlil, kuzatuv, ma'lumotlarini taqqoslash kabi tahlil usullaridan foydalanildi.

Tahlil va natijalar muhokamasi

Jahon tajribasi shuni ko'rsatadiki, qaysi davlat faol investitsiya siyosatini yuritgan bo'lsa, o'z iqtisodiyotining barqaror o'sishiga erishgan. Shu sababli ham investitsiya – bu “iqtisodiyot drayveri”, desak, mubolag'a bo'lmaydi. Investitsiya bilan turli soha va tarmoqlarga, hududlarga yangi texnologiyalar, ilg'or tajribalar, yuksak malakali mutaxassislar kirib keladi, tadbirkorlik jadal rivojlanadi.

Milliy iqtisodiyotni rivojlantirishda xorijiy investitsiyalarning ahamiyati katta bo'lib, u quyidagilar bilan izohlanadi:

birinchidan, ishlab chiqarishga zamonaviy texnika va texnologiyalarni joriy etib, eksportga mo'ljallangan mahsulotlarni ishlab chiqarishni rivojlantiradi;

ikkinchidan, import o'rnini bosuvchi tovar ishlab chiqarishni yo'lga qo'yish va buning uchun xorijiy investitsiyalarni iqtisodiyotning ustivor sohalariga yo'naltirish va pirovardida aholining me'yordagi turmush darajasini ta'minlash imkonini yaratadi;

uchinchidan, kichik biznesni, xususiy tadbirkorlikni rivojlantirish va qishloq xo'jaligi ishlab chiqarishini jadallashtirish orqali o'sib borayotgan aholini ish joylari bilan ta'minlaydi;

to'rtinchidan, korxonalarining eskirgan ishlab chiqarish quvvatlarini, moddiy- texnik bazasini yangilaydi va texnik qayta qurollantiradi;

beshinchidan, tabiiy resurslarni qayta ishlovchi korxonalarni barpo etishga ko'maklashadi, davlat byudjetiga soliq tushumining kelib tushishi ko'payadi.

Hozirgi kunda O'zbekiston iqtisodiyotiga xorijiy investitsiyalar oqimining jadal sur'atlarda o'sishini quyidagi omillar belgilab bermoqda:

- 1) mamlakatdagi investitsiya muhitining barqarorligi;
- 2) valyuta kursini tartibga solishdagi ijobiy o'zgarishlar;
- 3) mamlakatning soliq mexanizimini takomillashtirishning aniq yo'nalishlari belgilanganligi;
- 4) soliq qonunchiligida xorijiy investitsiyalarning faoliyatini tartibga soluvchi qaror va qonunlarning ishlab chiqilganligi;
- 5) jahon tovar bozorlaridagi eksportyorlar uchun qulay narx konyukturasi vujudga kelganligi.

Davlatimiz rahbari matbuot xizmati ma'lumotiga ko'ra, o'tgan yil yakuni bilan jami 22 milliard dollardan ziyod xorijiy investitsiyalar o'zlashtirilgani, bu avvalgi yilga nisbatan 1,8 barobar ko'pligi ta'kidlandi.

Yirik investorlar bilan manzilli ishlash, investitsiyalarni jalb qilishda iqtisodiy diplomatiyani va chet eldagi diplomatik vakolatxonalar ishtirokini kuchaytirish muhimligi alohida qayd etildi.

Yangi investitsiya loyihalarni amalga oshirishda hududlardagi maxsus zonalardan hamda sanoat kooperatsiyasi imkoniyatlaridan keng foydalanish orqali qo'shilgan qiymat zanjirini yaratish zarurligi ko'rsatib o'tildi. Tarmoq va hududlar rahbarlari investitsiya masalalarini hal etishda sanoat tarmoqlari bilan yaqindan ishlashi, asosiy e'tiborni hududlarda iqtisodiyotni diversifikatsiya qilish, yangi ish o'rinlarni ko'paytirishga qaratishi shartligi qayd etildi.

Xalqaro moliya institutlari mablag'laridan samarali foydalanish va ularni o'z vaqtida o'zlashtirish, ushbu mablag'larni ustuvor ravishda ijtimoiy, infratuzilma hamda suv xo'jaligi loyihalariga yo'naltirish zarurligi ta'kidlandi.

Xulosa

Xorijiy investitsiyalar ishtirokidagi yangi korxonalar sonining tobora ortib borishi va yangilari barpo etilayotgani davlatimizning bu sohaga bo'lgan katta e'tibori va ularga yaratib berayotgan qulayliklari natijasidir. Shu boisdan ham mamlakatimizga xorijiy sarmoyalarni jalb etayotgan korxonalarni iqtisodiy rag'batlantirish va ular uchun zarur sharoitlarni yaratib berish o'ta muhim masalalardan biri hisoblanadi. Shuning uchun ham milliy iqtisodiyotimizga xorijiy investitsiyalarni jalb qilishni faollashtirishda quyidagi chora-tadbirlarni amalga oshirish zarur:

birinchidan, inflyatsiya darajasini investitsion loyihalar qiymat o'sishiga ta'sirini kamaytirish, shuningdek, xorijiy investitsiyalar hajmini yanada ko'paytirish;

ikkinchidan, investitsiyalarni real ishlab chiqarish sohasiga, ya'ni xomashyoni qayta ishlovchi tarmoqlarga jalb etish;

uchinchidan, chet el investorlariga yanada qulay investitsiya muhitini yaratish maqsadida rag'batlantirish tizimini yanada takomillashtirish, xususan, soliq yukini

kamaytirish va soliq tizimini investorlar uchun ham soddalashtirish;

to'rtinchidan, xorijiy iqtisodiy sub'ektlar bilan o'zaro manfaatli loyihalarni amalga oshirish tizimini takomillashtirish va ular bilan erkin investitsion iqtisodiy zonalarni tashkil etish;

beshinchidan, infratuzilmasi mavjud va rivojlanishi qulay bo'lgan joylarga investorlarni jalb qilish orqali sanoatni tizimli rivojlantirish;

oltinchidan, uzoq muddatli, past foizli to'g'ridan-to'g'ri xorijiy kredit resurslarini jalb etish ishlarini kuchaytirish;

yettinchidan, xorijiy tajribalardan kelib chiqqan holda xorijiy investorlarni davlat tomonidan qo'llab-quvvatlovchi jamg'armalar tashkil etish.

Yuqoridagi takliflarni amaliyotda joriy etish milliy iqtisodiyotimizga xorijiy investitsiyalarni jalb etishni yanada faollashtirishga ijobiy ta'sir ko'rsatadi. Ushbu holat pirovardida ishlab chiqarishni texnik va texnologik jihatdan uzluksiz yangilab borish, iqtisodiyotda chuqur tarkibiy o'zgarishlarni amalga oshirish, sanoatni modernizatsiya va diversifikatsiya qilishni izchil davom ettirish asosida, kelgusida mamlakatimizda investitsion siyosatni to'liq amalga oshirish imkoniyatini yaratadi.

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Nazarov B.M.
teacher of mathematics and computer science
Ergashov L.M.
teacher of mathematics and computer science

METHODS FOR SOLVING LINEAR EQUATIONS AND SYSTEMS OF EQUATIONS USING MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES

Annotation. The article discusses the use of means and methods of electronic information tools for educational and methodological purposes in subject-matter mathematical activities as a tool for solving mathematical problems that develop the practical skills of schoolchildren and students in practical classes in algebra when solving algebraic systems of equations.

Key words: information and communication technologies, mathematics education, computer mathematical systems.

Today there is a growing need to improve the efficiency of education through the widespread use of innovative pedagogical and information technologies in the educational process. The use of new information and communication technologies in mathematics lessons saves time, increases the complex knowledge of students by solving many problems and examples, allows them to think independently, independently carry out the conditions of the task, gain a deep understanding of the subject and independently express their ideas.

The ongoing changes in the socio-economic development of Uzbekistan, which have led to reform in all areas, require improving the quality of professional training of university specialists. In this regard, there is a need to improve the training of future teachers in the context of informatization of education. The use of information and communication technologies in pedagogical activities is aimed at improving the preparation of a future teacher for teaching mathematics in the conditions of informatization of mathematics education. This opens up unique opportunities for school teachers and university mathematics teachers to intensify the processes of cognition and activity of students, making it possible to improve the quality of information and communication competence of students and the quality of assimilation of educational material.

In this regard, the problem of using information technology in the educational process of a modern pedagogical university as an effective teaching tool is of particular relevance. The involvement of mathematical systems is possible and advisable in school education - both in the basic school mathematics course and in the course system of a specialized school, where elective courses aimed at deeper mastery of the capabilities of mathematical systems can be used for this purpose. In this case, one should proceed from the fact that computer mathematical systems are not an end in themselves: they are based primarily on

mathematics, and only then on technology - as an auxiliary element that expands and develops the worldview and competencies. This eliminates the factor of replacing the process of development of mathematical thinking with the formal use of computer tools. It is necessary to introduce computer mathematical systems into the domestic education system in such a way as to preserve all the best in it and at the same time equip the teacher and student with new technology, give the teacher a new methodology that will improve the quality and efficiency of teaching.

We use computer technologies in teaching as a tool for solving mathematical problems to implement new didactic approaches to mathematical activities that develop the practical skills of schoolchildren and students based on the inclusion of tools and methods of electronic information tools for educational and methodological purposes in the subject mathematical activities. One of the main types of electronic information tools for educational and methodological purposes is intelligent learning systems (ITS).

An intelligent learning system (ITS) is an e-learning system that includes elements of artificial intelligence and allows you to solve the problem of constructing the sequence of studying a course that is most suitable for a student, adapting the course to the knowledge or other characteristics of the student.

Intelligent training systems should be presented in the form of systems that have a unique sequence of training in accordance with the specified criteria of the individual characteristics of the learner.

Intelligent learning systems consist of three components. The first of these is the learner model. This model is a block with information about the student, his chosen learning strategy and the mistakes he makes. The second component is a model of the learning process. It specifies the form for presenting information to the learner and the type of assessment of the quality of the learner's activity. This block includes the process of training a student of the course, as well as establishing a list of tests. In addition, this includes final control procedures on the topic being studied. The model interface is the connecting link between the expert block of the intelligent teaching system and its other blocks.

There are certain principles for building intelligent learning systems. These principles include the principle of pragmatic diagnosis, the principle of comparing the current model of the learner with the model of the ideal learner, the principle of "generative interfaces", non-equifinality of training and the principle of the necessary diversity of learning influences. The principle of comparing the current student model with the ideal student model implies the inclusion of diagnostics and comparison of the curriculum with the list of tasks completed by the user. The principle of pragmatic diagnosis implies the creation of a curriculum framework and a structure for subordinating the course student's error diagnosis system to the learning management system. The principle of "generative interfaces" implies the selection and adjustment of elements of the educational process that differ in content, depending on the specific needs of the student and his knowledge at the

time of selection. The principle of non-equifinality of learning speaks about different approaches to presenting the learning process based on the different level of knowledge of a student in a certain course. The principle of the need for a variety of educational influences suggests that the teacher must have in-depth knowledge about the options for influencing the student.

Modern intelligent teaching systems have various intellectualization algorithms. The purpose of their use is to carry out the process of teaching natural science subjects. They have the functionality to evaluate a step in the user's decision process based on the criteria of "correct" and "incorrect." In addition, such intelligent training systems provide hints indicating the user's wrong step or his further actions. An integral function of such systems is that they assign grades based on the results of the course. When operating a system of this class, the user's decision process is checked against the criteria of completeness and correctness. These criteria are checked by comparing the steps of the user's solution and the steps that are specified in the system by default.

If the substitution results in an identity, then the formula is correct. Suppose that the user entered the formula $c = f + 2$. From the conditions of the problem it follows that $c = 4$, $f = 2$. Since $4 = 2 + 2$, the formula entered by the user is correct. Calculating progress in solving a problem is much more difficult. In this case, the simplest way to measure progress in solving will be to present solutions to the problem known to the program in the form of lists of formulas and compare the formulas entered by the user of the intelligent learning system with formulas from these lists. In this case, to measure progress, it will be necessary to first select one of the known software solutions that is closest and most suitable to the student's solution, and then review what percentage of the formulas it contains are contained in the student user's solution steps. The higher this percentage, the greater the progress in the student's solution. The disadvantage of using such a relatively simple method of storing and processing information about solutions to problems is the need to introduce into the intelligent learning system a fairly large set of possible solutions that differ from each other by one, two or more formulas.

It can be noted that the success of automated management of the educational process strongly depends on the degree of faith of the student in the intelligence of the program. This belief depends significantly on how well the program understands his actions. The automated learning management algorithm should be advisory in nature. It should also be possible to turn it off at the request of the student. Meanwhile, in cases of irrational user behavior (for example, students' abuse of short text prompts while solving problems), it is necessary to include an impact on the learning process with the involvement of additional teachers of the subjects being studied. To summarize, we can say that intelligent teaching systems could significantly facilitate the learning process for students and teachers, but if students want to deceive the system and have incorrect motivation (it is not interesting to study the subject, but it is interesting to get good grades), it will still be difficult to do without the participation of the teacher.

Mathematics classes are held in a computer lab equipped with an interactive whiteboard.

By using Excel to solve some examples and problems, an accurate and simple solution can be obtained in a much shorter period of time. At the same time, an image of the exact solution of the system is created in the Excel program window. This, in turn, allows students to learn by listening, seeing and doing.

Solving algebraic systems of equations in the MathCAD package. A system of linear equations can be solved using the matrix method (either via the inverse matrix or using the `lsolve (A, B)` function) and using the two `Find` functions and the `Minerr` function. Systems of algebraic equations are solved in the computing unit. We set initial approximations for all variables. Enter the keyword `Given`.

Let us write down the system of equations specified for the solution. When writing equations, the equal sign must be entered not with the `=` (equals) key, but with the key combination `Ctrl + =`. An expression containing a `Find` function with unknowns is entered as parameters. The calculation result is given in the form of a vector. This is the solution to the system. The computing unit allows you to solve systems from 1 to 200 equations.

We check the found roots. To do this, we substitute the found roots into this equation.

By clicking the `Advanced Options` button, you can set additional options in addition to selecting methods.

We will show the solution of algebraic systems of equations using the `lsolve` function. Note that `M` can be neither degenerate nor nearly degenerate for use with `lsolve`. A matrix is called singular if its determinant is zero. A matrix is almost singular if it has a large condition number.

The `Lsolve` function is specified as: `lsolve (A, B)`, where `A` is the matrix of the system of linear algebraic equations, and `B` is the vector of free terms on the right side of the system of linear algebraic equations.

Method for solving a system of linear algebraic equations

$$2x + y + 2z = 7 \quad x + 2y + r = 8 \quad x + y + 2z = 9$$

The use of information and communication technologies in solving systems of algebraic equations allowed us to save time when solving systems of more than three complex equations; check the correctness of the solution if the system was initially solved without computer technology using traditional methods; generalize and consolidate acquired knowledge.

Thus, the practical use of information and communication technologies in the educational process when solving algebraic systems of equations is advisable due to the following main circumstances:

- allows teachers to achieve a fairly high relative efficiency in organizing search activities and self-control of students;
- saves time for acquiring skills in using computer technology, and the level of mastery of educational material is not lower than that achieved using traditional methods.

The introduction of electronic information tools into educational practice to a certain extent at different levels of full-time education makes it possible to improve the quality of information and communication competence of students and is aimed at improving the preparation of future teachers for specialized teaching of mathematics in the conditions of informatization of mathematical education.

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*Norboyeva D.D.
Jizzax Politexnika instituti o'qituvchisi
Khurmatov B.
Abu Ali Ibn Sino nomidagi Tojikiston
Davlat tibbiyot universiteti o'qituvchisi*

KORXONALARDA RAQOBAT MUHITINING AFZALLIKLARI

Annotatsiya. Ushbu maqolada raqobat afzalligining mohiyati, raqobat afzalligining nafaqat korxonalar balki jamiyat uchun afzalliklari, imkoniyatlari haqida so'z boradi. Jamiyatning iqtisodiy rivojlanishida raqobatning o'rni va uning salbiy tomonlari bormi? Raqobatning iqtisodiyotga foydasi hamda so'g'lom raqobat muhitini yaratishning hozirgi kunda yaratilayotgan shart sharoitlar haqida bilib olishingiz mumkin.

Kalit so'z: raqobat, bilim, xaridor, sifat.

*Norboyeva D.D.
teacher
Jizzakh Polytechnic Institute
Khurmatov B.
teacher
Tajik State Medical University named after Abu Ali Ibn Sina*

ADVANTAGES OF COMPETITIVE ENVIRONMENT IN ENTERPRISES

Abstract. This article talks about the essence of competitive advantage, advantages and opportunities of competitive advantage not only for the company but also for society. Is there a role of competition in the economic development of society and its negative aspects? You can learn about the benefits of competition to the economy and the conditions that are currently being created to create a healthy competitive environment.

Key words: competition, knowledge, customer, quality.

Raqobat afzalligini pichoq bilan urishayotganda, qo'lga qurol olish bilan tengdir iborasini tushunish mumkin. Ko'pincha kompaniyalar o'z raqobatchilaridan qandaydir bir ustunlik bilan emas raqobat afzalliklariga ega bo'lish muvaffaqiyat degan fikrdadir.

Kurashishning haqiqiy ustalari sifatida yaponlar ular oldiniga bozorga past narxlar bilan, keyin mahsulotning yaxshi xususiyatlari bilan, undan keyin yuqori sifat bilan va yakunida esa yuqori ishlab chiqarish sur'ati bilan chiqdilar. Ular marketing so'ngsiz poyga ekanligini tushundilar. Marketingni esa biz albatta sotishgacha bo'lgan jarayonni rejalashtirishni tushunsak maqsadga muvofiqdir.

Albatta bozor iqtisodiyoti sharoitida raqobatbardosh mahsulot yaratish uchun bozorni o'rganish, uning qonun qoidalarini yaxshi bilish, xaridorni va uning ehtiyojlarini o'rganib borishni taqozo etadi. Bugungi kunda xaridor o'z fikri, qarashlari va albatta nozik didga egadir. Bu bizni yanada samaraliroq ishlashga, yangiliklarga intilishga undaydi. Buni biz xaridorning individuallasuvi deb tushunsak ham bo'ladi. Bugun xaridor aynan bozordagi mahsulot emas balki, o'ziga xos mahsulotni istaydi va buyurtmalar qilish imkoniyatiga ega. Ehtiyojlari esa o'sib, ortib bormoqda. Insonlarni baxtli farovon yashashlarida barcha imkoniyatlar yaratilmoqda. Imkoniyatlar yaratish bilan birga yangi ish o'rinlari, daromad manbalari ko'payib boradi. Barcha ishlab chiqaruvchi tadbirkor egalarini bugun mahsulot ishlab chiqarishmas balki raqobatbardosh mahsulot ishlab chiqarish dolzarb masala bo'lib turadi. Bunda rejali ishlab chiqarish afzal bo'lib bozorga aynan qaysi mahsulotni taqdim etish uchun unda tadqiqotlar o'tkazish kerak bo'ladi.

Korxonalar o'zlarining raqobat afzalliklarini to'plaganlarida turli xil sifatdagi

-tezlik

-xavfsuzlik

-xizmat ko'rsatish

-dizayn

-ishonchdagi ustunlik

-past narx

Kompaniya bozordagi muvaffaqiyati turli omillarning ajoyib uyg'unligi bilan ta'minlanadi.

Rivojlangan korxonalarda bir birini kuchaytiruvchi afzalliklar yig'indisi ma'lum bazaviy g'oya atrofida guruhlashgan bo'ladi.

Barcha firmalarning raqobatchilari bor. Agar bitta aviakompaniya bo'lsa ham u poyezdlar, avtobuslar, avtomobillar, velosipedlar va hatto o'z manziliga piyoda borishni afzal ko'radiganlar bilan ham hisoblashishiga to'g'ri keladi.

Assortimentni raqobatchidan oldin eskirtirish uchun barcha kuchingizni ishlating. Bu o'z ustingizda tinimsiz ishlashni taqozo etadi. Nafaqat o'z hududingizdagilar balki uzoqdagilarni ham kuzatish kerak bo'ladi.

Boshqa baliqlarning odatini yaxshi biladiganlarga qaraganda, baliqlarning odatini yaxshi biladiganlar yutadi.

Prezidentimiz SH.M. Mirziyoyev aytganlaridek "Biz avvalo, iqtisodiyotni isloh qilish va erkinlashtirish borasidagi ishlarimizni yanada chuqurlashtirish, uning soha va tarmoqlarini-tarkibiy jihatdan o'zgartirish-bo'yicha boshlangan ishlarni jadallashtirishimiz va hududlarni modernizatsiya qilish, ularning raqobatdoshlik darajasini oshirish, eksport-salohiyatini rivojlantirish masalalari doimiy e'tiborimiz markazida bo'lishi lozim".

Korxonalarda raqobat afzalliklariga avvalo sifat tizimlarini joriy etilishi raqobat muhitida korxonalar yutug'i kafolati hisoblanadi.

Raqobatdoshlik konsepsiyasida bozorda raqobat sharoitida ishlab chiqarish, intellektual va axborot resurslari bozorlari mavjudligi tug'ildi.

Raqobatdoshlikning asosiy omillariga:

- moddiy resurslardan oqilona foydalanish
- nomoddiy resurslardan samarali foydalanish
- raqobat strategiyasi rejasi
- ehtiyojlarni o'rganish so'rovnomalar.

Globalashuv sharoitida raqobat kuchaygan davrda yashamoqdamiz. Raqobatda kurash o'z manfaatini himoya qilish, g'olib bo'lish uchun xarakat, usul va vositalardan foydalanish demakdir.

Raqobat bozor mexanizmining asosiy tarkibiy qismi bo'lib bozor iqtisodiyoti raqobatning mavjud bo'lishini taqozo etadi. Sog'lom raqobat muhitini yaratishda ishlab chiqarishni rivojlantirish ma'lum shart sharoitlarni yaratish bugungi kun pirovard maqsadimizdir.

Raqobatbardosh korxonalar bo'lish uchun avvalo ishlab chiqarish jarayonini takomillashtirish, mehnatni tashkil etish, ishlab chiqarish jarayonlarini samarali boshqarishni taqozo etadi. Ishlab chiqarish takomillashtirish uchun jarayonlarini mexanizatsiyalash va avtomatlashtirish usullaridan foydalanish samarali hisoblanadi. Korxonada nafaqat ishlab chiqarishni takomillashtirish balki kadrlar salohiyatining o'rni ham muhimdir. Yetuk kadrlarni ishga qabul qilish ularni malakalarini uzluksiz oshirib borish orqali korxonada innovatsion muhitni shakllantirishga erishish va bozorda raqobat muhitida faol ishtirok etia olishga erishiladi.

Albatta raqobat muhitidagi tadbirkorlik faoliyatlari rivojlanishiga yanada aholini yaxshi turmush shart sharoitlari yaratilishiga olib kelib, jamiyatning iqtisodiy ijtimoiy holatiga ijobiy ta'siri bo'ladi. Bugungi kunda raqobat afzalligi korxonalarni zamon bilan hamnafas harakat qilishga bozor talablari asosida mahsulot ishlab chiqarishga o'z bilimi ustida muntazam ishlashga undaydi. Raqobat afzalliklariga ko'plab misollar keltirish mumkin bunda xaridor ehtiyoj va talablarini bajarib borish, ularga xizmat ko'rsatishda yanada qulayliklarni taqdim etib yangi loyihalarni amalga oshiriladi. Bunda xaridor uchun sizda bugungi zamonaviy bozor iqtisodiyoti sharoitidagi barcha imkoniyatlardan foydalana olishini taqdim eta olishingiz bilan belgilandi. Oddiy misol qilib do'konga kirgan mijozga xizmat ko'rsatishning ham offline ham online sharoitlari sizda bo'lishi kerak bo'ladi. Yoki mahsulot yetkazib berishdagi zamonaviy qulayliklar, sotib olishning yengil shartlari, to'lovning turlari mavjudligi bilan ham baholanadi. Shu bilan birga kadrlar salohiyati, mijozlar bilan ishlash texnikasidagi bilim malakalaridagi yutuqlari raqobat afzalliklarining yaqqol ko'rinishidir. Chunki raqobatbardoshlik bugun faqat texnikaning o'zigina yetarli emasligini insonlar ehtiyoji faqatgina moddiy emasligini ko'rsatmoqda. Balki u jamiyatda hurmat izzat qilinishi uning fikri dunyoqarashi inobatga olinishi va muomalada chiroyli munosabatda bo'lishlarini istaydi. Raqobat muhitida nafaqat moddiy ehtiyojlar balki mijozlar bilan ishlash texnikasidagi bilimlar muhim rol

o'ynaydi. Ya'ni bugun mijoz u bilan iliq samimiy munosabatda bo'lgan savdo qilgan sotuvchisi bilangina gaplashadi. Bu nafaqat muomala balki marketingning muhim elementidir.

Shuningdek raqobat afzalligi bugun olib borilishi kerak bo'lgan tahlillarni keltirib chiqib va ular ustida bajarish kerak bo'lgan muhim vazifalarni qo'yish bilan birga iqtisodiyotimizning gullab yashnashiga xizmat qilib qoladi.

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*Normamatov I. B.
associate professor
Karshi Engineering and Economic Institute
researcher
Samarkand Institute of Economics and Service*

THE ROLE OF THE EXPERIENCE OF FOREIGN FINANCIAL INSTITUTIONS IN THE DEVELOPMENT OF THE COUNTRY'S ECONOMY

Abstract. In the article have been identified the problems associated with improving the practice of using forms of cashless payments in the Republic of Uzbekistan and developed scientific proposals aimed at solving these problems.

Keywords: Payment order, check, documentary letter of credit, clean collection, documentary collection, liquidity, commercial bank, overdraft, security, priority of payments.

INTRODUCTION. In the "Strategy for further development of the Republic of Uzbekistan in 2017-2021", approved by the Decree of the President of the Republic of Uzbekistan dated February 7, 2017 No 4947, the development of cashless payments is recognized as a necessary condition for ensuring stable macroeconomic growth not. Because there are current problems related to improving the practice of using cashless forms of payment in the Republic of Uzbekistan. In particular, in the practice of the republic, more than 90% of payments made through documented letters of credit are made through secured letters of credit.¹

This article develops solutions to the problems associated with improving the practice of using cashless forms of payment.

LITERATURE REVIEW. Opinions on the content of the concept of cashless settlements in the economic literature differ significantly from each other. A.S. Neshitoy, E.F. In the works of Zhukov, VP Polyakov and a number of other economists it is understood that cashless payments are made by transferring money through bank accounts and on the basis of mutual waiver of claims. For example, according to E. Zhukov, "non-cash settlements are settlements that are carried out without the use of cash, by transferring money to the accounts of credit institutions and waiving mutual claims"

In our opinion, this definition is specific to the practice of transition economies (Russia, Uzbekistan, Kazakhstan, Ukraine, etc.), where there is still a procedure for waiving mutual claims. In the practice of developed countries, however, there are no calculations based on the waiver of mutual demands and obligations. In countries with economies in transition, the amount of receivables and payables among businesses is high due to the low level of money supply in

the economy. In such circumstances, the debtor-creditor is forced to use the method of mutual waiver of claims and obligations in order to reduce the amount of debt, reduce the indebtedness of business entities to the state budget. For example, in the Republic of Uzbekistan, as of January 1, 2018, the current level of monetization coefficient was 29.4%

In the textbook "Banking", edited by Prof. OI Lavrushin, non-cash payments include the following three forms of payments:

- settlements made by writing on the accounts of payers and recipients of funds opened in credit institutions;
- settlements made by waiving mutual claims;
- settlements through the transfer of circulating payment instruments (bills, warrants, etc.)

-Contrary to the above definition of cashless settlements, O.I. According to Lavrushin's definition, settlements made through payment instruments are also included in non-cash settlements. In our opinion, the definition given by OI Lavrushin serves to fully disclose the content of cashless settlements. Two types of payment instruments, namely ordinary and transferable promissory notes, are widely used to make payments for goods and services. Characteristically, commercial bills can serve as a means of payment of money. Therefore, a non-cash payment can replace a certain portion of the cash involved in the turnover. There is a second side to the issue.

In our opinion, it is expedient to add some clarity to this definition, formulated by O.I. Lavrushin. That is, instead of "bank accounts of payers and recipients of money" should be replaced by "current accounts of payers and recipients of money in banks." This is because there are three main types of bank accounts of suppliers and payers: current deposit accounts, time deposit accounts, and savings deposit accounts. But payment documents are only credited to the current deposit account. Therefore, in our opinion, the current deposit account should be clearly stated in the definition.

The results of research conducted by J. Chanel-Reyno and E. Blua showed that well-established relationships of small businesses with large enterprises increase their access to cashless forms of payment.

According to E. Shodmonov, non-guarantee of payment is the main shortcoming inherent in payments through payment orders. The second drawback is that the risk of supplying substandard goods remains when the bulk of the goods are paid for.

According to H. Rahimova, the limited use of non-cash instruments in the economic turnover of the country, especially the underdevelopment of the practice of using credit instruments, slows down the payment process in the country's economy, leading to non-fulfillment of contractual obligations of business entities.

According to Bobakulov, the fact that the bulk of the population's payments are made in cash, the underdevelopment of payments by plastic cards

and checks contributes to the high level of demand for cash. In countries where the system of cashless settlements, payment cards based on plastic cards and paid checks is not developed, a significant part of the turnover is carried out in cash. As a result, there is, firstly, a direct link between cash flow and economic activity in the country; second, the impact of cash circulation on the exchange rate of the national currency increases.

ANALYSIS AND RESULTS. Currently, four forms of cash are used in the economic practice of the Republic of Uzbekistan: payment request, payment order, documented letter of credit and collection.

Table – 1. Structure and dynamics of non-cash payments in the Republic of Uzbekistan

Cashless payment forms	Years					In 2023 year to 2018 years, in %
	2018	2019	2020	2021	2022	
Payment request	0,12	0,26	0,18	0,16	0,16	0,04
Payment order	99,61	99,49	99,46	99,52	99,38	- 0,23
Documentary letter of credit	0,02	0,02	0,01	0,01	0,04	0,02
Collection	0,25	0,23	0,35	0,31	0,42	0,17
Payments - total	100,0	100,0	100,0	100,0	100,0	x

According to Table 1, the largest share in the total volume of non-cash payments made through non-cash forms of payment in the country is occupied by payments made through payment orders. This is a negative situation in terms of improving the practice of using cashless forms of payment.

Also, in the total amount of non-cash payments, payments made through payment applications and collection forms occupy a very small share.

The payment request does not exist in the economic practice of developed countries. This is because, in the practice of these countries, goods sold with a deferred payment are considered to have been sold on credit. Interest is paid on goods sold on credit.

From the data of Table 1 it is clear that in the practice of the republic there is no development of cashless settlements through the form of collection.

Using the data in the figure below, we estimate the change in the amount of cashless settlements made through cashless settlement forms and memorial orders.

The amount of non-cash settlements in the Republic of Uzbekistan through non-cash forms of settlement and memorial orders, bln. Sum.

It can be seen from the data in Figure 1 that in the practice of our republic the amount of payments made through memorial orders is relatively large. This indicates that the practice of using cashless payment forms has not been improved.

One of the current problems with the use of the payment request is the problem of timely collection on the basis of the act of reconciliation of payment.

The essence of the problem is that some farms have purchased goods from private firms. The fact that many of these firms have closed down to collect payment is causing difficulties.

In the practice of international banking, there is a lack of objects of the first category of collateral in the practice of the republic. For example, land is a first-category collateral. Thus, there is a problem of lack of highly liquid and reliable collateral in the banking and economic practice of the country. This, in turn, prevents banks from increasing the volume of credit operations. In the banking practice of developed foreign countries, securities transactions are the second main type of activity of banks after loans.

CONCLUSIONS AND RECOMMENDATIONS. In our opinion, one of the main shortcomings in the mechanism of using non-cash forms of payment is the lack of check checks used in the banking practice of the Republic of Uzbekistan for settlements between enterprises. Because in international banking practice, check checks are an independent form of cashless settlements and have their own advantages. Hence, their absence in the country's payment practice indicates that cashless settlements are not being fully implemented.

It is noteworthy that in developed countries, the amount of payment on checks is not deposited in a separate account. However, there is no problem of non-payment on checks in these countries. This is explained by the fact that a significant part of the checks are paid by loans from commercial banks. If the check does not have funds in the payer's current account at the time of receipt at the payer's bank, then the check is paid by the commercial bank from an overdraft or term loan account.

The results of the analysis performed in the second chapter of the study showed that 99% of the payments made through cashless payment forms accounted for the share of payments made through payment orders. This indicates that the practice of using non-cash forms of payment through letters of credit has not improved.

Failure to deliver the goods on time will result in a decrease in the real value of the deposited funds. This takes into account changes in inflation and devaluation rates.

In our opinion, in order to improve the practice of using cashless forms of payment in our country, it is necessary to implement the following measures:

1. It is necessary to increase the volume of unsecured documentary letters of credit operations for customers with stable cash flow.

2. It is necessary to increase the level of liquidity in the assets of commercial banks by increasing the share of investments in highly liquid securities and using the stable balance of demand deposits as a resource.

3. It is necessary to increase the amount of commission income of commercial banks and reduce the creditworthiness of customers by providing guarantees for the payment obligations of customers belonging to the first class in terms of creditworthiness.

4. In the case of a targeted sequence of payments, it is necessary to eliminate the risk of transformation, ensure normative levels of indicators characterizing credit risk and ensure a stable level of net interest spread in order to ensure the continuity of payments through commercial banks.

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*Nurmatov N.E.
Shahrisabz davlat pedagogika instituti
Geografiya kafedrası o'qituvchisi*

QISHLOQ XO'JALIGIDA AMALGA OSHIRILGAN ASOSIY ISLOHOTLARNING CHORVACHILIK TARMOG'I RIVOJLANISHIGA TA'SIRINING ASOSIY XUSUSIYATLARI

Annotatsiya. Maqolada O'zbekiston mustaqil bo'lgandan so'ng qishloq xo'jaligi sohasida amalga oshirilgan islohotlar va uning chorvachilik tarmog'i rivojlanishiga ta'siri, hududiy rivojlanish xususiyatlari hamda kelajakda tarmoq rivojlanishining ustuvor yo'nalishlari bayon qilingan.

Kalit so'zlar: qishloq xo'jaligi, chorvachilik, islohot, fermer xo'jaligi, dehqon xo'jaligi, yer resurslari, yem-xashak bazasi, yaylovlar.

*Nurmatov N.E.
teacher
Department of Geography
Shahrisabz State Pedagogical Institute*

KEY CHARACTERISTICS OF THE IMPACT OF MAIN AGRICULTURAL REFORM ON THE DEVELOPMENT OF THE LIVESTOCK NETWORK

Annotation. The article describes the reforms implemented in the agricultural sector after Uzbekistan gained independence, and their impact on the development of the livestock industry, features of regional development and priority directions for the development of the industry in the future.

Key words: agriculture, livestock breeding, reform, farming, farming, land resources, fodder supply, pastures.

Qishloq xo'jaligi hozirgi kunda jahon, milliy va mintaqaviy iqtisodiyot tarkibida yetakchi o'rinlarni egallaydi. Biroq uning rivojlanishi va ixtisoslashuvi turli mamlakatlarda turlicha kechadi. Rivojlanayotgan davlatlarda qishloq xo'jaligi, xususan, dehqonchilik ko'proq ekstensiv holatda bo'lsa, rivojlangan mamlakatlarda u intensiv ko'rinishga ega. Shunga mos tarzda agroiqtisodiyotning samaradorligi, mehnat unumdorligi ham geografik jihatdan farqlanadi. Ayni vaqtda, qishloq xo'jaligining asosiy xususiyatlari ushbu tarmoqning rivojlanish va joylanishini belgilab beradi.

O'zbekistonda mustaqillik yillarida qishloq xo'jaligida o'tkazilgan islohotlar jarayonini undagi ustuvor vazifalar, yo'nalishlar, amalga oshirilgan iqtisodiy tadbirlarning mohiyatiga ko'ra shartli ravishda *bash bosqichga* bo'lish mumkin.

Iqtisodiy islohotlarning *birinchi bosqichi* respublika mustaqilligining dastlabki yillaridan (1991 y.) boshlanib, 1997-yilgacha davom etdi. Bu bosqich mamlakatda qishloq xo'jaligini barqarorlashtirishni ta'minlash va rejali iqtisodiyotdan bozor iqtisodiyotiga o'tishning birlamchi asoslari yaratilganligi bilan tavsiflanadi. Mamlakatda g'alla mustaqilligiga erishish yo'li belgilandi, buning natijasida don ekinlari, birinchi navbatda, bug'doy ekin maydonlari keskin ko'padi. Bu bosqichda sobiq sovxozlar shirkat xo'jaliklariga aylana boshladi. 1991 yilda yirik qishloq xo'jaligi korxonalari a'zolari o'z ulushi va mol-mulki bilan ulardan chiqish huquqiga ega bo'lganligi sababli dastlabki fermer xo'jaliklari (asosan chorvachilik) paydo bo'la boshladi. Fermer xo'jaligining ushbu yangi shaklining huquqiy maqomi 1992-yil iyul oyida qabul qilingan "Dehqon xo'jaligi to'g'risida"gi qonunda mustahkamlab qo'yildi. Fermer xo'jaliklarini tashkil etish uchun yer uchastkalarini berish juda ko'plab kriteriyalarni (nomzodlarning moliyaviy imkoniyatlari, ularning qishloqda yashagan vaqti va qishloq xo'jaligidagi ish tajribasi, mavjud texnikalar soni, ma'lumotlilik darajasi va b.) hisobga olgan holda tanlov asosida amalga oshirildi. Jamoa xo'jaliklarini qayta qurish davrida fermer xo'jaliklarini tashkil etish uchun yerlar qayta tashkil etilgan xo'jaliklar yerlaridan ajratildi.

1997 yilning o'rtalariga kelib, bug'doy va paxtadan tashqari barcha turdagi qishloq xo'jaligi mahsulotlariga davlat buyurtmalari bekor qilindi. 1998 yilda Yer kodeksi qabul qilindi. Qishloq xo'jaligi yerlariga davlat mulki huquqini mustahkamladi, yuridik va jismoniy shaxslarning yer uchastkalariga bo'lgan huquqlarini, yerdan oqilona va samarali foydalanish bo'yicha javobgarligini, egalik, foydalanish va ijara huquqining davlat kafolatlarini ta'minladi, uchastka, yerdan foydalanganlik uchun to'lovlari, yerni ijaraga berish tartibini belgilab berdi.

1998 yilda hukumat ishlab chiqaruvchilarning uchta toifasi mavjudligini rasman belgilab berdi va e'lon qildi: dehqon xo'jaliklari (tomorqadagi qishloq xo'jaligi mahsulotlariga asoslangan), shirkatlar (qishloq xo'jaligi korxonalari) va fermer xo'jaliklari, ularning har biri yer hajmi, yer uchastkasi va undan foydalanish shakllari, mehnat shartnomalari va ishlab chiqarish ixtisoslashuvi turi bo'yicha farqlanadi. Bu o'zgartirishlar 1998-yil 30-apreldagi "Qishloq xo'jaligi kooperativi (shirkat) to'g'risida", "Fermer xo'jaligi to'g'risida", "Dehqon xo'jaligi to'g'risida"gi qonunlarda mustahkamlab qo'yildi.

Kolxozlar o'z mehnatkashlari o'rtasida mulklarga xususiy mulk bo'lgan a'zolik ulushlarini chiqarish va taqsimlash hamda qishloq xo'jaligi ishlab chiqarish shartnomalarini bajarish uchun aktsiyadorlarga dalalar ajratish yo'li bilan shirkatga aylandi. Fermer xo'jaliklarining ta'rifi tubdan o'zgarib, ularga shirkatsiz mustaqil, ishlab chiqarish qarorlarini, shu jumladan, resurslar va mahsulotlarni taqsimlash imkoniyatini berdi.

Islohotlarning birinchi bosqichida sohani isloh qilishni aniq tadbirlar bo'yicha olib borilishiga qaramasdan rejali iqtisodiyot unsurlari saqlanib qoldi. Bunga sabab – qishloq xo'jaligida mahsulot ishlab chiqarishini moliyalashtirish o'zgarishsiz qolib, asosan markazlashgan tizim orqali olib borilishi, qishloq

xo'jaligi ekin turlarini joylashtirish va qishloq xo'jaligi mahsulotlarinarxini belgilashhamdaularni sotish markazlashgan tarzda olib borilishi, moddiy manfaatdorlik tizimining aytarli o'zgarmaganligidir.

Ikkinchi bosqich (1998-2002 yillar). Bu bosqich islohotlarning institutsional bazasini, qonunlar va qonunosti meyoriy hujjatlar tizimini shakllantirish hamda islohotlarni amalga oshirishning bosh maqsadini ta'minlovchi iqtisodiy mexanizm va qishloq xo'jaligidagi islohotlarning huquqiy asosini yaratish bilan tavsiflanadi. Zararli va kam daromadli shirkat xo'jaliklari fermer xo'jaliklariga aylantirish jarayoni boshlandi. Fermerlar yerlarni uzoq muddatli ijaraga ola boshladilar, biroq paxta va g'alla sotib olish uchun davlat buyurtmalari tizimi saqlanib qoldi, ya'ni fermerlar ajratilgan yerlarga qaysi ekin ekish, paxta yoki g'alla hosilini kimga sotishni mustaqil hal qila olmasdi.

Davlat qishloq xo'jaligi ishlab chiqaruvchilarini resurslar (o'g'itlar, yoqilg'i-moylash materiallari va boshqalar) bilan markazlashgan holda ta'minladi va qishloq xo'jaligi mahsulotlarini yetkazib berish rejalarining bajarilishini talab qildi. Dastlabki ikki bosqichda qarzlarni hisobdan chiqarish, soliqlardan ozod qilish, qishloq xo'jaligi korxonalarini va umuman agrosanoat sektoriga moliyaviy yordam ko'rsatish kabi choralar faol qo'llanildi. Ikkinchi bosqichda birinchi navbatda yirik, samarasiz fermer xo'jaliklaridan kichik fermer xo'jaliklarini tashkil etish uchun yerlarni ijaraga berish va rasmiy tender savdolari orqali takliflar berish yo'li bilan o'tkazildi.

Bu bosqich nisbatan qisqa davrni o'z ichiga olsada, biroq ko'plab agroislohotlarga boy bo'ldi. Chunonchi, ushbu bosqichda respublika dehqon va fermer xo'jaliklari uyushmasi, dehqon va fermer xo'jaliklarini qo'llab-quvvatlash jamg'armasi tashkil etildi. Eng muhimi 1998-2000 yillarda qishloq xo'jaligida iqtisodiy islohotlarni chuqurlashtirish Dasturining qabul qilinishi ham shu davrni qamrab oladi. Natijada, ushbu bosqichda qishloq xo'jaligida tashkil etilgan yangi mulkchilik shakllarining mahsulot yetishtirishdagi ahamiyati ortdi va bu davrda agrar soha mahsuloti 113,3 foizga o'sdi.

Uchinchi bosqich (2003-2007 yillar). 2003 yildan boshlab qishloq xo'jaligining yetakchi tarmoqlaridan biri hisoblangan fermer xo'jaliklarini yanada rivojlantirish maqsadida davlat tomonidan iqtisodiy qo'llab-quvvatlashning turli mexanizmlarini amaliyotga joriy qilishga qaratilgan chora-tadbirlar ishlab chiqildi. Qishloqda bozor infratuzilmasini shakllantirish va rivojlantirish, moddiy-texnika ta'minotini mustahkamlash, moliyalashtirish va kreditlashning yangi shaklini ishlab chiqarishga joriy qilish va boshqa dolzarb masalalarni hal qilishga qaratilgan ko'plab dasturlar tayyorlandi. Jumladan, O'zbekiston Respublikasi Prezidentining 2003 yil 24 martdagi "Qishloq xo'jaligida islohotlarni chuqurlashtirishning eng muhim yo'nalishlari to'g'risida"gi farmonida fermer xo'jaliklarini shakllantirishning asosiy qoidalari belgilab berildi.

Bu davrda shirkat xo'jaliklarining shaxsiy tomorqalarga to'liq bo'linishi kuzatildi. Qishloq xo'jaligining meva-sabzavotchilik tarmog'i hamda

chorvachilikni jadal rivojlantirish boshlandi. 2007 yilda fermer xo'jaliklari soni 2006 yildagi 64 ming fermer xo'jaligiga nisbatan 28 mingtaga ko'paydi. Uchinchi bosqich (2008 yil) yakuniga ko'ra fermer xo'jaliklari soni 218,6 mingtaga yetdi, o'rtacha ekin maydoni 14 gektarni tashkil etdi. Yer resurslari cheklanganligi sababli mayda fermer xo'jaliklari bilan bir qatorda yirik fermer xo'jaliklarini tashkil etishning imkoni bo'lmadi. Yangi fermer faqat oldingi ijarachi uni bo'shatgandagina uchastkani ijaraga olishi mumkin edi.

2006 yil 23 martda Prezidentning "Shaxsiy tomorqalar, dehqon va fermer xo'jaliklarida chorva mollari sonini ko'paytirishni rag'batlantirish chora-tadbirlari to'g'risida"gi PQ-308-son qarori qabul qilindi. Qaror chorvachilik, ayniqsa, qoramol boqish bilan shug'ullanuvchi dehqon va fermer xo'jaliklari sonini ko'paytirish, aholi bandligi muammolarini hal etish uchun huquqiy va iqtisodiy shart-sharoitlar yaratishga qaratilgan edi. Tijorat banklari va Bandlikka ko'maklashish jamg'armasi tomonidan fuqarolarning o'zini o'zi boshqarish organlari (mahalla qo'mitalari) kafilligida sho'ba, dehqon va fermer xo'jaliklari uchun chorva mollari sotib olish uchun fuqarolarga imtiyozli maqsadli kreditlar ajratish tartibi soddalashtirildi. Natijada, 2006-2007 yillarda chorvachilikka ixtisoslashgan fermer xo'jaliklarida chorva mollari soni 13,7 ming boshdan 16 ming boshga, 2007 yilda fermer xo'jaliklarida chorva mollari soni 223 ming boshga (35 foizga), 2008 yilda 135 ming boshga (35 foiz) ko'paydi. Boshqa yillarda yillik o'sish o'rtacha 69 ming boshni tashkil etdi.

Shuningdek, 2006 va 2008-yillarda kam ta'minlangan oilalarga homiylar va tadbirkorlar hisobidan ajratilgan tekin sigirlar(100 ming boshga yaqin) berilishi orqali dehqon xo'jaliklarida chorvachilikni rivojlantirish qo'llab-quvvatlandi. Yana bir qadam – mahalliy ozuqa sotish punktlarini tashkil etish orqali aholi va fermerlarni taqchil, yuqori mahsuldor ozuqa yem mahsulotlari bilan ta'minlashdan iborat bo'ldi. Ozuqa yem mahsulotlarining (shrot, sheluxa va b.) barcha turlari ichki bozorda va eksport uchun faqat O'zbekiston Respublika tovar-xom ashyo birjasida ochiq birja savdolari orqali sotila boshlandi.

To'rtinchi bosqich, 2008–2014 yillar. 2008 va 2009 yilgacha fermer xo'jaliklarini qayta qurishda fermer xo'jaliklari ko'pincha tarqoq dalalardan iborat bo'lib, ko'pincha bir-biridan juda uzoqda joylashgan degan umumiy fikrni hisobga olmadi. Tez rivojlanayotgan fermer xo'jaliklarining resurs va xizmat ko'rsatish talablari tez orada bir qator muammolarni keltirib chiqardi, masalan, yirik fermer xo'jaliklari uchun mo'ljallangan sug'orish infratuzilmasi mos kelmaydigan darajada edi, mavjud sug'orish tizimini mayda dehqonchilikka moslashtirish uchun qayta qurish qimmat jarayon bo'lardi. Bu va boshqa muammolar davlatning fermer xo'jaliklari sonini qisqartirish va ularning maydonlari hajmini oshirish ("optimallashtirish") to'g'risida qaror qabul qilishga olib keldi. Prezidentning 2008-yil 10-oktabrda "Fermer xo'jaliklari tasarrufidagi yer uchastkalari hajmini optimallashtirish chora-tadbirlari bo'yicha takliflar ishlab chiqish bo'yicha maxsus komissiya tuzish to'g'risida"gi farmoni qabul qilindi. Buyurtma bilan fermer xo'jaliklari hajmini optimallashtirish (birlashtirish) dasturini tayyorlash

boshlandi. Ishchi guruhlar tuzilib, fermer o'z faoliyatini samarali olib bormoqdami, yerni undan tortib olishga arziydimi yoki yo'qmi, degan xulosaga keldi. Davlat buyurtmasi bo'yicha rejalarni bajarmagan fermerlardan birinchi navbatda yerlar tortib olindi.

Maqsadni "fermer xo'jaligi hajmini optimallashtirish", ya'ni kichik fermer xo'jaliklarini yiriklariga qo'shish orqali konsolidatsiya qilish deb e'lon qilib, to'rtinchi bosqich 2008/2009 yillar oxirida boshlandi. va 2015 yilgacha davom etdi. Fermer xo'jaliklarini optimallashtirishning rasmiy sababi fermer xo'jaliklarining unumdorligi pastligi, ayniqsa davlatning paxta va bug'doyga bo'lgan ehtiyojlarini qondirish nuqtai nazaridan ko'rsatildi va bu yechim tarqoq xo'jalik maydonlarini yirik ishlab chiqarish bo'linmalariga birlashtirish sifatida qaraldi. Fermer xo'jaliklari soni 2008 yildagi 218 645 tadan 2014 yilda 78 856 taga kamayib bordi. Fermer xo'jaliklarining o'rtacha ekin maydoni 13,9 gektardan 39,5 gektarga oshdi. Boshqa fermer xo'jaliklari foydasiga yerlari olib qo'yilgan fermerlar o'z faoliyatini to'xtatdi.

Alohida ta'kidlash lozimki, ushbu bosqichda 2009 yilni "Qishloq taraqqiyoti va farovonligi yili" deb e'lon qilinishi va tegishli Davlat dasturining ishlab chiqilishi ham muhim voqea bo'ldi. Dasturda qishloq joylarda aholi farovonligini oshirish, yangi ish o'rinlarini yaratish va bandlikni ta'minlashda fermer va dehqon xo'jaliklarini o'rni va ahamiyatiga alohida to'xtalib o'tilgan.

5-bosqich 2015 yildan hozirgi kungacha bo'lgan davrni o'z ichiga oladi. Bu bosqich fermer xo'jaliklarining yangicha bo'linishi va ishlab chiqarish tarkibining o'zgarishi bilan tavsiflanadi. 2015-yil 29-dekabrda Prezidentning "2016-2020-yillarda qishloq xo'jaligini yanada isloh qilish va rivojlantirish chora-tadbirlari to'g'risida"gi PQ-2460-son qarori qabul qilindi. Qaror 2016-2020-yillarda sug'oriladigan yerlarda paxta va g'alla ekinlari ekin maydonlarini optimallashtirishga qaratilgan. Optimallashtirish deganda tuzilgan ishchi guruhlarning ixtiyoriga ko'ra amalga oshiriladigan fermer xo'jaliklari yerlarini bo'lish yoki birlashtirish tushuniladi. Yangi chora-tadbirlar sug'oriladigan yerlarda g'ozaning umumiy ekin maydonini 170,5 ming gektarga (2015 yilga nisbatan 13 foizga kam) va g'alla maydonlarini 50 ming gektarga (2015 yilga nisbatan 3,4 foizga kam) bosqichma-bosqich qisqartirishni nazarda tutadi. Paxta va g'alla strategik ekinlar bo'lib qolsa-da, rejalashtirilgan chora-tadbirlar qishloq xo'jaligi ishlab chiqarishini diversifikatsiya qilishga urinishlardan dalolat beradi. Paxta va g'alladan bo'shagan yerlar kartoshka (36 ming gektarga ko'payish), sabzavot (ko'paytirish 91 ming gektar), yem-xashak ekinlari (50 ming 300 gektarga ko'paytirish), intensiv bog'dorchilik va boshqa moylicekinlarga o'tkazilishi rejalashtirilgan. Mamlakatda ko'p tarmoqli fermer xo'jaliklarini rivojlantirish yo'li belgilandi.

O'zbekiston Respublikasi Prezidentining 2017-yil 9-oktabrdagi "Fermer, dehqon xo'jaliklari va tomorqa yerlari egalarining huquqlari va qonuniy manfaatlarini himoya qilish tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida"gi UPP-5199-son Farmoniga muvofiq; qishloq xo'jaligi ekin

maydonlaridan samarali foydalanish» barcha fermer xo'jaliklari ko'p tarmoqli bo'lishi kerak. Farmonda tayyor mahsulotlarni qayta ishlash, saqlash, sotish va xizmatlar ko'rsatish kabi ko'p tarmoqli faoliyat turlari nazarda tutilgan. Yangi islohotning e'lon qilingan maqsadi qishloq xo'jaligi mahsulotlarini qayta ishlash darajasini oshirishdan iborat. Farmonga ko'ra, fermer xo'jaliklariga yer uchastkalari berish hajmi va tartibi o'zgartirildi. Shunday qilib, nasldor chorvachilik fermer xo'jaliklariga Andijon, Namangan, Samarqand, Toshkent, Farg'ona va Xorazm viloyatlaridagi sug'oriladigan yerlarda har bir shartli chorva boshiga kamida 0,5 gektar, boshqa viloyatlar va Qoraqalpog'iston Respublikasida esa 0,6 gektar sug'oriladigan yerlar ajratildi.

Qishloq xo'jaligi va chorvachilikni isloh qilishning asosiy bosqichlari (1992-2022 yy.)

Yillar	Qishloq xo'jaligidagi islohotlar bosqichi, shu jumladan. chorvachilikda	Tavsif	Chorvachilikka islohotlarning ta'siri
1991–1997	Sovxozlarni dekoltivizatsiya qilish.	Kolxozlar shirkatlarga aylantirildi. Birinchi fermer xo'jaliklari paydo bo'ladi. Yem-xashak ekinlaribug'doy bilan almashtirildi.	Chorva mollari, ayniqsa qo'y va echkilar, parrandalar soni kamaydi. Chorvachilikda dehqon xo'jaliklarining o'rni ortib bordi. Ozuqa bazasi ekin maydonlari keskin qisqardi.
1998–2002	Qishloq xo'jaligi ishlab chiqarishining zamonaviy institutsional tuzilmasini shakllantirish.	Fermer xo'jaliklari sonining keskin o'sishi kuzatildi. Yerning tizimsiz bo'linishi bir qancha muammolarni keltirib chiqardi.	Qoramollar sonining birmuncha o'sishi kuzatildi, fermer xo'jaliklarining qoramol boqishdagi ulushi 3 foizdan 5 foizga, shirkatlar ulushi 13 foizdan 6 foizga kamaygan. Dehqon xo'jaliklarining ulushi 84 foizdan 89 foizga oshdi.
2003–2008	Fermer xo'jaliklaritoliq shakllandi va ixtisoslashuvi davlat buyurtmasiga asoslangan paxta va g'allaga qaratildi. Chorvachilik bilan asosan dehqon xo'jaliklari shug'ullana boshladi.	Chorvachilikni imtiyozli kreditlash orqali rivojlantirishni yo'lga qo'yish va rag'batlantirish, fermerlar xo'jaliklarida bo'sh ish o'rinlarini yaratish. Shrot va sheluxalarni sotish usullarini takomillashtirish.	Qoramol, qo'y, echki va parrandalar soni keskin o'sdi. Chorvachilik mahsulotlari ishlab chiqarishda dehqon xo'jaliklarining ulushi 93 foizga oshdi.
2009–2014	Fermer xo'jaliklarini birlashtirish va optimallashtirish ishlari olib borildi. Ixtisoslashuvning oshishi kuzatildi.	Imtiyozli mikrokreditlar orqali tadbirkorlikni rag'batlantirish siyosati davom ettirildi. Bunda qo'shimcha qiymati yuqori chorvachilik mahsulotlari	Chorva mollari sonining sezilarli o'sishi kuzatildi. Go'sht va sut sanoati korxonalarini rivojlantirish imkoniyati yaratildi.

		yetishtirishga alohida e'tibor qaratilmoqda.	
2015 yildan hozirgi kungacha	Fermer xo'jaliklarining ixtisos-lashuvini oshirish. Ko'p tarmoqli fermer xo'jaliklarini yaratish.	Fermer xo'jaliklari ko'p tarmoqli bo'lishi kerak, shu jumladan, chorvachilik va go'sht-sut mahsulotlarini qayta ishlash yo'nalishini rivojlantirish. Imtiyozli kreditlar berish amaliyoti davom etmoqda.	Chorva va parrandalar soni ortib bormoqda. 2015-2022 yillarda qoramollar soni 12,8 foizga, parrandalar soni 22,3 foizga oshgan.

Jadvalda qishloq xo'jaligidagi islohotlarning barcha bosqichlari va bu bosqichlarda chorvachilik sohasidagi o'zgarishlar jamlangan.

O'zbekiston Respublikasi Prezidentining "O'zbekiston Respublikasi qishloq xo'jaligini rivojlantirishning 2020-2030 yillarga mo'ljallangan strategiyasini tasdiqlash to'g'risida"gi (23.10.2019 y. PQ-5853-son), O'zbekiston Respublikasi Prezidentining "O'zbekiston Respublikasi qishloq xo'jaligini rivojlantirishning 2020-2030 yillarga mo'ljallangan strategiyasida belgilangan vazifalar ijrosini samarali tashkil etishga doir qo'shimcha chora-tadbirlar to'g'risida"gi (07.06.2022 y. PQ-273-son) qarorlari mamlakatda oziq-ovqat xavfsizligini ta'minlash hamda aholini sifatli qishloq xo'jaligi mahsulotlari bilan ta'minlash, yer-suv resurslaridan samarali foydalanish, eksport geografiyasini kengaytirishda yangi yo'nalishlarni belgilab olishga asos bo'ldi.

O'zbekiston Respublikasi Prezidentining 8.02.2022 yildagi PQ-120-sonli qaror bilan O'zbekiston Respublikasida chorvachilik sohasi va uning tarmoqlarini rivojlantirish bo'yicha 2022-2026 yillarga mo'ljallangan dastur tasdiqlandi. Dastur chorvachilik mahsulotlari ishlab chiqarishni ko'paytirish hisobiga oziq-ovqat xavfsizligini ta'minlash, ishlab chiqarishning zamonaviy usullarini keng joriy etish, kooperatsiya munosabatlarini rivojlantirish, chorvachilik sohasini davlat tomonidan qo'llab-quvvatlashga yo'naltirilgan.

Shunday qilib, mustaqillik yillarida qishloq xo'jaligida fermer va dehqon xo'jaliklarining bozor iqtisodiyoti sharoitida va sog'lom raqobat asosida rivojlanishi uchun islohotlar bosqichma-bosqich amalga oshirilmoqda va mustahkam huquqiy-meyoriy baza yaratildi hamda asosiy yo'nalishlar belgilab olindi. Xususan, O'zbekiston Respublikasining Konstitutsiyasi, "Fermer xo'jaligi to'g'risida"gi, "Dehqon xo'jaligi to'g'risida"gi, "Tadbirkorlik faoliyati erkinligining kafolatlari to'g'risida"gi, "Veterinariya to'g'risida"gi qonunlar, respublika Prezidentining bir qator qaror, farmonlari va Vazirlar Mahkamasining qarorlari, fermer xo'jaliklari faoliyatining mulkiy daxlsizligi va tadbirkorlik erkinligini ta'minlashga hamda qo'llab-quvvatlash vazifalarini amalga oshirishga, dehqonchilik bilan birga chorvachilikni rivojlantirishga xizmat qiladi.

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Nurmatova M.H.
senior teacher
Department of Languages
Tashkent State Agrarian university

IMPROVING THE EFFICIENCY OF LEARNING LANGUAGES

Abstract. In the present globalized world, the capacity to impart in various dialects is progressively significant both expertly and by and by. However, for some individuals, learning another dialect stays an enormous test that requires a colossal speculation of time without any assurance of progress. While some are honored with a natural ability for getting dialects effectively, most battle to accomplish even fundamental capability after months or long periods of study. This makes one wonder - is there a superior way? With the tremendous assets now accessible through innovation and instructive examination, it appears there ought to be more productive techniques for assisting normal students with accomplishing practical familiarity with another dialect. This article will investigate a region where the ongoing way to deal with language learning could be improved to boost productivity and produce improved results.

Keywords: foreign languages, learning process, learning methods, technologies, well-qualified teachers.

Introduction: Customary language guidance has depended vigorously on repetition remembrance of jargon words and punctuation rules through monotonous drills and cheat sheets. While remembrance assumes a part, this approach frequently neglects to connect with understudies in a significant manner or offer them chances to utilize the language imaginatively. As instructive clinicians have illustrated, individuals learn best through dynamic, experiential discovering that permits them to interface new data to existing information and encounters actually. Language projects ought to integrate more intuitive exercises, project-based learning, and certifiable application situations to provide jargon and designs setting and motivation. Understudies are more roused to realize when they see the significance and can begin utilizing the language rather than simply learning about it.

One more impediment of ordinary language classes is their "one-size-fits-all" move toward that doesn't represent individual contrasts in learning styles, interests, and beginning capability levels. Innovation presently empowers exceptionally customized, versatile learning ways custom-made to every understudy's assets, shortcomings, and objectives. Man-made brainpower can examine execution information to as needs be recognizing holes and target guidance. Understudies ought to have command over their opportunity for growth and have the option to zero in additional on regions they view as trying while at the same time advancing quicker in solid areas. Customized criticism and

direction from artificial intelligence guides could assist with streamlining the educational experience for various sorts of students.

While course books, sound illustrations, and language labs give openness to a language, they can't reproduce the full vivid experience of living and communicating consistently inside the objective culture. Research shows drenching is one of the best approaches to really dominate a language since it powers understudies out of their usual range of familiarity and into veritable correspondence circumstances where they should utilize the language to work consistently. More language projects could sort out reasonable concentrate abroad projects, virtual trade organizations, comprehensive developments, and language meetups to give understudies standard practice and social figuring out through experiential submersion. Innovation additionally empowers new types of virtual inundation through intelligent media, online networks, and gaming.

At long last, to boost effectiveness and results, language advancing should be a progressing, iterative cycle with ceaseless appraisal and open doors for development in view of results. As of now, understudies frequently concentrate on in confined class meetings with restricted criticism until a high-stakes test toward the end. A more present-day approach would consolidate successive developmental evaluation through exercises, projects, and conversational practice to distinguish qualities and shortcomings while learning is still underway. Execution information could then be breaking down to refine individual review plans, learning materials, showing techniques, and program-level educational programs on a continuous premise. Understudies would likewise profit from post-learning reflection and objective setting to remain persuaded in additional fostering their abilities.

Correspondence implies the likeness of the growing experience and the correspondence cycle simply by the primary highlights, which are the deliberate and persuaded nature of discourse movement, the presence of specific connections between conversationalists that structure a correspondence circumstance, conversation of those points that relate to the interests of students, their degree of improvement, the utilization of those discourse devices that capability in the genuine interaction. It is realized that there are various kinds of correspondence: socially-arranged correspondence, bunch subject-situated correspondence and individual situated correspondence.

First of all, accordingly giving oral and discourse unknown dialect abilities fundamental for adjusting joint activities is essential. A significant down to earth task is to remember the student for unknown dialect correspondence exercises and its answer will make a critical commitment to the development of the understudy's character. The combination of the most common way of showing an unknown dialect at a school with the necessities of today is related with the consistent contribution of the understudy in such instructive and discourse circumstances, when he goes about as an initiator and coordinator during the time spent connection with different members in the action. The primary prerequisite for the

determination of the open least is the portrayal of the circles of correspondence ordinary for students. The subsequent prerequisite is connected with socially arranged correspondence, the development of the capacity to safeguard their perspectives and convictions. The third is the preparation of discourse acts that serve the chose activities, and the circumstances wherein they are performed.

Bunch subject-arranged correspondence happens throughout joint exercises. Alongside circumstances that put the student before such issues that he needs to settle, in actuality, a huge spot can be taken by circumstances that have a nonexistent person. The fourth prerequisite is the determination and association of language material that makes it conceivable to carry out the chose demonstrations of discourse. The determination of the informative least and its execution fundamentally builds the inspiration of instructive and discourse action, assists with getting discourse all the more near normal. The fundamental component of correspondence is impromptu, non-standard, erratic, inventive, and probabilistic nature. Now and again the arranged strategy of discourse conduct must be changed moving, in light of the fact that it is abused by the strategies of different conversationalists. You really want to show reorientation over correspondence.

In this manner, the strategic substance of an unknown dialect illustration ought to be open. Additionally, in the homeroom, students can make knowledge maps where the associations among thoughts and fundamental ideas are addressed graphically. Lately, this technique has become exceptionally famous and is progressively utilized in preparing. Another well-known method is the composition of stories. This strategy depends on the age impact: understudies will better recollect the substance of the story that they concoct themselves.

The adequacy of recollecting, saving, and further perceiving and repeating the got data depends not just on how it is handled. A significant viewpoint is redundancy. Notwithstanding, basic mechanical reiteration is valuable just while learning the way to express unfamiliar words. In any remaining cases, it frequently demands a ton of investment and exertion, however doesn't give great outcomes. Reiteration can be coordinated in a more useful manner: organize the rehashed material and connection it to the recently concentrated on material.

Another significant inquiry is: how is the information acquired by students in the homeroom, later on, utilized by them in life circumstances? It is accepted that the information that students get in the homeroom is additionally summed up as per the circumstances that understudies will confront. Various examinations have shown that "on the off chance that another circumstance isn't firmly connected with the one where learning occurred, there is essentially no change of information."

To guarantee that the gained information can be moved to new circumstances, it is important to offer students at the phase of working out and rehashing the material a functioning practice with a huge arrangement of life models and circumstances that will assist understudies with getting adequate

experience. The best technique for showing unknown dialects is viewed as by driving specialists in the field of semantic schooling to be the open strategy (The Informative Methodology) of educating. This strategy was first applied over quite a while back.

Classes as per this strategy for showing English are held in gatherings of 12-15 understudies. This number of students is viewed as ideal for accomplishing the primary objective of preparing the capacity to offer their viewpoints openly in an unknown dialect. With such a quantitative class creation, the educator can consolidate understudies into little subgroups or matches, giving them aggregate undertakings.

Likewise, co-instruction of students extends their jargon because of the steady trade of jargon and the view of new expressions from the lips of the educator, yet additionally their schoolmates. The open technique for showing unknown dialects enjoys another benefit: from the absolute first illustration, correspondence in the homeroom is brought out just through the language being examined.

Conclusion

In rundown, while conventional language guidance has esteem, there stays huge opportunity to get better in making the educational experience really captivating, customized, vivid and information headed to boost proficiency. Innovation currently empowers new methodologies that adjust to various student needs and give consistent input to progress. With additional development coordinating present day instructive examination and instruments, it might become feasible for normal understudies to accomplish elevated degrees of capability in new dialects inside a negligible portion of the time and exertion customarily expected through a more streamlined opportunity for growth. By and large, zeroing in on dynamic, experiential, individualized and vivid language training could assist more students with prevailing in the present universally associated world.

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Nurov U.Kh.
assistant
Jizzakh Polytechnic Institute
Orcid: 0009-0007-1652-4596

DEVELOPMENT OF SPECIFICATIONS FOR THE ACCREDITATION SYSTEM

Abstract. The development of specifications for an accreditation system is a crucial undertaking that plays a pivotal role in ensuring the credibility, consistency, and quality of various processes within an organization or industry. Accreditation serves as a recognized benchmark, signifying adherence to established standards and best practices. This abstract provides a concise overview of the key components and objectives involved in developing specifications for an accreditation system.

Keywords: Accreditation, skills, instruction, labor protection, recommendations, development.

In an era characterized by increased focus on quality assurance, standardization, and accountability, the establishment of a robust accreditation system is integral to validating the competency and adherence to standards within organizations, institutions, or industries. This paper embarks on the exploration of the developmental journey involved in creating specifications for an accreditation system a meticulous process that not only defines the criteria for evaluation but also sets the stage for benchmarking excellence [1].

Accreditation, as a formal recognition of an entity's compliance with established standards, is instrumental in fostering trust, credibility, and comparability. The introduction of specifications serves as the foundation for this accreditation framework, providing a structured blueprint for evaluating the performance, governance, and processes of entities seeking accreditation [2].

The development of accreditation specifications is a multifaceted endeavor, requiring a deep understanding of industry-specific nuances, regulatory requirements, and the evolving landscape of best practices. This paper seeks to unravel the complexities involved in crafting specifications that strike a balance between flexibility and stringency, catering to the diverse needs of entities while upholding the integrity and credibility of the accreditation process. Furthermore, the introduction highlights the collaborative nature of this process, emphasizing the involvement of stakeholders, industry experts, and regulatory bodies [3]. Inclusion of diverse perspectives ensures that the accreditation specifications are comprehensive, reflective of industry dynamics, and aligned with the overarching goals of quality enhancement and organizational improvement. As we delve into the development of specifications for an accreditation system, this paper aims to shed light on the pivotal role of this foundational document in fostering a culture

of continuous improvement, accountability, and adherence to best practices. The journey involves a synthesis of industry expertise, regulatory compliance, and organizational requirements to create a framework that not only meets the current needs but also adapts to the evolving landscape of quality assurance and accreditation [4].

In the culmination of the development of specifications for an accreditation system, it becomes evident that crafting a robust framework is not only a strategic imperative but a dynamic and evolving process. The journey undertaken in this exploration underscores the multifaceted nature of accreditation, requiring a careful balance of industry-specific considerations, stakeholder engagement, and a commitment to continuous improvement.

The established specifications serve as the cornerstone of a structured accreditation system, laying the groundwork for consistent evaluation, benchmarking, and enhancement of organizational practices. The culmination of these specifications reflects a commitment to quality assurance, transparency, and the pursuit of excellence within diverse sectors [5].

Stakeholder involvement, as emphasized throughout this discourse, emerges as a linchpin in the success of the accreditation system. The collaborative efforts of industry experts, regulatory bodies, and organizations contribute not only to the validity of the specifications but also to the acceptance and credibility of the accreditation process.

Flexibility and stringency, two seemingly divergent aspects, harmonize within the specifications to accommodate the unique needs of different entities while upholding universally recognized standards. This delicate equilibrium ensures that the accreditation system remains adaptable to industry changes, technological advancements, and emerging best practices [6].

As organizations embark on the implementation of the accreditation system guided by these specifications, the phased rollout strategy becomes crucial. By adopting a systematic approach and embracing continuous feedback loops, the accreditation system can evolve in response to real-world challenges and lessons learned during its application [7].

The exploration of case studies and best practices serves as a testament to the effectiveness of well-designed accreditation systems in diverse settings. Drawing inspiration from successful models, organizations can refine their approaches, learning from the experiences of others to further enhance the efficacy of their accreditation specifications [8].

In conclusion, the development of specifications for an accreditation system transcends a mere procedural exercise; it embodies a commitment to fostering excellence, ensuring compliance with standards, and contributing to the broader goals of quality assurance. As we look forward, the adaptive and forward-thinking nature of these specifications positions accreditation systems as dynamic tools for continuous improvement and as catalysts for elevating industries and organizations to higher standards of performance and integrity.

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Nurov U.Kh.
assistant
Jizzakh Polytechnic Institute
Orcid: 0009-0007-1652-4596
Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805

THE ROLE OF METROLOGY IN THE NATIONAL ECONOMY

Abstract. This topic proposes to study the importance of metrology in the context of the national economy. The abstract explores the multifaceted contribution of metrology, the science of measurement, in influencing and supporting various sectors in the economic framework of a country. Topics of interest may include accuracy and precision in measurements, standardization processes, and the impact of reliable metrological practices on industry, commerce, and general economic development. The abstract is expected to provide insight into how metrology plays a critical role in ensuring consistency, quality and efficiency in various economic activities and contributes to the strength and growth of a national economy.

Keywords: Metrology, framework, measurement, development, national economy, projects.

Introduction: Metrology, the science of measurement, stands as a cornerstone in the foundation of various industries and sectors, playing a pivotal role in shaping the dynamics of a nation's economy. The precision and accuracy of measurements, governed by metrological principles, extend far beyond mere technical considerations [1]. They form the bedrock of quality assurance, regulatory compliance, and efficiency across diverse economic activities. This paper aims to delve into the multifaceted role of metrology in the national economy, shedding light on its profound influence on industry, trade, and overall economic development. As we navigate through the intricacies of metrological practices, we uncover their far-reaching impacts on standardization, innovation, and the establishment of a robust framework for sustainable economic growth [2]. The discussion that follows aims to underscore the indispensable nature of metrology in fostering reliability, competitiveness, and excellence within the intricate tapestry of a nation's economic landscape [3].

In the intricate tapestry of a nation's economic landscape, the role of metrology emerges as a critical determinant of precision, reliability, and uniformity. Metrology, the science of measurement, extends beyond the mere quantification of physical quantities; it constitutes an essential foundation for

economic activities, industrial processes, and regulatory frameworks. As modern economies navigate the challenges of globalization, technological innovation, and dynamic market forces, the significance of metrology becomes increasingly pronounced [4].

This study seeks to unravel and underscore the multifaceted contributions of metrology in shaping and sustaining a robust national economy. By delving into the intricate interplay between metrological principles and economic dynamics, we aim to illuminate how precise measurements, standardized practices, and quality assurance mechanisms influence key aspects of economic performance. From manufacturing and trade to innovation and regulatory compliance, the impact of metrology resonates across diverse sectors, playing a pivotal role in fostering efficiency, promoting fairness, and enhancing overall economic competitiveness.

Against the backdrop of a rapidly evolving economic landscape, this exploration serves as a lens through which to analyze the challenges and opportunities that metrology presents. By understanding and appreciating the role of metrology in the national economy, we can discern how this science not only addresses technical considerations but also contributes fundamentally to the sustainable growth, development, and resilience of a nation's economic fabric. As we embark on this journey, the intricate relationship between metrology and the national economy unfolds, revealing a story of precision, innovation, and the pursuit of excellence [5].

Main Part: Metrology, as the science of measurement, plays a pivotal role in shaping and sustaining a nation's economy. Its influence extends across various facets of economic activities, providing a foundation for precision, reliability, and uniformity. This main part will delve into key aspects that illustrate the multifaceted contributions of metrology in the context of the national economy [6].

Industrial Processes and Quality Assurance:

Metrology is integral to industrial processes, ensuring that measurements are accurate and consistent. In manufacturing, adherence to precise standards guarantees the quality of products. This not only boosts consumer confidence but also establishes a foundation for robust domestic industries that can compete effectively in global markets [7].

Trade and Commerce:

Standardized measurements facilitated by metrology are essential for fair trade practices. Consistent measurements enable transparent transactions, reducing the potential for disputes and fostering a level playing field in domestic and international trade. Metrology thus becomes a cornerstone for economic transactions and the smooth functioning of markets.

Innovation and Research:

The advancement of metrological practices goes hand in hand with innovation. Cutting-edge technologies and scientific advancements often rely on

accurate measurements. By providing precise standards and methodologies, metrology fuels research and development, stimulating technological progress and fostering a culture of innovation within the national economy.

Regulatory Compliance:

Metrology serves as the bedrock for regulatory frameworks, ensuring that industries adhere to established standards and guidelines. Compliance with metrological standards not only promotes safety and reliability but also facilitates harmonization with international regulations, enhancing a nation's global economic standing [8].

In conclusion, the exploration of "The Role of Metrology in the National Economy" reveals a narrative of indispensable significance and far-reaching impact. As our analysis unfolded, it became evident that metrology, beyond its traditional association with measurements and standards, is a linchpin for economic success. The findings emphasize the crucial role played by metrology in enhancing precision, reliability, and uniformity across diverse sectors, fostering a conducive environment for economic growth and development.

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Nurov U.Kh.
assistant
Jizzakh Polytechnic Institute
Orcid: 0009-0007-1652-4596
Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805

THE ROLE OF STANDARDIZATION IN THE NATIONAL ECONOMY

Abstract. This study examines "The Role of Standardization in the National Economy," shedding light on the pivotal contributions of standardization to the economic fabric of a nation. Standardization, as a systematic process of developing and implementing agreed-upon norms, plays a fundamental role in fostering efficiency, reliability, and interoperability across diverse sectors. The abstract outlines the key themes explored in the study, including the impact of standardization on industrial processes, trade practices, innovation, regulatory frameworks, and overall economic competitiveness. By unraveling the intricate relationship between standardization and the national economy, this research seeks to underscore the imperative of a well-established and dynamic standardization framework for sustainable economic growth and resilience in an increasingly interconnected global landscape.

Keywords: standart, standardization, measurement, development, national economy, projects.

Standardization stands as a cornerstone in the foundation of a nation's economic architecture, influencing and shaping various aspects of industrial, commercial, and regulatory landscapes. This study delves into "The Role of Standardization in the National Economy," aiming to unravel the profound impact of standardized practices on the efficiency, reliability, and overall competitiveness of a country's economic framework. In the dynamic and interconnected world of commerce, where diverse sectors contribute to the intricate tapestry of national economies, standardization emerges as a linchpin [1]. It encompasses the systematic development and implementation of agreed-upon norms, providing a common language that facilitates seamless interactions and transactions. This introduction sets the stage for an exploration of how standardization influences key dimensions of the national economy [2].

1. Industrial Processes: Standardization plays a pivotal role in optimizing industrial processes. Established norms ensure consistency in manufacturing practices, fostering efficiency and reliability. Through standardized procedures

and specifications, industries can achieve higher levels of quality, streamline production, and enhance overall productivity [3].

2. Trade Practices: The global marketplace thrives on standardized practices, where nations engage in fair and transparent trade. Standardization of measurements, certifications, and product specifications not only eliminates barriers to international trade but also instills confidence among trading partners, creating a conducive environment for economic exchange [4].

3. Innovation and Research: Standardization is not merely a regulatory framework; it is a catalyst for innovation. By providing a common ground for understanding and compatibility, standards fuel research and development. They lay the groundwork for technological advancements, ensuring that innovations are built upon a stable and interoperable foundation.

4. Regulatory Frameworks: Standardization contributes significantly to regulatory frameworks, providing a basis for the development of laws and guidelines. Compliance with standards ensures safety, reliability, and consistency, fostering a secure environment for businesses and consumers alike. Standardized practices align with regulatory requirements, promoting harmonization within and beyond national borders [5].

5. Economic Competitiveness: Nations that prioritize and excel in standardization are better positioned to compete globally. Adherence to international standards enhances the reputation of a country's products and services, bolstering its economic competitiveness. Standardization fosters trust, opening doors to new markets and opportunities [6].

This study aims to navigate through these dimensions, shedding light on the nuanced ways in which standardization permeates the economic landscape [7]. By understanding the role of standardization in industrial processes, trade, innovation, and regulatory compliance, we can appreciate its integral role in fostering a resilient, efficient, and globally competitive national economy. As we embark on this exploration, the intricate relationship between standardization and economic prosperity unfolds, revealing a story of coherence, reliability, and sustainable growth [8].

In conclusion, the exploration into "The Role of Standardization in the National Economy" illuminates the pervasive influence and far-reaching implications of standardized practices on the economic landscape of a nation. Standardization, as a systematic and collaborative process, emerges as a linchpin that intricately weaves together various facets of industrial, commercial, and regulatory frameworks.

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Nurov U.Kh.
assistant
Jizzakh Polytechnic Institute
Orcid: 0009-0007-1652-4596

DEVELOPMENT OF RECOMMENDATIONS FOR KNOWLEDGE OF LEGAL, TECHNICAL AND SANITARY-HYGIENIC RULES OF LABOR PROTECTION IN ENTERPRISES

Abstract. This project centers on formulating guidelines to promote awareness and adherence to legal, technical, and sanitary-hygienic regulations governing labor protection within enterprises. The recommendations aim to facilitate a comprehensive understanding of the requisite rules and contribute to the improvement of occupational safety and well-being in workplace environments.

Key words: knowledge, skills, instruction, labor protection, recommendations.

Engineers of the future are expected to navigate complex problem-solving scenarios, think critically, and innovate in response to changing global demands [1]. This necessitates a pedagogical shift that transcends traditional teaching methodologies and embraces innovative approaches centered around the principles of 'C' - where 'C' signifies both Competence and Creativity. This paper explores various methods and strategies grounded in pedagogical principles to cultivate a holistic skill set among engineering students [2].

The integration of innovative solutions within the framework of pedagogy is crucial to bridge the gap between academic knowledge and practical application. By emphasizing the 'C' elements - Competence and Creativity - this paper aims to shed light on effective teaching methods that not only enhance technical skills but also nurture the ability to think innovatively.

This exploration includes an in-depth analysis of different pedagogical approaches, incorporating elements such as project-based learning, collaborative problem-solving, experiential learning, and real-world applications of engineering concepts. Additionally, the paper will delve into the role of emerging technologies, such as virtual reality and simulations, in creating immersive learning environments that stimulate creativity and practical skills development [3].

Ultimately, this research seeks to provide insights into the transformative potential of pedagogical approaches rooted in 'C' principles. As educators and institutions grapple with the challenge of preparing future engineers for a rapidly changing world, understanding and implementing innovative pedagogical methods becomes indispensable in nurturing a generation of professionals capable of not only meeting industry standards but also pushing the boundaries of

technological innovation. In an era marked by rapid technological advancements and ever-evolving industrial landscapes, the education system faces the critical task of preparing future engineers who are not only technically proficient but also possess the creativity and adaptability essential for navigating the complexities of the professional world [4]. This necessitates a paradigm shift in pedagogical approaches, placing a renewed emphasis on fostering both vocational competence and creativity among engineering students.

The convergence of competence and creativity, symbolized by the 'C' in this context, underscores the holistic nature of the skill set required for the engineers of the future. This paper aims to explore innovative methods of organizing educational solutions within the framework of pedagogical approaches, with a specific focus on cultivating competence and creativity. As the demands placed on engineers continue to evolve, the traditional modes of education are being re-evaluated to align with the dynamic needs of industries. The integration of innovative solutions into pedagogical strategies becomes imperative to bridge the gap between theoretical knowledge and practical application. By examining diverse pedagogical approaches, this research seeks to uncover methods that not only enhance technical proficiency but also stimulate the creative thinking essential for problem-solving in real-world scenarios [5].

This exploration will delve into various pedagogical methodologies, such as project-based learning, collaborative problem-solving, experiential learning, and the incorporation of real-world applications of engineering principles. Additionally, the paper will explore the integration of emerging technologies, such as virtual reality and simulations, to create immersive learning environments that foster both creativity and practical skills development. Through this examination, the research aims to contribute insights into the transformative potential of pedagogical approaches rooted in the 'C' principles—Competence and Creativity [6].

As the engineering profession continues to evolve, educators and institutions must grapple with the challenge of producing well-rounded professionals capable of meeting industry standards while simultaneously pushing the boundaries of innovation. This paper serves as a guide for educators, policy-makers, and institutions seeking effective methods to nurture the vocational competence and creativity of future engineers.

The development of recommendations for a comprehensive understanding of legal, technical, and sanitary-hygienic rules of labor protection in enterprises is a critical step towards fostering a safe and compliant working environment. As workplaces evolve and become more complex, ensuring the well-being of employees demands a multifaceted approach that encompasses legal compliance, technical safeguards, and adherence to sanitary-hygienic standards.

The amalgamation of these three facets forms a robust framework that not only safeguards the rights of workers but also contributes to the overall productivity and sustainability of enterprises. The recommendations proposed in

this study aim to provide a holistic guide for organizations to navigate the intricacies of labor protection, fostering a culture where the health and safety of employees are paramount.

Legal knowledge serves as the foundation, ensuring that enterprises comply with existing regulations and standards. By staying abreast of legal requirements, organizations can mitigate risks, avoid legal pitfalls, and create an environment where employees can confidently carry out their responsibilities.

Technical considerations, encompassing machinery safety, equipment maintenance, and hazard prevention, are integral components of an effective labor protection strategy. The recommendations emphasize the importance of implementing and regularly updating technical safeguards to reduce the likelihood of accidents and injuries.

Sanitary-hygienic rules are pivotal in preserving the health and well-being of employees. The study's recommendations advocate for the establishment of robust hygiene protocols, including regular inspections, training programs, and the provision of necessary facilities, to create a work environment that prioritizes the health and comfort of its workforce.

In conclusion, the synthesized recommendations presented in this study serve as a comprehensive guide for enterprises seeking to fortify their approach to labor protection. By integrating legal, technical, and sanitary-hygienic considerations, organizations can not only meet regulatory requirements but also foster a culture of responsibility, care, and continual improvement. Ultimately, the successful implementation of these recommendations contributes not only to the well-being of employees but also to the overall success and sustainability of enterprises in the long run.

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Nurov U.Kh.
assistant
Jizzakh Polytechnic Institute
Orcid: 0009-0007-1652-4596
Badalov U.N.
assistant
independent researcher
Jizzakh Polytechnic Institute
Orcid: 0000-0003-4983-6805

**PROVIDING RECOMMENDATIONS FOR ESTABLISHING A
QUALITY MANAGEMENT SYSTEM BASED ON ISO 9001
INTERNATIONAL STANDARDS IN PRODUCTION FACILITIES FOR
EXPORTING PRODUCTS IN OUR REPUBLIC**

Abstract. This involves offering guidance on the implementation of a quality management system aligned with ISO 9001 international standards within manufacturing facilities focused on producing goods for export in our Republic.

Key words: standard, quality, management, product, production enterprise.

Introduction: In an era of global trade and economic interconnectedness, the establishment of robust quality management systems is paramount for businesses aiming to thrive in international markets. This recommendation addresses the imperative of implementing a quality management system founded on ISO 9001 international standards [1]. Focusing specifically on production facilities within our Republic, this guidance aims to enhance the efficiency, reliability, and overall quality of products destined for export. The adherence to internationally recognized standards not only ensures compliance with rigorous quality benchmarks but also positions our Republic's products competitively on the global stage [2]. This introduction sets the stage for a comprehensive exploration of the key elements and benefits associated with adopting ISO 9001 standards in the context of our nation's export-oriented production sector.

In today's globalized economy, adherence to international quality standards is paramount for businesses aiming to compete on a global scale. ISO 9001, as a widely recognized and respected international standard, plays a crucial role in ensuring the quality and consistency of products and services. This paper explores the implementation and significance of ISO 9001 international standards within production facilities in our Republic, particularly those focused on exporting products [3].

ISO 9001 serves as a comprehensive framework for establishing and maintaining a Quality Management System (QMS). Its principles are designed to enhance efficiency, improve customer satisfaction, and elevate overall

organizational performance. For production facilities engaged in exporting goods from our Republic, complying with ISO 9001 standards not only meets the expectations of international markets but also fosters a culture of continuous improvement within the organization [4].

This paper aims to delve into the specific challenges and benefits associated with the integration of ISO 9001 standards in production facilities geared towards export-oriented industries in our Republic. It will explore how these standards contribute to enhancing product quality, meeting regulatory requirements, and building credibility with international partners and customers [5].

Additionally, the research will examine the process of obtaining and maintaining ISO 9001 certification, highlighting the steps involved and the potential obstacles that organizations may encounter. By doing so, it aims to provide practical insights and guidance for businesses navigating the path towards ISO 9001 compliance, particularly in the context of export-oriented production facilities [6].

As the Republic continues to position itself as a key player in the global market, understanding and implementing ISO 9001 standards can serve as a strategic advantage. This paper seeks to underscore the importance of embracing international quality standards, not only as a means of compliance but as a catalyst for continuous improvement and sustainable growth in the competitive landscape of global exports.

In conclusion, the integration of ISO 9001 international standards into production facilities for exporting products in our Republic emerges as a strategic imperative for sustained success in the global marketplace. The journey toward ISO 9001 compliance is not merely a checkbox for regulatory requirements; rather, it represents a commitment to excellence, quality, and continuous improvement [7].

By adhering to ISO 9001 standards, production facilities can elevate their operational efficiency, enhance product quality, and foster a culture of organizational excellence. This not only meets the stringent expectations of international markets but also establishes a robust foundation for long-term competitiveness.

The benefits of ISO 9001 certification extend beyond the realm of quality management; they encompass enhanced customer satisfaction, increased market credibility, and streamlined processes. As our Republic strives to assert its position on the global stage, the implementation of ISO 9001 standards becomes a key differentiator, signaling to international partners and customers a commitment to delivering products of the highest standards [8].

The certification process, while requiring dedication and resources, is an investment in the future viability of production facilities. The rigorous assessment and continuous improvement mechanisms inherent in ISO 9001 not only ensure compliance but also empower organizations to proactively address challenges and seize opportunities.

In essence, the conclusion drawn is that ISO 9001 is not just a set of standards; it is a transformative framework that propels production facilities toward a trajectory of sustained growth, resilience, and international recognition. By embracing and championing ISO 9001, our Republic's production facilities can confidently navigate the complexities of global markets, setting a precedent for quality, reliability, and excellence in the export-oriented landscape.

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Nurullayev O.U.
“Elektr texnikasi” kafedrası katta o‘qituvchisi
JizPI

INTELLEKTUAL ZAMONAVIY ELEKTR O‘LCHASH VOSITALARI TO‘G‘RISIDA TUSHUNCHALAR

Annotatsiya: zamonaviy intellektual elektr o‘lchash vositalari ularni bajaradigan funksiyasiga qarab quyidagi guruhlariga bo‘linadi: o‘lchovlar, etalonlar, o‘lchash o‘zgartkichlari, o‘lchash asboblari, o‘lchash qurilmalari va information o‘lchash tizimlariga bo‘linadi.

Kalit so‘zlar: elektr, magnit, noelektrik, o‘zgarmas va o‘zgaruvchan, noelektrik, o‘zgartkich, parametrik, telemexanika, silkinish, tebranish, tarozi.

Nurullayev O.U.
senior teacher
"Electrical engineering" department
JizPI

CONCEPTS OF INTELLECTUAL MODERN ELECTRICAL MEASURING INSTRUMENTS

Abstract: modern intelligent electrical measuring devices are divided into the following groups depending on the function they perform: measurements, standards, measuring transducers, measuring instruments, measuring devices and information measuring systems.

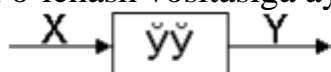
Key words: electric, magnetic, non-electric, constant and variable, non-electric, converter, parametric, telemechanics, shake, vibration, scales.

Zamonaviy intellektual elektr o‘lchash vositalari bu elektr, magnit, noelektrik kattaliklarni, elektr zanjir parametrlarini o‘lchashda qo‘llaniladigan qurilmalar majmuasiga aytiladi. Zamonaviy intellektual elektr o‘lchash vositalari ularni bajaradigan funksiyasiga qarab quyidagi guruhlariga bo‘linadi: o‘lchovlar, etalonlar, o‘lchash o‘zgartkichlari, o‘lchash asboblari, o‘lchash qurilmalari va information o‘lchash tizimlariga bo‘linadi.

Zamonaviy intellektual elektr o‘lchovlar deb kattalikning aniq bir qiymatini hosil qiladigan va saqlaydigan texnik vositaga aytiladi. O‘lchovlar o‘zgarmas va o‘zgaruvchan qilib ishlanadi, ya’ni bir qiymatli, qarshiligi 0,1 Om bo‘lgan g‘altak yoki normal element, tarozi toshi, o‘zgarmas yoki bir qiymatli o‘lchovdir; har xil sig‘imni olishga imkon beruvchi o‘zgaruvchan sig‘imli kondensator o‘zgaruvchan, yani ko‘p qiymatli o‘lchovlar hisoblanadi. Kattalik birligini qayta tiklash va saqlash uchun mo‘ljallangan o‘ta yuqori (metrologik) aniqlikdagi

maxsus o`lchash vositalari etalon deb ataladi va birlik o`lchamini uzatishda metrologik zanjirning oliy zvenosi hisoblanadi.

Etalon (o`lchashlar shkalasi yoki birligi etaloni) – kattalikning o`lchamini qiyoslash sxemasi bo`yicha quyi vositalarga uzatish maqsadida, shkalani yoki kattalik birligini qayta tiklash va saqlash uchun mo`ljallangan va belgilangan tartibda etalon sifatida tasdiqlangan ekekr o`lchash vositalarining majmui ishlab chiqilgan [1]. Elektr o`lchashlard elektr o`zgartkichlar ham muhim rol o`ynaydi, bu o`lchash informatsiyasi signalini ishlab berish, uzatish, keyinchalik o`zgartirish, ishlab berish va uni saqlashga mo`ljallangan, lekin uzatuvchining ko`rishi uchun moslanmagan o`lchash vositasiga aytiladi.



$Y=f(x)$, ba`zida o`lchash o`zgartkichining kirishiga bir qancha X_1, X_2, \dots, X_n kattaliklar kiritiladi va u holda Y quyidagicha ifodalanadi $Y=f(X_1, X_2, \dots, X_n)$. Odatda, o`lchash zanjirida birinchi bo`lgan, yani o`lchanayotgan kattalik signalini qabul qiladigan o`lchash o`zgartkichga birlamchi o`lchash o`zgartkichi deyiladi. Undan keyingi joylashgan o`lchash o`zgartkichlariga esa oraliq o`zgartkichlar nomi beriladi. Birlamcha o`lchash o`zgartkichlari, ko`pincha datchiklar deb yuritiladi. Uning bevosita o`lchanayotgan kattalik ta`siridagi qismi sezuvchan element deyiladi. Masalan, termoelektrik termometrda – termojuftlik, monometrik termometrda, termoballon ana shunday elementlardir. Bazida datchik bitta yoki bir nechta o`lchash o`zgartkichlarining konstruktiv yig`ilmasidan iborat bo`ladi. O`lchanadigan kattalikning xarakteriga qarab, o`lchash o`zgartgichlari quyidagi turlarga bo`linadi:

1. Elektr kattaliklarni yana elektr kattaliklarga o`zgartiruvchi o`zgartgichlar ($\Theta \Rightarrow \Theta$).

2. Noelektrik kattaliklarni elektr kattaliklarga o`zgartiruvchi o`zgartgichlar ($H\Theta \Rightarrow \Theta$).

1- turdagi o`zgartgichlarga masshtabli (shunt qarshiligi, qo`shimcha rezistorlar, kuchlanish bo`lgichlari, o`lchash tok va kuchlanish transformatorlari, kuchaytirgichlar va h.k) o`zgarkichlar, hamda to`g`irlagichli o`zgartgichlar (yarim o`tkazgichli elementlardan ishlangan diodli o`zgartkichlar) kiradi.

2 – turdagi o`lchash o`zgartgichlariga noelektrik (elektrmas) kattaliklarni (masalan, mexanik, issiqlik, kimyoviy, optik va boshqa turdagi) elektr kattaliklariga (tok, E.Yu.K., qarshilik kabi) o`zgartiruvchi o`zgartkichlar datchiklar deb yuritiladi va o`lchanayotgan kattalikning turiga qarab tegishli nomlarga ega bo`ladi. Masalan, bosim datchigi, moment datchigi, siljish datchigi, sath datchigi, issiqlik datchigi va h.k. Ta`kidlab o`tilgan parametrik o`lchash o`zgartkichlarida kirishdagi signal (mexanik siljish, bosim, o`g`irlik kabi) bo`lib, chiqishdagi esa faqat elektr signali (elektr qarshiligi, elektr sig`imi, elektr yurituvchi kuch va boshqalar) bo`ladi [2,3]. Telemexanika va teleo`lchash tizimlarida (masofadan o`lchashlar va boshqarishda) me`yorlovchi o`lchash

o`zgartkichlari keng qo`llaniladi. Bu o`zgartkichlarda har – xil elektr (kuchlanish, chastota, quvvat) va noelektrik (bosim, harorat va boshqalar) kattaliklar umumlashtirilgan elektr signaliga o`zgartiriladi. Bu o`lchash o`zgartkichga “Sapfir” turidagi bosim o`zgartkichi misol bo`la oladi.

Elektr o`lchash o`zgartkichlarining chiqishidagi o`lchash informatsiyasining signali kuzatuvchining ko`rishi uchun moslanmagan bo`lganligi sababli, bu o`zgartkichlar alohida o`lchash vositasi sifatida ishlatilmaydi. O`lchash o`zgartkichlari faqat o`lchash asboblari bilan birgalikda yoki o`lchash qurilmalari yoki o`lchash tizimlarining tarkibida ishlatiladi. Zamonaviy intellektual elektr o`lchash asboblari deb, kuzatish uchun qulay ko`rinishli shaklida o`lchash informatsiyasi signalini ishlab berishga mo`ljallangan elektr o`lchash vositasiga aytiladi. Zamonaviy intellektual elektr o`lchash asboblari struktura sxemasining turi bo`yicha o`lchash vositasiga o`lchash informatsiyasi signalini o`zgartirish ketma–ketligini ifodalovchi sxema asosida bevosita ta`sirdagi solishtirib o`lchaydigan asboblarga bo`linadi. Elektr o`lchash asboblari ularning ko`rsatishi, chiqishdagi kattalik bilan o`lchandigan kattaliklarning o`zaro bog`liqligi bo`yicha analogli va raqamli asboblarga bo`linadi [4]. Analogli asboblarda ularning ko`rsatishi o`lchanadigan kattalikning uzluksiz o`zgarish funksiyasiga bog`liq bo`ladi. Analogli asboblarda yuqori tezkorlikka ega, bundan tashqari asbobning ko`rsatishi bo`yicha o`lchanadigan kattalikning o`zgarishi raqamli o`lchashga qaraganda psixologik jihatdan oson qabul qilinadi. Lekin, analogli asosan strelkali va asboblarning aniqligi uning shkalasi bo`yicha kuzatish xatoligi bilan cheklanadi va bu xatolik odatda 0.05-1% kichik bo`lmaydi [5].

Raqamli asboblarda. Raqamli o`lchash asbobi deb, o`lchash borasida uzluksiz o`lchanadigan kattalikning natijasi raqamli qayd etish qurilmasida yoki raqamlarni yozib boruvchi qurilmada diskret tarzda o`zgartirilib, indikatsiyalanadigan asboblarga aytiladi. Raqamli asboblarda, diskret o`lchash usuliga asoslangan bo`lib, asbobning ko`rsatishi raqam ko`rinishida bo`ladi, shu sababli ularning ko`rsatuvlari osongina qayd qilinadi, va ularni EXM ga kiritish juda qulay hisoblanadi. Ishlatilish sharoitiga qarab elektr o`lchash asboblari A, B, V va T guruhlariga ajratiladi. Masalan, A guruhdan asboblarda havoning nisbiy namligi 80 % gacha yetadigan, harorati +10 ÷ +35 0C gacha bo`lgan quruq va isitiladigan yopiq honalarda ishlatishga mo`ljallangan.

T– guruhga kiruvchi asboblarda esa quruq va nam eng issiq iqlim sharoitida foydalanishga mo`ljallab tayyorlangan bo`ladi. Elektr o`lchash vositalari mexanik ta`sirlarga bardoshligiga qarab chidamli, mustahkam asboblarga bo`linadi. Silkinish, tebranish sharoitida ishlash imkoniyatini saqlagan asboblarda silkinish yoki tebranishga mustahkam elektr o`lchash vositalari deb ataladi. Ko`rsatuvchi elektr o`lchash vositalari keltirilgan xatoliklarning ruhsat etilgan qiymati bo`yicha sakkizta aniqlik klassiga bo`linadi:

$$\Delta_{an.kl} \in \{0.02;0.05;0.1;0.2;0.5;1;1.5;2;2.5;4\}.$$

Elektr o`lchash vositalari – bir joyda joylashgan ham funksional, ham konstruktiv bog`langan o`lchash vositalarining (o`lchovlar, o`lchash o`zgartgichlari, o`lchash asboblari) va yordamchi vositalar yig`ilmasidan iborat bo`lib, o`lchash jarayonini ratsional tashkil etishda xizmat qiladi.

Muqobil energiya manbalarini rivojlantirishning istiqbolli yo`nalishlaridan biri termoelektrik konvertorlarni ishlab chiqish va ishlab chiqarishdir [6].

Patent materiallarini tahlil qilish natijasida mexanik kuchlanish transformatorlarini konstruktiv takomillashtirishning bir qator umumlashtirilgan usullari olingan, bu erda eng muhim xususiyatlar: asosiy kuchlanish yo`nalishini o`zgartirishning sezgirliigi va xatosi [7].

Bunday sensorlarni ishlab chiqarish texnologiyasi qimmat uskunalarni talab qilmaydi, pin-diodga asoslangan sensordan farqli o'laroq, uni ishlab chiqarish uchun yuqori vakuumli qurilma va ion nurlari va ion qotishmalarini o'rnatishni talab qilmaydi [8].

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*Obidova F.Ya.
JizPI "Iqtisodiyot va menejment" kafedrası dotsenti*

TADBIRKORLIK SUBYEKTLARI MEHNAT RESURSLARIDAN SAMARALI FOYDALANISH

Annotatsiya: ushbu maqolada, tadbirkorlik subyektlarining hozirgi kundagi ahamiyati hamda tadbirkorlik subyektlarining mehnat resurslaridan samarali foydalanish zaruriyati haqida ma'lumotlar berilgan.

Kalit so'zlar: tadbirkorlik, ishlab chiqarish, diversifikatsiyalash, modernizatsiyalash, kichik va xususiy tadbirkorlik.

*Obidova F.Ya.
associate professor
"Economics and Management" department
JizPI*

EFFICIENT USE OF LABOR RESOURCES BY BUSINESS SUBJECTS

Annotation: this article provides information on the current importance of business entities and the need for effective use of labor resources of business entities.

Keywords: entrepreneurship, production, diversification, modernization, small and private entrepreneurship.

O'zbekiston Respublikasining hozirgi rivojlanish bosqichida, ya'ni milliy iqtisodiyotda ishlab chiqarishni diversifikatsiyalash va modernizatsiyalash, ijtimoiy-iqtisodiy islohotlarni yanada chuqurlashtirish sharoitida mehnatni tashkil etish u yoki bu xo'jalik faoliyati turi bilan shug'ullanuvchi korxonaning nafaqat o'ziga xos xususiyati bilan, balki milliy iqtisodiyotning rivojlanish bosqichi xususiyatlari bilan uzviy bog'liq kichik va xususiy tadbirkorlikni yanada rivojlantirishning ustuvor vazifalari sifatida kichik korxonada xodimlarini samarali mehnat qilish usullariga o'rgatish, mehnat potensialidan foydalanishni ratsional usullariga o'tish, ilg'or mehnat tajribalarini targ'ib qilish, samarali mehnat usullarini joriy etish hisobiga xarajatlarni kamaytirish kabi bir qancha vazifalar eng ustuvor vazifa hisoblanadi.

Bularning barchasi kichik korxonalarda mehnatni tashkil etish bilan bog'liq bo'lgan vazifalardir. Shuning uchun ham mehnatni tashkil qilish jarayoni ko'p qirrali jarayon bo'lib, o'ziga xos tadbirlar tizimi sifatida qaraladi. Bu tadbirlar ishchi kuchidan ratsional foydalanish, ishlab chiqarish jarayonida xodimlarni joy-joyiga qo'yish, mehnat taqsimoti va kooperatsiyasi, mehnat me'yorlari va rag'batlari, ish joyini tashkil etish va qulay mehnat sharoitlarini yaratish kabilarni ham o'z ichiga oladi. Ushbu tizimni amal qilishi holatida inson nafaqat ishchi

sifatida, balki inson sifatida uning individual qobiliyatiga, kasbiy faoliyati xususiyatiga e'tibor qaratiladi. Bu holat o'z navbatida ishlab chiqarishni samarali, zamonaviy tashkil qilishga o'tish uchun zarurat hisoblanadi yoki zamonaviy ishlab chiqarish korxonalarining maqsadini tashkil etadi.

Demografik jarayonlarga bog'liq holda, yurtimizda mehnat resurslari soni kun sayin ortib bormoqda. Ishchi kuchining qayta taqsimlanishi, uning mehnat bozoridagi harakatiga, binobarin, ishchi kuchiga bo'lgan talab va taklif o'rtasidagi miqdor-sifat jihatidan muvofiqlikka erishish ko'lamlariga bevosita ta'sir etuvchi omillar ijtimoiy-iqtisodiy rivojlanishning yangicha sharoitlarini shakllantiradigan makroomillarga bog'liqdir.

Shuning uchun ham ishsizlik miqyosining haddan ziyod oshib ketishining oldini olish va ishsizlarni ishga joylashtirishga yordam berish bo'yicha amalga oshiriladigan chora-tadbirlar quyidagilardan iborat bo'lmog'i lozim:

- mehnat munosabatlari sohasida ijtimoiy hamkorlikning uch tomonlama mexanizmini takomillashtirish;
- mamlakatning har bir hududida mehnat zahiralari va ish joylari sonining ham sifat, ham soni jihatidan o'sish mutanosibligiga erishish;
- yangi taraqqiy etgan tarmoqlar va faoliyat turlarini rivojlantirish yo'li bilan yangi ish joylarini barpo etish.

Bu tadbirlarni amalga oshirishda zamonaviy sanoat tarmoqlari, kichik va xususiy biznes, xizmat ko'rsatish sohalarida ish bilan bandlik innovatsion turlarini kengaytirishga ahamiyat berish kerak bo'ladi, shuningdek:

- ish bilan bandlikning tarmoq va kasbiy tarkibini takomillashtirish;
- iqtisodiyotda oqilona ish bilan bandlikni ta'minlash;
- mehnat bozorida raqobat mexanizmini yo'lga qo'yish samaradorligini oshirish, ishchi kuchining sifat ko'rsatkichlarini to'xtovsiz oshirib borish;
- samarali va "egiluvchan" mehnat bozorini shakllantirish, mehnat bozori infratuzilmasining innovatsion rivojlanishini ta'minlash, xodimlarning kasbiy harakatchanligini oshirish shu bilan birga mehnat bozorining alohida segmentlariga ta'sir ko'rsatish orqali ishsizlarda yangi kasblarga qiziqish uyg'otish;
- mehnat bozorida faol siyosat olib borish borasidagi rivojlangan mamlakatlar tajribasidan keng foydalanish, jamoat ishlarini kengaytirish, ishsizlarni o'qitish, qayta o'qitish tizimini va yangi ish joylarini barpo etish;
- yoshlar o'rtasida ishsizlikni kamaytirish choralari ishlab chiqish.

Personaldan samarali foydalanishga intiladigan har bir rahbar quyidagilarni bilishi zarurdir:

- barcha xodimlarni bir xilda motivatsiyalaydigan rag'batlantirish tizimi bo'lishi mumkin emas;
- muayyan rag'batlantirish tizimi muayyan kishi yoki ustunlik qiladigan ehtiyojlari o'xshash bo'lgan kishilar guruhi uchun ishlab chiqilishi (yoki umumiy tizim individuallashtirilishi) lozim;

– personalning ustunlik qiluvchi ehtiyojlari va motivatsiyasi monitoringi–personal bo'yicha rahbarning majburiyati va zarur faoliyat bo'g'ini.

Xorijiy mamlakatlar tajribasi shundan dalolat beradiki, rag'batlantirish tizimidan motivatsiya tizimiga o'tishning uddasidan chiqqan korxonalar yuqori raqobatbardoshlik darajasiga albatta erishgan. Bu tushunchalarning o'zgarishigina emas, balki juda yuqori darajali menejment ko'rsatkichlaridan biri hisoblanadi: xodimlar motivlarining barcha rang-barangligi va o'ziga xosligi rag'batlantirish tizimi o'rnini egallagan mos keluvchi motivatsiya tizimida aks etadi.

Personal motivatsiyasi tizimini tahlil qilish shuni ko'rsatdiki, tanlangan obyektlarda personalni boshqarish ma'muriy, iqtisodiy va ijtimoiy-psixologik usullarni birga olib borish orqali amalga oshiriladi. Motivatsiya tizimi asosi moddiy rag'batlantirish hisoblanadi, shu bilan bir qatorda sog'liqni saqlash va ta'lim tizimini rivojlantirish mehnat resurslaridan foydalanish samaradorligining muhim tarkibiy qismlaridan biri bo'lib qolmoqda.

Tadbirkorlik subyektlari mehnat resurslaridan foydalanish va xodimlar motivatsiyasi o'rtasidagi aloqa, personal motivatsiyasi tizimini tahlil qilish shuni ko'rsatdiki, tadbirkorlik subyektlarida personalni boshqarish ma'muriy, iqtisodiy va ijtimoiy-psixologik usullarni birgalikda olib borish yordamida amalga oshiriladi. Motivatsiya tizimi asosi moddiy rag'batlantirish hisoblanadi, shu bilan bir qatorda sog'liqni saqlash va ta'lim tizimini rivojlantirish mehnat resurslaridan foydalanish samaradorligining muhim tarkibiy qismlaridan bo'lib qolmoqda.

Bugungi kunda tadbirkorlik korxonalarida xodimlarni boshqarish tizimini takomillashtirishning asosiy yo'nalishlaridan biri quyidagilar bo'lishi kerak:

-korxonaning inson resurslaridan samarali foydalanish orqali xarajatlarni kamaytirish hamda xodimlarning samaradorligini oshirishga qaratilgan xodimlar sonini optimallashtirish;

-xodimlarni rag'batlantirish tizimini takomillashtirish, mehnat unumdorligini oshirish, xarajatlarni kamaytirish, mahsulot (ishlar, xizmatlar) sifatini yaxshilash va xodimlarning rentabelligini oshirish;

-ishlab chiqarishni modernizatsiyalash, innovatsion texnologiyalarni joriy etish orqali yuqori samarali ish o'rinlarini yaratish;

-korxonaning joriy va uzoq muddatli samaradorligini ta'minlashga imkon beradigan xodimlarni baholash reytingini joriy etish.

Hozirgi rivojlanish bosqichida kichik biznes va xususiy tadbirkorlik samarali mehnat bozorining yetarli darajadagi rivojlanish sur'atini olgani yo'q, u aksariyat holatlarda kapitalning dastlabki jamg'armasiga mo'ljallangan bo'lib, uni ijobiy rivojlantirish va tarkibiy o'zgarishlarni amalga oshirish, tahlillarga asosan aytish mumkinki, bu sohada katta imkoniyatlar mavjud ekanligini ko'rsatmoqda. Kichik biznes va xususiy tadbirkorlikni rivojlantirishning mehnat faoliyatini tashkil etish xususiyatlari, vazifalari, tarkibi va taraqqiyot asoslarini o'rganish muhim ahamiyatlardan biridir. Tadbirkorlikni rivojlantirishda motivatsiya omillaridan foydalanishning zamonaviy holatini o'rganish maqsadga

muvofigdir. Kichik biznesning innovatsiya negizida rivojlanishini ta'minlash borasida chora tadbirlarni ishlab chiqish, innovatsiyalarni yaratish va muntazam ravishda kichik biznes subyektlariga joriy etib borilishini ta'minlash lozimdir.

Kichik korxonalarda mehnatni tashkil etish bilan bog'liq bo'lgan vazifalardan biridir. Shuning uchun ham mehnatni tashkil qilish ko'p qirrali jarayon bo'lib, o'ziga xos tadbirlar tizimi sifatida qaraladi. Bu tadbirlar ishchi kuchidan ratsional foydalanish, ishlab chiqarish jarayonida xodimlarni joy-joyiga qo'yish, mehnat taqsimoti va kooperatsiyasi, mehnat me'yorlari va rag'batlari, ish joyini tashkil etish va qulay mehnat sharoitlarini yaratish kabilarni o'z ichiga oladi. Bu hol o'z navbatida ishlab chiqarishni samarali, zamonaviy tashkil qilishga o'tish uchun zarurat hisoblanadi yoki zamonaviy ishlab chiqarish korxonalarining maqsadini tashkil etadi. Tadbirkorlik korxonalarida xodimlarni boshqarishning innovatsion usuli korxonalar, jamoa kapitali va jamoa mehnatining motivatsiyasiga asoslangandir. Shu sababdan, xodimlarni boshqarishning innovatsion usuli jamoat birlashmalari, aksiyadorlik jamiyatlarida ma'lum tamoyillardan foydalangan holda bilvosita iqtisodiy usullar asosida hosil qilinishi lozim.

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DIFFICULTIES OF USING PREPOSITIONS IN ENGLISH AND THEIR SOLUTIONS

Abstract. This article deals with core problems and difficulties of employing English prepositions in sentences and highlights each issue in a detailed way. Also, valid solutions and methods will be suggested to overcome these difficulties. All information will be supported with examples and reasons.

Key words: prepositions, wrong use, overusing, omission of prepositions, incorrect placement, wrong verb forms, preposition types, grammar rules, viable solutions.

INTRODUCTION

It is certainly true that English language is being widely taught all over the world today. Its importance is urging young people to learn this language. But learning a new language is not an easy process, since it has its own difficulties to overcome. It is true that, the language learning process involves learning its grammar rules, making sentences in a correct grammatical form and being fluent in that language. One of the most important aspect of the English is its grammar. New language learners often face to many difficulties when employing grammatical forms, especially prepositions in their writing or in their speech. ESL learners often use prepositions incorrectly without knowing multiple meanings of them which leads grammatical errors related to this. In this article, some of the most common mistakes related to the use of prepositions in English will be explored and the best solutions to avoid them will be suggested.

MAIN BODY

The main function of the prepositions in the sentence is to indicate relationship between different parts of a sentence, such as nouns, pronouns or gerund verbs. They are employed to express various meanings, namely direction, time or location. Prepositions' role in grammar is very crucial. Having said this, ESL students are facing with various difficulties in the use of prepositions.

The first major problem is related to the use of wrong prepositions in the sentences. Making this mistake can alter the meaning of the sentence or cause an incorrect grammatical form. The examples for this type of mistake:

1. Jane will make a cake **to** 4 PM. ("to" is used incorrectly)
2. The school starts **on** September. ("on" is used incorrectly)
3. John was waiting **at** the room. ("at" is used incorrectly)

The second core issue is associated with incorrect placement of prepositions, which leads sentences to sound strange and sometimes can cause misunderstandings. For instance:

1. Children are getting around the beach **with cameras**. (“with cameras” is misplaced)

2. I am **waiting** the train **for**. (“waiting for” is misplaced)

The next mistake is concerned with overusing prepositions which results in wordiness in sentences and to make the meaning complex. Examples:

1. Your child jumped **up** onto the table and sat **down** next to the fridge. “up”, “down” is overused)

Another common pitfall related to prepositions is using the wrong form of the verb in relation to them. This mistake makes the sentence to be grammatically incorrect. To exemplify:

1. Your success is **depending on** your hard work. (“depending” is in the wrong form, it should be replaced with the form “depend”)

2. Children are **interesting in** reading colorful books. (“interesting” is in the wrong form which ought to be replaced with the form “interested”)

Additional mistake which was made by language learners a lot is omission of important prepositions. In order to express intended meaning, prepositions must be used in the place without omitting. Otherwise, that sentence cannot convey full meaning and show relationships between words. An example for this type of error can be:

1. I will buy a present my friend. (“for” preposition is omitted in this sentence and it ought to be used before the phrase “my friend”)

Focusing on solutions, there are a lot to mention, as it is one of the most essential grammatical features to make sentences understandable and clear. Initially, wrong preposition use in sentences come from not knowing different types of prepositions. there are a number of types of prepositions in English which carry different meaning expressions. For instance:

1. **Time preposition** – this type is about the indication of time which refers to any kind of action that happened or will happen. Time prepositions may include “on, in, during, at, since, until, from, for”. Without this type, we cannot express time – at 11:00, day – on Monday, month – in September, season – in spring, deadline – by midnight and etc.

2. **Place preposition** – it indicates the location of someone or something. It may include “at, behind, on, by, in, below, near, under, above, inside, over, beneath, underneath, between, opposite”. Without this type, we cannot express place of things or people – at the bus station, at the school, on the table, on the book, near the bank, near the house, in the box and etc.

3. **Direction preposition** – it can be also called “motion prepositions”, as it relates to motion’s direction which includes “to, by, toward, on, against, off”. Examples of its use can be: they are going to London, it is coming towards us” and etc.

4. **Possession prepositions** - it is employed in a sentence when an object that belongs to someone or something. This type includes “of, to, with”. Examples of its use can be: girl with sunglasses, boy with flowers, a friend of mine, it belongs to me and etc.

5. **Manner preposition** – it is also called “method prepositions”. it is used to show how an event or one certain thing happened. It consists of prepositions – like, with, by, on. Examples of its use can be: by answering the phone, with a knife, on foot, like a wolf, with happiness and etc.

6. **Source preposition** – it is about origin and source of something or someone. It may include “from, by, out of”. Examples of its use can be: from Uzbekistan, from home and etc.

If language learners are fully aware of all these mentioned types of prepositions, they will not definitely face with problems with the wrong use. Also, context should be taken into consideration in the sentence for choosing correct preposition type.

Secondly, in order to avoid incorrect placement, one ought to be aware of placement roles of prepositions. According to its strict rule, it must be placed before a pronoun or noun or sometime noun phrase in the sentence. To strengthen knowledge about their placement, students should do more exercises related to this grammar feature.

Additional solution is associated with overusing problem. To fix it, language learners should be aware of the fact that some English words do not even require prepositions to make meaning. If overusing occurs, the sentence can be confusing. Therefore, unnecessary prepositions can be removed or shortened in order to make the sentence more accurate and clearer.

Next way is associated with avoiding using wrong verb forms with prepositions. it is about employing correct verb forms by being informed about its own roles. Some verbs require prepositions for the relationship with other words. These verbs are:

- Arrive in / at
- Concentrate on
- Depend on
- Explain something to
- Listen to
- Wait for

In order to be efficient in employing verbs with prepositions, one ought to learn all of these rules by heart.

Finally, fixing the omission problem is highly associated with learning rules of prepositions, being aware of all mention types of it and studying them in the context. Students must be careful with the employment of prepositions, because of its important role in the relationship between words.

It is true that there are several difficulties with employing prepositions in the sentences according to their meaning. Having said that, if language learners

try their best to gain knowledge more about its roles, its types, and its usage in various contexts, they will be able to make sentences without any pitfalls. All of these mentioned strategies can address the given problems.

CONCLUSION

To conclude, I am of the opinion that prepositions' role in language is very essential, as they convey various meaning connections between words in a specific context. Without knowing them how to use correctly, sentences may lack coherence and logic. Therefore, overcoming all difficulties related to prepositions with the mentioned solid ways is a must for language learners, as they can foster grammatical accuracy in the sentences.

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*Ochilova M.H.
Iqtisodiyot 1- kurs 101-23 talabasi
Iqtisodiyot va pedagogika Universiteti
Xolmirzaev T.R.
Iqtisodiyot va pedagogika Universiteti
Iqtisodiyot kafedrası stajyor o'qituvchisi*

HUDUDLARDA XIZMATLAR SOHASINI JADAL RIVOJLANTIRISH

Annotatsiya. Maqolada hududlarning ijtimoiy-iqtisodiy rivojlanishida xizmat ko'rsatish sohasining rolini baholashning reyting usuli tadqiq etilgan. Unda xizmat ko'rsatish sohasining asosiy ko'rsatkichlari hududlar kesimida tahlil etilgan. Shu asosda hududlar rivojlanishi "yashil", "sariq" va "qizil" ranglar bo'yicha toifalangan va tavsifi ishlab chiqilgan. Shuningdek, xizmat ko'rsatish sohasini rivojlantirishda davlat xususiy sherikchiligini rivojlantirish zarurati bo'yicha ilmiy xulosalar va tavsiyalar taklif qilingan.

Kalit so'zlar: hudud, hududlar rivojlanishi, xizmat ko'rsatish sohasi, davlat xususiy sherikchiligi, hududlar toifasi, hududlar tavsifi, baholash, reyting.

*Ochilova M.H.
Economics 1st year student 101-23
University of Economics and Pedagogy
Kholmirzaev T.R.
intern teacher
Department of Economics
University of Economics and Pedagogy*

RAPID DEVELOPMENT OF THE FIELD OF SERVICES IN THE REGIONS

Abstract. The rating method of assessing the role of the service sector in the socio-economic development of regions is studied in the article. In it, the main indicators of the service sector are analyzed by region. On this basis, the development of regions is classified and described by "green", "yellow" and "red" colors. Also, scientific conclusions and recommendations on the need to develop public-private partnership in the development of the service sector were offered.

Key words: region, development of regions, service sector, public-private partnership, category of regions, description of regions, assessment, rating.

Kirish. Xizmat ko'rsatish sohasini rivojlantirish mamlakatimizda amalga oshirilayotgan islohotlarning asosiy masalalaridan hisoblanadi. Chunki bu soha iqtisodiy o'sishning muhim drayveri sifatida milliy iqtisodiyot raqobatbardoshligini ta'minlashda alohida ahamiyat kasb etishi zarur. Shu

boisdan xizmatlar sohasi hududlar ijtimoiy-iqtisodiy rivojlanishini baholashning asosiy mezoni hisoblanadi. Bu borada, mamlakatimizda xizmatlar sohasining tezkor o'sish sur'atlarini ta'minlash, sohada tadbirkorlik faolligini yanada qo'llab-quvvatlash va aholi uchun yangi ish o'rinlarini yaratish¹, hududlarni ijtimoiy-iqtisodiy rivojlantirishni reyting baholash tizimini joriy etish² borasidagi vazifalar belgilab qo'yilgan. Belgilangan vazifalardan kelib chiqib, hududlarni ijtimoiy-iqtisodiy rivojlanishida xizmat ko'rsatish sohasidagi tendensiyalar va bu jarayonlarda xususiy tadbirkorlikning rolini baholashga alohida e'tibor qaratdik. Chunki, xizmat ko'rsatish sohasini rivojlantirishda tadbirkorlikning rolini oshirish masalalari tadqiqot ob'ekti sifatida kam o'rganilgan.

Ilmiy muammoning qo'yilishi.

Hududlarni rivojlantirishda xizmatlar sohasining rolini baholashning reyting va toifalash usulini tadqiq etish borasida shu kunga qadar qator tadqiqotlar amalga oshirilgan, va bular qatorida quyidagilarni ko'rishimiz mumkin: hududiy rivojlanishning ijtimoiy-iqtisodiy siyosati, ijtimoiy-iqtisodiy samaradorligi ijtimoiy-iqtisodiy xavfsizligi⁵ va boshqalar⁶. Keyingi yillarda yangicha yondashuvdagi tadqiqotlar ham amalga oshirilmoqda. Xususan, oilaviy tadbirkorlik va hududiy rivojlanish, hududlar rivojlanishida oilaviy tadbirkorlikning rolini "mahallabay" yondashuvda baholash⁸ kabilarni ta'kidlash joiz.

Biroq, ushbu sohada tadbirkorlik rolini, mavjud iqtisodiy ijtimoiy vaziyatdan kelib chiqib ilmiy-amaliy jihatdan o'rganish ham amalga oshirilayotgan islohotlarning muhim tarkibiy qismi hisoblanadi. Shu jihatdan mazkur tadqiqot xizmat ko'rsatish sohasini tadqiq etishning alohida uslubi bo'lib, ushbu sohada aholining tadbirkorlik faolligini oshirishga qaratilgan samarali chora-tadbirlarni ishlab chiqishda muhim ilmiy ma metodologik ahamiyat kasb etadi.

Hududlar ijtimoiy-iqtisodiy rivojlanishining muam molar va omillariga ko'ra, hududlarni tadqiq etishning yo'nalishlari va metodologik konsepsiyalari farq qiladi. Bunday baholash natijalari ham hududlar rivojlanishida notekis tendensiyalarning mavjudligini tasdiqlaydi. Buning sabablari hududlarning qulay geografik joylashuvi, tabiiy resurslar va iqlim sharoitlari, infratuzilma ob'ektlarining rivojlanganlik darajasi va boshqa omillar bilan bir qatorda hududlarda kichik biznes va oilaviy tadbirkorlikning rivojlanganlik darajasi va bunda "mahalla" va "sektor"larning roli bilan bog'liqligi asoslantirilgan. Ushbu uslubiy yondashuvlarga tayangan holda, bizning tadqiqotimizda hududlarni rivojlantirishda xizmatlar sohasining roli va bu jarayonlarda davlat xususiy sherikchiligining ahamiyati o'rganildi.

Hududlarda xizmatlar sohasi rivojlanishini baholash, o'z tarkibiga ko'ra savdo, tashish va saqlash, yashash va ovqatlanish bo'yicha xizmatlar, axborot va aloqa, sog'liqni saqlash va ijtimoiy xizmatlar ko'rsatish kabi faoliyat turlarini qamrab oladi. Xizmatlar sohasi faoliyatining yakuniy natijasi ko'rsatilgan xizmatlar hajmi bilan belgilanadi. Shu bois, xizmatlar sohasining iqtisodiyotda

xususan, hududlar rivojlanishidagi rolini aniqlashda aholiga ko'rsatilgan xizmatlar hajmi indikatoridan foydalaniladi. Shunga asoslanib, ushbu soha rivojlanishida tadbirkorlikning hissasini baholash mumkin. Bunda hududlarda faoliyat ko'rsatayotgan tadbirkorlik sub'ektlari tomonidan ko'rsatilgan xizmatlar hajmi tahlil qilindi.

Xizmat ko'rsatish sohasini rivojlantirish milliy iqtisodiyotning tarkibiy yangilanishi, aholi farovonligi va ish bilan bandligini ta'minlashda muhim ahamiyatga ega. Shu bois, keyingi yillarda sohani rivojlantirishga jiddiy e'tibor berilishi natijasida, uning mamlakatimiz iqtisodiyotdagi ahamiyati oshmoqda. Shu o'rinda mamlakatimizda xizmatlar sohasining rivojlanish holatiga to'xtalsak, 2020 yil 1 yanvar holatiga YaIM hajmi 511838,1 mlrd. so'mni tashkil etgan bo'lsa, shundan xizmatlar sohasiga 165053,2 mlrd. so'm to'g'ri keladi. Yoki uning YaIMdagi ulushi 35,5 foizni tashkil etib, jami xizmat miqdori o'tgan yilga nisbatan 105,1 foizga o'sgan.

Mamlakatimiz iqtisodiyotida xizmat ko'rsatish sohasining rivojlanishini baholash bu boradagi muhim chora-tadbirlarni ishlab chiqishda muhim ahamiyatga ega. Shu bois, mazkur tadqiqotda xizmat ko'rsatish sohasining rivojlanishini hududlar kesimida baholash asosiy maqsad etib belgilandi. Bunda hududlarning o'rni aholi jon boshiga to'g'ri keladigan xizmatlar hajmi bo'yicha aniqlandi va quyidagi ko'rsatkichlar orqali hisoblandi:

- hisobot davrida doimiy aholi o'rtacha yillik soni (ming kishi);
- hisobot davrida ko'rsatilgan xizmatlari hajmi (mlrd. so'm).

Hududlarning xizmat ko'rsatish sohasining rivojlanishini tavsiflovchi xususiy ko'rsatkichlari rasmiy statistika ma'lumotlari asosida shakllantirildi. Bunda, aholi jon boshiga to'g'ri keladigan xizmatlar hajmi quyidagi formula orqali hisoblandi.

Hududlarni rivojlantirish va bu jarayonlarda xizmatlar sohasining rolini oshirishga oid tadqiqotimiz natijalari asosida quyidagi ilmiy-nazariy xulosa va takliflar ishlab chiqildi:

birinchidan, hududlarni rivojlantirishning muhim ijtimoiy-iqtisodiy ko'rsatkichlari tizimi qo'shimcha rivojlantiruvchi omillar ta'sirini hisobga olib yondashish zaruratini ko'rsatmoqda;

ikkinchidan, tadqiqot natijalariga asoslanib shunday xulosaga kelindiki, hududlar rivojlanishining ijtimoiy-iqtisodiy mohiyatini aniqlashda hamon qarama-qarshi fikrlar uchraydi. Chunki hududlarni ijtimoiy-iqtisodiy rivojlantirishning turli xil metodologik yondoshuvlarida turlicha ko'rsatkichlar tizimidan foydalanib, hududlar iqtisodiyotining u yoki bu sohasi baholangan. Shuning uchun tadqiqot natijalarini boshqa tadqiqotlar bilan solishtirish imkoni bo'lmadi;

uchinchidan, o'rganilgan tadqiqotlarda hududlar rivojlanishida davlat xususiy sherikchiligining o'rni va ahamiyati hisobga olinmagan. Shu bois hududlarning rivojlanishiga oid tadqiqot natijalarini sinergetika tamoyillari asosida birlashtirish yoki umumlashtirishda qiyinchiliklar uchradi;

to‘rtinchidan, mamlakatimizda amalga oshirilayotgan iqtisodiy islohotlar mazmunidan kelib chiqqan holda, xizmat ko‘rsatish sohasida DXShni rolini oshirish orqali hududlarning rivojlanishini baholash ham muhim vazifa lardan hisoblanadi. Bu borada tadqiqot uchun to‘plangan ma‘lumotlar DXSh faoliyatining ishlab chiqarish, qurilish va qishloq xo‘jaligi sohasining rivojlanishidagi rolini baholash uchun yetarli bo‘lmadi. Shuning uchun keyingi tadqiqotlarda ushbu sohalarda ham DXShni o‘rni va rolini baholash bo‘yicha tadqiqotlar olib borish vazifasi belgilandi. Bunda xizmat ko‘rsatish sohasining barcha faoliyat turlari bo‘yicha DXSh asosidagi loyihalarni baholash, hududlarning “xizmat ko‘rsatish sohasining rivojlanishida DXShning roli” indeksi bo‘yicha hududlarni toifalash mezonlarini ishlab chiqish keyingi tadqiqotlarning vazifalari sifatida belgilandi.

Foydalanilgan adabiyotlar:

1. O‘zbekiston Respublikasi Prezidentining 2020 yil 16 iyundagi “Xizmatlar sohasini qo‘llab-quvvatlash chora-tadbirlari to‘g‘risida”gi PQ-4752-son qarori.
2. O‘zbekiston Respublikasi Prezidentining 2020 yil 1 maydagi “Hududlarni ijtimoiy-iqtisodiy rivojlantirishni reyting baholash tizimini joriy etish to‘g‘risida”gi PQ-4702son qarori.
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*O‘razboyev S.
Jizzax politexnika instituti
Iqtisodiyot va menejment kafedrasi assistenti
Khurmatov B.
Abu Ali Ibn Sino nomidagi Tojikiston
Davlat tibbiyot universiteti o‘qituvchisi*

IQTISODIYOTIMIZNI RIVOJLANTIRISHDA INSON OMILINI FAOLLASHTIRISHNING ASOSIY TENDENSIYALARI

*Annotatsiya: ushbu maqolada, iqtisodiyotimizni rivojlantirishda inson omilini faollashtirishning asosiy tendensiyalari haqida ma’lumotlar berilgan.
Kalit so‘zlar: inson taraqqiyoti, iqtisod, xalqaro maydon, inson omili.*

*Orazboyev S.
assistant
Department of Economics and Management
Jizzakh Polytechnic Institute
Khurmatov B.
teacher
Tajik State Medical University named after Abu Ali Ibn Sina*

THE MAIN TENDENCIES OF THE ACTIVATION OF THE HUMAN FACTOR IN THE DEVELOPMENT OF OUR ECONOMY

*Abstract: this article provides information on the main trends in the activation of the human factor in the development of our economy.
Key words: human development, economy, international arena, human factor.*

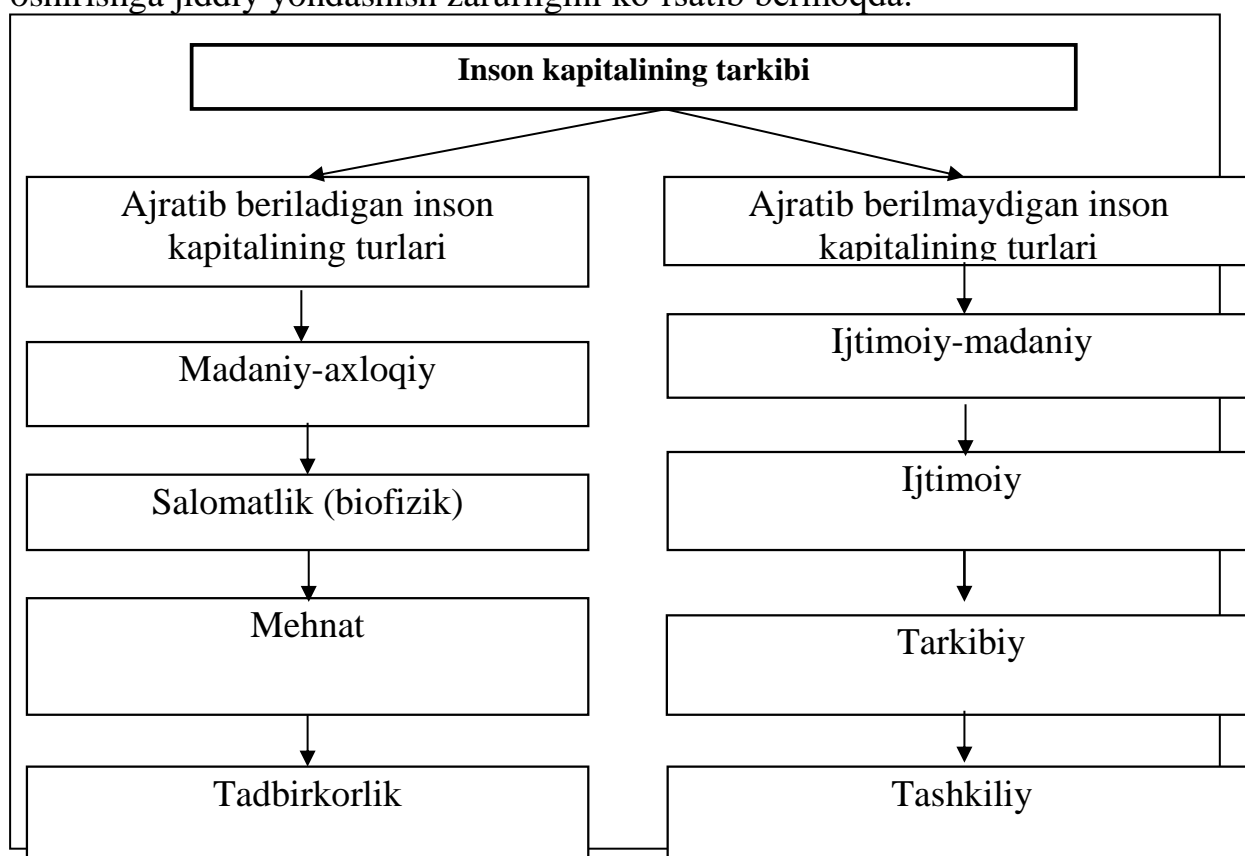
Jahon hamjamiyatida inson taraqqiyoti va uni faollashtirish masalasiga eng ustuvor masala sifatida qaraladi. Bunda inson omilini faollashtirish aholi turmush farovonligini oshirish va ijtimoiy-iqtisodiy taraqqiyotni yo‘lga qo‘yishning bosh omili sifatida tan olingan. Komil inson g‘oyasiga umumbashariy mohiyatga ega bo‘lgan, odamzodga xos eng yuksak ma’naviy va jismoniy barkamollikni mujassam etgan, uni hamisha ezgulikka undaydigan buyuk kuch sifatida qaraladi. Bu nafaqat alohida shaxslarni, balki butun-butun xalqlar va mamlakatlarni yuksak taraqqiyot sari yetaklagandir.

Bu tushuncha xalqaro maydondagi nufuzli tashkilotlar, shu jumladan BMT tomonidan qabul qilingan konsepsiyada ko‘rsatib berilganidek, “Odamlarning ishlab chiqarish faoliyatidan ko‘zlagan eng asosiy maqsadi, manbai – insonni taraqqiy ettirishga e’tibor qaratadi. Bu yerda ishlab chiqarish maqsad emas, balki insonning shu yuksak nomga loyiq kun kechirish yo‘lidagi vositadir. Shu bilan

birga bunda aks ta'sir ham mavjud kishilarning taraqqiyot darajasini oshirish orqali ishlab chiqarishning yanada yuqoriroq darajasiga erishiladi. Jamiyatning rivojlanganlik darajasi nafaqat mamlakatning iqtisodiy salohiyati yuqoriligi bilan, balki bu salohiyatdan har bir insonni uyg'un va har taraflama rivojlantirish uchun qanchalik foydalanayotganligi bilan ham o'lchanadi»⁴¹ – deyiladi.

Inson omilini faollashtirishning asosiy tendensiyalari inson kapitalining turlari mazkur iqtisodiy kategoriyaning ikkita o'ziga xos turlariga taaluqli (1-rasm).

Inson salohiyati – iqtisodiyotni jadal rivojlantirishning asosiy elementi sifatida ishlab chiqarishning barcha jabhalarida inson resurslarining sifatiga bo'lgan talabning oshib borayotganligi, inson omilining faollik darajasini oshirishga jiddiy yondashish zarurligini ko'rsatib bermoqda.



1-rasm. Inson kapitalining tasnifi

Ma'lumki mamlakatimiz iqtisodiyoti rivojlanishining hozirgi bosqichida innovatsiya, insoniyat taraqqiyoti va iqtisodiy o'sishning asosiy omiliga aylanmoqda. Iqtisodiyotda shunday umumqabul qilingan tamoyil amal qiladiki, unga ko'ra, qulay investitsion muhitning yaratilishi iqtisodiy o'sishning muhim sharti hisoblanadi. Bunday muhit inson kapitali investitsion faolligiga ham o'z ta'sirini ko'rsatadi. Jamiyatning jami boyligi inson kapitali va boshqa kapitallarga bog'liq.

⁴¹Inson taraqqiyoti to'g'risida ma'ruza. BMT, O'zbekiston. – T.: 2005 yil, - B. 13.

Jahonning deyarli barcha mamlakatlarida inson kapitalining asosiy tarkibiy qismi – ta’limni rivojlantirishga e’tibor ortgan. Bundan 100 yil muqaddam ta’lim uchun davlat xarajatlari yalpi ichki mahsulotining 1,0 % ni tashkil etar edi. Hozirga vaqtda bu ko’rsatkich 5,1 % ga etgan. Natijada dunyoda boshlang’ich ta’limga ega bo’lganlar soni jami aholining 94,0 % dan ortib ketdi. Ilmiy ishlanmalarga xarajatlar ham inson kapitaliga investitsiyalar hisoblanadi.

Axborot jamiyatida ilm-fan o’ziga xos «inson kapitali generatori»ga aylanadi. Inson kapitali nazariyasiga muvofiq, uning to’planishi turli shakllarda amalga oshirilishi mumkin. Ularning eng asosiylari ta’lim olish hamda kasbiy tayyorgarlik davomida qobiliyatlarni rivojlantirish asosida kapitalni to’plashdir. Odatda, bu qatordan oiladagi tarbiya ham muhim o’rin oladi.

O’zbekiston Respublikasi Prezidentining 2021-yil 24-yanvardagi Murojatnomasida “...biz O’zbekistonni rivojlangan mamlakatga aylantirishni maqsad qilib qo’ygan ekanmiz, bunga faqat jadal islohotlar, ilm-ma’rifat va innovatsiya bilan erisha olamiz” degan vazifani qo’yдилar.

Ma’lumki mamlakatimiz iqtisodiyoti rivojlanishining hozirgi bosqichida innovatsiya, insoniyat taraqqiyoti va iqtisodiy o’sishning asosiy omiliga aylanmoqda. Iqtisodiyotda shunday umumqabul qilingan tamoyil amal qiladiki, unga ko’ra, qulay investitsion muhitning yaratilishi iqtisodiy o’sishning muhim sharti hisoblanadi. Bunday muhit inson kapitali investitsion faolligiga ham o’z ta’sirini ko’rsatadi. Jamiyatning jami boyligi inson kapitali va boshqa kapitallarga bog’liq. Inson kapitaliga ta’lim, treninglar, migratsiya kabi sohalarga qilingan investitsiyalar yig’indisi kirs, boshqa kapitallarga tabiiy boyliklar, binolar va texnologiyalar kiradi.

Inson kapitaliga yo’naltiriladigan investitsiyalarning samaradorligini shakllantirish bo’yicha tashkiliy-iqtisodiy mexanizmlar amal qilishiga qarab quyidagicha guruhlanadi (2-rasm). Tashkiliy-iqtisodiy mexanizmlar bir-biri bilan uzviy aloqadorlikda umumiy jihatlarni ifodalaydi.

Inson kapitaliga yo’naltiriladigan investitsiyalarning tashkiliy-iqtisodiy mexanizmlari	
Tashkiliy mexanizmlar	Iqtisodiy mexanizmlar
Qonunchilik bazasi	Soliq-byudjet
Ma’muriy-hududiy boshqaruv	Bank, kredit, moliya
Sud-huquq	Bojxona
Mehnat bozori va ta’lim	Sug’urta
Tabiiy resurslar	Ijtimoiy infratuzilma
Axborot-kommunikatsiya	Tashqi iqtisodiy siyosat

2-rasm. Inson kapitaliga yo’naltiriladigan investitsiyalarni shakllantirishning tashkiliy-iqtisodiy mexanizmlar*

Olib borilgan tadqiqotlarga asoslanib inson omilini faollashtirishning asosiy tendensiyalariga quyidagilar ta’sir ko’rsatadi:

42 O’zbekiston Respublikasi Prezidentining 2021 -yil 24 -yanvardagi Oliy Majlisga murojaatnomasi. Lex.uz.

1. Bugungi kunda inson kapitali jamiyatning asosiy qadriyati va iqtisodiy muhim omili ekanligini unutmaslik.

2. Tashkilot miqyosida malakali psixolog bilan hamkorlikda favqulotdagi vaziyatlarda xodimlarning xavotirlanish hissini yo‘qotishga va motivatsion, ruhlantiruvchi, o‘z-o‘ziga bo‘lgan ishonchni oshirishga qaratilgan seminar - treninglarni doimiy amalga oshirish.

3. Inson kapitalini rivojlantirishning ishlab chiqarish omili sifatida samarali amal qilishini ta‘minlash vositalarini o‘rganish, inson kapitalini baholashning amaldagi mexanizmlaridan foydalanishni takomillashtirish usullarini tavsiya etish.

4. Korxonalar faoliyatini boshqarish tizimida inson kapitalini rivojlantirish va uni baholash jarayonida yuzaga keladigan ijtimoiy-iqtisodiy munosabatlarni tartibga solish.

5. Inson kapitalini boyitish, innovatsion sohaga jalb qilish maqsadida ilmfan, ta‘lim va biznes integratsiyasini kuchaytirish hamda inson kapitaliga qilingan investitsiyaning tarkibiy tuzilishini kengaytirishga erishish.

Demak, inson resurslari jismoniy va aqliy qobiliyatga ega bo‘lib, mehnat jarayonida moddiy ne‘matlar va xizmatlarni yaratadilar. Ularda jamiyatning mehnatga bo‘lgan ijtimoiy qobiliyati jamlangan bo‘lishi bilan bir qatorda, o‘zining shaxsiy ehtiyojlarini qondirish maqsadida mehnat qilish xohishlari bilan harakatda bo‘ladilar.

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Orinbaev A.K.
O'zbekiston Davlat Jismoniy Tarbiya va
Sport Universiteti Nukus filiali
Sport o'yinlari kafedrasida stajyor-o'qituvchisi

ESHKAK ESHISH TEXNIKASINI RIVOJLANTIRISH

Annotatsiya. Kanoeda eshkak eshish texnikasining rivojlanishi sportni o'zgartirib, kuch va samaradorlikni maksimal darajada oshirishga qaratilgan. An'anaviy qo'l-dominant texnikadan dinamik Kanada zarbasi va zamonaviy metodologiyalargacha, sportchilar endi optimal harakatni yaratish uchun butun tanalaridan foydalanadilar. Texnologik taraqqiyot texnikani takomillashtirish va nozik sozlash, samaradorlikni tahlil qilishga yordam berish va ushbu jozibali sport turini doimiy ravishda yaxshilashda muhim rol o'ynadi.

Kalit so'zlar: eshkak eshish mashqlari, rivojlantirish, usullar, sport, texnika, ta'lim.

Orinbaev A.K.
trainee-teacher
Department of Sports Games of the Nukus branch
Uzbekistan State University of Physical Education and Sports

DEVELOPMENT OF ROWING TECHNIQUES IN CANOE

Abstract. The development of rowing techniques in canoe has transformed the sport, focusing on maximizing power output and efficiency. From the traditional arm-dominant technique to the dynamic Canadian stroke and modern methodologies, athletes now utilize their entire body to generate optimal propulsion. Technological advancements have played a vital role in improving and fine-tuning techniques, aiding performance analysis, and facilitating constant improvement in this captivating sport.

Keywords: rowing exercises, development, methods, sports, technique, education.

Kirish: Eshkak eshish va kanoeda eshkak eshishda startning roli juda katta. Tadqiqotlarimizda biz kanoechilar (erkaklar va ayollar) va kanoechilarning barcha guruhlarida startda ishlab chiqilgan maksimal tezlik va 500 metrlik masofadagi yakuniy natija o'rtasida ishonchli aloqani o'rnatdik. Ba'zi hollarda, boshlashning samaradorligi yakuniy natijani aniqlaydigan 50% dan ortiq. Shuningdek, 500 yoki 1000 m raqobatbardosh masofani bosib o'tish natijalarining startda qayd etilgan mehnat faoliyati ko'rsatkichlari qiymatiga bog'liqligi aniqlandi. Shunday qilib, boshlang'ich tezligi, mexanik quvvat, kuch va temp parametrlari ko'p jihatdan umumiy ish faoliyatini aniqlaydi, bu parametrlarning

o'tgan masofa bilan korrelyatsiya koeffitsientlarining ishonchli qiymatlari bilan tasdiqlanadi.

Baydarka yoki kanoeda eshkak eshishning ayrim turlari bo'yicha mehnat faoliyatining o'ziga xosligi erkaklar uchun baydarkada yakuniy natijaga - boshlang'ich sur'at va harakatlarga, kanoeda erkaklar uchun - kuch parametrlariga, baydarkada ayollar uchun - yuqori sur'atga kompleks ta'sir qilishda namoyon bo'ladi. Yuqoridagilardan kelib chiqadiki, start samaradorligini oshirish butun raqobat masofasida natijani yaxshilaydi. Shu bilan birga, nafaqat qayiqni tezda tezlashtirish va etakchi mavqega ega bo'lish, balki masofaviy eshkak eshishga o'z vaqtida o'tish ham muhimdir, chunki maksimal intensivlik bilan o'tgan juda uzoq boshlang'ich segment sezilarli darajada to'planishiga olib keladi.

O'quv mezotsiklini o'qitishning nisbatan to'liq bosqichini yoki pastki bosqichini tashkil etuvchi turli xil yoki bir xil turdagi mikrotsikllar qatori sifatida aniqlash mumkin. Mashg'ulotlarni mezosikllar ko'rinishida qurish har bir mikrotsikl seriyasining umumiy mashg'ulot samarasini yanada samarali boshqarish imkonini beradi, shu bilan birga sportchilarning jismoniy tayyorgarligining yuqori o'sish sur'atlarini ta'minlaydi.

O'rta tsikllar ko'pincha 3-6 mikrotsikldan iborat va umumiy davomiyligi bir oyga yaqin. Ularning tuzilishi va mazmuni ko'plab omillarga bog'liq: yillik tsiklning bosqichi va davri, sport turi, sportchilarning yoshi va tayyorgarligi, mashg'ulotlar va dam olish rejimlari, tashqi mashg'ulotlar sharoitlari (iqlim, geografik va boshqalar), oylik bioritmlar haqida. tananing hayotiy faoliyatida (masalan, hayz davrlari) va boshqalar.

Mezosikllarning quyidagi turlari ajratiladi:

- orqaga chekinish;
- Asosiy;
- nazorat va tayyorgarlik;
- musobaqadan oldingi;
- raqobatbardosh;
- tiklovchi va boshqalar.

Ushbu turdagi mezotsikllarning barchasi sportchilarning mashg'ulot jarayonida ham sodir bo'lishi mumkin.

Qaytaruvchi mezosikl o'quv yuklari hajmining intensivligining bosqichma-bosqich oshishi bilan sezilarli qiymatlarga ko'tarilishi bilan tavsiflanadi. Tayyorgarlik davri odatda bunday mezosikldan boshlanadi. Past malakali sportchilarda tortuvchi mezosikl uch-to'rt hajmli mikrotsikldan iborat. Retraksion mezosiklda, sportchilarning malakasidan qat'i nazar, nafas olish va qon aylanish tizimlarining imkoniyatlarini oshirish uchun umumiy tayyorgarlik vositalariga ko'proq e'tibor beriladi. Bu sportchining maxsus tayyorgarlik darajasini oshiradigan keyingi ish uchun zarur shart-sharoitlarni yaratish uchun amalga oshiriladi. Ijtimoiy tayyorgarlik vositalari ham ma'lum darajada qo'llaniladi.

Asosiy mezotsikl funktsional imkoniyatlarni oshirish, asosiy jismoniy qobiliyatlarni rivojlantirish va allaqachon o'zlashtirilgan texnik va taktik usullarni takomillashtirishga qaratilgan katta hajm va intensivlikdagi asosiy o'quv ishlarini o'z ichiga olganligi bilan farq qiladi. Sportchilarning funktsional imkoniyatlarini kengaytirish bilan bir qatorda, bu mezosikllarning vazifalari tanadagi erishilgan o'zgarishlarni barqarorlashtirish va mustahkamlashni o'z ichiga oladi. Ustivor mazmuniga ko'ra ular umumiy tayyorgarlik va maxsus tayyorgarlik, o'qitish dinamikasiga ta'siri bo'yicha esa rivojlantiruvchi va yordamchi bo'lishi mumkin. Asosiy mezosiklning har bir turi tegishli turdagi bir nechta mezosikllarni o'z ichiga olishi mumkin, ammo har xil kombinatsiyalarda. Masalan, rivojlanish mezosikllari quyidagilardan iborat bo'lishi mumkin: 4 mezotsikl - ikkita hajmli, bitta intensiv va tiklovchi.

Nazorat va tayyorgarlik mezosikl asosiy mezosikllardan raqobatbardosh mezosikllarga o'tish shaklidir. Bu erda mashg'ulot ishining o'zi bir qator musobaqalarda ishtirok etish bilan birlashtiriladi, ular asosan nazorat-mashq xarakteriga ega va shuning uchun musobaqalarga tayyorgarlik ko'rish vazifalariga bo'ysunadi. Ushbu turdagi mezosikl ikki yoki uchta haqiqiy o'quv mikrosikllardan va raqobatbardosh turdagi bitta mikrotsikldan iborat bo'lishi mumkin.

Musobaqa oldidan mezotsikllar asosiy musobaqaga yoki asosiylaridan biriga bevosita tayyorgarlik bosqichi uchun xosdir. Ular bo'lajak musobaqaning butun rejimini modellashtirishi, uning o'ziga xos shartlariga moslashishni ta'minlashi va hal qiluvchi startlarda sportchining imkoniyatlarini to'liq ro'yobga chiqarish uchun maqbul sharoitlarni yaratishi kerak. Agar musobaqalar sportchi yoki jamoa uchun unchalik mas'uliyatli bo'lmasa va normal iqlim va geografik sharoitlarda o'tkazilsa, unda ularga to'g'ridan-to'g'ri tayyorgarlik etakchilik, raqobatbardosh va tiklanish mikrotsikllaridan iborat bo'lishi mumkin bo'lgan raqobatbardosh mezotsikl doirasida amalga oshiriladi. Sportchi uchun g'ayrioddiy sharoitlarda o'tkaziladigan mas'uliyatli musobaqaga tayyorgarlik ko'rayotganda, odatda musobaqa oldidan qurilgan bir yoki bir nechta mezosikllarni o'z ichiga olgan mas'uliyatli musobaqaga bevosita tayyorgarlik bosqichini alohida ta'kidlash tavsiya etiladi.

Qoida tariqasida, musobaqadan oldingi mezotsikl turli ketma-ketliklarda va turli chastotalarda birlashtirilishi mumkin bo'lgan model-raqobatdosh, etakchi va haqiqiy o'quv mikrosikllaridan iborat.

Raqobat mezosikllari asosiy musobaqalar paytidagi mashg'ulotlar tuzilishining tipik shaklidir. Raqobatbardosh mezosikllarning soni va tuzilishi mavjud sport kalendarining xususiyatlarini, dasturini, musobaqa tartibini, ishtirokchilar tarkibini, sportchilarning malakasi va tayyorgarlik darajasini belgilaydi. Hech bo'lmaganda, har bir raqobatbardosh mezotsikl etakchi, raqobatbardosh va tiklanish mikrosikllaridan iborat.

Qayta tiklovchi mezosikllar tiklovchi-tayyorlovchi va tiklovchi-qo'llab-quvvatlovchilarga bo'linadi. Ikki raqobatbardosh mezosikl o'rtasidagi birinchi

reja. Ular bir yoki ikkita tiklash, ikki yoki uchta haqiqiy o'quv mikrosikllaridan iborat. Ularning asosiy vazifasi jismoniy va asabiy xarajatlarni talab qilmaydigan bir qator asosiy musobaqalardan so'ng sportchilarni tiklash, shuningdek, yangi musobaqalarga tayyorgarlik ko'rishdir.

Sportchi uchun bir qator musobaqalar juda qiyin bo'lgan taqdirda, raqobatbardosh mezosikldan keyin tiklovchi va qo'llab-quvvatlovchi mezotsikllar ham rejalashtirilgan. Sportchining bir qator musobaqalarda ishtirok etishi natijasida yuzaga keladigan jami effektning kuchayishiga yo'l qo'ymaslik uchun, umumiy mashg'ulot vositalaridan keng foydalangan holda, tiklanishdan keyin mikrotsikllarni qayta tayyorlashga yordamchi xarakterdagi mashg'ulotlar joriy etiladi. Ushbu turdagi o'rtacha davrlar asosan o'tish davriga xosdir.

Tayyorgarlik davrining tuzilishi uchun variantlar.

O'quv jarayonini yanada samarali rejalashtirish va boshqarish uchun yillik tsiklning tayyorgarlik davri har xil turdagi mezosikllarga bo'linadi. Bu mezosikllar doirasida mashg'ulot vositalari va usullari, mashqlar hajmi va intensivligi va boshqalar o'zgaradi. Ularning mazmuni va davomiyligi quyidagilarga bog'liq:

1) tayyorgarlik davrlarining umumiy davomiyligi va sport tadbirlari taqvimini;

2) sport turi;

3) sportchilarning yoshi, malakasi, tajribasi;

4) mashg'ulot sharoitlari va boshqa omillar.

Umumiy tayyorgarlik bosqichida sportchilar uchun bir davrli mashg'ulotlarni qurishda orqaga tortuvchi, asosiy umumiy jismoniy mezosikl ajralib turadi; maxsus-tayyorgarlik bosqichida - asosiy ixtisoslashtirilgan-jismoniy, asosiy maxsus-tayyorgarlik va nazorat-tayyorgarlik mezosikllari. Mezosikl turlarining bu kombinatsiyasi "mavsumiy" sport turlari uchun xosdir.

Qaytaruvchi mezosiklning asosiy maqsadi sportchilarni katta hajmli va intensiv mashg'ulot yuklarini bajarishga bosqichma-bosqich tayyorlash, tayanch-harakat, nerv-mushak tizimi va tananing funktsional asosiy tizimlarini, ayniqsa qon aylanishini va nafas olishni ta'minlash, shuningdek, rivojlanishni ta'minlashdir. irodaviy fazilatlardan. Ushbu mezosiklda yangi mashqlarni o'rganish va unutilgan harakatlarning tuzilishini tiklash tavsiya etiladi.

Asosiy umumiy jismoniy mezosiklning mazmuni sportchilarning har tomonlama va uyg'un rivojlanishiga mos kelishi kerak. Malakali sportchilar 1-2 ta asosiy umumiy jismoniy mezosikllarga ega bo'lishi mumkin, yangi boshlanuvchilar esa bir nechta bo'lishi mumkin.

Asosiy ixtisoslashtirilgan jismoniy mezosiklda umumiy chidamlilik, moslashuvchanlik, kuch, tezlik va muvofiqlashtirish qobiliyatlarini rivojlantirish davom etmoqda, ammo qo'llaniladigan vositalar va usullar tobora o'ziga xos bo'lib bormoqda. Uning asosiy vazifasi tanlangan sport turining texnikasini tiklash, uni takomillashtirish uchun zarur shart-sharoitlarni yaratish va sportchilarning tanasini ushbu sport turi bo'yicha katta hajmdagi va yuqori intensivlikdagi

mashg'ulotlarga bosqichma-bosqich tayyorlashdan iborat. O'quv yuklarining intensivligi biroz pasayadi va ularning hajmi kamayadi.

Ushbu mezotsiklda maxsus va umumiy o'quv vositalarining mohirona uyg'unlashuvi tufayli jismoniy qobiliyatlar, musobaqa mashg'ulotlarida ilgari olingan texnik va taktik ko'nikmalar o'zgaradi.

Asosiy maxsus-tayyorgarlik mezosiklida musobaqa mashqlari hajmi oshadi, texnik va taktik mahoratni oshirishga katta e'tibor beriladi. Biroq, umumiy jismoniy mashqlar hali ham haftasiga 1-2 kun ajratilgan.

Nazorat-tayyorlash mezosiklida sport formasini shakllantirish tugallanadi. Uning asosiy vazifasi sportchilarni muhim musobaqalarda qatnashishga tayyorlashdan iborat. Raqobat mashqlarining yuk hajmi maksimal bo'ladi, mashg'ulotning intensivligi oshadi. Sportchilar mashg'ulot jarayonining uzviy qismi bo'lgan nazorat va ikkinchi darajali musobaqalarda qatnashadilar. Ushbu mezosikl tugagandan so'ng, raqobat davri boshlanadi.

Raqobat davri.

Bu davrda mashg'ulotlarning asosiy maqsadi sport formasini saqlab qolish va shu asosda maksimal natijalarga erishish uchun uni amalga oshirishdir. Ushbu davrda tanlangan sport turi bo'yicha maxsus ko'rsatkichlarni oshirishga qaratilgan raqobatbardosh va maxsus tayyorgarlik mashqlari qo'llaniladi. Musobaqa davrida umumiy o'quv vositalarining ulushi maxsus tayyorgarlik bosqichidan past bo'lmasligi kerak. Umumta'lim vositalari yordamida turli jismoniy qobiliyatlarni, harakat qobiliyatlari va ko'nikmalarini, faol dam olishni zarur darajada rivojlantirish va saqlash ta'minlanadi. Sportchilar o'rtasida musobaqa davridagi maxsus va umumiy tayyorgarlik vositalarining o'ziga xos nisbati ularning yoshi va sport malakasiga bog'liq.

Bu davrda sport mashg'ulotlarining eng ko'p mehnat talab qiladigan usullari qo'llaniladi (musobaqaviy, takroriy, intervalli).

Musobaqalarning soni sport turining xususiyatlariga, musobaqa davrining tuzilishiga, sportchilarning yoshiga va malakasiga bog'liq. Musobaqalarning chastotasi va umumiy sonidan foydalanib, ushbu davrda sport natijalarining o'sishini nazorat qilishingiz mumkin. Biroq, ularning optimal soni har bir sportchi uchun alohida belgilanishi kerak. Shaxsiy musobaqalar orasidagi dam olish oralig'i sportchilarning ko'rsatkichlarini tiklash va rivojlantirish uchun etarli bo'lishi kerak.

Xulosa

Eshkak eshish texnikasining rivojlanishi kanoeda eshkak eshish sportiga sezilarli ta'sir ko'rsatdi. Asboblar bilan ibtidoiy eshkak eshishdan tortib, ilg'or eshkak eshish dizaynlari va biomexanikani o'z ichiga olgan sport uzoq yo'lni bosib o'tdi. Texnologik yangiliklar va o'qitish usullari va ergonomikaga e'tibor qaratgan holda kelajak istiqbolli ko'rinadi. Kanoeda eshkak eshish ixlosmandlari rivojlanishda davom etayotgan sportni intiqlik bilan kutishlari va inson faoliyati chegaralarini surishlari mumkin.

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Orinbaev A.K.
O'zbekiston Davlat Jismoniy Tarbiya
va Sport Universiteti Nukus filiali Sport
o'yinlari kafedrasi stajyor-o'qituvchisi

ESHKAK ESHISH TRENIROVKASINI DAVRLASHTIRISH

Annotatsiya. Kanoeda eshkak eshish mashqlari noyob va qiziqarli mashq tajribasini taqdim etadi. Bu nafaqat ajoyib yurak-qon tomir mashqlarini ta'minlaydi, balki kuch va chidamlilikni oshirishga ham yordam beradi. Eshkak eshish harakatlarini birlashtirib, bu mashq kam ta'sirli mashqni ta'minlab, bir nechta mushak guruhlarini jalb qiladi. Siz boshlang'ich yoki tajribali fitnes ishqibozi bo'lasizmi, kanoeda eshkak eshish mashqlari sizning fitnes tartibingizga osongina kiritilishi mumkin.

Kalit so'zlar: mashqlar, zamonaviy metodlar, eshkak eshish, chaqqonlik, harakatchanlik, mushaklar.

Orinbaev A.K.
trainee-teacher
Department of Sports Games of the Nukus branch
Uzbekistan State University of Physical Education and Sports

THE PERIOD OF ROWING EXERCISES IN CANOE

Abstract. Rowing exercises in a canoe offer a unique and exciting workout experience. Not only does it provide an excellent cardiovascular workout, but it also helps to build strength and endurance. By combining the movements of rowing and paddling, this exercise engages multiple muscle groups while providing a low-impact workout. Whether you are a beginner or an experienced fitness enthusiast, canoe rowing exercises can be easily incorporated into your fitness routine.

Keywords: exercises, modern techniques, rowing, agility, mobility, muscles.

Kirish: Baydarka va kanoeda eshkak eshish dunyoda mashhur va keng tarqalgan sport turi bo'lib, unda ikki turdagi qayiqlar qo'llaniladi: baydarka va canoe. 1936 yildan buyon olimpiya sport turi hisoblanadi (u birinchi marta 1924 yilgi Olimpiya o'yinlarida norasmiy sport turi sifatida kiritilgan). Kayak va kanoeda eshkak eshish (yoki "tekis suv") bilan bir qatorda, ushbu turdagi qayiqlardan foydalanadigan boshqa ko'plab fanlar mavjud. Ulardan faqat slalomda eshkak eshish Olimpiada dasturiga kiritilgan.

Baydarka va kanoeda eshkak eshish bo'yicha jahondagi musobaqalar Xalqaro kano federatsiyasi (ICF) shafeligida o'tkaziladi. Rossiyada uning vakili Butunrossiya baydarka va kanoeda eshkak eshish federatsiyasi hisoblanadi.

Baydarka va kanoeda eshkak eshish - Olimpiya sport turi; suv muhitida va maksimal eshkak eshish tezligi bilan standart mushaklar faolligi sharoitida baydarka va kanoeda harakatlanishni o'z ichiga oladi.

Kayak va kanoeda eshkak eshish dinamik, tsiklik ishdir. Baydarka va kanoeda eshkak eshishning o'ziga xos xususiyati shundaki, eshkak eshuvchining barcha harakatlari beqaror tayanchda, o'tirganda (kanoeda) yoki bir tizzada (kanoeda) amalga oshiriladi. Kayak va kanoeda eshkak eshkak eshishning qayiq bilan qattiq aloqasi yo'q, buning natijasida eshkakchi ko'proq harakat erkinligiga ega. Bu harakatlarni muvofiqlashtirishni ancha qiyinlashtiradi. Shuning uchun, eshkak eshish kabi murakkab vosita mahoratini o'zlashtirish uchun muvofiqlashtirish qobiliyatlarini yuqori darajada rivojlantirish kerak. Texnikani o'zlashtirish, eshkak eshuvchining harakatlari odamning kundalik va ish faoliyatida kamdan-kam uchraydiganligi bilan murakkablashadi.

Eshkak eshish harakatining to'liq tsikli ikkita zarbadan iborat - o'ng va chap pichoqlar bilan - baydarkachilar uchun va bitta kanoechilar uchun [1]. O'z navbatida, har bir zarba shartli ravishda ikkita asosiy bosqichga qaratilgan: haydash (qo'llab-quvvatlash) fazasi, bunda eshkak eshkakchisi eshkak tig'ini suvga suyangan holda, qayiqni va haydash (qo'llab-quvvatlanmaydigan) bosqichni oldinga siljitadi, bunda keyingi bosqichga tayyorgarlik ko'riladi. insult sodir bo'ladi.

V.S.Farfel tasnifiga ko'ra, eshkak eshishni submaksimal va yuqori intensivlikdagi ishlarga ajratish mumkin. Mashg'ulotlardan so'ng eshkak eshuvchilarda ko'pincha tana funktsiyalari faolligi pasayadi, ularning tiklanishi ko'pincha bir kun yoki undan ko'proq vaqtni oladi: Buni eshkak eshuvchilar bilan ishlashda murabbiy hisobga olishi kerak.

Eshkak eshuvchining ishini tezlik-kuch sifatida tavsiflash mumkin. Binobarin, eshkak eshuvchi kuch va tezlikni ancha yuqori darajada rivojlantirishi kerak. Shu bilan birga, eshkak eshkakchisi 500 metrlik poyga masofasida o'rtacha 200 va undan ortiq zarba berish kerakligini hisobga olsak, eshkak eshuvchining kuch va tezlik bilan birga chidamlilik sifatini ham rivojlantirishi zarurligi ayon bo'ladi.

Mashq qilishning zamonaviy usullari sportchilarning har tomonlama jismoniy rivojlanishiga qaratilgan. Shu sababli, eshkak eshishning bir tomonlama ko'rinadigan ta'siri, asosan, tananing yuqori qismini ishlaydigan, xususan, pastki ekstremitalarning mushaklarini kuchaytirish va rivojlantirishga qaratilgan boshqa jismoniy tarbiya vositalari bilan uyg'unlashishiga yordam beradi. eshkak eshuvchining rivojlanishi.

Ko'pgina tadqiqotlar ma'lumotlari shuni ko'rsatadiki, fiziologik nuqtai nazardan, mashg'ulotlar va musobaqalar rejimlari yuqori kuchlanish va kuch

chidamliligidan haddan tashqari foydalanish bilan bog'liq bo'lgan sport turlarida sport etukligi eng ko'p 23-25 yoshda namoyon bo'ladi.

Baydarka va kanoeda eshkak eshishda yuqori natijalarga erishish uchun 9-10 yillik tayyorgarlik talab etiladi.

Turli mamlakatlardagi mashg'ulotlar amaliyotida 20-25 yoshda jahon chempionatlari va Olimpiya o'yinlarida medallarni qo'lga kiritish imkonini beradigan natijalarga erishildi.

Jiddiy, muntazam va tizimli tadqiqotlarni boshlash 10-13 yil oralig'ida tavsiya etiladi. Biologik va pasport yoshidagi farqni hisobga olgan holda.

Yuqori natijalarga erishish faqat bir necha yillar davomida qat'iy va oqilona tashkil etilgan mashg'ulotlar bilan mumkin. Uzoq muddatli sport faoliyati jarayoni odatda alohida bosqichlarga bo'linadi, odatda bir necha yillik tsikllardan iborat. Uzoq muddatli mashg'ulotlarning tuzilishi ko'plab omillarga bog'liq [3]. Bularga muayyan sport turi bo'yicha eng yuqori natijalarga erishish uchun zarur bo'lgan muntazam mashg'ulotlarning o'rtacha yillari kiradi; optimal yosh chegaralari, ular doirasida sportchilarning qobiliyatlari odatda eng to'liq namoyon bo'ladi va eng yuqori natijalarga erishiladi: sportchilarning individual iste'dodi va ularning sport mahoratining o'sish sur'ati; sportchining mashg'ulotlarni boshlagan yoshi, shuningdek, maxsus tayyorgarlikni boshlagan yoshi.

Boshlang'ichdan sport mahoratining maksimal cho'qqilarigacha bo'lgan uzoq muddatli sport mashg'ulotlari jarayoni ketma-ket almashinadigan bosqichlar, jumladan, odatda bir necha yillik tsikllardan iborat bo'lgan alohida bosqichlar shaklida taqdim etilishi mumkin. Ular sport yutuqlarining yoshga bog'liq dinamikasi naqshlariga asoslanadi.

Uzoq muddatli mashg'ulotlar bosqichlari o'rtasida aniq chegaralar yo'q, ularning davomiyligi ma'lum darajada, birinchi navbatda, o'z yoshidagi sportchilarning individual imkoniyatlari, sport ixtisosligining o'ziga xosligi, mashg'ulot tajribasi va sport mashg'ulotlarini tashkil etish shartlariga qarab farq qilishi mumkin.

O'zining tuzilishi va mazmuni bo'yicha har xil bo'lgan o'rta tsikllar yil bo'yi tayyorgarlik jarayonida ma'lum shtatlarda yillik tsiklning bosqichlari va davrlarini tashkil qiladi, ya'ni. sport mashg'ulotlarining kattaroq "bloklari". Yillik tsiklda qoida tariqasida uchta davr ajratiladi: tayyorgarlik, raqobatbardosh va o'tish davri. O'quv yilida mashg'ulot jarayonida davriy o'zgarishlarni keltirib chiqaradigan sabablar dastlab asosan sport musobaqalari taqvim va mavsumiy iqlim sharoitlarida ko'rib chiqildi.

Sport musobaqalari taqvimi, albatta, yillik tsiklning tuzilishiga - musobaqalar va boshqa davrlarning tuzilishiga, davomiyligiga ta'sir qiladi. Rasmiy musobaqalar sportchi qaysi vaqtda eng yaxshi tayyorgarlik holatida bo'lishi kerakligini ko'rsatadi. Ushbu muddatlarni hisobga olgan holda, o'quv ishlarini rejalashtirish kerak. Boshqa tomondan, sport mashg'ulotlarini tashkil etishning asosiy tamoyillarini hisobga olmasdan, sport kalendarini tuzish mumkin

emas. Faqat bu holatda u mashg'ulotlarning optimal tuzilishiga va natijada sport natijalarining eng katta o'sishiga yordam beradi [2].

Yillik mashg'ulot siklining tuzilishini belgilovchi asosiy omil sport formasini rivojlantirishning ob'ektiv qonuniyatidir. Sport shakli deganda sportchining sport natijasiga erishish uchun optimal (eng yaxshi) tayyorgarligi holati tushuniladi, bu har bir katta o'quv siklida, masalan, yillik yoki olti oylik mashg'ulotlarda tegishli tayyorgarlik jarayonida erishiladi.

Optimal tayyorgarlik tushunchasi shartli. U faqat sport shakli rivojlanishining ma'lum bir tsikliga qo'llanilishi mumkin. Sportchining mahorati oshgani sayin, bu optimal o'zgaradi. Sport formasi ham miqdoriy, ham sifat jihatidan farqlanadi. Ushbu kontseptsianing nisbiyligi, sport turini boshlang'ich sportchilarda rivojlanishning o'ziga xos xususiyatlari haqida gap ketganda yanada aniqroq bo'ladi.

Fiziologik nuqtai nazardan sport shaklining holati alohida organlar va tizimlarning eng yuqori funktsional imkoniyatlari, ish jarayonlarini mukammal muvofiqlashtirish, vaqt birligiga har qanday mushak ishining energiya sarfini kamaytirish, tezlashtirilgan ish qobiliyati va charchoqdan keyin ishlash qobiliyatini tiklash bilan tavsiflanadi., faoliyatning bir turidan boshqasiga o'tishning yanada mukammal qobiliyati, vosita ko'nikmalarini yuqori avtomatlashtirish.

Psixologik nuqtai nazardan sport shakli emotsional va irodaviy harakatlarning kuchayishi bilan tavsiflanadi. Shu bilan birga, aqliy jarayonlar (reaksiyalar, idrok etish, yo'naltirish, qaror qabul qilish) ancha tez boradi. Diqqat ko'lami kengayadi, harakatlarni ongli ravishda boshqarish va boshqarish roli oshadi, g'alaba qozonish istagi, o'ziga ishonch namoyon bo'ladi, sportchilarda musobaqalarda alohida emotsional kayfiyat, quvnoq, quvnoq kayfiyat, o'z faoliyatini o'ziga xos idrok etish hissi paydo bo'ladi. Atletik tayyorgarlik holatida sportchilar zavq bilan mashq qilishadi.

Sport formasi holatining eng umumiy ko'rsatkichi eng muhim musobaqalarda ko'rsatilgan sport natijasidir. Sport natijalarini tahlil qilish sport formasining darajasini uning yillik mashg'ulot tsiklidagi o'zgarishlar dinamikasida baholash imkonini beradi. Odatda, sport natijalari etarli darajada ob'ektiv miqdoriy o'lchovlarda sport yutuqlari o'lchanadigan sport turlarida sport shaklining ko'rsatkichi bo'lib xizmat qilishi mumkin. Sport natijasi etarli darajada ob'ektiv miqdoriy ko'rsatkichlarga ega bo'lmagan sport turlarida sport formasining holatini baholash uchun foydalanish juda qiyin. Ushbu sport turlarida sport formasining holatini baholash musobaqa faolligini tahlil qilish, jismoniy, funktsional, texnik va psixologik tayyorgarlik darajasini tekshirish ma'lumotlari asosida amalga oshiriladi. Biroq, har bir sport yutug'i sport shaklining holatini tavsiflamaydi.

Xulosa

Xulosa qilib aytganda, kanoeda eshkak eshish mashqlari tabiatning ulug'vorligiga sho'ng'ib, sog'lom bo'lishning hayajonli va foydali usulini beradi.

Muhim texnikani o'zlashtirish va turli xil mashqlarni o'z ichiga olgan holda, odamlar ushbu suv sporti taqdim etadigan jismoniy va ruhiy foyda olishlari mumkin. Ritmik harakatni qabul qilish, chegaralaringizni cheklash va kanoeda eshkak eshish mashqlarining quvonchli tajribasidan bahramand bo'lish lozim.

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*Otabekov U.G.
Toshkent davlat transport universiteti*

TEXNIKA OLIY TA'LIM MUASSASALARIDA GEOMETRO-GRAFIK TA'LIMNING TUZILISHI VA TARKIBI

Annotatsiya. Maqolada texnika oliy ta'lim muassasalarida geometro-grafik ta'limning tuzilishi va tarkibi bajarishdagi zaruriyati keltirilgan. Talabalarda grafik kompetentsiyalarni rivojlantirishning intensiv usullari xaqida tavisia, takliflar berilgan.

Kalit so'zlar: darajali grafik topshiriq, ko'rgazmalilik, virtual detal modellarini yaratish, plakatlar tayyorlash, tarqatma material, multimediali dars ishlanmalari, videodars.

*Otabekov U.G.
Tashkent State Transport University*

STRUCTURE AND COMPOSITION OF GEOMETRO-GRAPHIC EDUCATION IN TECHNICAL HIGHER EDUCATION INSTITUTIONS

Abstract. The article presents the structure and composition of geometro-graphic education in technical higher education institutions and the need for implementation. Recommendations and suggestions about intensive methods of development of graphic competences in students are given.

Keywords: level graphic assignment, demonstration, creation of virtual detailed models, preparation of posters, handout, multimedia lesson developments, video lesson.

Jahon ta'lim taraqqiyotida davlatning ravnaqi va uning ijtimoiy-iqtisodiy, hamda istiqbollarini belgilashda mustaqil, mantiqiy fikrlash, tasavvur qila olish ko'nikmalarini rivojlantirishning ahamiyati beqiyos. Rivojlangan davlatlar oliy ta'lim tizimi (AQSH, Buyuk Britaniya, Germaniya, Yaponiya, Janubiy Korea, Xindiston, Xitoy, Rossiya, Ukraina va boshqalar) muvaffaqiyatlarining asosi tayyorlanayotgan kadrlarda mustaqil ishlay olishi, grafik savodxonligi, chizmalarni o'qish-chizish, loyihalash (detal-buyum, bino-inshoot, lanshaft dizayni va boshqalar) kompetentsiyasini rivojlantirish bilan belgilanadi. Grafik fanlarni jumladan, "Chizma geometriya va muhandislik grafikasi" fanidan masofadan mustaqil ta'lim olish, multimediali vositalar yordamida grafik bilimlarni o'zlashtirish kompetentsiyasi talabalarning fazoviy tasavvurini rivojlantirishiga, grafik ta'lim samaradorligini oshirishga xizmat qiladi.

"Chizma geometriya va muhandislik grafikasi" fanini o'qitishda talabalar fazoviy tasavvurini rivojlantirishda multimediali kompyuter texnologiyalarni qo'llash dolzarb ahamiyat kasb etmoqda Raqobatbardosh kadrlarni tayyorlashda

ularning kasbiy kompetentsiyachlarining muhim komponentlaridan biri sifatida texnika fanlarini mukammal o'zlashtirilishini tahminlash zarur. Texnika fanlarini o'zlashtirishda grafik fanlarni o'zlashtirish muhim, yani "Chizma geometriya va muhandislik grafikasi" fanini o'qitish lozim Evropa va AQSHda M.Sroka, B.Radovan, T.Jelena, H.Stachel va boshqalar, MDX davlatlarida V.V.Kondratova, J.J.Djanabaev, S.V.Panyukova va boshqalar, O'zbekistonda A.K.Xamraqulov, CH.T.Shokirova, N.D.Yadgarov, D.S.Saidaxmedova va boshqalar o'zlarining ilmiy tadqiqot ishlarida "CHizma geometriya va muhandislik grafikasi" fanidan oliy va kasb-hunar ta'limning turli bosqichlarida multimediali kompyuter texnologiyalaridan foydalanish bo'yicha ilmiy tavsiyalar berishgan. Bu tavsiyalar ichida ko'rgazmalilik printsiptiga alohida e'tibor qaratilgan. Ko'rgazmalilik – bu dars jarayonida foydalaniladigan plakatlari, tarqatma materiallar, elektron materiallar va boshqalarni talabalar fazoviy tasavvurini rivojlantirish hamda tushunish va o'zlashtirishga yordam beradigan materiallar jamlanmasi.

Chizma geometriya va muhandislik grafikasi fani bo'yicha quyidagilar:

- A.K. Hamraqulovning "Chizma geometriya va muhandislik grafikasi" fani bo'yicha elektron uslubiy qo'llanmasida faqat tayanch masalalar bo'yicha dasturiy-pedagogik vosita yaratilgan;

- CH.T. Shokirovaning "Chizma geometriya" fanidan faqat 1-darajali test topshiriqlari ishlab chiqilgan;

- D.S. Saidaxmedovaning KHKlar uchun "Texnik chizmachilik" fanidan multimediali elektron o'quv qo'llanmasida o'zlashtirilishi qiyin bo'lgan mavzular tanlab olingan va ular animatsiyalashtirilgan;

A. Xolmurzaev va boshqalar tomonidan "Chizma geometriya" fanidan elektron darslik yaratilgan. Qayd etilgan ishlarning mazmunidan ayon bo'ladiki, oliy ta'lim muassasalarida "Chizma geometriya va muhandislik grafikasi" fanini o'qitishda grafik ta'lim sifati va samaradorligini oshirishning muhim omillaridan biri – ta'limning elektron resurslaridan, xususan, multimediali kompyuter texnologiyadan foydalanish masalasi tadqiq etilmagan. Shu bois bu borada metodik manbalar, jumladan elektron didaktik vositalarni tayyorlash hamda grafik ta'lim jarayonida ulardan foydalanish metodikasiga oid ilmiy asoslangan hamda samaradorlik darajasi eksperimental tarzda tasdiqlangan tavsiyalar mavjud emas. Multimediali kompyuter dasturiy vositalarida turli hildagi didaktik materiallar-virtual detal modeli, o'quv plakatlari, tarqatma materiallar, multimediali dars ishlanmalari tayyorlash ko'rsatilgan. Biroq ko'rsatilgan materiallar fan bo'yicha to'liq ma'lumotlarni, yahni bilimlar bazasini shakllantirishda muhim ahamiyatga ega. O'quv jarayonini ko'rgazmali tashkil etish ham eshitish, ham ko'rsatish o'quv materiallarini idrok qilish, ularni ongli va puxta o'zlashtirishga olib keladi hamda diqqatni barqarorlashtiradi. Dars turi va mavzusiga mos ravishda ko'rgazmali materiallar tayyorlash, ularni talabaning yoshi va bilish darajasiga muvofiqlashgan bo'lishi, hamda ulardan foydalanishning samarali usul va vositalar yordamida tashkil etishi lozim.

“Chizma geometriya va muhandislik grafikasi” fanida ko‘rgazmali materiallar dars turi va mavzuga qarab turli-tuman bo‘lishi mumkin. Jumladan:

- bosma shakldagi materiallar (plakat, tarqatma materiallar va boshqalar).
- elektron ko‘rinishdagi materiallar (taqdimotlar, shakllar, rasmlar va boshqalar).
 - animatsion ko‘rinishdagi materiallar (multimediali elektron kitob, elektron darslik va boshqalar).
 - virtual modellar (detallar, uy maketlar, mashina mexanizmlari va modellari). “Chizma geometriya va muhandislik grafikasi” fanidan ko‘rgazmali materiallarini zamonaviy ko‘rinishda yaratish uchun berilgan kompyuter dasturlaridan foydalanish mumkin.

Talabalarning fazoviy tasavvurini rivojlantirish ko‘rgazmalilik darajasiga bevosita bog‘liq. Ko‘rgazmalilik darajasi yuqori bo‘lsa, talabalarning fan bo‘yicha o‘zlashtirayotgan bilimi samarali bo‘ladi. Virtual detal modellarini yaratishda AutoCAD, Compas, 3ds Max dasturlaridan foydalanish mumkin. Chunki bu dasturlar aynan kompyuterda virtual modellashtirish ishlari uchun mo‘ljallangan. “CHizma geometriya va muhandislik grafikasi” fani o‘qituvchilari uchun, asosan AutoCAD dasturida yaratish tavsiya etiladi.

Birinchidan, AutoCAD dasturi xalqaro standartlarga moslashtirilgan bo‘lib, o‘qituvchi uchun har tomonlama qulaylik yaratadi.

Ikkinchidan, bu dastur aynan chizma geometriya va muhandislik grafikasi qonun-qoidalari asosida ishlash uchun mo‘ljallangan.

Yaratilgan virtual detal modelini ko‘rgazmalilik darajasini, yahni dizayn jihatdan Autodesk Inventor Fusion dastur imkoniyatlari keng berilgan bo‘lib, unda detalga material va rang berish AutoCAD grafik dasturiga nisbatan anchagina qulay. Autodesk Inventor Fusion dasturida virtual detalg‘ modellariga ishlov berishda har tomonlama afzalliklari mavjud bo‘lib, foydalanuvchi uchun qiziqarli va tushunarli bo‘lishida katta yordam beradi. Plakatlar tayyorlash uchun MS Word, PhotoShop, CorelDraw dasturlaridan foydalanish mumkin. Chizma geometriya va muhandislik grafikasi fani o‘qituvchilari MS Word va PhotoShop dasturlari imkoniyatlaridan foydalanishi tavsiya etiladi. Matnlarni MS Word dasturi yordamida kiritish va unga dizayn berish o‘qituvchilar uchun qulay hisoblanadi. PhotoShop dasturida tasvirlarni qayta ishlash va dizayn berish imkoniyatlariga ega. Tarqatma material tayyorlashda MS Word, AutoCAD, Paint NET dasturlaridan foydalanish mumkin.

Bu dasturlar yordamida o‘qituvchilar tarqatma material uchun kerakli bo‘lgan matn, grafik topshiriq va chizmalarni dizayni, sifatini zamon talabi asosida tayyorlash imkoniyatlari mavjud. Multimediali dars ishlanmalari tayyorlashda MS PowerPoint, AutoCAD, Snagit dasturlari yordamida yaratish mumkin. MS PowerPoint dasturi chizma geometriya va muhandislik grafikasi fanidagi turli xil chizmalar va topshiriqlarni animatsiyali ko‘rinishga o‘tkazish uchun eng qulay dasturlar turkumiga kiradi. AutoCAD dasturida sirtlarni o‘zaro kesishishi, detal modellarini yaratish va ularni turli tomonlardan ko‘rish, qirqim

berish, rang berish va hokazolarni bajarishda yordam beradi. Snagit dasturi esa kompyuter ekranida bajarilayotgan jarayonlarni video shaklga o'tkazishga mo'ljallangan. AutoCAD grafik dasturida bajarilayotgan barcha amallarni Snagit dasturi yordamida video shaklda saqlash va uni ta'lim jarayonining barcha turlarida keng foydalanish natijasida talabalarining o'zlashtirish ko'rsatkichlarini birmuncha yuqori darajalar bilan belgilash mumkin. Bundan tashqari animasion video rolik ko'rinishidagi qurilish binolari inshotalari, texnikaga oid mexanizmlarni virtual modellarini yaratishda Lumion dasturidan foydalanish mumkin.

Tadqiqotlar va kuzatishlar shuni ko'rsatdiki, aksariyat talabalarining grafik topshiriqlarni bajarishida yo'l qo'yayotgan xatoliklari bir xil. Bu talabalarda fazoviy tasavvurni etarli darajada rivojlanmaganligini ko'rsatadi. Bu muammoning maqbul echimi kompyuterlashtirilgan o'qitish tizimini tashkil etishdir. Yahni talabalar fazoviy tasavvurini rivojlantirish uchun imitatsion model orqali mavjud muammoni bartaraf etishdir. Bundan tashqari talabalar fazoviy tasavvurini rivojlantirishdagi imitatsion model rangli kompyuter grafikasi, animatsion ketma-ketlik, bajariladigan topshiriqlar fan qonun qoidalari asosida bosqichma-bosqich bajarilishi kabi talablarni o'z ichiga olishi zarur. Imitatsion modelni ta'lim jarayoniga qo'llash natijasida fan o'qituvchisi talabalarga berilayotgan grafik topshiriqlarni o'zlashtirilishi nazorat qilish imkoniyati yaratiladi. Bundan tashqari talaba olayotgan bilimlarini samarali o'zlashtirish, mustaxkamlash, qo'llay olish ko'nikmalariga ega bo'ladi.

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*Paluaniyazova N.A.
O'zbekiston Davlat Jismoniy Tarbiya va Sport Universiteti Nukus filiali
Sport o'yinlari kafedrasida Stajyor o'qituvchisi*

BASKETBOLCHILARNING BOSHLANG'ICH TAYYORGARLIK GURUHLARIDA JISMONIY SIFATLARINI YETILISHTIRISH USLUBLARI

Annotatsiya. Basketbolchilar uchun optimal ishlash darajalariga erishish uchun kuch, tezlik, chaqqonlik va chidamlilik kabi jismoniy fazilatlarini rivojlantirish birinchi o'rinda turadi. Basketbolni rivojlantirishni boshlagan yosh sportchilardan tashkil topgan boshlang'ich tayyorgarlik guruhlarida ushbu jismoniy xususiyatlarni oshirishning samarali usullarini qo'llash uzoq muddatli muvaffaqiyat uchun juda muhimdir. Ushbu maqolada murabbiylar boshlang'ich tayyorgarlik guruhlaridagi futbolchilarning jismoniy sifatlarini yaxshilash uchun foydalanishi mumkin bo'lgan bir nechta tasdiqlangan texnika va mashqlarni ko'rib chiqadilar.

Kalit so'zlar: basketbolchilar, texnika, rivojlanish, trening mashqlar, usullar, tayyorgarlik.

*Paluaniyazova N.A.
Physical Education and Sports University Trainee teacher
Department of Sports Games
Uzbekistan State University
Nukus branch*

METHODS OF IMPROVING THE PHYSICAL QUALITIES OF BASKETBALL PLAYERS IN PRIMARY TRAINING GROUPS

Abstract. Developing physical qualities such as strength, speed, agility, and endurance is paramount for basketball players to achieve optimal performance levels. In primary training groups consisting of young athletes just beginning their basketball development, employing effective methods to enhance these physical attributes is essential for long-term success. This article will examine several proven techniques and exercises coaches can utilize to improve the physical qualities of players in primary training groups.

Keywords: basketball players, technique, development, training exercises, methods, preparation.

Kirish: Boshlang'ich tayyorgarlik guruhlarida basketbol mashg'ulotlarining asosiy vazifalari har tomonlama jismoniy tayyorgarlik, o'yinning asosiy texnik va taktik usullarini egallashdir. Preparatni tanlashda muhim omil - bu ularning tanaga turli xil ta'siri. Tanlangan vositalar juda xilma-

xildir. Ularning vazifalari nafaqat jismoniy rivojlanish, balki to'p bilan muomala qilish va vaqt va makonda o'z harakatlarini to'p bilan muvofiqlashtirish qobiliyatini o'zlashtirishdir. Basketbolchi ko'proq tayyorlansa, bu qobiliyat juda muhim bo'ladi. Tayyorgarlikning dastlabki bosqichi basketbol o'ynashni xohlaydigan barcha bolalarni o'rgatish uchun mo'ljallangan. Dastlabki tayyorgarlik bosqichlari bolalar sport maktablari uchun normativ hujjatlar bilan belgilanadi.

Basketbolchilarni tayyorlash tizimi umumiy maxsus va jismoniy tayyorgarlikdan iborat. Umumiy jismoniy tayyorgarlik (GPP) - insonning har tomonlama, barkamol rivojlanishiga erishish uchun jismoniy sifatlar va harakat harakatlarini rivojlantirish va takomillashtirish jarayoni. Umumiy jismoniy tayyorgarlik - bu jismoniy tarbiyaning ixtisoslashgan bo'lmagan (yoki biroz ixtisoslashgan) jarayoni bo'lib, uning maqsadi tananing funksional imkoniyatlarini, ishlash qobiliyatini va chidamliligini oshirishdir. Umumiy jismoniy tayyorgarlik maxsus jismoniy tayyorgarlik va tanlangan sport yoki mashg'ulotda yuqori natijalarga erishish uchun asosdir.

Umumiy jismoniy tayyorgarlikning vazifalari har tomonlama jismoniy tayyorgarlikning yuqori darajasini ta'minlash va sog'liqni saqlash va ijodiy uzoq umr ko'rish uchun uni ko'p yillar davomida saqlab turishdan iborat.

Umumiy jismoniy tayyorgarlikning asosiy vositalari turli sport turlarida qo'llaniladigan maxsus tayyorgarlik jismoniy mashqlardir. Qoida tariqasida, ushbu sport turlarining asosiy mazmuni turli xil faoliyat turlarida muvaffaqiyatga erishish uchun keng shart-sharoitlarni yaratishga qaratilgan. Umumiy jismoniy tarbiya jarayonini qurish asosiy faoliyatda bajariladigan tayyorgarlik mashqlaridan asosiy mashg'ulotlarga tayyorgarlik effektini o'tkazish qonuniyatlaridan foydalangan holda amalga oshiriladi [5].

Maxsus jismoniy tayyorgarlik (SPT) - bu jismoniy fazilatlarni rivojlantirish jarayoni bo'lib, u birinchi navbatda ma'lum bir sport faoliyati, sport turi yoki mehnat faoliyati uchun zarur bo'lgan harakat qobiliyatlarini rivojlantirishni ta'minlaydi. Shu bilan birga, SFP ushbu qobiliyatlarni maksimal darajada rivojlantirish uchun mo'ljallangan. Sport mahoratining o'sishi bilan umumiy jismoniy tarbiya fondlari hajmi kamayadi, jismoniy tarbiya fondlari esa sezilarli darajada oshadi.

Basketbol bo'yicha mashg'ulotlar o'quvchilar o'z motor imkoniyatlarini raqobat muhitida samarali ishlatganda muvaffaqiyatli hisoblanadi. O'yin faoliyatini o'rgatishning asosi tayyorgarlikning individual komponentlari o'rtasidagi shakllangan munosabatlardir.

Umumiy jismoniy tarbiya va jismoniy mashqlar vositalari va usullarining nisbati sportchining individual xususiyatlariga, uning sport tajribasiga, mashg'ulot davriga va hal qilinayotgan vazifalarga bog'liq. Ta'lim va tarbiya jarayonining turli bosqichlarida umumiy va maxsus jismoniy tayyorgarlikni oqilona uyg'unlashtirishni o'rganish muhimdir. Shunday qilib, sportchilarni

tayyorlashning dastlabki bosqichida, sport turidan qat'i nazar, asosiy jismoniy tayyorgarlik etakchi o'rinni egallashi kerak.

Tezlik-quvvat qobiliyatlari asab-mushak tizimining funktsional xususiyatlariga asoslangan bo'lib, ular mushaklarning sezilarli kuchlanishi bilan bir qatorda maksimal harakat tezligini talab qiladigan harakatlarni amalga oshirishga imkon beradi. Boshqacha qilib aytganda, "tezlik kuchi" atamasi insonning optimal harakat amplitudasini saqlab [1], eng qisqa vaqt ichida maksimal quvvat kuchlarini namoyish etish qobiliyatini anglatadi.

Tezlik-quvvat sifatlarining tuzilishi:

1. Mutlaq kuch
2. Boshlang'ich kuch - mushaklarning ishchi kuchini tezda rivojlantirish qobiliyati kuchlanishning dastlabki momentidagi harakatlar.
3. Tezlashtiruvchi kuch-mushaklarning tez qurish qobiliyati ularning qisqarishi boshlangan sharoitda ish harakatlari.
4. Mushaklar qisqarishining mutlaq tezligi.

Tezlik-quvvat fazilatlarini namoyon bo'lganda, yetakchi o'rinni egallaydi (vaqt birligiga kuchning oshishi). Tezlik-kuch fazilatlarining namoyon bo'lishining ko'plab shakllari orasida sakrash mashqlari eng keng tarqalgan hisoblanadi. Tezlik umumiy va maxsus bo'lishi mumkin. Harakat tezligi, chastota va reaksiya tezligi sport jihozlarining darajasiga bog'liq. Harakatlarning eng oqilona shaklini o'zlashtirish (tananing og'irlik markazining to'g'ri joylashishi, harakatlar yo'nalishi, qo'llarning tezlashishi, inertsiyadan foydalanish va boshqalar) ularni tezroq bajarishga imkon beradi. Ammo sportda tez harakatlanish, asosan, katta mushak kuchi "portlovchi" va tez kuch bilan amalga oshiriladi.

Dinamik mashqlar natijasida dinamik kuchning oshishi statik kuchning oshishiga olib kelmasligi mumkin. Izometrik mashqlar dinamik kuchni oshirmaydi yoki statikdan sezilarli darajada kamroq oshiradi. Bularning barchasi o'quv effektlarining o'ta o'ziga xosligini ko'rsatadi: ma'lum bir mashq turidan foydalanish (statik yoki dinamik) ushbu turdagi mashqlar natijasining eng sezilarli o'sishiga olib keladi.

Bundan tashqari, mushak kuchining eng katta o'sishi mashqlar sodir bo'ladigan harakat tezligida aniqlanadi. Mushak kuchining navlaridan biri tez namoyon bo'lish qobiliyatini tavsiflovchi portlovchi kuch deb ataladi. U asosan, masalan, to'g'ri oyoqlari bilan yuqoriga sakrash yoki joydan uzunlikka sakrash balandligini aniqlaydi, maksimal bilan qisqa yugurish segmentlarida harakatlanish tezligi mumkin bo'lgan tezlik.

Quvvat deganda minimal vaqt ichida hosil bo'lishi mumkin bo'lgan maksimal kuch tushuniladi va basketbolda tezlik va sakrash qobiliyati bilan chambarchas bog'liq. Tiklanish, zarbalarni blokirovka qilish yoki chekkada tugatish uchun vertikal sakrashlar juda foydali mahoratdir. Chuqurlikka sakrash, keng sakrash va tibbiyot to'pini uloqtirish/urish-bu mushaklarning tez eksantrik va konsentrik qisqarishi orqali pastki tana kuchini oshiradigan plyometrik

mashqlarga misol [4]. Haddan tashqari jarohatlardan qochish uchun ehtiyotkorlik bilan harakat qilish kerak, ammo plyometriya hatto yosh sportchilar uchun ham samarali ekanligini isbotladi. Vertikal sakrash balandligi va quvvatni sinash ballarini kuzatish vaqt o'tishi bilan quvvat rivojlanishini ob'ektiv baholashga imkon beradi.

Chidamlilik, uzoq vaqt davomida charchoqsiz yuqori darajada energiya sarflash qobiliyati basketbol uchun ham muhimdir. O'yinlar va raqobatbardosh mavsumlar davomida yuqori intensiv mudofaa va hujum harakatlarini davom ettirish uchun o'yinchilarga chidamlilik kerak. Yugurish, suzish, velosiped yoki eshkak eshish kabi aerobik mashg'ulotlar basketbol mahoratini qo'llab-quvvatlash uchun yurak-qon tomir bazasini yaratadi. Murabbiylar bir vaqtning o'zida texnik ko'nikmalar va chidamlilikni rivojlantirish uchun shuttle yugurish bilan amaliyotlarni tuzishlari mumkin.

Xulosa: Boshlang'ich o'quv guruhlarining jismoniy rivojlanish darajalariga yo'naltirilgan kuch, tezlik va epcillikni o'rgatish usullarini tatbiq etish orqali murabbiylar basketbol muvaffaqiyati uchun zarur bo'lgan fazilatlarini samarali ravishda oshirishlari mumkin. Qobiliyatlarni yaxshilash va haftada ikki-uch mashg'ulotning tegishli chastotasini saqlab turish kabi mashqlarni doimiy ravishda rivojlantirish yosh sportchilarga sportda o'z kelajagi uchun kuchli jismoniy asos yaratishga imkon beradi. Texnikani birinchi o'ringa qo'yish, ish oraliq'ini yuqori intensivlikda saqlash va zavqlanishga e'tibor qaratish uzoq muddatli o'yinchi rivojlanish natijalarini optimallashtiradi.

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Qodirov R.Sh.
Andijon davlat tibbiyot instituti
biologik kimyo kafedrasida katta o'qituvchisi

OQSILLAR SINTEZI VA SHAKLLANISHI

Annotatsiya. Molekulyar biologiyaning asosiy qoidasi shundan iboratki, "DNKdan RNK, RNKdan oqsil hosil qiladi" aksincha emas. Ya'ni, siz oqsildan oqsil, oqsildan RNK yoki RNKdan DNK hosil qila olmaysiz. Bu barcha hujayrali organizmlar uchun amal qiladi. Faqat majburiy parazit bo'lgan ba'zi viruslarda bu qoida buziladi

Kalit so'zlar. DNK, RNK, Oqsil, Gen, Genom, Transkripsiya, Translyatsiya, Genetik kod, Kodon, Ribosoma, Hujayra.

Qodirov R.Sh.
senior teacher
department of biological chemistry
Andijan state medical institute

PROTEIN SYNTHESIS AND PROCESSING

Abstract. A basic rule of molecular biology is that "DNA makes RNA, RNA makes protein" and not the other way around. That is, you cannot make protein from protein, RNA from protein, or DNA from RNA. This is true for all cellular organisms. Only some viruses that are obligate parasites violate this rule

Key words. DNA, RNA, Protein, Gene, Genome, Transcription, Translation, Genetic Code, Codon, Ribosome, Cell.

Oqsillarning sintezi ikkita jarayonni o'z ichiga oladi:

1. **Transkripsiya:** Transkripsiya deb DNKda joylashgan genetik axborotni RNKga ko'chirish va keyinchalik RNKdan ribosomaga o'tkazish jarayoniga aytiladi. Transkripsiya qilinyotgan DNK bo'lagi transkripton deb ataladi. Transkriptonlar uzunligi 300 nukleotiddan 10^8 nukletidgacha bo'lishi mumkin.

2. **Translyatsiya:** Irsiy axborotlarni o'tkazish mexanizmi, yoki genlar ekspresiyasiga, translyatsiya jarayoni bevosita aloqador bo'lib, bunda «nuklein kislotalarning to'rt harfli tili, oqsilni yigirma harfli nutqiga» aylanadi. Boshqacha qilib aytganda, translyatsiya davrida ribosomalarda oqsil sintezlanadi. Bu jarayonda mRNKda nukleotidlarni ketma-ket joylashishini oqsilni birlamchi qurilishini, ya'ni sintezlangan oqsil molekulasida alohida aminokislotalarni ketma-ket tartib bilan joylashishini belgilaydi.

RNK polimerazaning ta'sir mexanizmi ko'p jihatdan DNK polimerazaning ta'sir mexanizmiga to'g'ri keladi. Sintez $5' \rightarrow 3'$ yo'nalishida boradi va RNK zanjiri DNK zanjiriga nisbatan qarama-qarshi polyarlikka ega. Lekin o'ziga xos

farqlar ham bor. E. Coli RNK-polimerazasi nativ qo'sh spiralli DNK bo'lganda faollik ko'rsatadi, in vitro tajribalarda DNK ikkala zanjiridan RNK-polimeraza nusxa oladi, in vivo DNKni faqat bir zanjiri transkripsiyalanadi. RNK-polimeraza nativ DNK bir zanjiri bilan ma'lum nuqtada bog'lanadi, natijada chegaralangan qismida bispiral struktura yechiladi va RNK sintezlanadi. DNK-polimerazaga o'xshab, ferment praymer bo'lishini talab etmaydi.

Transkripsiya mexanizmi 3 bosqichdan iborat

1. Initsiatsiya. 2. Elongatsiya. 3. Terminatsiya.

Initsiatsiya promotorga DNK-ga bog'liq RNK-polimeraza birikishi natijasida sodir bo'ladi. Eukariotlarda uchta RNK-polimeraza - I, II, III bor. Bu oqsillar bir necha subbirlikdan iborat bo'lib, bir-biridan transkripsiya spetsifikligi bilan farqlanadi.

Elongatsiya RNK polimerazaning qolip DNK yuzasida siljishi natijasida vujudga keladi. Har bir keyingi nukleotid DNK qolipdagi komplementar asos bilan bog'lanadi. RNK-polimeraza uni uzayotgan RNK zanjiri bilan fosfodiefir bog'i yordamida bog'laydi. Elongatsiya tezligi 1 sekundda 40-50 nukleotidni tashkil etadi.

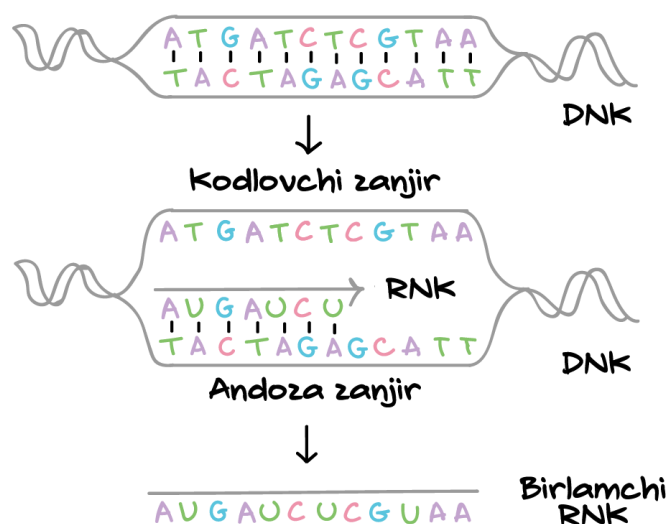
Terminatsiya RNK polimeraza DNKdagi stop-signal hisoblangan nukleotid ketma-ketliklariga yetgandan keyin sodir bo'ladi. Transkriptonda shunday stop-signal bo'lib poli(A) ketma-ketliklar hisoblanadi.

Transkripsiyadan keyingi davrda RNK yetiladi. RNKning 3 xil o'tmishdoshlari tafovut etiladi:

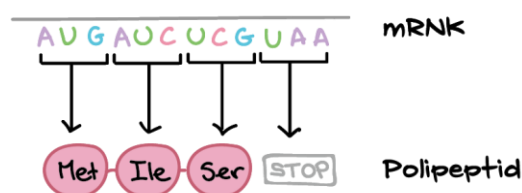
1. mRNK o'tmishdoshi yoki geterogen yadro RNKsi.
2. rRNK o'tmishdoshi.
3. tRNK o'tmishdoshi.
4. Qalpoqchani hosil qilish (kepirlash).

Yadroda RNKning barcha o'tmishdoshlari transkripsiyadan keying yetilish yoki protsessing bosqichini o'taydilar. Bu jarayon ushbu holatni o'z ichiga oladi:

1. Pre-RNKdan axborotsiz qismlarni uzib tashlash.
2. Uzilgan axborotli qismlarni biriktirish – splyasing.
3. RNK 5¹ va 3¹ oxirlarini modifikatsiya qilish.



Translyatsiya. Irsiy axborotlarni o'tkazish mexanizmi, yoki genlar ekspresiyasiga, translyatsiya jarayoni bevosita aloqador bo'lib, bunda «nuklein kislotalarning to'rt harfli tili, oqsilni yigirma harfli nutqiga» aylanadi. Boshqacha qilib aytganda, translyatsiya davrida ribosomalarda oqsil sintezlanadi. Bu jarayonda mRNKda nukleotidlarni ketma-ket joylashishini oqsilni birlamchi qurilishini, ya'ni sintezlangan oqsil molekulasida alohida aminokislotalarni ketma-ket tartib bilan joylashishini belgilaydi.



Oqsil sintezi besh bosqichda boradi:

- ✓ Aminokislotalarning faollashuvi.
- ✓ Initsiatsiya – sintezning boshlanishi.
- ✓ Elongatsiya – polipeptid zanjirning uzayishi.
- ✓ Terminatsiya – polipeptid zanjir sintezining tugallanishi.
- ✓ O'z-o'zidan o'ralish va protsessing.

1. **Aminokislotalarning faollashuvi.** Sitoplazmada har bir 20 ta aminokislota o'zining spetsifik tRNKsi bilan kovalent bog'lar yordamida birikib, aminoatsil-tRNK hosil qiladi. Bunda ATF energiyasi sarflanadi va magniy ionlari ishtirok etadi.

Reaksiya har bir aminokislota va ma'lum tRNK uchun spetsifik bo'lgan aminoatsil-tRNK- sintetaza fermenti yordamida tezlashtiriladi.

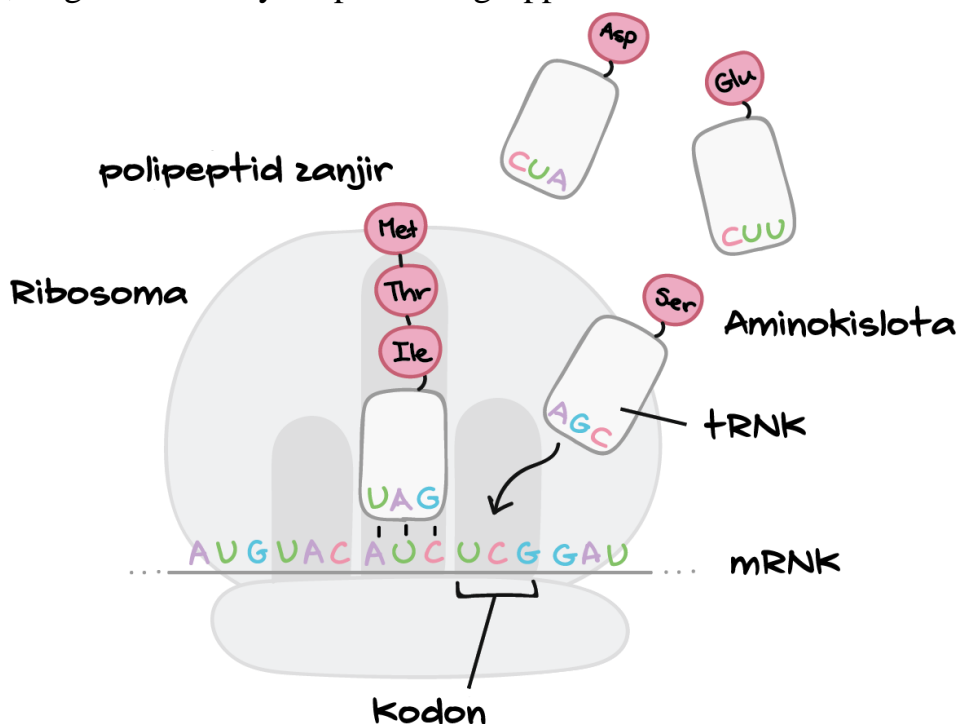
2. **Polipeptid zanjir initsiatsiyasi.** Ma'lum polipeptid haqida axborot tutuvchi mRNK ribosomaning kichik subbirligi bilan birikadi, keyin esa ma'lum tRNKga birikkan initsiatsiyani boshlovchi aminokislota bilan bog'lanadi. Natijada initsiatsiya kompleksi hosil bo'ladi. Initsiatsiya qiluvchi aminokislota

olib keluvchi tRNK mRNK tarkibidagi polipeptid zanjirining boshlanishi haqida xabar beruvchi maxsus triplet yoki kodon bilan komplementarlik prinsipi asosida bog‘lanadi.

3. **Elongatsiya.** Bu bosqichda aminokislotalarning ketma-ket kovalent bog‘lanishi orqali polipeptid zanjirning uzayishi sodir bo‘ladi. Elongatsiya jarayonida uchta oqsil omillar EF – Tu, EF – Ts va EF – Q qatnashadi; eukariotlarda TF – 1 va TF – 2 deb nomlangan elongatsiya omillari mavjud. Ularni barchasi molekulyar og‘irligi yuqori bo‘lgan oqsillardir.

4. **Terminatsiya** va polipeptid zanjirning ajralishi mRNKdagi terminator kodonlar polipeptid zanjir sintezining tamom bo‘lganligi haqida xabar beradi va polipeptid maxsus R1, R2, R3 «»rilizing» faktorlar ta’sirida ribosomadan ajraladi. UAA, UAG, UGA tripletlari terminator kodonlari rolini o‘ynaydi.

5. **Polipeptid zanjirning o‘ralishi va protsessing.** Polipeptid o‘zining nativ biologik shaklini egallashi uchun ma’lum fazoviy konfiguratsiyaga ega bo‘lib o‘ralishi kerak. O‘ralishdan oldin yoki keyin yangi sintezlangan polipeptid fermentlar ta’sirida sodir bo‘ladigan protsessingga (yetilishga) uchraydi. Bu vaqtda initsiatsiyalovchi aminokislotalar, ortiqcha aminokislota qoldiqlari ajratiladi, ba’zi aminokislotalarga fosfat, metil, karboksil va boshqa guruh qoldiqlari, shuningdek, oligosaxaridlar yoki prostetik gruppalar biriktiriladi.



Oqsil sintezida ishtirok etuvchi biron-bir zvenoning buzilishi yoki tushib qolishi patologik holatning rivojlanishiga olib keladi, bunda kasalning belgilari sintezi buzilgan oqsilning tabiati va funksiyasiga bog‘liqdir

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Qodirqulova F.
Samarqand agroinnovatsiyalar
va tadqiqotlar instituti 2- bosqich talabasi

YASMIQ DONINING TARIXI VA SISTEMATIKASI

Annotatsiya. Ushbu maqolada dukkakli don ekinlaridan biri bo'lgan yasmiq o'simligining birinchi kelib chiqishi tarixi va uning sistematikasi haqida malumotlar keltirilgan. Dukkaklilardan olinadigan protein eng arzon va eng oson hazm bo'ladiganlardan biridir. Dukkaklilar oilasiga mansub eng keng tarqalgan o'simliklardan biri yasmiqdir. Bu o'simlik qishloq xo'jaligida eng qadimiy hisoblanadi, bu arxeologik topilmalar bilan ham tasdiqlangan. Arxeologlar tomonidan topilgan yasmiqning eng qadimgi qoldiqlari neolit davriga to'g'ri keladi u vaqt endigina paydo bo'lgan edi. Dukkaklilar oilasining bu vakilini qadimgi rimliklar misrliklar hindular arablar tomonidan yetishtirib kelingan. O'simlik qadimgi yunonlar orasida ham juda mashhur edi. Yasmiq birinchi marta Janubi-G'arbiy Osiyoda paydo bo'lgan deb aytiladi. Butun dunyoda yasmiq ekinlari 3.336 mln gektarga yaqin maydonni egallaydi. Ayniqsa, Osiyo va O'rta yer dengizida mashhur.

Kalit so'zlar: Yasmiq, dukkakli don, to'yimli, Sharqiy Osiyo, tarixi, qizil yasmiq, dahl, A va B vitamin, oqsil, temir, gipogeval, roti, gurunch, acropetal.

Kadirkulova F.
2nd stage student
Samarkand Institute of Agricultural Innovations and Research

HISTORY AND SYSTEMATICS OF LENTIL GRAIN

Abstract. This article provides information on the history of the first origin of the lentil plant, one of the legumes, and its systematics. Protein from legumes is one of the cheapest and easiest to digest. Lentils are one of the most common plants belonging to the legume family. This plant is the oldest in agriculture, which is also confirmed by archaeological findings. The oldest remains of lentils found by archaeologists date back to the Neolithic period, when it had just appeared. This representative of the legume family was cultivated by the ancient Romans, Egyptians, Indians, and Arabs. The plant was also very popular among the ancient Greeks. Lentils are said to have appeared for the first time in South-West Asia. In the whole world, lentil crops occupy an area of about 3.336 million hectares. It is especially popular in Asia and the Mediterranean.

Keywords: Lentil, legume, nutritious, East Asia, history, red lentil, dahl, vitamin A and B, protein, iron, hypogeal, roti, rice, acropetal.

Hozirgi kunda Qishloq xo'jaligi sohasi kundan kunga jadal rivojlanyapdi. Dukkaklilar butun dunyoda mashhur va buning bir qancha sabablari bor. Birinchidan, ular biologik xususiyatlariga ko'ra yaxshi salafdir bu tur o'simliklar tuproqni azot bilan boyitadi, ikkinchidan, bu oilaning vakillari eng ko'p hosil qiladi ko'p miqdorda boshqa ekinlar bilan solishtirganda, maydon birligiga protein. Dukkaklilardan olinadigan protein eng arzon va eng oson hazm bo'ladiganlardan biridir. Dukkaklilar oilasiga mansub eng keng tarqalgan o'simliklardan biri yasmiqdir. Dukkakli o'simliklarning bir turi bo'lgan yasmiq o'simligi ming yillar davomida inson tomonidan ekib parvarishlanib kelinmoqda. Yasmiq doni qolgan dukkakli o'simliklarga qaraganda nisbatan arzon bo'lsada, lekin juda to'yimli va eng muhimi barcha dukkakli o'simliklarning eng mazalisidir.

Yasmiq yetishtirish bizga ota bobolarimizdan qolgan meros desak ham mubolag'a bo'lmaydi. Yasmiq yaqin Sharq yoki O'rta yer dengizi hududida paydo bo'lgan deb hisoblangan. Yasmiq qadimgi davrdan beri ajdodlarimiz uchun oziq – ovqat manbai bo'lib kelgan. Ular insoniyatga ma'lum bo'lgan eng qadimiy dukkakli don ekini va eng qadimiy uy ekini hisoblangan. Yasmiq so'zi lotincha linzadan olingan haqiqatdan ham loviya o'simligining qarindoshi hisoblanadi va ikki tomoni qavariq optic linzaga o'xshaydi.

Furot daryosi sohilidagi arxeologik qazilmalardan miloddan avvalgi 8000-yillarga oid yasmiq ashyolari topilgan. Misrliklar, Rimliklar, va Ibroniylar ushbu dukkakli o'simlikni is'temol qilganligi haqida dalillar mavjud. Yasmiq Bibliyada ham bir necha bora tilga olingan. Yasmiq obro'si joylashuviga qarab yasmiq oziq-ovqat yetishmovchiligi bilan kurashayotgan odamlar uchun juda ham zarurat tug'diradi. Bugungi kunda yasmiq hamma sevib is'temol qiladigan, ovqatlanish ratsionlariga kiritish mumkin bo'lgan dukkakli ekindir. Qishloq xo'jaligida yasmiq qurg'oqchilik ehtimoli bo'lgan va tuproq sharoitlari qulay bo'lmaganda mustahkam ekin hisoblanadi. Yasmiq o'simligining 40 smdan 60 smgacha bo'lib urug'lar ko'chatlarda o'sadi, odatda har bir dukkakda 2 tadan don bo'ladi. Oziq ovqat mahsuloti sifatida eng yirik ishlab chiqaruvchilar Kanada va Hindiston bo'lib, 2021-yilda dunyodagi jami yasmiqning mos ravishda 29% va 27% ni ishlab chiqaradi.

Yasmiq uni dunyoda pazandachilik uchun ishlatiladi. Yasmiq asosiy mahsulot bo'lgan Hindiston yarim orolining oshxonalarida dal deb nomlanuvchi yasmiq (ko'pincha qobig'i olib tashlangan) ko'pincha gurunch yoki roti bilan iste'mol qilinadigan qalin kori shaklidapishiriladi. Yasmiq odatda pishiriq va sho'rvalar tayyorlashda ishlatiladi. Yasmiq vicia jinsi fabaceae gulli o'simliklar oilasiga kiradi.

Gullashdan oldin dalada yasmiq o'simliklari sobiq lens jinsi madaniy *L. culinaris* va oltita turdosh taksonlardan iborat edi. Yovvoyi yasmiqlarning turli taksonlari orasida *Lens orientalis* odatda *lens culinaris* subsp sifatida tasniflangan *orientalis*.

Yasmiq gipogealdir, ya`ni unib chiqayotgan urug`ning kotiledonlari yerda va urug` qobig`ining ichida qoladi. Shuning uchun u sovuqqa, shamol erroziyasiga yoki hasharotlar hujumiga kamroq ta`sir qiladi. Yasmiq o`simligi diploid, bir yillik, buta, tik, yarim tik yoki yoyiladigan va ixcham o`sadigan o`simlik bo`lib, odatda balandligi 30 dan 50 smgacha o`zgarib turadi. Uning tukli shoxlari ko`p, poyasi ingichka va burchakli. Bargi navbatma – navbat joylashgan, cho`zinchoq chiziqli va o`tmas shaklga ega, rangi sarg`ish yashildan to`q ko`k yashil ranggacha. Umuman olganda yuqori barglari paychalarga aylanadi, pastki burglar esa mikronatdir. Gullarining birdan to`rttagacha bo`lgan gular kichik, oq, binafsha, och binafsha, yoki och ko`k rangga ega. Ular barglar qo`ltig`idan deyarli barglar kabi uzun bo`yli naylar paydo bo`ladi. Yasmiq donining bir nechta yetishtiriladigan navlari barglari gullari va urug`larining kattaligi, tukliligi va rangi bilan farqlanadi. Yasmiq o`simligi o`z-o`zidan changlanadi. Gullash eng pastki kurtaklardan boshlanadi va asta sekin yuqoriga ko`tariladi, bu acropetal gullash deb ataladi. Bitta novdada barcha gullarning ochilishi uchun taxminan ikki hafta kerak bo`ladi.

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IMPROVING COMMUNICATION SKILLS IN ENGLISH AMONG NON-PHILOLOGY STUDENTS

Abstract: the article deals with psychological features of dialogic speech, its linguistic component, types of dialogue, as well as approaches to teaching a dialogic speech in the conditions of professionally oriented teaching of foreign languages in a non-philological higher educational institutions. The author of the article believes that in the course of professionally oriented foreign language teaching it is necessary to prepare students for communication in this language in situations characteristic for their future professional sphere. Modern professionally oriented training is aimed at mastering the language as a means of communication within the chosen specialty. In this case, the foreign language serves as a means of increasing communicative competence and personal and professional development of students and is a prerequisite for the successful professional activity of a specialist-graduate of a modern institution of higher education, who is able to conduct business contacts with foreign partners.

Keywords: a dialogue speech, speech situation, professionally oriented foreign language teaching, successful development, means, condition, specialty, sphere.

Political and socio-cultural transformations in Uzbekistan have created new opportunities and conditions for studying foreign languages in the higher education system aimed at training highly qualified specialists capable of professionally directed communication not only in their native 51 languages, but also in a foreign language. Therefore, in the course of professionally oriented foreign language study it is necessary to prepare students for communication in this language in situations typical for their future professional sphere. Modern professionally oriented training is aimed at mastering the language as a means of communication within the chosen profession. In this case, the foreign language is a means of increasing communicative competence and personal and professional development of students and is a prerequisite for the successful professional activity of a specialist graduate of a modern higher school, able to conduct business contacts with foreign partners. However, the success of verbal communication depends not only on the speaker's desire to come into contact, but also on the ability to realize his or her verbal intention, which depends on the degree of knowledge of language units and the ability to use them in specific situations of communication. Dialogue is a process of mutual communication, when a replica is replaced by another phrase and there is a constant change of roles. Dialogic form of speech suggests that in the course of training, students will

acquire skills such as freely using certain stamps characteristic of this type of speech, understand the speech of the interlocutor, quickly respond to the words of the interlocutor and continue conversations by making up replicas that would encourage the partner to respond to them. The process of teaching dialogical speech is inextricably linked to another type of speech activity, namely listening, because it is necessary to perceive speech by ear during the conversation [3]. From the point of view of the objectives of learning dialogue speech, educational and natural dialogues are distinguished. Natural dialogue is realized in different situations of communication between native speakers, between native speakers and a foreigner who speaks the language. In the context of professionally oriented foreign language teaching, educational dialogues are used that would prepare students for natural dialogues. The natural dialogues are divided into three groups: contact making, information and reference, and social and domestic. Information and reference dialogues imply the request for any information or reference (dialogue-reference, dialogue-request). Social and household dialogues are used during a conversation on various household or social topics. Educational dialogues modeling natural dialogues, in turn, are divided into fully learned, partially transformed, transformed, prepared under the guidance of a teacher, independently prepared and spontaneous. The main criterion for such division of dialogues is the degree of readiness. The highest level of proficiency in dialogical speech implies a relaxed and structurally diverse conversation, whether paired or group, that is, free or "initiative" speech. The method emphasizes the ways of teaching dialogic speech: deductive and inductive. The reproduction of dialogue on roles, stimulation of dialogical communication happens on the basis of a similar speech situation. In this case, the dialog model is a support for orientation in the substantive plan of communication, as well as introduces the socio-cultural peculiarities of native speakers and their speech behavior. So, for example, students of nonlinguistic higher education institutions should be able to discuss, describe and compare graphs, tables, formulas, conduct business and telephone conversations, conduct presentations and participate in conferences, participate in scientific discussions, both in formal and informal atmosphere in a foreign language, which is impossible without dialogues support [4]. Therefore, the question of including such areas of communication as educational and professional, official business and research, which would recreate the conditions of possible professional contacts and research activities, in addition to social and domestic and socio-cultural areas of communication inevitably arises. The inductive approach assumes a way from assimilation of elements of dialogue to its independent conducting on the basis of an educational and communicative situation, and also on the basis of the knowledge received at work with dialogues-samples. At the same time, the most effective teaching of dialogic speech is the variation of these approaches, which makes it possible to form such components of communicative competence as: linguistic competence - knowledge of 52 language system in speech and ability to understand other people's thoughts and

express oneself with the help of the system; speech competence - ability to choose a suitable linguistic form and method of expression depending on conditions of speech act; subject competence - ability to orientate oneself in the substantial plan of communication in a certain sphere of human activity; research competence - ability to carry out scientific research in professional sphere; pragmatic competence - ability to work in a certain sphere of human activity. Teaching a foreign language as a means of professional communication should have a scientific and practical orientation, which implies a close relationship of classes with the profiling disciplines, as well as active participation of students in scientific activities of the university in order to improve the ability to communicate in a foreign language. In this regard, the role of teaching for specific purposes has significantly increased and is designed to prepare competent specialists capable of successfully carrying out foreign language speech communication in professional activities [6].

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USE OF INTERACTIVE METHODS IN TEACHING ENGLISH

Abstract. In the modern world, technology and digital tools have permeated nearly every aspect of our lives. This includes the field of education as well, with interactive methods gaining prominence in teaching various subjects. When it comes to teaching English as a second or foreign language, interactive methods have shown great promise in engaging students and helping them learn the language effectively. This essay seeks to discuss the benefits of using interactive methods in English language teaching and how they can enhance the learning experience for students.

Keywords: learning models, dynamic communication, individual commitment, common help, think fundamentally, take care of issues.

Introduction: Intuitive learning innovations - this is such an association of the growing experience in which it is beyond the realm of possibilities for the understudy not to take part in a group, strong together, in light of the communication of every one of its members during the time spent educating information. Intelligent strategies for showing English assistance understudies trade data, yet in addition gain pragmatic relational abilities in the language they are examining, figure out how to form their contemplations, immediately answer and answer reproductions of the conversationalist. In such illustrations, the educator is as of now not simply a pioneer, however an associate who can rapidly tell the right word, right an error. Intelligent techniques for showing English fundamentally speed up the most common way of learning an unknown dialect. In teaching method there are a few learning models:

1) inactive - the understudy goes about as the "object" of learning (tunes in and looks)

2) dynamic - the understudy goes about as the "subject" of preparing (free work, innovative undertakings)

3) intuitive - bury (common), act (act). The growing experience is done in states of steady, dynamic association, everything being equal. The understudy and educator are equivalent subjects of guidance.

The quintessence of intuitive learning is that the growing experience is coordinated so that practically all understudies are engaged with the growing experience, they can comprehend and ponder what they know and think. The movement of understudies during the time spent comprehension, advancement of instructive material implies that everybody working together makes their own singular commitment; there is a trade of information, thoughts, and methods of

action. Besides, this occurs in an environment of altruism and common help, which permits acquiring new information, yet additionally fosters the mental action itself, makes an interpretation of it into higher types of participation and collaboration. Intuitive movement in the illustrations includes the association and improvement of discourse correspondence, which prompts shared figuring out, cooperation, to joint arrangement of normal, however huge for every member errand.

During the intuitive preparation, understudies figure out how to think fundamentally, take care of complicated issues in view of an examination of conditions and pertinent data, weigh elective conclusions, settle on informed choices, partake in conversations, and speak with others. For this, individual, endlessly bunch work is coordinated in the examples, research projects, pretending games are applied, work is in progress with reports and different wellsprings of data, and imaginative work is utilized. In the educational experience, one can recognize basically the considerable (what to educate), procedural (how to teach), motivational (how to actuate the exercises of understudies) and hierarchical (how to structure the exercises of the educator and understudies) parties. Every one of these sides has various ideas.

Thus, the principal side relates to the idea of significant speculation, speculation of instructive material, reconciliation of instructive subjects, growth of instructional units, and so on. The procedural side is the idea of customized, risky, intelligent learning, and so forth. Persuasive - the idea of inspirational help for the instructive interaction, the development of mental interests, and so on. Authoritative - the thoughts of humanistic teaching method, the idea of instructional method of participation, "drenching" in the subject, concentrated preparing, and so forth.

This large number of ideas are thusly given by innovation. For instance, the ideas of issue-based learning relate to such innovations: issue based intuitive learning; tricky; issue algorithmic; relevant; issue model; secluded issue; PC based preparing.

By the innovation of intelligent learning, we comprehend the arrangement of approaches to sorting out the collaboration of the educator and understudies as instructive games, ensuring educationally compelling mental correspondence, because of which conditions are made for understudies to encounter progress in learning exercises and to improve their persuasive, scholarly, close to home and different regions.

The premise of current inventive innovations is character arranged preparing. In the act of showing an unknown dialect, I utilize various character situated advances. Intelligent learning innovation is one of them. The innovation of learning in collaboration depends on the utilization of different systemic methodologies and procedures for demonstrating circumstances of genuine correspondence and the association of cooperation of understudies in a gathering (two by two, in little gatherings) to take care of open issues mutually. Obviously,

for me such types of guidance in collaboration are not new, as dialogic - steam room; polylogical - bunch game. These are the alleged conventional types of learning. The principal thought of preparing in collaboration is to concentrate together, and not simply to accomplish something together. This makes the most common way of concentrating regarding the matter fascinating, shapes and fosters understudies' roused interest in the subject. The techniques utilized for intuitive learning are pointed toward upgrading the job of understudy movement. As of now, there is a logical inconsistency between the need of society for a socially dynamic, inventive, free character and the genuine condition of the instructive cycle in a homegrown school.

Benefits of Interactive Methods

Some of the key benefits of employing interactive methods in English teaching include:

- Increased student engagement and motivation: Interactive activities like games, simulations and role plays make the learning process more fun and livelier. This helps capture students' interest and attention for a longer duration. The element of fun and interactivity motivates students to actively participate in class.

- Focus on communication skills: Interactive methods emphasize using English for real communication. Activities that involve pair/group work, discussions and problem-solving scenarios help students practice their speaking, listening and collaborative skills. This focus on applying the language aids stronger learning.

- Catering to different learning styles: Not all students learn in the same way. Interactive methods address this by incorporating visual, auditory and kinesthetic elements. Different types of learners - visual, auditory or tactile - can engage according to their preferred style of learning.

- Contextual learning: Role plays, simulations and project-based activities provide students with meaningful contexts to use English in. This helps them comprehend concepts better and commit things to memory in a more impactful way compared to traditional rote learning.

- Peer learning opportunities: Working together on tasks and helping each other out allows students to learn from their peers as well. This collaborative approach fosters a positive learning environment and builds confidence.

- Immediate feedback: Many interactive tools and games provide automatic feedback to students about their responses. This timely feedback helps them recognize mistakes and correct them instantly for improved learning.

- Development of 21st century skills: In today's digital world, skills like critical thinking, problem-solving, communication and collaboration are highly valued. Interactive methods effectively help nurture these essential life skills.

Implementation in Classrooms

There are various interactive techniques that English teachers can implement to engage students in a fun and meaningful way. A few examples are:

- Gamification of lessons using tools like Kahoot, Quizizz etc. This turns the learning process into an enjoyable game.
- Role plays and simulations based on real-life scenarios to practice speaking and decision making.
- Project-based learning around topics of students' interest to develop research, teamwork and presentation abilities.
- Debates and discussions on thought-provoking issues to enhance analytical thinking and articulation.
- Collaborative digital activities like creating videos, podcasts, websites etc. using online tools.
- Blended approach combining offline and online elements through a learning management system.
- Flipped or inverted classroom model where basic concepts are learnt remotely and class is for doubts, projects and peer learning.

Conclusion

To summarize, interactive teaching has immense potential to make English classes vibrant and result-oriented. When combined judiciously with other methods, it can boost student motivation, engagement and holistic development. Regular implementation of such techniques requires training and resources but pays off manifold in terms of improved learning outcomes. Overall, interactive methods hold great promise for the future of English language education.

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Rakhimov I.B.

intern teacher

*Department of Teaching Methodology of Exact and Natural Sciences
Namangan State Pedagogical Institute*

WAYS TO CREATE AND USE INTERNET RESOURCES IN GEOGRAPHY LESSONS

Annotation. This article explores the integration of internet resources in geography lessons to enhance the learning experience. By leveraging digital tools such as GIS, online maps, and remote sensing, educators can create dynamic and interactive lessons that go beyond traditional methods. The literature analysis delves into existing research on the impact of internet resources in geography education, while the methods section outlines practical approaches for incorporating these tools. The results section highlights the benefits observed in student engagement and understanding, followed by a discussion on the implications. The article concludes with suggestions for future implementation and the importance of continually adapting to technological advancements in education.

Keywords: Geography education, internet resources, digital tools, geographic information systems (gis), online maps, educational technology, remote sensing, virtual field trips.

Introduction:

Geography education has undergone a significant transformation with the advent of internet resources and digital tools. Traditional teaching methods are increasingly being complemented and, in some cases, replaced by innovative approaches that leverage the power of the internet. This article explores the various ways in which educators can create and utilize internet resources to make geography lessons more engaging and effective.

Literature Analysis:

Numerous studies have highlighted the positive impact of internet resources on geography education. Digital tools such as Geographic Information Systems (GIS) allow students to explore spatial data, analyze patterns, and make informed decisions. Online maps provide an interactive platform for students to visualize geographical concepts, while remote sensing technologies offer a unique perspective on Earth's surface. The literature analysis underscores the importance of integrating these tools into geography lessons to enhance students' spatial thinking skills and foster a deeper understanding of the subject.

Methods Section:

Incorporating internet resources into geography lessons requires a thoughtful and strategic approach. Educators can begin by familiarizing themselves with available digital tools, such as Google Earth, ArcGIS Online, or

interactive online maps. Virtual field trips can be organized, allowing students to explore different regions without leaving the classroom. The use of GIS in project-based learning encourages collaborative problem-solving and critical thinking. Additionally, incorporating remote sensing data into lessons provides real-world examples of how technology contributes to geographical research.

Results Section:

Incorporating internet resources into geography lessons can enhance students' understanding of the subject and make learning more engaging. Here are various ways to create and use internet resources in geography lessons:

Online Maps and GIS Tools:

- Utilize platforms like Google Maps, Google Earth, or ArcGIS for interactive map exploration.

- Assign projects where students create custom maps, mark locations, and analyze spatial patterns⁴³.

Geographic Information Systems (GIS):

- Introduce students to basic GIS concepts using online GIS tools or software.

- Create activities that involve analyzing real-world data and making decisions based on spatial information.

Virtual Field Trips:

- Take virtual field trips to explore geographical features, ecosystems, or cultural landmarks using websites or virtual reality tools.

- Encourage students to research and present virtual field trips to specific locations⁴⁴.

Online Databases and Resources:

- Access databases like the CIA World Factbook, United Nations databases, or World Bank for up-to-date global statistics.

- Assign research projects that require students to analyze and present data from these sources.

Geography Games and Quizzes:

- Incorporate educational geography games and quizzes available online to make learning fun.

- Platforms like Kahoot! or Quizizz allow teachers to create interactive quizzes for review sessions.

Social Media and Blogs:

- Engage students by exploring geography-related content on social media platforms.

- Encourage students to create blogs or social media posts discussing geographical topics or sharing their research findings.

43 Белоусова И.Д. Дидактические условия внедрения информационных технологий в процесс обучения студентов вуза: дис. ... канд. пед. наук. Магнитогорск, 2006. 186 с.

44 Ионов О.Н. Формирование информационной компетентности взрослых в процессе дополнительного образования: автореф. дис. ... канд. пед. наук. Великий Новгород, 2007. 20 с.

Online Research Projects:

- Assign projects that require students to conduct online research on specific geographical topics.
- Guide students on how to critically evaluate online sources for reliability and accuracy.

Webinars and Guest Speakers:

- Arrange virtual guest speakers or webinars with experts in geography-related fields.
- Encourage students to participate in Q&A sessions and discussions with professionals.

Educational Videos and Documentaries:

- Use platforms like YouTube or educational streaming services to incorporate videos and documentaries on geographical topics.
- Create assignments where students analyze and discuss the content of these videos.

Collaborative Online Platforms:

- Use platforms like Google Classroom or Microsoft Teams for collaborative projects.
- Foster discussion forums where students can share insights, ask questions, and engage in virtual group work⁴⁵.

Online Simulations:

- Explore online simulations that allow students to experiment with geographical concepts, such as climate change models or population dynamics.
- Discuss and analyze the outcomes of these simulations as a class.

Digital Storytelling:

- Have students create digital stories or presentations using tools like PowerPoint, Prezi, or Adobe Spark.
- Encourage them to incorporate multimedia elements to enhance their storytelling.

By integrating these internet resources into geography lessons, you can create a dynamic and interactive learning environment that caters to diverse learning styles and interests.

Discussion Section:

The positive outcomes observed in the results section underscore the potential of internet resources in transforming geography education. However, challenges such as access to technology and digital literacy need to be addressed. Moreover, educators must continually update their skills to keep pace with advancements in educational technology. The discussion delves into the implications of these findings, emphasizing the need for a balanced approach that combines traditional teaching methods with innovative digital tools.

Conclusions and Suggestions:

45 Крылов А. Компьютерный инструментальный учителя: картографические ресурсы // Народное образование. 2008. № 2 (1375). С. 207–211.

In conclusion, the integration of internet resources in geography lessons offers a transformative approach to education. The positive results observed highlight the potential for improved student engagement and understanding. To sustain these benefits, ongoing professional development for educators is crucial. Additionally, policymakers should prioritize providing schools with the necessary infrastructure and resources to facilitate the integration of digital tools in geography education. As technology continues to evolve, educators must remain adaptable and embrace new opportunities to enhance the learning experience for students.

Future research in this field should focus on longitudinal studies to assess the long-term impact of internet resource integration in geography education. Exploring the effectiveness of emerging technologies, such as augmented reality and virtual reality, can provide valuable insights into their potential contributions to geography lessons. Additionally, investigating strategies to address the digital divide and ensure equitable access to internet resources is essential for the continued development of inclusive geography education.

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Raxmatullayeva N.E.
NamMQI o'zbek tili va adabiyot kafedrasida o'qituvchisi

HALIMA XUDOYBERDIYEVA ASARLARINING LINGVOPOETIK XUSUSIYATLARI

Annotatsiya. Ushbu maqolada Halima Xudoyberdiyeva asarlarining lingvopoetik xususiyatlari haqida ilmiy fikrlar bayon etilgan. Ilmiy fikrlar faktlarga asoslanib yoritilgan.

Kalit so'zlar – She'riyat, lingvopetika, poetika, she'r, ijod, folklore, she'r, qo'shiq.

Raxmatullayeva N.E.
teacher
Uzbek language and literature department
NamMQI

LINGUOPOETIC CHARACTERISTICS OF HALIMA KHUDOYBERDIYEVA'S WORKS

Abstract. This article presents scientific opinions about the linguopoetic features of Halima Khudoyberdiyeva's works. Scientific opinions are explained based on facts.

Key words - Poetry, linguistics, poetics, poem, creativity, folklore, poem, song.

Tildagi fonetik va leksik so'zlarni qo'llash bir qancha osonlikni va ravonlikni ta'minlaydi. Badiiy asarning eng muhim bosqichi til bo'lar ekan, biror asarni yuksak darajada ko'tara olishda uni ishlatayotgan odamni qay muloqotdan foydalanayotgani va qaysi ifoda maqsadlarni ishlatayotgani eng muhim xususiyati xisoblanadi, biror ijodkorni tilini o'rganar ekanmiz dastavval eng e'tibor berishimiz kerak bo'ladigan narsa uning tilimiz rivojiga o'z asarlari bilan qanday ta'sir o'tkazayotgani bo'ladi. Badiiy asarning bosh unsuri so'z, umuman, til ekan, ana shu asarning chinakam san'at darajasiga ko'tara olishida uning tili, muallifning til vositalarini qay darajada qo'llay olishi asosiy omildir. Adabiyotimizda iz qoldirgan har bir ijodkor asarlarining tilini o'rganish, birinchidan, adibning mahoratini o'rganish, shu bilan birga, tilimiz rivojiga uning asarlari tili ta'sirini, tadqiqotning esa tilshunosligimiz taraqqiyotiga qay darajada ta'sir ko'rsatayotganligini belgilash ehtiyojidan kelib chiqadi. Tabiiyki, badiiy asarni lingvopoetik tahlil qilishning bir qator tamoyillari mavjud. Badiiy matn lingvopoetikasi muammosini o'zbek tili materiallari asosida mufassal tadqiq etgan M.Yo'ldoshev lingvopoetik tahlilning quyidagi asosiy tamoyillarini ko'rsatadi:

- 1) shakl va mazmun birligi asosida yondashuv;
- 2) makon va zamon birligidan kelib chiqish;
- 3) umumxalq tili va adabiy til munosbati asosida baholash;
- 4) badiiy matnga badiiy-estetik yaxlitlik sifatida yondashuv;
- 5) badiiy matnda poetik aktuallashtirilgan til vositalarini aniqlash;
- 6) badiiy matndagi eksplitsitlik va implitsitlik nisbatini aniqlash;
- 7) badiiy matndagi intertekstuallik mexanizmlarining lisoniy va semantik xususiyatlarini aniqlash.

Lingvopoetika lingvistik poetikaning qisqargan shakli bo'lib, badiiy asarlarda qo'llanilgan lisoniy birliklar: fonetik, morfemik, leksik va boshqalarning badiiyestetik vazifalarini, tilning konnotativ funksiyasini o'rganadi. Boshqacha aytganda, lingvopoetika tilshunoslikning badiiy nutqni o'rganuvchi bo'limidir.

Ma'lumki, Halima Xudoyberdiyeva she'riyati lingvopoetikasi haqida fikr yuritadigan bo'lsak, uning she'rlarida ritm, ohangdorlik eng muhim omillardan biri hisoblanadi. Shoiraning o'ziga xos ifoda usuli, xalq og'zaki ijodiga xos ko'p ma'nolilik, xalq qo'shiqlariga yaqin ohangdorlik, sinonimlardan o'z o'rnida, to'g'ri va unumli foydalanish mavjud bo'lib, uning she'rlariga o'zgacha ruh, ritm mahorat bilan singdirib yuborilgan, natijada adabiy til bilan jonli tilning qorishiq holda kelishi, shoira ijodining jozibaliligi, soddaliligi va tushunarligini ta'minlagan. Shoira she'rlarida emotsional-ekspressivleksikaning manbasini hisoblangan sinonimlardan qanchalik ustalik bilan keng foydalanganligini uning she'rlari tahlilida yaqqol ko'rishimiz mumkin:

Toza yurak tovonlarda toptalgan mahal,
Azal ko'z yosh qayg'u g'amgayem bo'lib kelgan.

Makr-u hiylabijg'igan bu dunyoda azal,

Qo'zichoqlar bo'rilarga yem bo'lib kelgan. ("Bo'rilar eshigida" 21-bet)

Ushbu she'rda qo'llangan qayg'u –g'am, makr-u hiyla so'zlari o'zaro sinonimlikni hosil qilgan bo'lib, sinonimlarning bu holatda ishlatilishi lirik qahramon tuyg'ularining asl holatini ochib berishga xizmat qiladi.

“Qayg'u –boshga tushgan ruhiy azob, g'am, musibat” (O'TIL.I,223-bet),
“G'am-so'zi esa arabcha so'zdan olingan bo'lib, qayg'u, hasrat, g'am alam degan ma'nolarni bildiradi. (O'TIL.I,434-bet).

Keyingi misralarda qo'llanilgan makr-so'zi arabchadan olingan bo'lib hiyla, nayrang, aldov ma'nolarini ifodalasa, unga sinonim bo'lib kelgan makr so'zi ham arabcha so'z hisoblanib, makkorlik, ayyorlik ma'nolarida keladi. Shoira ushbu sinonimlarni yonma yon qo'llash bilan she'rning jozibadorligini yanada oshirgan. O'z davrida haqiqat deb kurashgan qahramon makr-u hiyla to'la dunyoda qayg'u g'amga yem bo'layotgani va bu kurashga otlangan qahramon doimo bo'rilarga yem bo'lib kelayotgani o'z ifodasini topgan. Ota dunyo, bu o'ylarni o'zing hal qil yech, Bolalaring ehtiyot qil har cho'pdan, xasdan. Loqayd bo'lmay sharsharaning toza suvin ich, Bilib-bilmay kimdir uni loyqalatmasdan. (“Xayollarim parday to'zg'ir”, 48-bet)

Misralarda qoʻllanilgan: “Choʻp-forscha darxt, yogʻoch, xoda, novda, shox boʻlagi...” (OʻTIL,525-bet) maʼnosini ifodalasa, “Xas-xashak, shox-shabba, quruq shoxcha, quruq oʻsimlik poyasi” (OʻTIL,387-bet) maʼnolarini anglatadi. Ketma-ket keltirilgan bu maʼnodosh soʻzlar sheʼrning ifoda mazmunini ochib berish bilan birga unga emotsional-ekspressivlik ham bagʻishlashga xizmat qilgan. Koʻrinadiki, Halima Xudoyberdiyeva sheʼrlarida emotsional ekspressiv leksikaning birlamchi manbasi boʻlgan sinonimlardan keng foydalanilgan. Shoira sheʼrlarining lugʻaviy tarkibi juda boy va rang-barang boʻlib, ularda soʻzlarning oʻrinsiz takrori uchramaydi. Bunga esa shoira aynan sinonim soʻzlardan mohirona foydalanganligi tufayli erishgan. Sheʼriyatda sinonimlarning bu kabi toʻgʻri va oʻrinli ishlatilishi asar qimmativaqiymatini oshirishga xizmat qilgan. Shoira sinonimlarni oʻrinli qoʻllashda quyidagi maqsadlar ham toʻlaqonli yuzaga chiqqan:

- Badiiy ifodaning taʼsirchanligini oshirish;
- Soʻzlarni takror ishlatishdan qochish;
- Uslubning ravonligi;
- Fikrni aniq, loʻnda, ixcham ifodalash;
- Oʻzbek tilining lugʻat tarkibi boy ekanini namoyish etish;
- Misralarni vaznga solish, qofiya hosil qilish, turli badiiy sanʼatlarni yuzaga keltirish va h.o.

Sinonimlar tilning lugʻat tarkibini boyitishga xizmat qiladi, badiiy adabiyot namunlarida tasvirlanayotgan lavha, timsol, voqea-hodisalarning taʼsirchan, jozibali, ohangdor boʻlishiga olib keladi. Shoira Halima Xudoyberdiyeva ayni bir maʼnoni bildiruvchi birdan ortiq til birlilarini muayyan maqsadni koʻzlab qoʻllagan va oʻz maqsadiga toʻlaqonli erishgan desak mubolagʻa boʻlmaydi. Badiiy adabiyot insonning olamini boyitadi, ruhiyatini tarbiyalaydi, qalbimiz va ongimizda odamiylik hislarini parvarishlaydi. Xuddi shunday tilning boyligi va nutqning jozibadorligi, taʼsirchanligini taʼminlashda sinonimlarning ahamiyati katta. Sinonimlar muhim tasviroy vosita sifatida badiiy manzaralar yaratishga, lirik qahramon holatini, ichki kechinmalarini yoritishga xizmat qiladi.

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*Sabirova M.Sh.
senior teacher
Tourism faculty
Social sciences department
Alfraganus University
Pardayev N.S.
intern-teacher
Economical and social geography department
Mirza Ulugbek in the name of Uzbekistan National university*

TASHKENT REGION THE FAMILY STRUCTURE OF THE POPULATION'S DEMOGRAPHIC DEVELOPMENT REGIONAL CHANGES

Annotation. The population increased in the own-self demographic processes of the study is to be directed of the work scope to further expand should means. Population geography in science of the structure of the population, and in particular age, sex, national, ethnic composition, together with family, social structure, as there are pressing them to come to the present day is one of the tasks of diagnosis and research. The family is also one of the aspects of geographical research of the population, the population's location, the height of the toe 'citizens of families and the number, type, shape, and o 'the toe of lcham 'citizens o 'is to reveal specific aspects of worthy requires.

Key words: family, age-gender, marriage, economic geographical place, divorce, national, demographic processes, rural districts, national-ethnic structure.

Let's not go to any corner of the world, the family composition of the population is manifested as the main link in society. The family is an important component, which spontaneously determines the development of social capital of Man and society. As proof of this, at the seventh World Congress of families (Sydney, May 2013), "the formation of a healthy family economy will make the country prosperous" [1] was treated as.

In population growth and settlement, family composition acts as a foundation in ensuring the well-being of society. When studying the process of marriage in the family structure of the population, first of all, it is studied within the framework of the reproduction of the population, its age-sex composition and its impact on the population. One of the geographer scientists V.Kopilov: "age-gender, marriage and family composition are associated with an increase in the population, and this is the subject of demography. The rest are exogenous i.e. variables that indirectly affect demographic processes" [8.]. In addition, a.Anoxin, D.Geographer scholars such as Jitin have also expressed opinions that "marriages and divorces generally fall within the natural movement of the population,

although they do not directly change the population [7; 86 b.]. Indeed, the natural movement of the population is directly related to the reproduction of the population. The reestablishment of the population, in turn, has its own influence on the family composition of the population. Tashkent economic districts of respublika in itself to specific rather than has the fact that with other economic geographical districts separated is. In particular, them an example of make, the capital city of the presence of, advanced industrial cities, transportation systems, economic - social and economic infrastructure, demographic potential is high that is to come in the fitting.

Tashkent economic region is distinguished from other economic geographical regions by the fact that it has a special place in the Republic. Examples of these include the presence of a capital city, developed industrial cities, a transport system, economic - social and economic infrastructure, high demographic potential.

The territory of own specific comfortable, natural and economic geographical place possible is that, Built and Akhangaran river from the movement of flowing since the population of the location for favorable conditions to create has given. Economic geographical districts urbanizatsiya level high, the demographic processes of the development, the city and the rural population radical difference it makes. Specifically, the city of the population of the marriage and the divorce process itself to specific feature it has, if, other areas are separated is. Tashkent economic districts incoming Tashkent region of its own, located in the natural geographic location, according, nature, tourism and the population 's living conditions, according to the republic 's own specific place to be able. In the territory of the population is uneven located, the population of the number and growth rates at different levels, have, own specific historical development, natural geographic location, demographic factors and socio-economic development with chambarchars is associated.

Consequently, Tashkent economic districts of man 5802,1 the number of total population in 2022, the organization of the republic's total population of 16 percent in the same territory living makes. Districts incoming Tashkent city and Tashkent region, population dynamics, location and density according vary will. Tashkent region the total population, the number of 2022 year data according 2939,700 man up of, the total population of 50 percent in cities, 49,8 percent, while the villages of living makes [10.]. Tashkent region administrative territorial administrative units, the number of 22 units, then, the rural districts the number of 15 units and 16 than cities organization is. If the number of towns than 90, 998 agriculture and are ovul of dollars. The territory of relyef structure directly by the population of the location and density vividly realized. Tashkent in the year 2022 in the region of 1 sq.miles to to 'g'ri who comes to the number of population than 194 was established.

The relief structure of the territory is reflected in the location of natural conditions and the development of Natural Resources, in turn, the participation of

the population in demographic processes. The location of the population also influences its demographic views. The family composition of the population living in the mountain and Plains region, the fact that demographic processes differ from each other, assumes research through geodemographic typologization.

In this study, the regions and districts were divided into 3 groups, and the districts of Ohangaron, Boastonliq, Parkent of Tashkent region were included in the first group, namely, mountain districts. Moreover, from the analysis of the above studies, it is worthwhile to distinguish the object of the study under study at absolute heights as follows, “the location of the population, the transport system, the contiguity of the territory are also sufficient to recognize them as a single central demogeographic region”, which called the city of Tashkent and The Tashkent Region Central These are:

1. 400-500 meters (area) area: Nurafshon sh, Bekabad city, Yangiyul city and Science, Bekabad, Culture, Quyichirchiq, Yangiyul, Chinaz district;

2. 400-500 from 1000-1100 meters (Mountain before) regions: Almalyk city, Angren city, Chirchik city, Akhangaran city and Akhangaran, Zangiota, Kibray, Pskent, Workshop, Yukorichirchik, Tashkent district;

3. Areas above 1000-1100 meters (mountainous): Parkent and Bostonian districts.

Tashkent region districts in the allocation of the district is located, by means of appropriate agreements than absolute height on the basis of the made were. Studyabed in the region in total 22 districts there are if, of them 9 of them “plain” to the districts on come on, teach students: the territory of the area of 20 percent. “Before the mountain” of the districts total area of 11 them on come, they learnabed in the territory of the area of 40 percent occupy. The region of 1000 meters, and of it the top which is “mountain areas” to districts, while 2 units of the district is included in 39,4 percent of the territory. These districts the population of the number, density, marriage and finding the number on is dramatically different from each other.

1-table

Separation of the territory of the Tashkent region into groups of absolute Heights (2022 year)

Absolute high social	cities and districts	Number of cities and districts	General has an area of.	Population number (thousand people)	Density	Number of cities and towns	Population of the city (thousand people)
Up to 0 – 400 meters (plain)	Nurafshan, Bekabad, Yangiyol cities and Akkurgan, Bekabad, Boka, Quyichirchiq, Yangiyol, Chinoz districts	$\frac{9}{41}$	$\frac{3,13}{20,6}$	$\frac{430,1}{26}$	137,4	$\frac{30}{29}$	$\frac{432}{29,3}$
From 400-500 m to 1000-1100 meters (Woven)	Olmalik sh, Angren sh, Chirchiq sh, Ohangaron and Ohangaron, Zangiota, Qibray, Piskent, Tashkent districts	$\frac{11}{50}$	$\frac{6,11}{40,0}$	$\frac{861,7}{53}$	141	$\frac{53}{51}$	$\frac{901}{61}$
Above 1000-1100	Parkent and Bostonlik districts	$\frac{2}{9}$	$\frac{6,01}{39,4}$	$\frac{345,0}{21}$	57,4	$\frac{22}{20}$	$\frac{143}{9,7}$
Total		$\frac{22}{100}$	$\frac{15,25}{100}$	$\frac{1636,8}{100}$	107.3	$\frac{106}{100}$	$\frac{1,476}{100}$

Source: Table <https://ru-ru.topographic-map.com> sites and by author based on data of the state statistics committee of the republic of uzbekistan was established. Note: in the photo-as an absolute amount, a percentage given in the denominator.

In terms of population density, the lowland areas had a population density of 137 persons per square mile (20.6%) of the total area of the province. In contrast, the mountainous areas had a population density of 57.4 persons per km². The highest population density figure is mainly in the Highlands, which occupy 40% of the total area. Of these areas, each sq. km.ga medial a population of 141, the population density is 2.4 times higher than in the districts located in the mountainous region.

According to research, the rural districts in the areas under study have a total of 106 cities and towns. Of these, 22 are located in mountainous regions, 53 in the Highlands and 30 in the districts of the plains raions.

From this, it was the salmog of the urban population that was higher in the Highlands, with 61%, and the urban population in the plains and Highlands

respectively: 29.3%; 9.7%. So, in these districts, the population of the city is thinning from the bottom to the top, and this, in turn, is also reflected in the population density and demographic processes. It is known that the socio-economic conditions of the population have a decisive influence on the restoration of its number, on all processes and their quantity.

The family composition of the population in terms of its size, type, shape and structure also differs from each other in terms of urban and rural population and absolute altitude regions of the population. As we know, the family composition of the population differs from each other in the number and form of families in the rural population in relation to the urban population.

The families of the population of the Tashkent region make up 10% of the Republic. The highest in the number of families was the city of Angren in 2015-2020, while in 2023 the number of families in the city of Chirchik was higher 10 per cent. The city of Chirchik also has a high rate in terms of the number of families with children under the age of 18.

In the number of incomplete families, the city of Angren was higher, while in the cities of Ohangaron and Yangiyol, the amount of incomplete families can be seen to be slightly lower. In provincial districts, however, areas with a higher percentage of total families in 2015 have declined slightly by 2023. It is known to us that the abundance of families ensures natural growth of the population, human capital. But in regional districts and villages, this process is relatively slow. The rise in the age of marriage in provincial families, the decrease in the number of families and the increase in the number of divorces in turn cause geodemographic problems in the area. It is in the regional districts that the decrease in the number of non-families is also observed. The fact that the territory is close to the capital city, increasingly views on the urban population are observed in the families of rural residents. The families of residents of the region, each urban and rural population, are fundamentally different from each other.

Bostanliq, Ortachirchik and Zangiota districts of Tashkent region had the highest number of families with children under 18 years old in 2015, and by 2023, these figures will increase to 50%. it can be seen that it has decreased. The separation process is also active in the cities of Bostonliq district, which are part of the mountainous region. We know that there are families in this village that provide the republic with labor resources. According to the number of families with many children in the region, the villages of Parkent, Bostonliq, Chinoz districts had a high index until 2020, and by 2023, the number of families with many children will be at this point. reduced by half. In general, views on marriage and family relations have changed in the families of Parkent and Bostonliq districts, which are part of the mountainous region.

The influence of the geographic location of the population on the changes in the territorial-demographic development of the family composition of the population of the Tashkent economic region was reflected in every demographic process. The positive and negative aspects of the location of the population along

the altitude regions of the Tashkent region were determined. The fact that the population density, the diversity of the national-ethnic structure has its influence on the composition of families of the Tashkent economic region, which in turn affects the dynamics of demographic processes, has been thoroughly examined.

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*Safarov I.B.
Qarshi davlat universiteti o'qituvchisi
Chorshamiyev R.R.
Qarshi MII akademik litseyi o'qituvchisi*

G`UZOR TUMANI ZIYORATGOHLAR MASKANI

Annotatsiya. Ushbu maqolada Qashqadaryo viloyatining G`uzor tumanida joylashgan ziyoratgohlar haqidagi ma'lumotlar to'plangan va tahlil qilingan. G`uzor tumanida ziyorat turizmini rivojlantirish bo'yicha taklif va tavsiyalar ishlab chiqildi.

Kalit so'zlar: Ziyoratgohlar, ziyoratgoh, ziyoratgoh, turizm, muqaddas, mintaqa, tuman, ziyorat turizmi.

*Safarov I.B.
teacher
Karshi State University
Chorshamiyev R.R.
teacher
academic lyceum of Karshi MII*

PLACE OF PILGRIMAGE OF GUZOR DISTRICT

Abstract. In this article, information about shrines located in Guzor district of Kashkadarya region is collected and analyzed. Proposals and recommendations for the development of pilgrimage tourism in Guzor district were developed.

Key words: Shrines, pilgrimage, pilgrimage, tourism, sacred, region, pilgrimage tourism.

Bugungi kunda shiddat bilan rivojlanib borayotgan XXI asrda nafaqat butun dunyo mamlakatlarida, shu bilan birga Yangi O'zbekistonda muqaddas qadamjolar va ziyoratgohlarga bo'lgan munosabatlar o'zgarib bormoqda. Buning isbotini 2019-yil 19-dekabrda BMT Bosh Assambleyasining yalpi majlisida "Markaziy Osiyoda barqaror turizm va barqaror rivojlanish" nomli maxsus rezolyutsiyasi, shuningdek O'zbekiston Respublikasi Prezidentining 2021-yil 9-fevraldagi PF 6165-sonli "O'zbekiston Respublikasida ichki va ziyorat turizmini yanada rivojlantirish chora-tadbirlari to'g'risidagi" farmoni46, hamda O'zbekiston Respublikasi Vazirlar Mahkamasining 2021-yil 100-sonli "Ichki va ziyorat turizmini rivojlantirish bo'yicha qo'shimcha chora-tadbirlar to'g'risidagi" qarorlari, 2018-yil 15-fevraldagi 120-sonli "Muqaddas qadamjolar, ziyoratgohlar,

46 O'zbekiston Respublikasi Prezidentining 2021 yil 9-fevraldagi "O'zbekiston Respublikasida ichki va ziyorat turizmini yanada rivojlantirish chora-tadbirlari to'g'risida" gi Farmoni//www.lex.uz

masjidlar va qabristonlarni obodonlashtirish ishlarini samarali tashkil etish to'g'risidagi"⁴⁷ qarorlarining qabul qilinishida ham ko'rish mumkin.

Hozirgi kunda milliy iqtisodiyotga ko'p daromad keltiradigan istiqbolli tarmoqlaridan biri turizm sohasi bo'lib, ziyorat turizmi esa hozirgi kunda eng tez rivojlanib borayotgan turizmning tarmog'i hisoblanadi. Qashqadaryo viloyatidagi muqaddas qadamjolar hamda ziyoratgohlarni joylashgan geografik o'rni va ziyoratgohlarning inson turmush tarzida tutgan ahamiyatini o'rganish hamda tahlil qilish asosiy vazifalar hisoblanadi.

Ma'lumki, Qashqadaryo viloyatida qadimiy 1321 ta moddiy-madaniy meros obyekti va Shahrisabzdagi tarixiy obyektlar YUNESKONing Butun jahon madaniy meros obyektlari ro'yxatiga olingan bo'lib, 1043 ta arxeologik, 208 ta me'moriy, 27 ta diqqatga sazovor joy, 43 ta monumental san'at yodgorliklari, 50 ta joylashtirish vositalari, 100 dan ortiq milliy va Yevropa taomlarini tayyorlovchi restoran hamda milliy uslubdagi choyxonalar, 17 ta turoperatorlik subyektlari, 12 ta turizm toifasiga mansub avtotransport vositalari faoliyat ko'rsatib kelmoqda⁴⁸. Bundan tashqari Qashqadaryo viloyatda 90 dan ortiq muqaddas ziyoratgohlar mavjud. Bu esa viloyatda ziyorat turizmini rivojlantirish uchun asosiy omil bo'lib xizmat qiladi.

Viloyatda joylashgan ziyorat turizm obyektlarini uch turga bo'lib, o'rganishimiz mumkin; *birinchisi* - Ziyorat turizmining tabiiy geografik obyektlari (g'orlar, daraxt, buloq, ko'l, daryo, sharshara, tosh); *ikkinchisi* - Ziyorat turizmining sakral geografik obyektlari (muqaddas ziyoratgohlar, avliyolar qabrlari, ba'zi ulug' zotlarning g'oyib bo'lgan joylari); *uchunchisi* - Ziyorat turizmining arxeologik va arxetektura yodgorliklari;

Qashqadaryo viloyatida butun dunyoga ma'lum bo'lgan atoqli olim va mutaffakkirlar abadiy qo'nim topgan. Ularning boy ma'naviy-madaniy merosi butun dunyoga avvalgidek katta qiziqish tug'diradi. Viloyatda yuzga yaqin muqaddas qadamjolar va ziyoratgohlar xalqimizning tarixiy-madaniy obidalari sifatida saqlanib kelinmoqda. Abu Muin Nasafiy, Abu Ubayda al-Jarroh, Langar ota, Sulton Mir Haydar, Hazrati Beshir, Isoq ota, Murodbaxsh ota ziyoratgohlari bugungi kunda ziyoratchilar bilan gavjum. Bu ziyoratgohlarga viloyat bo'yicha eng ko'p ziyoratchilar tashrif buyurmoqda.

G'uzor tumanida ham muqaddas qadamjolar va ziyoratgohlar juda ko'p bo'lib, bu ziyoratgohlar Mirijanda ota, Musofir ota, G'ulom Naqshband (*G'uzor shahri*), Azizi G'uzoriy (*Eskibog' qishlog'i*), Chuchuk ota (*Chukuk qishlog'i*), Xonaqa ota (*Chanoq qishlog'i*), Zaynulobidin ota (*Oqbo'yin qishlog'i*), Xo'ja Buzruk ota (*Batosh qishlog'i*), Valiy Bobo (*Qo'shtepa qishlog'i*), Sharilloq ota (*Qirpachkamar qishlog'i*), Said Xo'ja Qorovul ota (*Pachkamar MFY*), Qorayli bobo (*Qorayli qishlog'i*), Oqtosh bobo (*Tengdosh qishlog'i*), Yettiqo'l ota, Omon

47 O'zbekiston Respublikasi Vazirlar Mahkamasining 2018 yil 15-fevraldagi "Muqaddas qadamjolar, ziyoratgoh, masjid va qabristonlarni obodonlashtirish ishlarini samarali tashkil etish to'g'risida" 120-sonli Qarori//www.lex.uz.

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ota (*Omon-ota qishlog'i*), Chuchuk ota (*Qorako'z qishlog'i*), O'tari ota, Dostor ota (*O'tari qishlog'i*), Ko'ktosh ota (*Sovlig'ar qishlog'i*), Hazrati Luqmon ota (*Mustaqillik mahallasi*), Hazrati Imom Halqama (*Zangtepa qishlog'i*), G'oyib ota (*Qududq qishlog'i*), Qorako'z ota (*Qorako'z qishlog'i*), Qumcho'p ota, Tohir va Zuxra (*Qavchin qishlog'i*), Zangi bobo (*Zangibobo qishlog'i*), Jinjakli ota (*Toshguzar qishlog'i*), Hojatbaror (*Oqtosh qishlog'i*), Hazrati Xo'jaboshi Abulays ota (*Chugurtma qishlog'i*) ziyoratgohlari shu tumanda joylashgan. Ziyoratgohlarning ko'pligi bu tumanda ziyorat turizmini rivojlantirish uchun asosiy omil bo'lib xizmat qiladi. Bugungi kunda yuqorida keltirilgan ziyoratgohlarni faqatgina mahalliy ziyoratchilar biladi, tashrif buyurayotgan ziyoratchilarning ham asosiy qismi mahalliy xalq vakillaridir. Mahalliy aholi ommoviy ravishda ziyoratgohlarga bahor va yoz oylarida boradilar. Insonlar tomonidan ziyorat qilish uchun haftaning ba'zi kunlari ziyorat qilinadigan kunlar sifatida belgilab olingan bo'lib, bu tumanda asosan chorshanba, juma, yakshanba kunlari ziyorat qilish uchun xosiyatli kunlar hisoblanadi. Ziyoratchilar doimo muqaddas qadamjolar va ziyoratgohlarga o'zgacha bir hurmat bilan munosabatda bo'lib kelganlar. Ziyorat jarayonida mahalliy aholi o'zlarini qiynab kelayotgan savollarga javob topishga harakat qilishadi va ma'lum bir vaqt dunyo g'am-tashvishlaridan ozod bo'lib, ruhan engillik sezishadi.

G'uzor tumanida joylashgan ziyoratgohlarni, ziyorat turizmining tabiiy va sakral geografik obyektlariga kiritishimiz mumkin. Ziyorat turizmining tabiiy geografik obyektlariga (daraxt, tosh, ko'l, g'orlar) Sharilloq ota, Hazrati Luqmon ota, Chuchuk ota (*Chukuk qishlog'i*), Chuchuk ota (*Qorako'z qishlog'i*), Jinjakli ota ziyoratgohlarini kiritishimiz mumkin. Ziyoratgohlarni ba'zilar haqida to'xtalib o'tadigan bo'lsak. *Hazrati Luqmon ota ziyoratgohi* - G'uzor tumanidagi Mustaqillik mahallasi hududi yaqinidagi Hazrati Luqmon ota nomli fermer xo'jaligi hududida joylashgan. Ziyoratgoh atrofida bitta kattagina daraxt bo'lib, mahalliy aholi bu erga kelib, ziyorat qilib ketishadi.

Sharilloq ota ziyoratgohi - G'uzor tumanidagi Qirpachkamar qishlog'ida baland qirliklar tepasida joylashgan. Ushbu ziyoratgoh Sharilloq ota yoki Qo'chqorbuloq ota ziyoratgohi deb ham ataladi. Qishloqda yashovchi aholining aytishicha ziyoratgohda bitta daraxt bo'lib, bu daraxt nomini ziyoratgoh nomi bilan aytar ekan. Qirning tepasida Sharilloq ota ziyoratgohi joylashgan. Qirning pastki qismida, ya'ni Sharilloq ota ziyoratgohiga chiqish joyida ikkita buloq sharillab oqib turibdi. Buloqning suvi bir necha yillardan buyon to'xtovsiz oqib turadi. Buloq suvi qish va yoz oylarida bir xil haroratda o'zgarmasdan turadi. Ziyoratga kelganlar buloq suvidan ichib, o'zlarining ziyorat marosimlarini o'tkazib ketishadi. Ziyoratgohning janubi-g'arbiy yon bag'rida kattagina g'or mavjud bo'lib, bir yo'la o'sha g'orni ham ziyorat qilib ketishadi. Aytishlariga qaraganda, cho'ponlar g'orning ichiga 6-9 metr kirishgan, ichkari qismida odam tik tursa bo'ladi. Odamlar ziyorat qilishlari uchun buloqning oldida saxovatli insonlar tomonidan mo'jaza sharoit qilingan.



1-rasm. Sharilloq ota ziyoratgohi.

Chuchuk ota ziyoratgohi - G'uzor tumanidagi Chuchuk qishlog'ida joylashgan. Bu ma'lumotlarni shu qishloqda yashovchi aholi bilan bo'lgan suhbatda bilib oldik. Ziyoratgohlarimizning ko'pchiligida ko'plab buloqlarni ko'rishimiz mumkin. Insonlar, tabiat, hayvonot dunyosi barchasi doimo suvga intilib yashab kelishadi. Chuchuk ota ziyoratgohida ham buloq bo'lib, atrofdagi hududlarga hayot bag'ishlab turibdi. Buloqning suvi anchagina chuchuk hisoblanadi. Buloqning tepa qismida Chuchuk ota ziyoratgohi joylashgan. Aytishlaricha, Chuchuk ota oilasida uchta farzand bo'lgan. Katta farzandi Xo'ja Bibi Sara, Qo'chqorli ota, Chuchuk ota bo'lgan. Bugungi kunda ziyoratgohga mart, aprel va may oylarida ziyoratchilar juda ko'p tashrif buyurishadi. Buloqning suvi nihoyatda shifobaxsh bo'lib, ko'plab dardmandlarning dardiga davo bo'lgan.

Yana shu nom bilan ataluvchi *Chuchuk ota ziyoratgohi* G'uzor tumani Omon-ota MFY Qorako'z qishlog'ining sharqiy tomonida baland qirliklar orasida joylashgan. Bu ziyoratgohda ham buloq va bir nechta daraxtlari bor. Buloq suvi baland toshlarning ostidan shiddat bilan oqib chiqadi va o'sha joydagi quduqqa suv yig'iladi. Ziyoratgohda toshlarni yorib chiqqan bir nechta daraxtlari bor. Ziyoratga kelganlar ham buloq suvidan ichib, o'sha daraxtlar atrofida turli xildagi ziyorat marosimlarini bajarishadi. O'sha erga g'oyib bo'lgan Chuchuk ota ruhlariga fotihalar o'qishadi. Darani ikki tarafdin daraxtlar o'rab olishgan soya salqin joy bo'lib, bunday sharoit ziyoratchilarga ham yoqadi. Ayniqsa buloq yonida ikki dona baqa o'zlarining chiroyli kuylari bilan ziyoratchilarni o'ziga tortadi. Agarda biz bu ziyoratgohlarni tamirlab ziyoratchilar uchun qulay sharoitlar yaratib, ziyoratchilar oqimini ko'paytirsak tumanda ziyorat turizmini rivojlantirishga hissa qo'shgan bo'lar edik.



3-rasm. Chuchuk ota ziyoratgohi(Omon-ota MFY)

G'uzor tumanida ziyorat turizmining sakral geografik obyektlari ham juda ko'p bo'lib, faqat bu ziyoratgohlarni tuman miqyosida biladilar xalos. Ziyorat turizmining sakral geografik obyektlariga muqaddas qadamjolar hamda mavhum ziyoratgohlar kiradi. Said Xo'ja Qorovul ota, O'tari ota, Dostor ota, Yettiqo'l ota, Omon ota, Qorako'z ota, G'oyib ota, Qumcho'p ota Hojatbaror ziyoratgohlari tumandagi ziyorat turizmining sakral geografik obyektlari hisoblanadi.

Said Xo'ja Qorovul ota ziyoratgohi G'uzor tumanidagi Pachkamar suv ombori hududida joylashgan. Bu ma'lumotlarni qishloqda yashovchilar bo'lgan suhbatda bilib oldik. Kasbi Qorovullik bo'lganligi uchun ziyoratgohga Said Xo'ja Qorovul ota deb atashadi. XX asrning 60-yillarida bu erda Pachkamar suv omboridagi qurilish amalga oshirilgan. Aytishlaricha, qurilish boshlangandan keyin bu erda har xil g'ayritabiiy hodisalar yuz bergan, va qurilish Said Xo'ja Qorovul ota ziyoratgohidan aylanib o'tilgan. Said Xo'ja Qorovul ota qishloqda yashovchilarning aytishicha, dushmanlardan qochib mana shu erda g'oyib bo'lgan ekanlar. Bugungi kunda Pachkamar suv omboriga dam olish maqsadida chiqqanlar ham bir yo'la ziyoratgohga kelib, Said Xo'ja Qorovul ota ziyoratgohini ziyorat qilib ketadi.



4-rasm. Said Xo'ja Qorovul ota ziyoratgohi

Omon-ota ziyoratgohi - Omon-ota bulutlar bilan bo'ylashgan, yulduzlar bilan so'zlashgan sehrli va so'lim bir go'shadir. Tog' bag'rida joylashgan, bu aziz go'shaning har bir giyohi, har bir toshi asrlardan so'zlaydi. G'uzor tumanining shimoli-sharqiy tomonida Omon-ota deb nomlanuvchi qishloq joylashgan. Bu qishloq tuman markazidan 35-40 km uzoqlikda joylashgan.



5-rasm. Omon-ota ziyoratgohi

Qishloq atrofini baland qirliklar o'rab turadi. Ayni vaqtda bu qishloqda 240 ta oila mavjud bo'lib, ularda 1160 nafar aholi istiqomat qiladi. Bu qishloqqa "Omon-ota" deb nom berilishiga bir nechta rivoyatlar mavjud. Qishloqni oldingi nomi "o'n olti" bo'lgan. Rivoyatlarda aytilishicha qadim zamonlarda bu qishloqqa bir nechta darvish ziyoratga kelishadi. Ular ko'plab joylarni ziyorat qilib qishloq tepasidagi baland tepalikka dam olishadi. O'sha kuni darvishlardan bittasi betob bo'lib qoladi va shu erda vafot etadi. Darvishlar bu vafot etgan hamrohini olib ketolmas edi. Chunki ular juda ko'p joylarga ziyoratga borishlari kerak edi. Shu erda yashovchi aholiga iltimos qilib, baland tepalik ustiga dafn qilishadi. Ular "Bu do'stimizni sizlarga omanot qilib tashlab ketamiz" - deb ketishgan ekan. Hozir ham o'sha tepalik ustida qabr va yonidan daraxt o'sib chiqqan. Shundan buyon bu qishloq Omon-ota qishlog'i deb atalib kelinadi. Hozir o'sha tepalik ustida Omon-ota ziyoratgohi joylashgan. Bu tepalikni balandligi taxminan 1000-1100 m ga teng. Ziyoratgohga qishloqda yashovchi aholi hamda tumandagi boshqa qishloqlardan ham yosh-u qari haftaning qaysi kuni bo'lishidan qat'iy nazar ziyoratga kelib ziyorat qilib ketishadi.

G'uzor tumanidagi ziyoratgohlarni joylashgan geografik o'rniga ko'ra ularning aksariyati tumandagi adirlarda joylashgan. Bu esa tumanda ziyorat turizmi bilan birgalikda ekoturizmni ham rivojlantirish uchun qulay bir imkoniyat hisoblanadi. G'uzor tumani o'zing "*tandir go'shti*" bilan butun O'zbekistonda mashhur hisoblanadi. Demak tumanda gastronomik turizmni rivojlantirish uchun imkoniyatlar etarlidir. Tumandagi muqaddas qadamjolar va ziyoratgohlarni qaytadan tamirlab, ziyoratchilar uchun qulay sharoitlar yaratib berilsa ziyoratchilar oqimining ko'payishiga sabab bo'ladi. Demak G'uzor tumanida ziyorat turizmining tabiiy va sakral geografik obyektlari etarli darajada bo'lib, bu ziyorat obyektlari rivojlantirilsa viloyat miqyosida ziyorat turizmini rivojlanishi uchun zamin tayyorlangan bo'lardi.

Xulosa qilib, G'uzor tumanida ziyorat turizmini rivojlantirish uchun quydagi taklif va tavsiyalarni berish mumkin;

✓ Homiylik va xususiylashtirish chora-tadbirlarni amalga oshirish orqali maqsadli ravishda ziyorat turizm obyektlarini obodonlashtirish, rekonstruksiya qilish va turizm infrastrukturasi yaxshilab borish;

✓ An'anaviy ravishda o'tkazib kelinayotgan "O'zbekiston bo'ylab sayohat qil" turizm dasturi doirasida turizmning qolgan turlari bilan birgalikda ziyorat turizm obyektlariga tizimli sayohatlar tashkil etish,

✓ Ziyorat turizmida uy-mehmonxonalar va halol-brendli umumiy ovqatlanish shahobchalarini tashkil etish mumkin.

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Saidaxmedova D.S.

JizPI

Iqtisodiyot va menejment kafedrası dotsenti

ERKIN IQTISODIY ZONALAR – HUDUDLARNI RIVOJLANTIRISHNING MUHIM OMILI SIFATIDA

Annotatsiya. Mazkur maqola O‘zbekistonda erkin iqtisodiy zonalarini rivojlantirish muammolariga bag‘ishlangan. Unda erkin iqtisodiy zonalarini tashkil etishning xorijiy tajribalari va uning o‘ziga xos xususiyatlari yoritilgan.

Kalit so‘zlar. maxsus iqtisodiy zona, erkin iqtisodiy zona, hududiy-iqtisodiy siyosat, xorijiy investitsiya, ishlab chiqarish, soliq imtiyozlari, eksportni rag‘batlantirish.

Saidakhmedova D.S.

associate professor

Department of Economics and Management

JizPI

FREE ECONOMIC ZONES ARE AN IMPORTANT FACTOR OF THE DEVELOPMENT OF THE REGIONS

Annotation. This article is devoted to the problems of development of free economic zones in Uzbekistan. The foreign experience of free economic zones and its features is described.

Keywords. Special economic zone, free economic zone, regional economic policy, foreign investment, production, tax incentives, export promotion.

Mamlakatda innovatsion faoliyatni rivojlantirish, ilg‘or texnologiyalarni joriy qilish, eksport, shuningdek transport va telekommunikatsiya infratuzilmasini jadal rivojlantirish, mahalliy mahsulot va xizmatlarning ichki va tashqi bozorlarda xalqaro sifat, sertifikatlashtirish talablarini joriy etish orqali raqobatdoshligini oshirish, yangi ish joylarini barpo etish kabi bir qator muhim masalalarni ijobiy hal etishda maxsus iqtisodiy zonalar muhim o‘rin tutadi.

Jahon tajribasida maxsus iqtisodiy zonalar faoliyatini tashkil etish amaliyoti XX asrning 70 yillarida boshlangan. Hozirgi zamon ilmiy adabiyotlarida va ma‘muriy hujjatlarda maxsus iqtisodiy zonalarning xilma-xil shakllari qo‘llanilmoqda: “Erkin iqtisodiy zona”, “Texnologik zona”, “Erkin bojxona zonasi”, “Erkin tadbirkorlik zonasi”, “Erkin eksport zona”, “Erkin savdo zona”, “Bojsiz zona”, “Qo‘shma tadbirkorlik zonasi”, “Offshor zona” va hokazo. Bu sohada olib borilgan izlanishlar va tadqiqotlarni tahlil qilish asosida aytish mumkinki, mazkur atama mazmuniga turli mutaxassislar o‘z nuqtai nazari, bilim va tajribasidan kelib chiqib yondashishgan va turlicha ta‘riflar yuzaga kelgan.

Shiuningdek, turli mamlakatlarda maxsus iqtisodiy zonalarning turli shakllarini qo‘llanilishi har bir davlatning rivojlanish darajasi, iqtisodiy ahvoli, mavjud geografik, iqtisodiy yoki boshqa afzalliklaridan kelib chiqqan holda tashkil etiladi.

Jumladan, AQSH, Fransiya, Buyuk Britaniya kabi sanoati rivojlangan mamlakatlarda Maxsus iqtisodiy zonalarni tashkil etish maqsadi tashqi iqtisodiy faoliyatni jadallashtirish, mintaqaviy siyosatni amalga oshirish, kichik va o‘rta biznesni rivojlantirishga ko‘maklashish, chekka hududlarda ishsizlikni kamaytirish, hududlarning ijtimoiy-iqtisodiy rivojlanishini ta‘minlashga qaratiladi. Ushbu maqsadlarga erishish uchun rezidentlarga ko‘proq faoliyat erkinligi, shuningdek, ahamiyatli soliq va moliyaviy imtiyozlar taqdim etiladi. Bu davlatlarda maxsus iqtisodiy zonalarning “Texnologik zona”, “Erkin tadbirkorlik zonai”, “Erkin savdo zona” kabi shakllari keng qo‘llaniladi.

Iqtisodi rivojlanayotgan mamlakatlarda maxsus iqtisodiy zonalarni yaratishda ishlab chiqarishga xorijiy investitsiyalar va fan-texnika taraqqiyoti yutuqlarini jalb etishga asosiy ustuvorlik beriladi, shuningdek, eksportni rag‘batlantirish asosida muayyan hududlarda bandlik va valyuta tushumlari o‘shirishni ta‘minlash maqsadi ilgari suriladi.

Shu bois, ko‘pchilik rivojlanayotgan mamlakatlarda “Erkin iqtisodiy zona”, “Erkin eksport zona”, “Erkin savdo zona” kabi shakllari keng tarqalgan. Bu mamlakatlarda maxsus iqtisodiy zonalarning faoliyati davlatning aniq strategik maqsadlarini hal etishga qaratilgan bo‘lib, u quyidagilarni o‘z ichiga oladi:

- milliy iqtisodiyotning raqobatbardoshligini oshirish;
- rivojlanishning xomashyo eksporti modelidan chetga chiqish;
- zonalarda boshqaruvning yangi usullarini tadbqiq qilish;
- milliy iqtisodiyotning jahon iqtisodiyotiga integratsiyalashuvi darajasini oshirish.

O‘zbekiston Respublikasining 2019-yil 14-dekabrda qabul qilingan “Maxsus iqtisodiy zonalar to‘g‘risida”gi Qonuniga⁴⁹ muvofiq, maxsus iqtisodiy zona deganda, tegishli hududni jadal ijtimoiy-iqtisodiy rivojlantirish uchun chet el investitsiyalari va mahalliy investitsiyalarni, yuqori texnologiyalar hamda boshqaruv tajribasini jalb etish maqsadida maxsus ajratilgan, belgilangan chegaralarga va maxsus huquqiy rejimga ega bo‘lgan hudud tushuniladi. Shundan kelib chiqqan holda, MIZning asosiy maqsadi davlatning chekka hududlari va iqtisodiy kam ta‘minlangan hududlariga investitsiyalarni jalb etish, yangi ish o‘rinlari yaratish, texnologiya va iqtisodiyotning turli tarmoqlarini rivojlantirishga ko‘maklashishga qaratilgan.

Qonunga ko‘ra, mamlakatimizda maxsus iqtisodiy zonalar quyidagi turda tashkil etilishi mumkin:

49 O‘zbekiston Respublikasining 2020-yil 17-fevraldagi “Maxsus iqtisodiy zonalar to‘g‘risida” gi O‘RQ-604-sonli Qonuni

- erkin iqtisodiy zonalar;
- maxsus ilmiy-texnologik zonalar;
- turistik-rekreatsion zonalar;
- erkin savdo zonalari;
- maxsus sanoat zonalari.

Erkin iqtisodiy zona bu - yangi ishlab chiqarish quvvatlarini barpo etish, yuqori texnologik ishlab chiqarishni rivojlantirish, zamonaviy raqobatbardosh, import o'rnini bosuvchi, eksportga yo'naltirilgan tayyor sanoat mahsulotini ishlab chiqarishni o'zlashtirishga faol jalb etish, shuningdek ishlab chiqarish, muhandislik-kommunikatsiya, yo'l-transport, ijtimoiy infratuzilmani va logistika xizmatlarini rivojlantirishni ta'minlash maqsadlarida tashkil etiladigan hudud hisoblanadi.

Erkin iqtisodiy zonalar mamlakatlar va iqtisodiyot tarmoqlari o'rtasidagi iqtisodiy aloqalarni yengillashtirish maqsadida yaratiladi. Erkin iqtisodiy zonada tovarlarni erkin olib kirish va eksport qilish, soliq va bojxona imtiyozlarini qo'llash, xorijiy investorlarni jalb qilish, iqtisodiy faoliyat uchun maxsus shart-sharoitlardan foydalanish mumkin. Shu munosabat bilan erkin iqtisodiy zonalarni rivojlantirish orqali eksportni jadallashtirish, xalqaro biznesni yo'lga qo'yish va korxonalarining raqobatbardoshligini oshirish imkoniyati kengayadi. Shuningdek, erkin iqtisodiy zonalar turizm yoki ishlab chiqarish kabi muayyan sohalarni rivojlantirish va bu maqsadlarni amalga oshirishga yordam beradigan ajoyib rag'batlantirish va subsidiya dasturlariga ham ega.

O'zbekiston Respublikasi Prezidenti huzuridagi statistika Agentligi ma'lumotlariga ko'ra, 2023 yil 1 oktyabr holatiga ko'ra O'zbekiston Respublikasida 819 ta maxsus iqtisodiy zonalar mavjud bo'lib, ularda 5196 ta korxonalar va tashkilotlar faoliyat ko'rsatmoqda. Ulardan: 22 ta maxsus (erkin) iqtisodiy zonalar, 323 ta kichik sanoat zonasi (keyingi o'rinlarda – KSZ), 24 ta texnopark hamda 450 ta klasterlar (keyingi o'rinlarda – klaster) mavjud bo'lib, ularning tarkibidagi korxonalar va tashkilotlar soni MIZda 752 tani, KSZda 2488 tani, exnoparklarda 1501 tani va klasterlarda 455 tani tashkil etmoqda⁵⁰.

Respublikamizda erkin iqtisodiy zonalarni tashkil etish quyidagi o'ziga xos xususiyatlarga ega:

- erkin iqtisodiy zonalar davlatning asosiy qismi hisoblanadi;
- erkin iqtisodiy zonalarda to'liq imtiyozlar tizimi mavjud;
- erkin iqtisodiy zonalar faqatgina bojxona soliq va boshqa nazorat turlaridan "erkin" hisoblanadi;
- erkin iqtisodiy zonalar rezidenti barcha nazorat turlaridan ozod degan ma'noni bermaydi;
- erkin iqtisodiy zonalarni rivojlantirishga jiddiy yondashish tashqi savdo, texnika, fan va texnologiya sohasidagi muamolarni yechishga yordam beradi.

50 <https://invexi.org/uz/press/information-about-special-economic-zones-in-the-republic-of-uzbekistan-in-january-september-2023/>

Xulosa qilib aytganda, erkin iqtisodiy zonalar xorijiy investitsiyalarni jalb qilish va eksportni rag‘batlantirishning muhim omili sifatida hududlarni va davlatning iqtisodiy rivojlanish sur‘atini tezlashtiruvchi “akselerator” vazifasini o‘taydi. Muhimi, ularni har bir hududning siyosiy va iqtisodiy xususiyatidan kelib chiqqan holda to‘g‘ri tashkil etish va boshqarishga bog‘liq.

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Samadov A.X.
“Texnologik mashinalar va jihozlar” kafedrası katta o‘qituvchisi Qarshi
muhandislik iqtisodiyot instituti
Qosimova A.Y.
Yoshlar bilan ishlash, ma'naviyat va ma'rifat bo'limi boshlig'i
Axborot texnologiyalari va menejment universiteti

ZAMONAVIY ROCKSTRONG™ VA GIDRO-SEAT BARREL TIZIMI (HSBTM) KERN OLISH TIZIMLARINI ASOSLASH

Annotatsiya. Maqolada neft va gaz sanoatining asosiy ustuni bo‘lgan neft va gaz konlarini geologik – izlov ishlarini amalga oshirishda, quduqlardan kern olish orqali qatlamlarni to‘liqroq o‘rganish mumkin. Bu esa o‘z navbatida quduqlarni samarali burg‘ilash, ularni o‘z vaqtida ishga tushirish va burg‘ilash jarayonida avaraiyalarni oldini olish, mumkin. Maqolada burg‘ilash sanoati jihoz uskunalarni rivojlantirish, burg‘ilarning zamonaviy va innovasion ishlanmalarni yaratish va ushbu zamonaviy burg‘ilar orqali quduqlarni kam vaqt, eng tejamkor va samarali burg‘ilash imkoniyatlarini oshirish bo‘yicha takliflar berilgan.

Kalit so‘zlar: burg‘i, kern oluvchi snaryad, kern, kern oluvchi jihoz, tog‘ jinslari, murakkab quduqlar, shlam, burg‘ilash kallaklari, abraziv jinslar, vertlyug osma tarmog‘i.

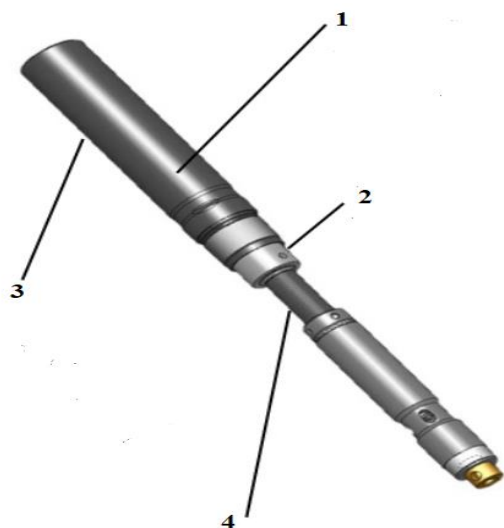
Samadov A.Kh.
senior teacher
"Technological machines and equipment" department
Karshi Institute of Engineering Economics
Qosimova A.Y.
Head of the Department of Work with Youth, Spirituality and Enlightenment
University of Information Technology and Management

ESTABLISHING MODERN ROCKSTRONG™ AND HYDRO-SEAT BARREL SYSTEM (HSBTM) CORE SYSTEMS

Abstract. In the article, it is possible to study the layers more fully by taking cores from wells during the geological exploration of oil and gas fields, which are the main pillar of the oil and gas industry. This, in turn, makes it possible to effectively drill wells, start them on time, and prevent accidents during the drilling process. In the article, proposals are made for the development of drilling industry equipment, the creation of modern and innovative developments of drills, and the improvement of the possibilities of drilling wells with the help of these modern drills in a short time, in the most economical and efficient manner.

Key words: drill bit, coring shell, core, coring equipment, rock, complex wells, mud, drill heads, abrasive rock, vertlyug suspension network.

Yuqori qatlam bosimi va harorat sharoitlarida, shuningdek, qattiq va abraziv jinslar uchun maxsus loyihalashtirilgan RockStrong™ kern olish tizimi o'z sinfida burg'ilash kallaklari ishlab chiqarishning eng yaxshi texnologiyasini, kern oluvchi snaryad konstruktsiyasini, kernning tiqilib qolishini oldini oladigan va tebranishdan hosil bo'ladigan yuklanishlarni ta'sirini kamaytirish uchun maxsus loyihalangan tizim.



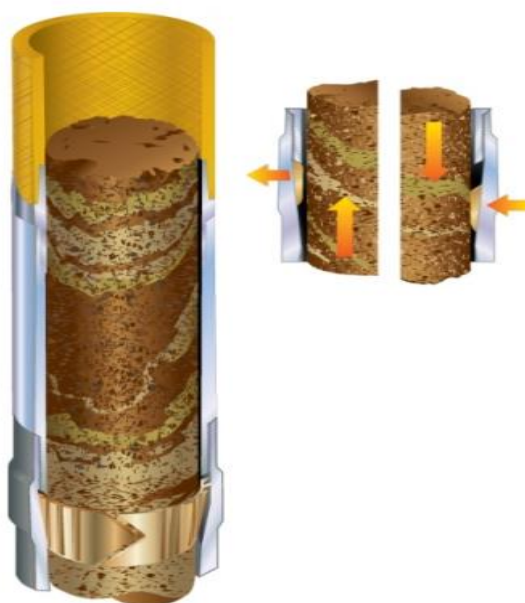
1–Mustahkam barqarorlikka ega ikki podshipnikdan iborat tarmoq. Kernni silliq kirishini ta'minlaydi va kernni shikastlanish ehtimolini kamaytiradi.

2–Kengaytirilgan bo'shliqni sozlash diapazoni. Yuqori qatlam bosimi va haroratga bardosh beradi.

3–Kern qisilishining oldini olish xususiyati. Maxsus amortizatsiya tarmog'ini o'z ichiga oluvchi, bu oldindan yuklangan prujina sifatida faoliyat ko'rsatadigan va kern qabul quvur asboblardagi o'qiy tebranishlarini yutadi. **4 – Oldindan yuklangan sozlash tizimi.** Toliqish natijasida ishdan chiqishga ancha chidamli bo'lishni ta'minlaydi va tebranishning yuqori darajalarini kompensatsiya qilish qobiliyatini oshiradi.

1 – rasm. RockStrong™ kern olish tizimini tuzilishi.

RockStrong™ tizimi o'ziga xos vertlyug osma tarmog'ini o'z ichiga oladi, bu uni bozordagi eng yuqori darajada kern olish jihoziga aylantiradi. Bugungi kunga kelib, bu juda murakkab quduqlarni burg'ilash sharoitlari uchun maxsus ishlab chiqilgan yagona tizimdir. Bu amalda isbotlangan va eng noqulay sharoitlarda ham yuqori sifatli kern olishni ta'minlaydi.



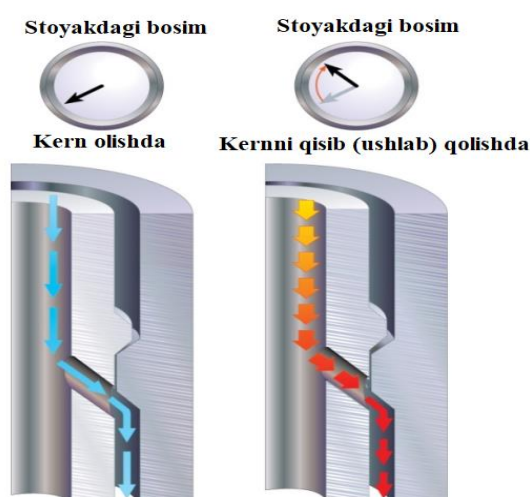
2-rasm. Kuchaytirilgan kernuzgichning umumiy ko`rinishi.

Kuchaytirilgan kern oluvchi – O'rtacha qattqlikdagi jinslardan, yuqori darzlilik jinslardan yoki o'zgaruvchan qatlamchalardan namuna olish uchun mo'ljallangan. 7.15 – rasmda kern kirganda prujinali kern oluvchi jihozning ochilishi ko'rsatilgan.

Kern oluvchi snaryadlar quduq tubidan chiqarib olinayotganda, prujinali kernuzgich yopiladi, bu kernni chiqarib olish va keyinchalik kern qabul qiluvchi quvurda ushlab turish uchun zarurdir.

Kern olishning Hidro-seat barrel tizimi (HSBTM).

Konstruktsiyaning qo'shimcha varianti hisoblanadigan Hydro-Seat Barrel (HSB™) tizimi kernni qisib qolish (chiqarish)ning aniq va tezkor indikatsiyasini ta'minlaydi.



3 – rasm. Gidravlik muallaq harakatlanuvchi quvurni kernni qisib qolish jarayoni.

Bu gidravlik muallaq harakatlanuvchi quvur (7.15 – rasmda ko'rsatilgan), ya'ni kern qabul qiluvchi quvurga kirishda kichik kuchlanishlar amal qiladi. Kernni qisib (ushlab) qolganda, ichki quvur ko'tarilib, burg'ilash eritmasini oqimini cheklaydi va stoyakdagi bosimni oshiradi.

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Sattarov O.X.
assistant
Department of Propaedeutics of Internal Diseases
Andijan State Medical Institute

ASSOCIATION OF GENETIC MARKERS WITH THE DEVELOPMENT OF METABOLIC SYNDROME AMONG YOUNG RESIDENTS OF UZBEKISTAN

Annotation. Metabolic syndrome (MS) is a multifactorial disease that is one of the causes of the development of cardiovascular diseases. The development of this pathology is based on insulin resistance with hyperinsulinemia. The atherogenicity of the lipid profile with insulin resistance is accompanied by increased production of very low-density lipoproteins in the liver and impaired destruction of them in the periphery, which contributes to the accumulation of triglycerides and low-density lipoproteins. However, disruption of Ca^{2+} - Na^{+} metabolism under conditions of peroxidation due to obesity leads to an increase in Ca^{2+} ions in platelets and hypertrophy of the heart muscle, thereby increasing diastolic pressure. Hyperglycemia is accompanied by the accumulation of advanced glycation end products (AGEs). Proteins with AGEs, with the assistance of cytokines, promote the proliferation of endothelial cells of the vascular wall, synthesizing endothelin-1, which causes local thrombosis and inhibits platelet aggregation. In individuals genetically predisposed to obesity and (or) insulin resistance, the development of metabolic disorders occurs slowly and constantly progresses under the influence of factors such as eating disorders and physical inactivity. Impaired endothelial properties are associated with many gene mutations, in particular the MTHFR gene, which is involved in homocysteine metabolism, and the CSK gene, which regulates cell growth and differentiation. Disruption of the expression of these genes negatively affects target cells located in the cardiovascular system, kidneys, endocrine organs and the central nervous system.

Keywords Metabolic syndrome, MTHFR, glycosylation, hyperglycemia.

INTRODUCTION

Metabolic syndrome (MS) is defined as a group of metabolic disorders represented by a number of risk factors for the development of cardiovascular pathologies and type 2 diabetes mellitus (T2DM). Components associated with MS include abdominal fat deposition, hypertension, carbohydrate metabolism disorders, and dyslipidemia. The relationship between MS and the development of many chronic diseases (cardiovascular pathology, non-alcoholic fatty liver disease (NAFLD), arthritis, chronic kidney disease, schizophrenia), as well as some types of cancer (endometrial cancer, prostate cancer, colorectal cancer and

breast cancer) is noted over many decades. It is known that MS also develops in parallel with obesity and T2DM.

Obesity is a worldwide metabolic disorder that is becoming a global pandemic. In 2015, 604 million adults and 108 million children were obese. Since 1980, the prevalence of obesity has doubled in 73 countries. According to the United Nations (UN), Mexico ranks first in the world in terms of the number of obese patients (32.8%), the Russian Federation is in 19th place (24.9%). With the global rise in obesity, MS has become a major public health problem worldwide.

The prevalence and mortality of diabetes also continues to increase worldwide, with important public health implications. In a study by K. Ogurtsova et al. 196 data sources from 111 countries were analyzed. In 2015, there were an estimated 415 million people with diabetes aged 20–79 years, 5 million diabetes-related deaths, and total global health care costs estimated at US\$ 673 billion. About 75% of people with diabetes lived in low- and middle-income countries. The number of people with diabetes aged 20–79 years is projected to increase to 642 million by 2040.

There are no similar global data on the prevalence of MS, but since it is approximately three times more common than diabetes, the estimated prevalence of this symptom complex is about a quarter of the world's population. About 1/5 of the population in the Asia-Pacific region, which is home to half the world's population, has MS. In other words, currently more than 1 billion people in the world suffer from MS, and the incidence of this pathology will steadily increase.

The purpose of the study was to identify possible associations between gene polymorphisms and components of the metabolic syndrome in young indigenous and non-indigenous residents of the Uzbek region.

Materials and research methods

Since 2015, 8-47 young people were examined for 3 years, whose average age was 36.62 ± 5.12 years. Of these, 675 patients had metabolic disorders and 129 people had normal body weight and without metabolic disorders. Two groups of examined patients are presented. The first clinical group - non-indigenous residents living in the city and in rural areas. The second clinical group is indigenous people (Khanty and Mansi) living in the village. The examination included instrumental methods (determining body mass index ($BMI = kg / m^2$), measuring waist circumference (WC) and blood pressure). All subjects underwent a study of the lipid spectrum (determination of serum levels of total cholesterol (TC), high-density lipoprotein cholesterol (HDL-C), low-density lipoprotein cholesterol (LDL-C), triglycerides (TG)), carbohydrate metabolism). Table 1 presents anthropometric, laboratory and instrumental data of the examined indigenous and non-indigenous residents.

Table 1
Characteristics of the surveyed indigenous and non-indigenous residents (
M ± m)

Options	Control group n = 139	Non-Indigenous n=492	Native people n=203
BMI, kg/m ²	23.4 ± 0.0 1 _	32.17±0.03*	31.97±0.06
OT, cm	74.25±0.014	93.69±0.65	89.08±0.72
Fasting glucose level, mmol /l	4.37±0.001	5.63±0.001*	5.32±0.002
Glucose level 2 hours after exercise, mmol /l	5, 15 ±0.00 3	7.16±0.002	6.91±0.001*
TC, mmol /l	3.27 ±0.00 2	5.31±0.004	5.63±0.002
TG, mmol /l	0.95 ± 0.0 02 _	2.57±0.001*	2.51±0.002
HDL cholesterol mmol /l	1.58 ± 0.00 2	1.55±0.002	1.65±0.002
LDL cholesterol, mmol /l	1.38 ± 0.00 6 _	3.12±0.003	3.03±0.001*
SBP, mm rt. Art.	1 09.75 ± 0.0 5 _	114.27±0.06	116.76±0.07
DBP, mm Hg. Art.	7 3, 20 ±0.070	75.63±0.40	74.95±0.52

Note. p *<0.001 compared to control group

Abbreviations: SBP – systolic blood pressure, DBP – diastolic blood pressure

When studying mutations to diagnose the allelic polymorphism rs1801133 (C677T) of the MTHFR gene and rs1378942 of the CS K gene, polymerase chain reaction with restriction fragment length polymorphism (PCR with RFLP) was used by phenol-chloroform extraction. The selection of patients for the study was based on the recommendations of the All-Russian Scientific Society of Cardiology (VNOK) (2009). The main criterion is WC>94 cm in men and over 80 cm in women - and 2 additional: arterial hypertension (BP≥130/85 mmHg), increased TG levels (≥1.7 mmol /l), decreased levels HDL cholesterol (<1.0 mmol /l in men; <1.2 mmol /l in women), increased LDL cholesterol >3.0 mmol /l, fasting hyperglycemia ≥6.1 mmol /l. Patients provided informed consent for the examination. Statistical processing of the obtained results was carried out using the SPSS 16.0 program. The frequencies of genotypes and alleles of the studied polymorphisms in the group of patients with MS and in the control group were determined, and the odds ratio (OR) and confidence interval (CI) for the development of MS components on the frequency of alleles were calculated. The significance level was p <0.001.

Research results and discussion

The distribution of genotypes rs1801133 (C677T) of the MTHFR gene and rs1378942 of the CS K gene among the examined residents is presented in Table 1. The frequencies of genotypes rs1801133 of the MTHFR gene among patients with MS were CC - 54.1%, ST - 36.1%, TT - 9.8 %. Carriage of the T allele, associated with the risk of developing cardiovascular diseases, was noted in 27.8% of all examined patients with MS in the control group (32.7%). The frequency of carriage of the heterozygous genotype TG rs1378942 of the CS K gene in young people with MS was 50.3%, while homozygous carriage of GG was 20.4%, TT was 29.3%. In the control group, the carriage frequency of both heterozygous and homozygous variants rs1378942 of the CS K gene did not differ significantly from this parameter in patients with MS (Table 2).

table 2

Frequency of genotypes of single nucleotide polymorphisms in metabolic syndrome and in the control group

Polymorphism	Genotype	Control		MS		OR, 95% CI, p
		n	%	n	%	
CSK rs1378942	GG	22	18.2	125	20.4	1.155, 0.699 – 1.908, p=0.256
	TG	59	48.7	308	50.3	1.065, 0.721 – 1.573, p=0.199
	TT	40	33.1	179	29.3	0.837, 0.552 – 1.279, p=0.213
	Allele G	103	42.6	558	45.6	1.131, 0.856 – 1.494, p=0.142
	Allele T	139	57.4	666	54.4	0.793, 0.601 – 1.046, p=0.141
MTHFR rs1801133 (S677T)	SS	63	45.3	376	54.1	1.422, 0.986 – 2.050, p=0.187
	ST	61	43.9	251	36.1	0.723, 0.500 – 1.046, p=0.188
	TT	15	10.8	68	9.8	0.897, 0.496 – 1.620, p=0.302
	Allele C	187	67.3	1003	72.2	1.261, 0.956 – 1.663, p=0.141
	Allele T	91	32.7	387	27.8	0.793, 0.601 – 1.046, p=0.141

When analyzing the distribution of carriage frequencies of genotypes rs1801133 (C677T) of the MTHFR gene and rs1378942 of the CS K gene, no pronounced differences were identified among both indigenous and non-indigenous residents. However, the occurrence of the homozygous genotype TT rs1378942 of the CS K gene and rs1801133 (C677T) of the MTHFR gene among indigenous people with MS is slightly higher than among non-indigenous patients with MS (Table 3).

Table 3
Frequency of genotypes of single nucleotide polymorphisms in metabolic syndrome among non-indigenous and indigenous people with MS

Polymorphism –	Genotype	Non-Indigenous People		Native people		OR, 95% CI, p
		n	%	n	%	
CSK rs1378942	GG	87	21.1	38	19.1	0.884, 0.578 – 1.35, p= 0.217
	TG	214	51.8	94	47.2	0.832, 0.593 – 1.168, p= 0.173
	TT	112	27.1	67	33.7	1.364, 0.947 – 1.966, p= 0.186
	Allele G	388	47.0	170	42.7	0.842, 0.661 – 1.071, p=0.123
	Allele T	438	53.0	228	57.3	1.188, 0.934 – 1.512, p=0.123
MTHFR rs1801133 (C 677 T)	SS	249	53.4	127	55.5 –	1.085, 0.79 – 1.491, p =0.162
	ST	174	37.3	77	33, 6	0.85, 0.61 – 1.185, p= 0.1 7
	TT	43	9, 3	2 5	10.9	1, 206, 0.716 – 2.209, p= 0.266
	Allele C	672	72.1	331	72.3	0.992, 0.773 – 1.273, p=0.127
	Allele T	260	27.9	127	27.7	1.008, 0.786 – 1.294, p=0.127

Associations of polymorphisms rs1378942 of the CSK gene and rs1801133 C677T of the MTHFR gene with MS components were studied. The main symptom of MS is abdominal obesity (AO). Among patients with and without AO, the frequency of carriers of the heterozygous genotype T G rs1378942 of the CSK gene was 50.3% and 48.7%, respectively. Carriage of the mutant allele T rs1801133 C677T of the MTHFR gene among patients with AO was 9.8%, among patients without AO – 10.8% (OR 0.856, 95% CI 0.474 – 1.545, p = 0.302). An association of hypertension with carriage of the mutant T allele rs1801133 C677T of the MTHFR gene was identified (OR 1.367, 95% CI 1.015 – 1.841, p = 0.047). When analyzing the lipid spectrum, it turned out that carriage of the TT rs1378942 genotype of the CSK gene is associated with hypertriglyceridemia (OR 2.018, 95% CI 1.110 – 3.368, p = 0.09) (Table 4).

Table 4

Association of single nucleotide polymorphisms with MS parameters

Sign	rs1378942 CSK gene				rs1801133 (C677T) MTHFR gene			
	GG n (%)	TG n (%)	TT n (%)	OS 95%CI p	CC n (%)	ST n (%)	TT n (%)	OS 95% CI p
Abdominal obesity								
Patients with AO	125 (20.4)	308 (50.3)	179 (29.3)	0.837 0.552 – 1.270 p=0, 213	376 (54.1)	251 (36.1)	68 (9.8)	0.856 __ 0.474 – __ 1,545 __ p=0, 302
Patients without AO	22 (18.2)	59 (48.7)	40 (33.1)		63 (45.3)	61 (43.9)	15 (10.8)	
Arterial hypertension								
Patients with hypertension	26 (23.6)	52 (47.3)	32 (29.1)	0.963 0.620 – 1.496 p=0, 225	51 (46.4)	42 (38.2)	17 (15.4)	1, 367 1,015 – __ 1,841 __ p = 0.047
Patients without hypertension	147 (20.1)	367 (50.1)	219 (29.8)		415 (53.8)	285 (36.9)	72 (9.3)	
Hypercholesterolemia								
Patients with HCS	138 (19.9)	350 (50.6)	204 (29.5)	0.996 0.698 – 1.420 p=0, 181	368 (53.5)	257 (37.4)	63 (9.1)	0.891 0.519 – __ 1,530 __ p = 0.276
Patients without HCS	36 (19.4)	95 (51.1)	55 (29.5)		98 (52.4)	70 (37.4)	19 (10.2)	
Hypertriglyceridemia								
Patients with HTG	157 (19.6)	398 (49.8)	245 (30.6)	2.018 1.110-3.668 p=0.019	425 (52.9)	296 (36.9)	82 (10.2)	1.365 0.575 – 3.237 p=0, 441
	Patients without GTG	17 (21.8)	47 (60.2)		14 (18)	41 (52.6)	31 (39.7)	
Increased LDL cholesterol levels								

Patients with elevated LDL cholesterol	103 (20.9)	242 (49.1)	148 (thirty)	1.059 0.790 – 1.419 p = 0.149	273 (55.2)	184 (37.2)	38 (7.6)	0.559 0.358 – 0.872 p = 0.012
Patients without elevated LDL cholesterol	71 (18.4)	203 (52.7)	111 (28.9)		193 (50)	143 (37)	50 (13)	
Decrease in HDL cholesterol levels								
Patients with decreased HDL cholesterol	20 (15.4)	66 (50.8)	44 (33.8)	1.234 0.944 – 1.612 p = 0.136	67 (50.8)	48 (36.4)	17 (12.8)	1, 153 0.868 – 1.531 _____ p=0, 145
Patients without a decrease in HDL cholesterol	154 (20.6)	379 (50.7)	215 (28.7)		399 (53.3)	279 (37.2)	71 (9.5)	
Hyperglycemia								
Patients with HS	47 (16.7)	151 (53.5)	84 (29.8)	1.021 0.748 – 1.392 p=0, 158	156 (54.8)	93 (32.6)	36 (12.6)	1,513 0.964 – 2.374 _____ p=0, 230
Patients without GG	127 (21.3)	294 (49.3)	175 (29.4)		310 (52)	234 (39.3)	52 (8.7)	

Abbreviations: AO - abdominal obesity, AG - arterial hypertension, GG - hyperglycemia, HTG - hypertriglyceridemia, HCS - hypercholesterolemia, LDL cholesterol - low-density lipoprotein cholesterol, HDL cholesterol - high-density lipoprotein cholesterol

As a result of our study, we discovered a connection between the rs1801133 C677T polymorphism of the MTHFR gene and rs1378942 of the CSK gene with individual components of MS. Thus, carriers of heterozygous T G rs1378942 CSK gene were somewhat more common among patients with obesity (50.3%) and hyperglycemia (53.5%), less often among patients with hypertriglyceridemia (49.8% vs 60.2%). Among patients with the mutant T allele rs1801133 C677T of the MTHFR gene in a heterozygous and homozygous state, an association with hypertension was detected (p = 0.047), and carriers of the TT genotype were significantly less common in the group with increased LDL cholesterol (7.6% vs 13.0%, p =0.012).

Conclusion

Thus, in young patients with MS, both indigenous and non-indigenous, no association was found with the rs1801133 C677T polymorphisms of the MTHFR gene and rs1378942 of the CSK gene. However, associative links have been identified with its individual components, such as arterial hypertension, hypertriglyceridemia, and increased LDL cholesterol levels. Timely study of the genetic predisposition of individuals to certain metabolic disorders and reducing the influence of modifiable risk factors, such as physical inactivity, eating disorders, obesity, will prevent the development of cardiovascular diseases and complications.

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Sattorov T.T.
assistant teacher
Department of "Accounting and Audit"
Samarkand Institute of Economics and Service
Uzbekistan

DESCRIPTION OF THE ELEMENTS OF CAPITAL IN ENTERPRISES AS AN AUDIT OBJECT

Abstract. The nature of private capital, its role in the development of enterprises and its description as an audit object, enterprises from the activity strictly look either work release with do it either service Be related to the activity, material wealth and money funds and economy activities conduct for done to have capital consisting of the sum of increased financial flows is determined by.

Keywords: capital, money, personnel, accounting, banking, operations, operations.

Capital – this material riches and money funds farm in appearance activities conduct for done increased financial castings is the sum. Enterprise capital own (internal) funds and attraction done (external) from sources formed can be Financing main source of the enterprise is capital. of the enterprise financial stability which provides of the factors one enterprise capital increase.

Enterprise of private capital common appearance assets in formation invested money funds, material and intangible in the form of riches evaluates.

The authorized capital of the enterprise is established at the expense of the contributions of the founders, according to the rules in accordance with its charter and founding agreement. It can be replenished at the expense of the company's profit from economic activity, and, if necessary, at the expense of targeted contributions of the founders. Buildings, structures, devices and other tangible assets as a contribution to the authorized capital of the enterprise: rights to use land, water and other natural resources, as well as other property rights (including for the use of discoveries, "NOW HAU" and other intangible assets); funds may be added in freely convertible currencies in the currencies of the participating countries of the joint venture.

Contributions of the founders can be included in the form of sums of money, as well as buildings, structures, equipment, intangible assets, etc. The characteristics of authorized capital include:

the amount of authorized capital is determined in accordance with the charter of the enterprise and the founding agreement and has a relatively permanent character. The change of its initial amount is carried out only by re-transferring the charter of the enterprise from the state register;

the actual formation of authorized capital is limited by time.

is one calendar year from the date of establishment. Enterprises that have not formed their authorized capital within this period lose their legal status and are liquidated. The authorized capital depends on the organizational and legal forms of the enterprises and the forms of ownership. In enterprises established on the basis of private and collective partnership properties, the charter capital consists of shares and contributions of the founders. In joint-stock companies, the authorized capital consists of the sum of the sums of the nominal value of issued ordinary and preferred shares.

Founders' contributions to the authorized capital can be included with long-term and short-term assets, that is, with fixed assets, intangible assets, capital and financial investments, goods and cash.

The contributions of the founders to the authorized capital are the basis for the distribution of the net profit of the enterprise in the contributory method, and the number of shares is the basis for the distribution of the net profit in accordance with each of them. In state-owned enterprises, net profit is not distributed and is directed to increase the amount of authorized capital.

Private capital enterprise balance 3 in the part located there _ property belonging to the owner, participating in the production process and profit which brings sum of assets reflection has been achieved.

Equity is the real value of the company's property, assets (mol properties) and obligations between difference with is defined as shown in Figure 1.



Figure 1 Formula for finding equity capital

The private capital of the enterprise is of economic origin different was, formation methods and of the enterprise financial resources takes advantage of its resources. Such to be economy activities analysis to do in the process financial from reports users for is necessary. Enterprise balance passives in the system capital of weight high of the enterprise financial stability proof gives

The company's equity represents the total value of its funds, a certain part of his assets belonging to him on the basis of property rights used to build. From the account of investing in equity capital set up done of assets this part, of the enterprise pure assets represents _ Enterprise capital rotation in the process three from the boss past: _

the first step, capital in the form of cash to operating assets (rotation and without rotation outside) invested in work exterminator becomes a form.

Second in the stage work exterminator capital the product work goods in the process of production becomes the shape of

Third in the stage commodity capital commodity and of services money from the sale becomes capital.

Market economy modernization to do condition and enterprises with the increase in demands for their activities, for the stable operation of enterprises, the need to improve the organization of their activities increases. That's why for xar one enterprise in the eye caught purposes reach and efficient of development optimal the way choose for, certain account has a policy to be Uzbekistan Republic Finance of the ministry 2009 year 19 5 of the "Financial Statement" approved by Order No. 37 of March in the form of private of capital structure of the following consists of that shown: Authorized capital, added capital, reserve capital, undistributed benefit (not covered loss), purchased private shares, earmarked income, etc.

The authorized capital means the sum of the sums of the sums of the nominal value of the issued shares, as well as the set of funds invested by the founders of the enterprise.

Object, element and control points of private capital audit by regulating accounting in the Republic of Uzbekistan is based on existing legal documents. Private here formation and use of structural elements of capital according to complete to the imagination have to be demand will be done. Research in the process private capital each one of the element from the features come out audit in doing out of consideration don't run away demand to be done separately aspects was determined.

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Sattorov T.T.
assistant teacher
Department of "Accounting and Audit"
Samarkand Institute of Economics and Service
Uzbekistan
Rajaboev Sh.Sh.
assistant teacher
Department of "Information Technologies",
Samarkand Institute of Economics and Service
Uzbekistan

ANALYTICAL AUDIT OF PRIVATE CAPITAL IN ENTERPRISES DEEDS

Abstract. The analysis of the share of the structural elements of private capital in the republic in relation to the value of the sources of own funds and the analysis of the changes in the value of the elements over the years is carried out separately for each item. Analysis in this order does not allow to determine at the expense of which group of sources the change in the value of private capital occurred.

Keywords: money, personnel, accounting, banking, operations, operations.

Analytical operations mean the analysis and evaluation of the information received by the auditor, the identification of unusual and incorrectly reflected facts of economic activity in accounting, and the study of important financial and economic indicators of the audited economic entity in order to determine the causes of such errors and confusions.

Analytical operations involve the use of elements and methods of financial analysis, such as comparisons, ratios and coefficients.

of analytical operations is comparison. It compares the following: balances in schemes for different periods; financial reporting indicators with business plan indicators; the ratio between various items of the report and the data of previous periods; financial indicators of the economic entity with the average indicators in the relevant sector of the economy; financial information with non-financial information (information about the activity of an economic entity that is not directly reflected in its accounting system).

Analytical operations include the study of interrelationships between indicators of accounting and reporting data, comparison of reporting data and their trends of change, study of the reasons for sharp differences in reporting items and indicators.

(Table 12)

Private capital elements of JSC enterprise in Samar sugar region share analytical⁵¹

(thousand in soums)

No	Elements	01.01.2018	Share (%)	01.01.2019	Share (%)	01.01.2020	Share (%)
1	Authorized capital	78460118	33.8	82705204	27.0	165410409	49.9
2	Added capital	50169	0.01	3336448	1.1	3336448	1.0
3	Reserve capital	35287391	15.2	52556002	17.2	63503325	19.2
4	Not distributed benefit	88230177	38.0	84544817	27.6	38784100	11.7
5	Purposeful receipts	-	-	34356056	11.2	12874550	3.9
6	The future period expenses reserve	30440724	13.1	48690118	15.9	47601630	14.4
7	Own funds sources total:	232468579	100.0	306188645	100.0	331510462	100.0
8	of HK in the balance sheet percentage (%)	86.0	-	97.3	-	72.9	-
9	Balance total:	270400396	-	314813678	-	454475858	-

Equity is structural of the elements own funds sources common to the value of relatively shares and their years during change from the data of Table 12 to see can _

(Table 13)

JSC enterprise in Samar sugar region dynamic analysis of 52 private capital elements

(thousand in soums)

No	Elements	01.01.2018	Growth (%)	01.01.2019	Growth (%)	01.01.2020	Growth (%)
1	Authorized capital	78460118	90.9	82705204	5.4	165410409	100.0
2	Added capital	50169	-	3336448	6550	3336448	-
3	Reserve capital	35287391	2.2	52556002	48.9	63503325	20.8
4	Not distributed benefit	88230177	25.5	84544817	-4.2	38784100	-54.1
5	Purposeful receipts	-	-	34356056	-	12874550	-62.5

⁵¹By Dissertation make up developed JSC enterprises in Samar sugar region in the example

⁵²By Dissertation make up developed JSC enterprises in Samar sugar region in the example

6	In the future expenses reserve	30440724	59.4	48690118	60.0	47601630	-2.2
7	Own funds sources total:	232468579	40.8	306188645	31.7	331510462	8.3
8	of HK in the balance sheet percentage (%)	86.0	-	97.3	-	72.9	-
9	Balance total:	270400396	-	314813678	-	454475858	-

Elements of private capital years during growth indicators from the data of table 13 to see can _ Tables 12 and 13 information too of private equity value change common without basically which factor at the expense of happened that it was evaluation enable does not give

Private capital accounting _ international practice research to do in the process of, his with a separate standard in order not to be put was determined. Accounting _ in the field in practice has been international standards requirements research done without private capital account organize in reaching main counted standards The list is given in Table 15 passed.

Today's in the day more than 160 of the world countries this standards based on private capital account is running This of states most of them developed countries in line confession done _

Table 14

JSC enterprise in Samar sugar region private capital new to classification according to structural of the elements growth indicators analysis⁵³

(thousand in soums)

No	Elements groups	01.01.2018	Growth (%)	01.01.2019	Growth (%)	01.01.2020	Growth (%)
1	Founders deposits	78510287	191	86041652	110	168746857	196
2	Enterprise work found funds	123517568	118	137100819	111	102287425	75
3	It's fair the value to determine and in the future appropriation for funds	30440724	159	83046174	273	60476180	73
4	Own funds sources total:	232468579	141	306188645	132	331510462	108
5	XK is in the balance sheet percentage (%)	86.0	-	97.3	-	72.9	-
6	Balance total:	270400396		314813678		454475858	

⁵³By Dissertation make up developed JSC enterprises in Samar sugar region in the example

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*Shamuratova M.E.
Xorazm viloyati Gurlan tumani
1-son kasb-hunar maktabi
Matematika fani o'qituvchisi*

LOGARIFMIK FUNKSIYALAR, TENGLAMALAR VA TENGSIZLIKLAR

Annotatsiya: ushbu maqolada, logarifmik funksiyalar, tenglamalar va tengsizliklarning yechish usullari haqida ma'lumotlar berilgan.

Kalit so'zlar: logarifmik funksiyalar, tenglamalar, tengsizliklar, grafik, funksiya, oraliq musbat.

*Shamuratova M.E.
Mathematics teacher
Vocational school No. 1
Gurlan District, Khorezm Region*

LOGARITHMIC FUNCTIONS, EQUATIONS AND INEQUALITIES

Abstract: this article provides information about logarithmic functions, methods of solving equations and inequalities.

Key words: logarithmic functions, equations, inequalities, graph, function, intermediate positive.

Logarifmik funksiya. $a > 0$, $a \neq 1$ bo'lsin. N sonining a asos bo'yicha **logarifmi** deb, N sonini hosil qilish uchun a sonini ko'tarish kerak bo'lgan daraja ko'rsatkichiga aytiladi hamda $\log_a N$ bilan belgilanadi.

Ta'rifga ko'ra, $a^x = N$ ($a > 0$, $a \neq 1$) tenglamaning x yechimi

$x = \log_a N$ sonidan iborat. Ifodaning logarifmini topish amali shu ifodani **logarifmlash**, berilgan logarifmiga ko'ra shu ifodaning o'zini topish esa **potensirlash** deyiladi.

$x = \log_a N$ ifoda potencirlansa, qaytadan $N = a^x$ hosil bo'ladi. $a > 0$, $a \neq 1$ va $N > 0$ bo'lgan holda $a^x = N$ va $\log_a N = x$ tengliklar teng kuchlidir.

Shu tariqa biz o'zining aniqlanish sohasida uzluksiz va monoton bo'lgan $y = \log_a x$ ($a > 0$, $a \neq 1$) funksiyaga ega bo'lamiz. Bu funksiya:

a asosli **logarifmik funksiya** deyiladi. $y = \log_a x$ funksiya $y = a^x$ funksiyaga teskari funksiyadir. Uning grafigi $y = a^x$ funksiya grafigini $y = x$ to'g'ri chiziqqa nisbatan simmetrik almashtirish bilan hosil qilinadi. Logarifmik funksiya ko'rsatkichli funksiyaga teskari funksiya bo'lganligi sababli, uning xossalarini ko'rsatkichli funksiya xossalaridan foydalanib hosil qilish mumkin.

Jumladan, $f(x) = a^x$ funksiyaning aniqlanish sohasi $D(f) = \{-\infty < x < +\infty\}$, o'zgarish sohasi $E(f) = \{0 < y < +\infty\}$ edi. Shunga ko'ra $f(x) = \log_a x$ funksiya uchun $D(f) = \{0 < x < +\infty\}$, $E(f) = \{-\infty < y < +\infty\}$ bo'ladi.

$a > 1$ da $\log_a x$ funksiya $(0; +\infty)$ nurda uzluksiz, o'suvchi, $0 < x < 1$ da manfiy, $x > 1$ da musbat, $-\infty$ dan $+\infty$ gacha o'sadi. Shu kabi $0 < a < 1$ da funksiya $(0; +\infty)$ da uzluksiz, $+\infty$ dan 0 gacha kamayadi, $0 < x < 1$ oraliqda musbat, $x > 1$ da manfiy qiymatlarni qabul qiladi. Ordinatalar o'qi $\log_a x$ funksiya uchun **vertikal asimptota**.

Quyidagi misollarni ko'rib chiqamiz:

1. $2^x=4$ ni yechish uchun $2^x=2^2$ deb yozamiz va $x=2$ yechimni topamiz.
2. $2^x=5$ bo'lsin. o'ng tomondagi 5 ni asosi 2 bo'lgan daraja ko'rinishida tasvirlash mushkul. Lekin bu tenglamaning haqiqiy ildizi mavjudligi bizga ma'lum. Bunday tenglamalarni yechish uchun logarifm tushunchasi kiritiladi.

Umuman olganda, $a^x=b$ ($a>0, a\neq 1, b>0$) tenglamaning ildizi a asosga ko'ra b sonning logarifmi deyiladi.

Ta'rif: b sonning a asosga ko'ra logarifmi deb b sonni hosil qilish uchun a sonni ko'tarish kerak bo'ladigan daraja ko'rsatkichiga aytiladi va $\log_a b$ kabi belgilanadi. $a^x=b$ tenglamani ($x=\log_a b$ bo'lgani uchun)

$$a^{\log_a b} = b \quad (1)$$

ko'rinishida yozish mumkin. (1) formula asosiy logarifmik ayniyat deyiladi, bu yerda

$$a>0, a\neq 1, b>0$$

Misollar: 1) $\log_2 16$ 2) $\log_5 0,04$ ning qiymatini toping.

Yechish: 1) $16=2^4$ bo'lgani uchun, 16 ni hosil qilish uchun ikkini to'rtinchi darajaga ko'tarish kerak, demak $\log_2 16=4$.

2) $0,04 = \frac{4}{100} = \frac{1}{25} = 5^{-2}$ ekanligi ma'lum. Shuning uchun $\log_5 0,04 = -2$

Misollar: 3. $\log_4 x = \frac{1}{2}$, 4) $\log_x 4 = -\frac{3}{4}$ tenglamalarni qanoatlantiruv-chi x larni topamiz.

Yechish: Asosiy logarifmik ayniyatdan foydalanib:

$$3) x = 4^{\frac{1}{2}} = 2$$

4) $x^{\log_x 4} = 4$, ya'ni $x^{\frac{3}{4}} = 4$, $x = 4^{\frac{4}{3}} = \frac{1}{\sqrt[3]{256}}$ larni topamiz.

Har qanday $a>0, b>0, a\neq 1, b\neq 1, x>0, y>0$ va haqiqiy istalgan n va m sonlar uchun quyidagi tengliklar bajariladi:

$$1) \log_a 1 = 0, \quad 2) \log_a a = 1,$$

$$3) \log_a (xy) = \log_a x + \log_a y,$$

$$4) \log_a \frac{x}{y} = \log_a x - \log_a y,$$

$$5) \log_a x^n = n \log_a x,$$

$$6) \log_{a^m} x = \frac{1}{m} \log_a x,$$

$$7) \log_{a^m} x^n = \frac{n}{m} \log_a x,$$

$$8) \log_a x = \frac{\log_b x}{\log_b a},$$

$$9) \log_a b = \frac{1}{\log_b a},$$

Bu tengliklar ko`rsatkichli funksiya xossalaridan kelib chiqadi. Bulardan ba`zilarini isbot qilamiz.

Logarifmik ayniyatdan foydalanib:

$$x = a^{\log_a x}, \quad y = a^{\log_a y} \text{ ni topamiz.}$$

Bu tengliklarni hadlab ko`paytirsak yoki bo`lsak

$$xy = a^{\log_a x} * a^{\log_a y} = a^{\log_a x + \log_a y},$$

$$\frac{x}{y} = a^{\log_a x} : a^{\log_a y} = a^{\log_a x - \log_a y}, \text{ hosil bo`ladi.}$$

Bu tengliklardan logarifm ta`rifiga ko`ra 3) va 4) tengliklar kelib chiqadi.

$x = a^{\log_a x}$ ayniyatning ikkala tomonini n – darajaga oshirsak, $x^n = a^{n \log_a x}$ hosil bo`lib, bundan $\log_a x^n = n \log_a x$ ni topamiz.

Bir asosli logarifmdan boshqa asosli logarifmga o`tish formulasi 8) ni xususiy holda 9) ni isbotlash uchun quyidagicha amal qilamiz:

$$\log_a x = b \Rightarrow x = a^b$$

Hosil bo`lgan $x = a^b$ ifodaning ikkala tomonidan b asosga ko`ra logarifm topamiz:

$$\log_b x = \log_b a^b = b \log_b a \Rightarrow b = \frac{\log_b x}{\log_b a}$$

Chap tomonga b ning qiymatini qo`yib, 8) formulani hosil qilamiz. Agar bu formuladan $x = b$ desak, 9) formula hosil bo`ladi.

5-misol. Agar $\log_2 5 = a$ va $\log_2 3 = b$ bo`lsa, $\log_2 3000$ ni a va b orqali ifodalang?

Yechish: $\log_2 3000 = \log_2 (3 \cdot 5^3 \cdot 2^3) = \log_2 3 + 3\log_2 5 + 3\log_2 2 = b + 3a + 3$

6-misol. Agar $\log_3 x = \log_3 7 + 2\log_3 5 - 3\log_3 2$ bo`lsa, x ni toping.

Yechish: $\log_3 x = \log_3 7 + \log_3 5^2 - \log_3 2^3 = \log_3 \frac{7 \cdot 5^2}{2^3} = \log_3 \frac{175}{8}$,

Bundan $x = \frac{175}{8} = 21,875$

O`nli va natural logarifmlar. 1-ta`rif. Asosi $a=10$ bo`lgan logarifmlar o`nli logarifmlar deyiladi va lgx orqali ifodalanadi, ya`ni $\log_{10}x = lgx$

7-misol. $lg100 = lg10^2 = 2$

8: $lg0,01 = lg10^{-2} = -2$

2-ta`rif. Natural logarifm deb asosi e son bo`lgan logarifmga aytiladi va lnx bilan belgilanadi, ya`ni $\log_e x = lnx$, e soni irratsional son bo`lib, $e=2,7182818284\dots$ amalda $e \approx 2,7$ deb qabul qilish mumkin.

O`nli va natural logarifmlar orasida

$$lg x = \frac{1}{\ln 10} \cdot \ln x \approx 0,434294 \ln x \text{ va}$$

$$\ln x = \frac{1}{\lg e} \cdot \lg x \approx 2,302551 \lg x \text{ bog`lanish mavjud. Amalda } \lg x \approx 0,4 \ln x \text{ va}$$

$\ln x \approx 2,3 \lg x$ tengliklardan foydalanish mumkin.

9-misol. $ln100$, lge^2 ni hisoblang.

Yechish: $\ln 100 \approx 2,3 \cdot \lg 100 = 2,3 \cdot 2 = 4,6$.

$\lg e^2 = 2 \lg e \approx 2 \cdot 0,4 \ln e = 0,8$.

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*Shashina N.
professori
Sankt-Peterburg davlat elektrotexnika universiteti
Baytanov O'. M.
Jizzax Politexnika instituti
Iqtisodiyot va menejment
kafedrasi assistenti*

MAMLAKATIMIZ IQTISODIYOTINI RIVOJLANTIRISHDA RAQAMLI IQTISODIYOTNI TAKOMILLASHTIRISH YO'NALISHLARI

Annotatsiya. Jahonda globallasuv sharoiti kechayotgan bir davrda mamlakatimizda raqamli iqtisodiyotni rivojlantirishga katta e'tibor qaratilmoqda. Buning natijasida esa iqtisodiyotda raqamli iqtisodiyot ulushi ortib bormoqda. Shu bois, mamlakatimiz iqtisodiyotining tez sur'atlarda raqamlashuvi, mobillashuvi, sohaga sun'iy intellektning joriy etilishi bilan bog'liq muhim davrni boshdan kechirmoqda.

Kalit so'zlar: raqamli iqtisodiyot, sun'iy intellekt, raqamli texnologiya.

*Shashina N.
professor
Saint Petersburg State Electrotechnical University
Baitanov O'. M.
assistant
department Economics and management
Jizzakh Polytechnic Institute*

DIRECTIONS FOR IMPROVING THE DIGITAL ECONOMY IN THE DEVELOPMENT OF THE ECONOMY OF OUR COUNTRY

Annotation: in a period of global globalization, great attention is paid to the development of the digital economy in our country. As a result of this, the share of the digital economy in the economy is increasing. Therefore, the economy of our country is experiencing a significant period of rapid digitalization, mobilization, the introduction of artificial intelligence into the industry.

Keywords: digital economy, artificial intelligence, digital technology.

Rivojlangan davlatlarning iqtisodiy hayotiga raqamli iqtisodiyotni joriy etish allaqachon boshlangan. Jahon iqtisodiyotining globallasuvi va raqamli texnologiyalarning rivojlanishi sharoitida O'zbekistonning iqtisodiy taraqqiyotiga raqamli iqtisodiyotni rivojlantirmasdan erishib bo'lmaydi.

Bugun jadallik bilan kechayotgan raqamlashuv jarayoni “yangi iqtisodiyot”ni vujudga keltirmoqda. Kam o’rganilgan va kun sayin chuqur tomir otib borayotgan bu bozor segmenti ishlab chiqaruvchilarga biznesda samarali marketing kompaniyalari uyushtirish, minimal xarajat qilib, maksimal foyda olish, tovar va xizmatlarni muvaffaqiyatli sotishning optimal usullarini taqdim etadi. Iste’molchi, xaridor va mijozlarga sifatli xizmat, qulaylik yaratiladi. Bu vaqtingiz tig’iz paytida internet orqali tushlikka buyurtma berish, mobil ilova orqali taksi chaqirish, uzoqdagi yaqiningizga pul jo’natishdan ko’ra kengroq imkoniyatlar bo’lib, transchegaraviy biznes hamkorlik, elektron tijoriy maydon, masofaviy ofis kabilarni ham qamrab oladi.

Raqamli iqtisodiyot raqamli texnologiyalarga asoslangan, elektron biznes, elektron tijorat bilan bog’langan, raqamli Tovar va xizmatlar ishlab chiqarayotgan va taqdim etayotgan iqtisodiy faoliyatdir.

Raqamli iqtisodiyot yirik sanoat obyektlari ish samaradorligini oshirish, ishlab chiqarishda o’sish, faoliyat shaffofligini ta’minlash, mahsulot tannarxini kamaytirish imkonini beradi. Nufuzli xalqaro tashkilotlar olib borgan tahlillar natijalariga ko’ra, raqamli iqtisodiyot yalpi ichki mahsulotni kamida 30 foizga oshiradi, shuning barobarida, xufyona iqtisodiyotga barham beradi.

Aql-zakovat va ilm – taraqqiyot qanotidir. Zamonaviy ilm-fanning cho’qqisi yuqori texnologiyalarda, raqamli olmda ko’zga tashlanadi. To’rtinchi sanoat inqilobi taraqqiyotning yangi ko’rinishi – “raqamli iqtisodiyot” boshlanganini anglatadi. Bugungi kunga kelib jahonda raqamli iqtisodiyot taraqqiy etgan 20 mamlakatda 2 trillion AQSH dollarini tashkil etayotgani hisoblab chiqilgan. Mamlakatimizda 2020-yildan boshlab transport, geologiya, ta’lim, arxiv kabi sohalarni to’liq raqamlashtirish belgilangan va bu boradagi ishlar jadal olib borilmoqda. Zamonaviy infratuzilmaga ega bo’lgan “IT-park”lar ham fikrimiz dalilidir.

Aholi va tadbirkorlik subyektlarining davlat organlari bilan kontaktsiz aloqa shakllarini yanada rivojlantirish maqsadida Yagona interaktiv davlat xizmatlari portalining yangi versiyasi, Bosh vazirning tadbirkorlar murojaatlarini ko’rib chiqish virtual qabulxonasi “business.gov.uz” portali ishga tushirilgani raqamli iqtisodiyot rivoji yo’lidagi muhim qadamlardir.

Mamlakatimizda zamonaviy dasturlash texnologiyalarini o’zlashtirgan kadrlarni tayyorlash maqsadida “Bir million dasturchi” loyihasi ishlab chiqilib, loyiha doirasidagi mashg’ulotlarni tashkil etish uchun uzbekcoders.uz o’quv portali ishga tushirildi.

2024-yil mamlakatimizda “Yoshlar va biznesni qo’llab-quvvatlash yili” deb e’lon qilindi va bu boradagi ishlar endilikda yangi bosqichga ko’tarilib, Prezident Farmoni bilan mamlakatning “Raqamli O’zbekiston - 2030” strategiyasi va uni amalga oshirish bo’yicha “Yo’l xaritasi” tasdiqlandi.

Raqamli iqtisodiyotni rivojlantirishda avvalo telekommunikatsiya va elektron infratuzilmani takomillashtirish alohida ahamiyatga ega. Albatta, aholini internet tarmog’idan foydalanish darajasi qanchalik yuqori bo’lsa raqamli

iqtisodiyot, shu jumladan elektron hukumat tizimi ham shuncha samarali faoliyat yuritadi. Yurtimiz bo'yicha internet foydalanuvchilari soni jami aholiga nisbatan 2018-yilda 52 foizni tashkil qilgan bo'lsa, 2023-yilda bu ko'rsatkich 60 foizdan yuqorini tashkil etmoqda.

Reallik bilan bog'laganda raqamli iqtisodiyot rivojlangan davlatlarda YAIM hajmi ham, YAIMning aholi son boshiga ulushi ham yuqoriligini ko'rishimiz mumkin. Shu jihatdan olib qaraganda, mamlakatimizda mazkur masalaga e'tibor qaratish yagona maqsadni ko'zlaydi, u ham bo'lsa, aholining yashash sharoitini yaxshilash, aholini real daromadini oshirish, qolaversa tadbirkorlikni va mamlakatimiz iqtisodiyotini rivojlantirishdir.

“Raqamli texnologiyalar nafaqat mahsulot va xizmatlar sifatini oshiradi, ortiqcha xarajatlarni kamaytiradi. Shu bilan birga, meni juda qattiq tashvishga soladigan va bezovta qiladigan eng og'ir illat – korrupsiya balosini yo'qotishda ham samarali vositadir” – Prezidentimizning mazkur so'zlari raqamlashtirish nafaqat iqtisodiyot tarmoqlarida tejamkorlik va samaradorlikni ta'minlashi, balki korrupsiya va qora iqtisodiyotga qarshi kurashish uchun samarali vosita sifatida qayd etilishi bilan ahamiyatlidir.

Xulosa o'rnida raqamli iqtisodiyotni rivojlantirish iqtisodiy-ijtimoiy, siyosiy jihatdan kuchli, bozor iqtisodiyoti qonunlari to'liq amal qiladigan demokratik davlat qurishga hamda mamlakatda ishbilarmonlik muhitini yaxshilash, tadbirkorlik faoliyatiga keng qulaylik yaratish va uni yuritishni soddalashtirish, yangi innovatsion g'oyalar realizatsiyasiga xizmat qiluvchi asosiy vositalardan biri ekanligi bilan alohida ahamiyatga egadir.

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*Shashina N.
professori
Sankt-Peterburg davlat elektrotexnika universiteti
Baytanov O'. M.
Jizzax Politexnika instituti
Iqtisodiyot va menejment
kafedrasi assistenti*

OZIQ-OVQAT KORXONALARIDA MAHSULOT SIFATINI BOSHQARISHNI TAKOMILLASHTIRISH

Annotatsiya. Maqola oziq-ovqat korxonalarida mahsulot sifatini boshqarish amaliyotini takomillashtirishning o'ziga xos xususiyatlarini o'rganishga bag'ishlangan. Oziq-ovqat mahsulotlari ishlab chiqaruvchi korxonalar faoliyatining ijtimoiy-iqtisodiy muhitining qisqacha tavsifi uning kerakli parametrlarini aniqlash uchun berilgan. Muallif tomonidan muhokama qilingan oziq-ovqat sanoati korxonalarida mahsulot sifatini takomillashtirish orqali narxsiz raqobatda yutib chiqish imkoniyatlari ko'rib chiqilgan.

Kalit so'zlar: Oziq-ovqat sanoati, sanoat inqilobi, sifat menejmenti, oziq-ovqat mahsulotlari, sifatni takomillashtirish, sifat standarti.

*Shashina N.
professor
Saint Petersburg State Electrotechnical University
Baitanov O'. M.
assistant
department Economics and management
Jizzakh Polytechnic Institute*

IMPROVING PRODUCT QUALITY MANAGEMENT IN FOOD ENTERPRISES

Annotation: the article is devoted to the study of the peculiarities of improving the practice of Product Quality Management in food enterprises. A brief description of the socio-economic environment of the activities of food production enterprises is given to determine its necessary parameters. In the enterprises of the food industry discussed by the author, the possibilities of winning in non-price competition by improving the quality of products are considered.

Keywords: Food Industry, Industrial Revolution, Quality Management, Food Products, Quality Improvement, quality standard.

«Sifatni boshqarish amaliyoti» iborasini mahsulot sifatiga oid qo'llaganda, mahsulot sifatini doimiy nazorat qilish, uni belgilovchi shartlar va omillarga maqsadga muvofiq ta'sir etish yo'llari bilan mahsulot sifatini loyihalashtirish, ishlab chiqarish va foydalanishda uning zarur darajada o'rnatilishini, ta'minlanishini tushunish zarurdir.

Korxonalarda mahsulot sifatini boshqarish operatsiyalari injener-texnik, tashkiliy-texnologik, nazorat, transport, ombor va boshqa jarayonlarning o'zaro bog'liqligi majmuasini tashkil etuvchi tartib doirasida olib boriladi. Mahsulot sifatini boshqarish jarayoni quyidagi operatsiyalardan iboratdir: mahsulot sifati darajasini belgilash, mahsulot sifatiga ta'sir ko'rsatuvchi omillar hamda ishlab chiqarish jarayoni holati to'g'risidagi axborotlarni yig'ish va ularni o'rganish; mahsulot sifatini boshqarish to'g'risida qaror qabul qilish va ob'ektga ta'sir ko'rsatishga tayyorlanish, boshqaruv buyruqlarini berish; boshqarish natijasida mahsulot sifatining o'zgarishi haqidagi axborotlarni yig'ish va tizimli tahlil qilish.

Sifatni ta'minlash yo'lidagi birinchi qadam bo'lib, maqsadlarni aniqlash hisoblanadi. Bu strategik qadam o'z ichiga ehtiyojlarni aniqlash va bu ehtiyojlarni qondirishga mo'ljallangan mahsulot parametrlarini ishlab chiqishni oladi.

Korxonalarda sifat uchun javobgarlik odatda sifat nazorati bo'limi deb ataluvchi alohida bo'limga yuklatilgan bo'lib, bu yondoshish qisman nazoratning mustaqilligi prinsipiga asoslanadi, ya'ni sifatni baholash vakolatlari ishlab chiqarish bilan bog'liq bo'lmagan bo'linmada mujassamlashgan. Hozirgi kunda ilg'or tajribalar bu masalaga yangicha yondoshishni majbur etmoqda. Masalan, Yaponiyada sifatni ta'minlash bo'yicha javobgarlikning ko'p qismi an'anaviy holda ishlab chiqarishdagi ishchilarga yuklatilgan. Sifatni ta'minlash masalalari bo'yicha tayyorgarlikni yaponlar ishlab chiqarishdagi ishchilarni professional tayyorlash dasturlariga kiritganlar va ishchilarga o'z ishi sifatini nazorat qilishni yuklaganlar.

Sifat nazorati ishida uni ta'minlashning umumiy rejasi ishlab chiqilgandan keyingi qadam bo'lib sifatni o'lchashni tashkil etish hisoblanadi. Sifat albatta o'chanishi mumkin bo'lishi kerak.

Tashkilot faoliyatining yakuniy muvaffaqiyati funksional sifat va konstruksiya sifatiga qaramasdan, ishlab chiqarishni boshqaruvchilar ko'proq sifatni texnik shartlarga mosligini ta'minlashga e'tibor qiladilar. Yakuniy mahsulotni tayyorlashda faqatgina bir korxonada ishchi-xodimlari emas, balki xom-ashyo, materiallar va butlovchi qismlar yetkazib beruvchi hamkor korxonalar jamoalari ham qatnashadilar. Bunday sharoitlarda mahsulotning yuqori sifatini barcha omillarni kompleks hisobga olish va qo'yilgan masalaga sistemali yondoshish asosida ta'minlash mumkin. Ushbu talablarga **Mahsulot sifatini boshqarishning kompleks tizimi** javob beradi. Kompleks tizim mahsulotni loyihalashtirish, tayyorlash, ishlab chiqarish va foydalanishdagi zarur sifat darajasini ta'minlash va ushlab turish uchun amalga

oshiriladigan chora-tadbirlar, usullar hamda vositalarni o'z ichiga tashkiliy jihatdan qamrab oladi.

Mahsulot sifatini boshqarish tizimi deganda boshqarish idoralari va boshqariluvchi ob'ektlarning mahsulot sifatini boshqarishda moddiy - texnika va axborot vositalari yordamida o'zaro bog'lanishning majmui tushuniladi. Shuning uchun bu tizim o'zaro bog'langan mahsulot sifatini boshqarishni ta'minlaydigan tashkiliy, texnikaviy, iqtisodiy va ijtimoiy tadbirlarning yig'indisi sifatida ko'zda tutilgan bo'lmoqligi lozim. Boshqarishning asosiy maqsadi esa mahsulot sifatini kerakli darajaga erishilishini ta'minlash hisoblanadi. Mahsulot sifatini boshqarish tizimi o'z tarkibiga inson jamoalarini, texnikaviy qurilmalarni, moddiy vositalarni va kuchli axborot oqimini oladi. Mahsulot sifatini boshqarish o'zida quyidagi boshqarish davrining umumlashgan elementlarini mujassamlashtiradi:

- Oldindan aytib berish va rejalashtirish;
- Ishlarni tashkil qilish;
- O'zaro muvofiqlashtirish va tartibga solish;
- Faol harakatga keltirish va rag'batlantirish;
- Nazorat, hisob – kitob va tahlil qilish.

Mahsulot sifatini boshqarishning kompleks tizimi ishlab chiqarishni boshqarishning avtomatlashtirilgan tizimining tarkibiy qismi bo'lib, berilgan darajali sifatga ega mahsulotni ishlab chiqarishga qaratilgan ilmiy-texnik, tashkiliy, iqtisodiy va ijtimoiy chora-tadbirlarni yagona majmuuga birlashtiradi. Tizimning tashkiliy-texnik asosi bo'lib standartlashtirish xizmat qiladi.

Sifatni ta'minlashda standartlashtirish katta ahamiyatga ega bo'lib, u quyidagi prinsiplarga ega: optimallik; dinamiklik; progressivlik; komplekslilik; majburiylik. Bu prinsiplarga ega bo'lgan barcha standartlar korxonalar va tashkilotlar uchun qonun kuchiga ega. Standartlarga amal qilmaslik qonun bo'yicha javobgarlikka sabab bo'ladi. Standartlar amal qilish ko'lamini, darajasi va xossasiga ko'ra quyidagicha tasniflanadi:

- GOSTlar – davlat standartlari;
- OSTlar – tarmoq standartlari;
- STPlar – korxonalar standartlari;
- TUlar – texnik shartlar;
- DUlar – shartnomaviy shartlar.

Yuqoridagilar bizning respublikamizda o'rnatilgan standartlar tizimidir. Xalqaro talablar umumjahon **ISO 9000 sifat standartlari tizimida** mujassamlashgan. Standartlarni ishlab chiqish to'rt bosqichda amalga oshiriladi:

1. Standartlarni ishlab chiqishda texnikaviy talablarni ishlab chiqish va uni muhokamadan o'tkazish;

2. Standart loyihasini (birinchi nusxasi) ishlab tayyorlab taqrizga yuborish;
3. Olingan taqrizlarni ishlab chiqish, oxirgi nusxasini tayyorlash va tasdiq uchun yuborish;

4. Standartlarni davlat ro'yxatidan o'tkazish va tasdiqlash. Standartlashtirish metrologiya va sertifikatlash bo'yicha O'zbekiston Respublikasi Davlat markazi ro'yxatidan o'tkazilib, uning texnik shartlari belgilab qo'yiladi.

Texnik shartlar shartli belgisining 3-4 qismlari standart ishlab chiqaruvchi korxonaga qaysi tarmoq va uning qaysi bo'limiga qarashini ko'rsatadi. OST shartli belgisining 3- qismi standartni tasdiqlagan tarmoq nomini bildiradi. Xom-ashyolar sifati, tayyor mahsulotlarga bo'lgan iste'molchilar talablarining o'sishi, ularni sinash usullari o'zgarishlarini e'tiborga olgan holda standartlar vaqti-vaqti bilan qayta ko'rib, o'zgartirilib boriladi.

Sifatni boshqarish o'z ichiga mahsulotni attestatsiyadan o'tkazish, ishlovchilarni moddiy va ma'naviy rag'batlantirish, mahsulotlar sifatini nazorat qilishni tashkil etish va nazorat usullarini oladi. Sifatni attestatsiya qilish mahsulotlarning texnik darajasi va sifatini oshirishga, texnologiyani takomillashtirishga, yuqori sifatli mahsulotlarni ishlab chiqarishni kengaytirish va mahsulotni yangilashga yordam beradi.

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Shokirova D.O.
assistant teacher
Department of Social and Economic Sciences
Tashkent Institute of Chemical Technology
Shahrisabz Branch
Umrzakov B.J.
Student of group 1-22, economics major

PUBLIC DEBT AND ITS NEGATIVE CONSEQUENCES

Annotation. This article examines the nature of public debt, the impact of public debt on the country's financial situation, and the issues of effective use of public debt. Also, the dynamics of the current state of the public debt of the Republic of Uzbekistan and the analysis of debts and expenses, as well as reviews of the compliance of public debt management mechanisms with world standards and ways of developing financial strategies were discussed.

Keywords: government loans, government loans, high taxes, shortening of investments.

INTRODUCTION

As countries prioritize economic growth and social stability, governments worldwide have resorted to borrowing in order to finance large investment projects and address the needs of their citizens. This has contributed to a noticeable increase in public debt levels in both developed and developing nations, which has been one of the primary driving forces behind global economic growth in recent decades. However, the growth of public debt portfolios has led to complex financial structures and significant financial and operational risks, compounded by debt crises in various regions across the globe. Therefore, managing public debt effectively is critical for governments and requires the implementation of proper practices.

Public debt refers to the obligation of a government to pay certain amounts of money to the owners of claims established by law. The debt can be in standard currencies or foreign currency units of the debtor state. In the case of the United States, public debt mainly represents the obligation of the federal government to pay certain amounts of the U.S. dollar to creditors. Public and local debt can consist of repaying the principal debt, paying both the principal and interest, or paying only the interest. Some debts may have clear timelines, while others may not. Debt securities that represent the obligation to pay interest forever do not include the obligation to return the principal. The causes of public debt, whether it increases or decreases, are linked to the economic policy of each country and the scope and dynamics of reforms. The demand for foreign debt in the world has increased over the past decade, and the gap between countries in this regard has widened.

It is common for the government to borrow money in order to fund various projects and initiatives. However, if this borrowing is not managed properly, it can lead to negative consequences. Excessive public debt can have several negative impacts such as:

1. **Interest payments:** A significant portion of the government's budget must be allocated to pay the interest on the debt. This means that less money is available for important public services such as healthcare, education, and infrastructure development.

2. **Decrease in investment:** High levels of public debt can deter private investment because it leads to an increase in interest rates and limits borrowing from the private sector. This can hinder economic growth and job creation.

3. **Financial instability:** When a government accumulates too much public debt, it can cause financial instability. This is because investors may lose confidence in the government's ability to repay the debt. As a result, they may demand higher interest rates or even refuse to lend the government any more money, which can lead to a financial crisis.

4. **High Taxes:** To pay off their debt, governments often resort to tax-raising or austerity measures. However, this can aggravate taxpayers and reduce their voluntary income.

5. **Dependence on lenders:** If a government becomes heavily indebted to foreign creditors, it could compromise its sovereignty and decision-making autonomy. This is because these lenders may impose conditions and influence policy choices, which could be detrimental to the government's interests.

6. **Intergenerational burden:** A high level of public debt can place a payment burden on future generations, limiting their ability to invest in their own priorities and development.

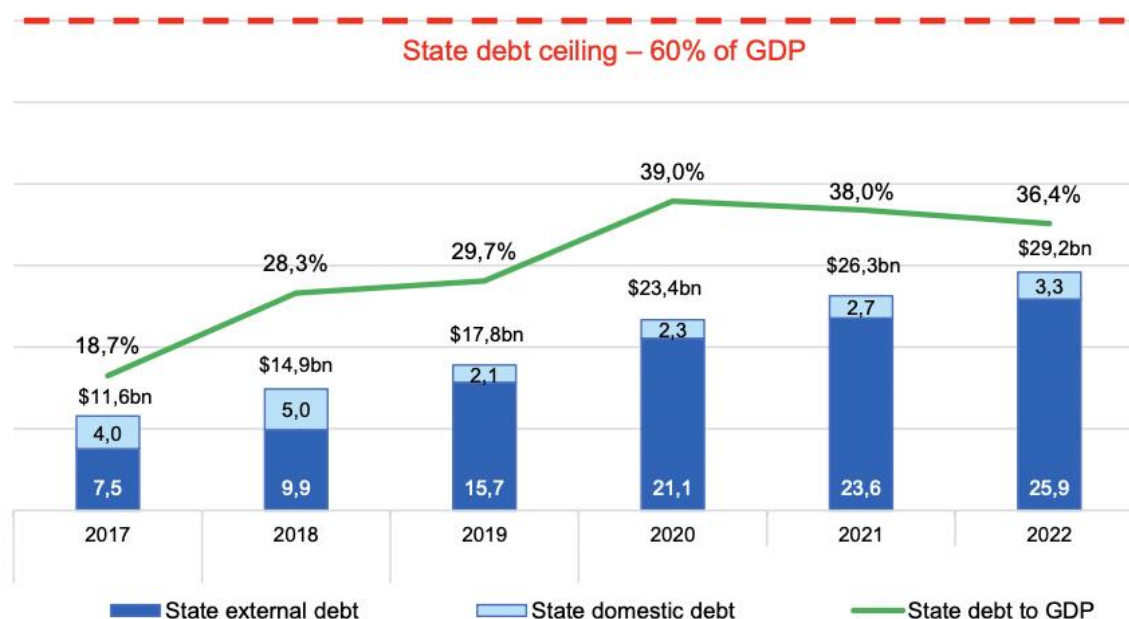
Experience from around the world shows that debt relations have existed in nations since antiquity. When seeds were first purchased, people had to take out loans, which they later paid back once their crops were grown. Lenders and banks continue to offer loans for planting seeds today. Nonetheless, past events have demonstrated that unsecure credit can trigger worldwide financial and economic catastrophes. As such, there is a greater need to focus on smart borrowing, sensible investing, and problem-avoidance.

We must objectively assess the dangers associated with using foreign debt to close the state budget deficit, even if it is still a popular financial tool in many nations. Economic and political reliance on international financial institutions can result from a large growth in external debt, particularly for emerging countries. It can also make it more expensive for the state to repay the debt if it keeps growing. Furthermore, the allure of corporate debt from both local and international markets may result in unnecessary expenditure on pointless initiatives or dramatic swings in the economy due to macroeconomic factors including the rate of inflation, rate of economic growth, and national currency rates. Consequently,

every nation needs to determine through its national policy the ideal level of public debt.⁵⁴

Fiscal policy and economic growth have a complicated relationship that is vital to policymakers. Both in the short and long terms, fiscal policy has a significant impact on economic growth. According to Kumar and Woo (2010), a persistently high level of public debt in particular may have a negative influence on productivity and capital accumulation, which may then have an adverse effect on economic growth. Cecchetti, Mohanty, and Zampolli (2010) contend that unless fiscal policy is altered, the amount of debt will keep increasing because government spending is growing faster than revenue. They propose that the aging population and greater risk premia for issuing government bonds could result in unstable debt dynamics.

Let's take a look at the amount of debt our state has accumulated in the last two years. In 2022, Uzbekistan's public debt increased by 2.9 billion dollars and reached 29.2 billion dollars, which accounts for 36.4 percent of the country's GDP. More than 90 percent of the state debt is in foreign currency. As of January 1, 2023, the state debt of Uzbekistan amounted to 31.5 billion dollars. This is the highest amount of debt the country has ever had.⁵⁵



Data chart for January 2023

Infrastructure projects in developing countries like Uzbekistan are expanding rapidly. Governments have two options to fund these projects: either raise taxes or attract foreign debt and investment funds. Since increasing taxes can discourage economic growth in the long run, many developed countries tend to opt for the latter.

54 <https://www.imf.org/en/News/Articles/2019/11/07/sp110719-how-to-use>

55 <http://tashkenttimes.uz/finances/12003-uzbekistan-s-public-debt-tops-31-5-billion-as-of-july-1-2023>

The paper is structured as follows: Firstly, we provide a literature review on the relationship between public debt and economic growth, focusing solely on empirical studies. Next, we describe the applied methodology and the data used in the estimation models for evaluating the direct impact of public debt on growth. In the fourth section of the paper, we present the results and determine the debt turning point for a particular group of countries. Lastly, we conclude with the main findings and limitations in the last section.

LITERATURE REVIEW

According to A. Pienkowski's research on public debt and the structural composition of debt, there is no universally accepted maximum limit for all public debt. However, these indicators vary significantly for developing and least developed countries. One of the key recommendations is to issue public securities linked to GDP in order to increase the maximum level of debt for developed countries. Additionally, it is advisable to denominate the debts of relatively low-income countries in their national currency.⁵⁶ In his article, P. Leao analyzes whether high debt levels are a real problem. He argues that high levels of public debt can lead to an increase in the tax burden. He also proposes the development of state fiscal policy mechanisms to reduce the state's default and its impact on inflation.⁵⁷ E. Beqiraj and S. Fedeli conducted a study on the attitude of governments towards an increase in the debt-to-GDP ratio. The study covered 21 member countries of the Organization for Economic Co-operation and Development. The aim was to identify corrective measures that can be taken by governments in response to the correlation between debt and deficit, in case the debt burden increases.⁵⁸ The literature on the relationship between public debt and economic growth suggests that it is nonlinear and concave in shape, forming an inverted U-shape. This means that public debt can have either a positive or negative effect on economic growth. However, there is a lack of consensus on the effect of public debt on economic activity in developing countries as the academic literature on this topic is scarce. Our research focuses on examining the critical threshold for public debt and its impact on economic growth in EU countries, distinguishing between the 'old' and 'new' member states. It is important for countries with increasing debt burden to develop models that predict both positive and negative effects of debt on financial and economic stability. These models should be accompanied by a faster political will to implement them.

RESULT AND DISCUSSION

Management of public debt and prevention of associated risks are carried out through a comprehensive legal, economic, and technological framework. The main purpose of public debt management is to cover the state budget deficit of the

56 Pienkowski A. Debt Limits and the Structure of Public Debt // Journal of Globalization and Development, vol. 8, no. 2, 2018, pp. 20170018. <https://doi.org/10.1515/jgd-2017-0018>.

57 Pedro L. Is a very high public debt a problem? // Levy Economics Institute of Bard College, Annandale-on-Hudson, NY. No. 843, 2015

58 Elton B., Silvia F. Public debt sustainability: An empirical study on OECD countries // Journal of Macroeconomics, vol. 58 (2018) 238-248.

Republic of Uzbekistan at the expense of state funding, as well as ensure the need to finance social and infrastructure projects and the development of public programs, as well as public debt services at the most optimal level of cost and risk promptly, extension of the average term of public debt and diversification by currencies and sources, expansion of the practice of attracting funds by the state in the currency of the Republic of Uzbekistan, and prevention of risks associated with public debt services, which consists of elimination or reduction. Public debt management consists of the following operations:

- ✓ development of public debt management strategy;
- ✓ government funding;
- ✓ management of funds raised by the state;
- ✓ public debt risk management;
- ✓ public debt restructuring;
- ✓ refinancing of funds raised by the state;
- ✓ formalization and provision of state guarantees;
- ✓ maintaining a list of public debt agreements and government guarantees, including revoked state guarantees;
- ✓ maintaining public debt accounting and reporting;
- ✓ Ensuring public debt service and fulfilling state guarantee obligations.

Public debt is a type of debt that is unique to countries that have adopted a market economy and an open market policy. If there is full effective control over the use of this debt, it can be used to serve the needs of the population while promoting economic growth. A good example of this is Japan's economic success story, where the Japanese people trusted their government and lent enough to fuel their country's growth. It is important to note that the estimated values do not provide a specific target to support the growth projections. Instead, these results are an additional argument for implementing fiscal consolidation strategies to reduce public debt. Our research provides direct evidence of the nonlinearity between public debt and economic growth. The results indicate that unstable debt dynamics may increase the risk of a detrimental effect on capital accumulation and productivity growth, potentially leading to adverse effects on economic growth. Therefore, this research can help us better understand the issue of high public debt and its impact on economic activity in Uzbekistan. The knowledge gained from our research can be used to address the problem in a timely manner and maintain a stable macroeconomic environment in the future.

CONCLUSION

Today, as the world's economies become increasingly interdependent, managing public debt is an important consideration in ensuring the openness of Uzbekistan's economy. This is because the development of economic and social infrastructure, modern projects, and new technologies require additional investments. Therefore, it is essential to develop the domestic debt market to

provide modern mechanisms for increasing domestic resources, alongside external debt sources. Managing public debt, especially external debt, involves risks that need to be carefully considered. Therefore, it is a key issue in the strategy for public debt management.

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CHANGES IN THE CONSTRUCTION INDUSTRY AND THE ROLE OF CONSTRUCTION IN THE ECONOMY OF OUR COUNTRY IN 2021-2025

Abstract. This article examines the role and importance of the construction industry in the national economy of our country today. Maintaining the high rates of economic growth outlined by our president is also closely linked to ongoing reforms in the construction sector, and data on the implementation of construction works in the Republic of Uzbekistan by the statistics Department is also provided.

Keywords: Construction network, construction product, building, structure, farm construction method, contract construction method.

Today, the economy of the country is going to a new stage of socio-economic development, since the main goal of the reforms being carried out is to ensure the development of the Republic of Uzbekistan in every possible way, both economically and socially stable, to be among the developed countries of the world. In addition to economic reforms, the role and importance of construction in the national economy play an important role in achieving this goal.

In accordance with the decree of the president of the Republic of Uzbekistan "on additional measures to deepen reforms in the construction sector of the Republic of Uzbekistan". The main directions in the field of modernization, accelerated and innovative development of the construction industry are defined as:

- ✚ urban development of territories and ensuring effective public participation in this process;
- ✚ improving the quality and safety of urban development activities;
- ✚ ensuring the efficiency, rationality and transparency of administrative procedures in the field of urban development, as well as improving the efficiency of organizations in the construction industry;
- ✚ digitalisation of urban development activities, introduction of modern information and communication technologies in the industry;
- ✚ improvement of the system of training, retraining and advanced training of personnel, development of scientific potential in the field of urban planning.

The Decree also approved the strategy of modernisation, fast and innovative development of construction industry of the Republic of Uzbekistan for the years 2021-2025 and road map for implementation in the years 2021-2025 modernization Strategy, fast and innovative development of the construction industry:

✚ improving the position of Uzbekistan in the International Doing Business Index in the direction of "obtaining construction permits" (Dealing with Construction Permits) from the current 61.7 points to 78.2 points by the end of 2025;

✚ achieving by 2025 the harmonisation of national urban planning norms and regulations with international standards and standards at the level of at least 50%, taking into account the geological, climatic, seismological and other features of the Republic;

✚ ensuring the creation of an additional four electronic platforms within the framework of the "Transparent construction" system by 2025, as well as their integration with interdepartmental information systems and databases;

✚ achievement by 2025 of the share of implementation of the "volume" method of development of design and estimate documentation up to 50% of the total number of construction projects in the Republic;

✚ by 2025, one of the universities in the field of architecture and construction will be included in the list of the best higher educational institutions in Asia (TOP1000) in the ratings of internationally recognised organizations.

From January 1, an important procedure for public control over construction is introduced. General plans of settlements are approved taking into account the results of public discussion. At the same time, public discussion of the general plans of settlements is carried out in four stages (familiarization, discussion, analysis, implementation).

It also introduces the possibility of carrying out public expertise of the general plans of settlements for compliance with the rights and legitimate interests of legal entities and individuals, the interests of society and the state. This opportunity will significantly affect the entry of foreign investors into the territory of Uzbekistan.

Most of the changes and innovations in the construction sector are aimed at legally protecting the interests of both individuals and legal entities, which in turn will affect the quality of work performed.

Several changes are aimed at reducing or completely banning construction or renovation by non-professional workers.

The distribution of construction works by type of economic activity carried out in the Republic of Uzbekistan in January 2023 is as follows:

-the share of construction of buildings and structures amounted to 67.1% compared to 66.5% for the corresponding period of 2022;

-the share of civil engineering was 19.9% compared to 70.9% for the corresponding period in 2022;

-the share of specialized construction works amounted to 13.0% and 56.1% compared to the corresponding period of 2022.

Most of the completed construction works relate to the construction of new buildings and structures. 65.8% of the total volume of construction works, or \$3,296.7 billion. Construction works are aimed specifically at creating new

production facilities, residential and other social facilities in the economy. 302.7 billion sum due to new construction by large construction organizations. The share of large construction organizations in the volume of new construction works amounted to 9.2%. 1988.6 billion. Dollars due to the new construction of small enterprises and microenterprises. The sum or total share of small enterprises and microenterprises in new construction works amounted to 60.3%. The contribution of the informal sector to the volume of new construction works amounted to \$1005.4 billion. The share in or to Soums was 30.5%. In the structure of construction works for the construction of buildings and structures, the share of construction works performed by large construction organizations amounted to 7.2%, an increase of 0.1% compared to the corresponding period in 2022. The share of deposits from small enterprises and microenterprises in this type of activity decreased by 8.0 percentage points compared to the corresponding period in 2022 and amounted to 59.0%. And the share of the informal sector increased by 7.9% compared to the corresponding period in 2022 to 33.8%. \$240.9 billion. 1984.6 billion sum 1138.0 billion The total construction of buildings and structures is 3363.5 billion soums. in Sumy, the share of large construction organizations, small enterprises and microfirms, as well as the informal sector increased by 7.9 percentage points compared to the corresponding period in 2022 and amounted to 33.8%. The share of products created by construction organizations in the gross income of the national economy is constantly growing, which is the result of ongoing economic reforms in the industry, as well as accelerated development the economy of the country. It should be noted that there is a growing trend in the number of private enterprises, which account for most of the construction industry of the entire business structure.

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Sotvoldiyev E.
assistant
Department of Agribusiness and Marketing
Andijan Institute of Agriculture and Agrotechnologies

MARKETING COMMUNICATIONS IN AGRICULTURE PERFORMANCE EVALUATION

Abstract. In the article, the evaluation of the effectiveness of marketing communications was analyzed according to such criteria as the popularity of the product, brand, company, etc. To evaluate the effectiveness of marketing communications, marketing research should first be used. For this, surveys of randomly selected audiences are often conducted. Data were usually obtained by telephone and small structured questionnaires at the points of sale.

Key words. marketing communications, product, brand, company, segmentation, advertising.

The effectiveness of the organization's activities depends on various circumstances and factors, including the effectiveness of using the marketing communication complex. At the same time, according to marketing experts, there is currently no single approach to evaluating the effectiveness of marketing communications.

There is a widespread opinion that the effectiveness of marketing communications in agriculture directly depends on the volume of product sales. At the same time, it should not be forgotten that this dependence is not natural, because on the one hand, advertising and other elements of the marketing communication complex can appeal to consumers and buyers of goods and not change their purchase readiness and attitude to the manufacturer of products, goods and organizations. On the other hand, the increase in product sales may be caused by its urgent need (for example, food in the context of limited production and sales, products during a drought, water, medicine during an epidemic, various goods as gifts on holidays and weekends, etc.) and not the result of an effective advertising campaign. In such cases, the priority is to satisfy the urgent need and urgent need, and the level of influence of the elements of the marketing communication complex will be indirect and secondary, on the contrary, the price, in this case, will be a more important factor in choosing a particular product.

At the same time, the influence of elements of the marketing communication complex on the behavior of consumers and buyers is significant. It is appropriate to divide the effectiveness of marketing communications into sales (changes in the volume of product sales before and after using the influence of communication) and communication (changes in the level of product, brand recognition, etc.). In addition, the reaction of each buyer and consumer to the application of the influence of elements of complex marketing communications is

individual and subjective, as it depends on the personal characteristics of each customer, the type of marketing communications, the period of implementation of the advertising influence (what time of the day, day of the week, season, etc.) are methods of applying marketing communications.

It is also necessary to take into account the level of statistical error in standard marketing research.

Evaluation of the effectiveness of marketing communications in agriculture can be done according to such criteria as the popularity of the product, brand, company, etc. The popularity of the company can be active (without a sign) or passive (with a sign). To determine the effectiveness of marketing communications, it is necessary to evaluate:

- product and brand recognition. That is, how many potential buyers know (or remember) about the existence of this product and brand;
- the popularity of the advertisement, that is, how many potential buyers know (or remember) about the existence of this advertisement;
- popularity of the manufacturer; products, that is, how many potential customers know (or remember) about the existence of the manufacturer;
- publicity of advertising texts, logos, etc.

When evaluating the effectiveness of marketing communications, a map of the perception of products (brands) in the market is created.

The main method of studying the market, marketing environment and consumer preferences is survey, observation, test and imitation. The main condition for large-scale and intensive marketing research is a well-equipped and fully developed information system using computer equipment, bank data.

Segmentation and determination of the target market is manifested in the determination of a group of consumers of agricultural enterprises, characterized by the character of one type of consumer preferences and one type of reaction to marketing measures. The main goal is to gain advantages in comparison with competing agricultural farmers, to increase the efficiency of their actions, to prevent conflicts and direct competition in the market. In addition, the selection of the target market segment, which corresponds to the capabilities of the agricultural farmer, is also envisaged. This selection will be in relation to a specific group of consumers who will carry out intensive marketing activities depending on the movement of agricultural products. Segmentation and the choice of the target market are related to the tasks of the agricultural farmer to optimize costs and strengthen competitiveness in the context of the acquisition and expansion of sales markets.

Innovation covers the activities of production and sales organization as part of the principle of marketing concept of management. First of all, it implies constant improvement of manufactured agricultural products, changing their appearance and updating it, developing new lines of more perfect technological work.

Innovation policy includes the introduction of new forms and methods of entering new markets, introduction of innovations in sales promotion and advertising activities for agricultural products, formation of new services in the management of the agricultural farmer, company, and identification of new channels in the network of goods movement and sales organization.

As a principle of marketing activity, strategic planning is closely related to the principle of adaptation and is its logical continuation and complement. The principle of strategic planning implies the creation of marketing programs for the organization of production and sales based on market forecasts and forecasts of the development of scientific and technical development.

Marketing programs embody strategies and norms aimed at realizing the goals that agricultural producers have set for their farms. They attract entrepreneurs to a significant extent from the point of view of forming new methods of planned management that reduce the level of risk at work in the conditions of unfavorable market relations, create comfort and stability for the development of agricultural producers, and ensure a guaranteed increase in the sales volume of agricultural products.

In addition, to evaluate the effectiveness of marketing communications, you can use an expert rating scale based on attracting the attention of potential and real consumers and buyers, including through emotional impact, as well as using various elements of the marketing communications complex relevant for a particular situation.

The loyalty of customers and consumers to a brand is called their loyalty.

In addition, it is possible to evaluate the effectiveness of marketing communications using the traditional approach to calculating profitability:

$$R = \frac{P * 100}{3}$$

where R is the profitability of product advertising, %; P — profit received as a result of advertising, soum; 3. The cost of advertising this product, soums.

With the help of separate formulas, it is possible to evaluate the effectiveness of the use of advertising of goods in television, transport and periodicals.

Organizational managers should remember that it is important to skillfully combine quantitative and qualitative methods, taking into account the influence of external and internal factors, to evaluate the effectiveness of marketing communications and services.

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Sotvoldiyev E.
assistant
Department of Agribusiness and Marketing
Andijan Institute of Agriculture and Agrotechnologies

IMPORTANCE OF FINANCIAL RELATIONS OF ENTERPRISES IN MANAGEMENT

Abstract. Since the first days of our republic's independence, specific programs have been developed to further deepen and liberalize economic reforms in all aspects of society's development, first of all, in the economic sphere. As a result of the effective implementation of the tasks defined in these programs, enterprises, firms and companies with different forms of ownership began to appear in the economy. Of course, important factors in the achievement of economic and financial stability of our country are the growth of production volume, reduction of currency depreciation, increase of export volume and other similar macro-economic growth, as well as ensuring the economic growth of every enterprise, firm, and company operating in our republic. It requires development as a social entity.

Key words: Enterprise activity, foreign investments, modern marketing, financial relations, bank credit, leasing operations, economic entities, economic indicators.

We know that any enterprise operating in the economy cannot operate in the same way, regardless of its economic and financial activity. Enterprises achieve their goals as a result of conducting economic relations in direct cooperation with the other party in the process of production, provision of services, performance of work and sale of products, and as a result, the financial activity of enterprises is formed. Financial activities of enterprises are carried out directly through the system of financial relations. Factors such as the emergence of various forms of ownership in the conditions of the development of market relations, the rapid development of foreign economic activities of enterprises, the creation of a modern system of management in them led to the further development of the system of financial relations of enterprises and the expansion of their scope. Financial relations of enterprises can be divided into two groups: external financial relations and internal financial relations. Directing or distributing the financial relations with the founders of the enterprises, the formation of the authorized capital during the initial establishment of the enterprise and a certain part of them to finance the production and provision of services in the enterprise, and based on the final financial results of the enterprise, the authorized capital of the founders We can see in the relations that arise in the payment of dividends according to their shares or according to the percentage share of the shares they hold.

To ensure the continuity of economic activity of enterprises, to increase the efficiency of production and service provision in them, and to achieve high indicators of economic stability, the tasks and work processes of workers and servants operating in enterprises are organized at a high level, their work creation of a material and moral incentive system is of particular importance. Effective organization of financial relations between enterprises and their employees is important for achieving the above goals and rational use of labor resources.

Currently, taxes and compulsory payments paid by enterprises of various forms of ownership operating in our country occupy a significant place in the state budget revenues. One of the main factors of the economic development of any country is the state support for the development of enterprises, in a word, the effective implementation of the state's financial policy is important both economically and socially. Taxes and mandatory payments to the state budget based on the form and characteristics of the ownership of enterprises, financial assistance allocated from the state budget for the financial recovery of enterprises and other purposes, granting them various tax benefits or applying fines and sanctions against enterprises based on the law financial relations of enterprises with the state or with budgetary and extra-budgetary funds arise in the process of such relations. It can be said that the financial relations of enterprises with commercial banks occupy the central link in the implementation of all types of financial and economic relations of enterprises. The financial relations of the enterprise, the creation of a system for storing and using money in special accounts in commercial banks, the use of credit and leasing operations of the bank, that is, the relations that arise in the process of paying the principal debt and accrued interest payments on the loan, all kinds of money o It occurs in the process of carrying out transfers and currency trading operations and using other banking services.

All the considered financial relationships, enterprises have their own important aspects and methods of implementation in economic activity. But all of them have a dual description from the point of view of the entities participating in this process, their material basis is the movement of funds, in the process of their use, cash flows are formed, in the process of financial relations, the authorized capital of enterprises is formed, the circulation of financial funds period begins and ends, various purpose funds, savings and all kinds of financial resources are organized and used in the enterprise. Financial relations and financial activities of enterprises are managed directly through the functions of financial management, therefore it is understood that the basis of financial management is the system of managing the formation, distribution and use of financial resources of economic entities.

In the conditions of market relations, the role and service of employees working in these enterprises, firms and companies is of great importance in the effective implementation of the goals of any economic entities, in the further development of the production and service sector. In the process of implementing

the incentive function in enterprises, employees working in various departments of the enterprise's management system have fully fulfilled the financial plans and tasks set by the enterprise, contributed to the development of the service and service industry, and made use of available material resources. A system will be created to encourage and reward these employees for increasing the volume of production using frugality or, on the contrary, to take certain measures against employees who are lax and indifferent in the implementation of these tasks. The correct organization of the incentive function of financial management leads to the improvement of the quality of products and services in the enterprise, to the increase of the qualifications of employees, which, in turn, directly affects the development of the economic activity of the enterprise.

The next group functions of financial management classify the features of its separate management activities. Its composition consists of:

- asset management;
- capital management;
- investment management;
- cash flow management;
- financial risk management.

Capital management. In the conditions of market relations, one of the main tasks is to find optimal ways of financial resources and to use them effectively in the realization of the goals and tasks set for itself by any enterprise. The provision of financial resources used in the implementation of current and future activities of the enterprise represents the essence of the function of capital management. This mainly includes the study of the enterprise's total demand for capital and their effective use, determination of the most optimal ways and sources of financing, implementation of complex measures for refinancing.

Investment management. The financial stability of enterprises and the development of their activities are directly related to the increase in the efficiency of the use of investments. The function of investment management is to develop an investment policy aimed at the implementation of the company's tactical and strategic goals. In this, mainly, taking into account the type of activity and financial capabilities of the enterprise, in order to choose the one that brings more financial benefit to it and the most appropriate, to evaluate the efficiency and return of investment projects, to develop a capital investment budget, to organize, manage and manage a portfolio of securities. others are implemented.

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*Sulaymonov J.S.
O‘zbekiston davlat jismoniy tarbiya va sport
Universiteti farg‘ona filiali sport o‘yinlari
nazariyasi va uslubiyati kafedrsi assistent o‘qituvchisi*

MAKTAB VA PROFESSIONAL TA'LIM TIZIMIDA TA'LIM TIZIMIDAGI INNOVATSION PEDAGOGIK TEXNOLOGIYALAR

Annotatsiya. Maqola maktablar, professional ta'lim tizimi muassalarida tahsil oladigan o'quvchi hamda o'qituvchilari uchun ma'lumotlar bazasi sifatida shakllanadi. Ta'lim jarayonini tashkil etishda innovatsion pedagogik texnologiyalardan foydalanish, oliy ta'lim tizimida esa kredit-modul tizimini joriy qilish, zamonaviy axborot tizimlari yordamida masofaviy ta'lim shaklining ilg'or usullarini qo'llash ta'lim sifatini ta'minlash haqida fikr yuritilgan.

Kalit so'zlar: covid, professional, ta'lim, tizim, raqamli texnologiya, kredit, modul, zamonaviy, onlayn, oflayn, dasturiy vosita, maktab.

*Sulaymanov J.S.
assistant
Department of Theory and Methodology of Sports Games
Uzbekistan State University of Physical Education and Sports
Fergana branch*

INNOVATIVE PEDAGOGICAL TECHNOLOGIES IN THE EDUCATION SYSTEM IN THE SCHOOL AND PROFESSIONAL EDUCATION SYSTEM

Annotation. The article is formed as a database for students and teachers studying in schools, institutions of the professional education system. The use of innovative pedagogical technologies in the organization of the educational process, the introduction of the credit-module system in the higher education system, the use of advanced methods of distance education with the help of modern information systems, and the provision of quality of education were considered.

Key words: covid, professional, education, system, digital technology, credit, module, modern, online, offline, software, school.

KIRISH

Jahon tajribasida maktab hamda professional ta'lim muassasalarida voleybol sport turini yanada rivojlantirish va tayyorlash jarayoniga amaliy dasturiy vositalar, masofaviy ta'lim shakllari, ochiq ta'lim resurslari, elektron ta'lim mahsulotlaridan (Multimedia, vidioroliklar, animatsiyalar va boshqalar) foydalanish keng tatbiq etilgan. **COVID-19 davrida, maktablarning yopilishi**

paytida oflayn (an'anaviy) ta'lim muvafaqiyatga erishini to'xtatdi. Masofaviy ta'lim 1 milliarddan ortiq ta'lim oluvchilarni qamrab oldi, lekin u ham kamida yarim milliardga yoki butun dunyo bo'ylab ta'lim oluvchilarning 31 foiziga va eng kambag'allarning 72 foiziga erisha olmadi. **Ta'lim olish huquqi tobora mazmunli ulanish huquqi bilan sinonim bo'lib bormoqda, ammo o'zaro teng emas.** Dunyo miqyosida boshlang'ich maktablarning atigi 40 foizi, to'liq o'rta maktablarning 50 foizi va yuqori o'rta maktablarning 65 foizi internetga ulangan. Mamlakatlarning 85 foizi maktab yoki o'quvchilar bilan aloqani yaxshilash siyosatiga ega. **Raqamli texnologiyalar o'quv va o'quv resurslariga kirishni keskin oshirdi.** Masalan, Efiopiya Milliy akademik raqamli kutubxonasi va Hindiston Milliy raqamli kutubxonasi. Bangladeshdagi o'qituvchilar portalida 600 000 dan ortiq foydalanuvchi mavjud.⁵⁹

Mamlakatimizda COVID-19 davrida mamlakatimizning barcha maktab, professional ta'lim hamda oliy ta'lim muassasalari masofaviy ta'lim shakliga o'tkazildi. Ayni vaqtda zamonaviy axborot texnologiyalari yordamida o'qitishni tashkil etish, masofaviy ta'limning tashkiliy-huquqiy asoslarini shakllantirish, ta'lim olish huquqini ta'minlash ta'lim berishning yangi uslublaridan foydalanish nihoyatda dolzarb masalalardan biridir.

Ta'lim jarayonini tashkil etishda innovatsion pedagogik texnologiyalardan foydalanish, oliy ta'lim tizimida esa kredit-modul tizimini joriy qilish, zamonaviy axborot tizimlari yordamida masofaviy ta'lim shaklining ilg'or usullarini qo'llash ta'lim sifatini ta'minlashda muhim ahamiyat kasb etadi. Masofaviy ta'lim muhiti zamonaviy axborot, telekommunikatsiya va veb-texnologiyalar imkoniyatlariga ko'ra rang-barangligi, kontentning barcha yoshdagi iste'molchilarga moslashtirilganligi bilan o'ziga jalb etadi. Masofaviy ta'limning samarali yo'lga qo'yilishi uchun soha marketingini, ta'lim xizmatlarini yo'lga qo'yish, ta'limiy xarakterdagi mahsulotlarni ishlab chiqarish, iste'mol bozorini yuzaga keltirish hamda rivojlantirish maqsadga muvofiqdir.⁶⁰

Ma'lumki mustaqillikka erishgan kundan boshlab jismoniy tarbiya va sport ham davlat siyosatining ustuvor yo'nalishlari doirasida taraqqiyoti etib kelmovda. Ushbu sohani rivojlantirish maqsadida qabul qilingan Prezident Farmonlari, bir qator qonun, hukumat qarorlari va ularning amalda o'z ifodasini topib kelayotgani, ayniqsa bolalar sportini rivojlantirishga alohida ahamiyat berilayotgani e'tiborga loyiqdir.

So'nggi yillar ichida yurtimiz hududlarda, hatto uzoq qishloq va tumanlarda ham ko'pdan ko'p zamonaviy voleybol uchun maydonlar shakllantirilib bormoqdaki, bu ushbu sport turini yanada ommalashihsiga katta hissa qo'shmoqda. Buning oddiy va yaqqol misoli sifatida barcha ta'lim

59 Yuneskonning 2023 yilgi global ta'lim monitoringi hisoboti

60 Masofaviy ta'limni tashkil etish tartibi. Metodik qo'llanma. Mamataliyev.T, Murodullayev Sh. – Toshkent: "Sano - Standart", 2023. – 32 b

muassasalarida ushbu sport turidan shug‘ullanuvchilar soni anchayinoshdi. Ko‘plab musobaqa dasturlaridan joy oldi, masalan 5 tashabbus olimpiadasida sportning eng sevimlilaridan biri bo‘lmoqda.

O‘zbekiston maktab va professional ta’lim muassasalarida ta’lim muassasalarida voleybol bo‘yicha sport sektsiyalarini tashkil etish va rivojlantirishning umumiy maqsadi shundan iboratki, barcha sport turlari qatori ushbu sport turida ham birinchi navbatda inson salomatligi uchun katta ijobiy ta’sir ko‘rsatadi, mushak kuchini va harakatchanligini rivojlantiradi, moddalar almashinuvini yaxshilaydi, o‘pka tiriklik sig‘imini oshiradi, yurakni qisqarish chastotasini pasaytiradi, qon bosimini normal holatga keltiradi. Voleybol bilan shug‘ullanadigan kishilarda, ayniqsa ko‘rish qobiliyatini, reaksiya tezligini va atrofni o‘rab turgan sharoitda orientir ola bilishni yaxshi rivojlantiradi. Ochiq havoda voleybol bilan yil davomida muntazam shug‘ullansa salomatligini mustahkamlaydi. Voleybol ish kuni davomida to‘planib qolgan psixik zo‘riqishni va charchashni oldini oladi hamda pasaytiradi, asab jarayonlarini o‘tishiga ijobiy ta’sir ko‘rsatadi, shu bilan birga mustahkam va tiniqib uxlashga yordam beradi.

XULOSA

Xulosa qilib aytganda, zamon kundan kun sayin shiddat bilan rivojlanishda davom etar ekan, insonlarning ham dunyoqarashi ham shunga yarasha oshib real o‘shishda davom etmoqda. Hamma pandemiya davrida hohlasa hohlama ham yangi raqamli texnologiya asriga qadam qo‘ydilar. Tajribali va iqtidorli yosh tadqiqotchilar tomonidan mashg‘ulotlarini tashkil qilishning halqaro andozalarini yetakchi olimlarining ish tajribalari bilan davr talablari asosidagi faoliyatlari izchillik bilan o‘rganilmoqda.

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*Sultamuratov A.O.
Osiyo xalqaro universiteti
Pedagogika va psixologiya fakulteti
Magistr talabasi*

SPORTCHILARDA PSIXOLOGIK HIMOYA MEXANIZMLARINI RIVOJLANTIRISHNING IJTIMOIIY PSIXOLOGIK XUSUSIYATLARI

Annotatsiya. Raqobatbardosh sport turlarida qatnashish sportchilardan yuqori darajadagi raqobat bosimini yengish uchun psixologik kuch va chidamlilikni rivojlantirishni talab qiladi. Samarali psixologik himoya mexanizmlarini ishlab chiqish sportchilar uchun ruhiy salomatlikni saqlash va ishlashni maksimal darajada oshirish uchun juda muhimdir. Ushbu maqolada sportchilarda bunday psixologik himoyani shakllantirish asosidagi ijtimoiy psixologik xususiyatlar ko'rib chiqiladi.

Kalit so'zlar: jismoniy mashqlar, trening dasturlar, ijtimoiy-psixologik harakatlar, o'zgarishlar.

*Sultamuratov A.O.
master's student
Faculty of Pedagogy and Psychology
Asian International University*

SOCIAL PSYCHOLOGICAL CHARACTERISTICS OF THE DEVELOPMENT OF PSYCHOLOGICAL PROTECTION MECHANISMS IN ATHLETES

Abstract. Participation in competitive sports requires athletes to develop psychological strength and resilience to cope with the pressures of high-stakes competition. The development of effective psychological protection mechanisms is crucial for athletes to maintain mental health and maximize performance. This article examines the social psychological characteristics underlying the formation of such psychological defenses in athletes.

Keywords: physical exercises, training programs, socio-psychological actions, changes.

Kirish: Hozirgi kunda sportchilarning jamiyatning samarali a'zolari sifatida ruhiy salomatligiga e'tibor juda muhimdir. Ruhiy salomatlik hissiy salomatlik bilan birga hayot talablari va stress stimullarini yengish uchun konstruktiv munosabatlarni shakllantirishi mumkin. Ushbu muhim psixologik tuzilma bizning fikrlarimiz va his-tuyg'ularimizni, atrofimizdagi vaziyatlarni qanday talqin qilishimizni va jismoniy, ijtimoiy va psixologik muhitni qanday tartibga solishimizni ifodalaydi.

Sport fanining muhim muammolaridan biri bu sport muvaffaqiyatlarini qo'lga kiritish va saqlashda samarali omillarni tan olishdir. Sport muvaffaqiyati, faol o'quv jarayoni, yuqori darajadagi sport ko'rsatkichlariga erishish uchun zarur ko'nikmalarni takomillashtirish bo'yicha qattiq mashq qilish natijasida olinadi. Darhaqiqat, sportda optimal ko'rsatkichlarga texnik qobiliyatlarni (texnik va taktik), jismoniy qobiliyatlarni (kuch, tezlik va boshqalarni) birlashtirish natijasida erishiladi.) va aqliy qobiliyatlar (konsentratsiya, ishonch, xavotirni nazorat qilish va boshqalar.). Ruhiiy salomatlikni aniqlash uchun bir necha omillar mavjud.

Odamlarning axborotni qayta ishlash tizimiga ta'sir qilishi mumkin bo'lgan samarali psixologik omillardan biri bu ego mudofaa mexanizmlari. Erta bolalik davrida shakllanishi tufayli ushbu mexanizm keyinchalik hayotda qayta ishlash modeli sifatida ishlatilishi mumkin. Ta'rifga ko'ra, mudofaa mexanizmlari-bu kognitiv dissonansni kamaytirish va tahdidli hodisalarni idrok etishga ta'sir qilish orqali ichki va tashqi voqealikdagi keskin o'zgarishlarni minimallashtirish uchun harakat qiluvchi avtomatik tartibga soluvchi jarayonlar.

Himoya mexanizmlari, tashvish bilan kurashish uchun ego ongsiz strategiyasi sifatida, yetishmovchilikni himoya qilishi mumkin va tuyg'ular va o'z - o'zini hurmat qilish kabi hislarni ham albatta. Freyding ta'kidlashicha, turli xil himoya mexanizmlaridan foydalanish chastotasi shaxsiyat, patologiya va sozlashni tan olish uchun asosiy o'zgaruvchidir. Endryus va boshqalar [7,8], Vaillantning mudofaa mexanizmlari haqidagi ierarxik tasnifiga asoslanib, 20 ta himoya mexanizmini uchta yetuk, nevrotik va yetuk bo'lmagan mudofaa uslubiga ajratdi.

Yetuk mudofaa mexanizmlari moslashuvchan, normal va samarali ta'sir qilish deb hisoblanadi, ba'zi usullari, nevrotik va yetuk bo'lmagan himoya mexanizmlari esa noto'g'ri va disfunktsional ta'sir qilish usullari hisoblanadi. Umuman olganda, himoya mexanizmlari hissiy oqibatlarini idrok etishni buzadi. Uells va Metyusning so'zlariga ko'ra, mudofaa hissiy tajribalarni bezovta qilingan ma'lumotlarni ongli ravishda qayta ishlashga to'sqinlik qiladigan diqqatni o'zgartirish orqali tartibga soladi.

Ampirik dalillar shuni ko'rsatadiki, mudofaa mexanizmlari sozlash ierarxiyasiga muvofiq o'rnatilishi mumkin. Adaptiv himoya mexanizmlari jismoniy va ruhiy salomatlik natijalari bilan bog'liq. Noto'g'ri moslashuvchan himoya mexanizmlari shaxsiyatning buzilishi va depressiya kabi sog'liqning ko'plab salbiy omillari bilan bog'liq. Hissiy kayfiyat, mudofaa uslublari va depressiv alomatlar o'rtasidagi munosabatni o'rganishda mudofaa uslubi yetuk bo'lmagan odamlar depressiv alomatlarini ko'rsatishga moyil ekanligi aniqlandi.

Zeigler-Hill va boshqalar shuni ko'rsatdiki, yetuk bo'lmagan mudofaa uslublari ortib borishi bilan o'z-o'zini hurmat qilishning beqarorligi oshadi va yetuk mudofaa uslublari ortib borishi bilan o'z-o'zini boshqarishning beqarorligi kamayadi. Meta-tahlil tadqiqotida topilmalar shuni ko'rsatdiki, depressiya buzilishi bo'lgan odamlar yetuk mudofaa uslubiga nisbatan pastroq ball

ko'rsatadilar. Aksincha, yetuk bo'lmagan va nevroitik mudofaa uslublari bo'yicha yuqori ball kuzatiladi.

Parker va boshqalar ego mudofaa mexanizmlarini asabiy va stressli his-tuyg'ularni boshqaradigan psixologik mexanizmlar deb hisoblashadi. Ushbu qarashga ko'ra, ego mudofaa mexanizmlari hissiy tartibga solishning hal qiluvchi omilidir. Boshqa tomondan, progressiv harakatlardagi ko'pchilik odamlar kabi sportchilar optimal ishlash uchun katta bosim ostida qolmoqda.

Tadqiqotlar shuni ko'rsatdiki, sportchilar raqobat talablari, muvaffaqiyatsizlik qo'rquvi, yetishmovchilik hissi, aybdorlik, nazoratni yo'qotish, ota-onalarning ishtiroki, ishlashga erishish, shaxsiy nizolar, mukofotning sifati / miqdori, raqobat, muhim munosabatlar, ijtimoiy baholash, media xavfsizligi, qo'rqinchli xatti-harakatlar va hatto omadsizlik tajriba stress kabilarni boshdan kechiradi.

Tadqiqotlar shuni tasdiqlaydiki, turli xil stress turlari (masalan, xatolar, murabbiy yoki muxlislardan olingan qiyinchiliklar va boshqalar), sportchilarning individual farqlari (masalan, yoshi, tajribasi, xavotiri, o'zini o'zi qadrlashi va boshqalar) va sport turi stressni yengish uchun turli xil strategiyalarni talab qiladi. Shunday qilib, sport stressi bilan samarali kurashmaslik sportchining ishlashi va shaxsiy qoniqishi uchun zararli [5,6].

Himoya-bu yoqimsiz hissiy tarkibni ondan saqlaydigan psixologik harakatlar. Noxush his-tuyg'ularga tashvish, depressiya va g'azab kiradi, bunda bu his-tuyg'ularning fikri va hissiy mazmuni hozirgi kungacha o'sishning dastlabki bosqichlarida, ehtimol haqiqiy hayot voqealari, tasavvurlari yoki ikkalasining kombinatsiyasiga asoslangan bo'lishi mumkin. Oddiy odamlarda juda kuchli hayajonning paydo bo'lishi fikrlash, tashkil etish va diqqatni jamlash kabi aqliy funktsiyalarni yo'q qiladi. Boshqacha qilib aytganda, hissiyotlar ego funktsiyalariga (xususan, fikrlash, tashkil etish va diqqatni jamlash) ta'sir qilsa, zararli hisoblanadi. Stressli vaziyatlarni yengishda himoya mexanizmlarining ahamiyatiga qaramay, sportchilarda himoya mexanizmlarining roli va ularning roli bo'yicha bir nechta tadqiqotlar mavjud.

Sport psixologiyasi sohasida himoya mexanizmlari e'tiborga olinmagan. Nikolas va Jebrane sportchilar ustida olib borgan tadqiqotida mudofaa mexanizmlari sport ko'rsatkichlari bilan moslikni oshirish uchun ham zarurligini ko'rsatdi va sport hayotining tez-tez va muhim muammolariga ko'ra yengish uslublari va mudofaa uslublari o'rtasida sezilarli bog'liqlik mavjud. Bundan kelib chiqadiki, mudofaa uslublari psixologik salomatlik va sport muvaffaqiyatlarida muhim rol o'ynaydi. Bunday tadqiqotlar, ayniqsa mudofaa uslublari bo'yicha, sportda dinamik psixologiya va ijobiy psixologiyaning bir vaqtning o'zida tushunchalari va tuzilmalariga e'tibor berishga urinish bo'ladi.

Sportchilar, kuchli jismoniy va psixologik stressga duchor bo'lgan shaxslar sifatida, ko'pincha o'zlarining sport talablarini engish uchun psixologik himoya mexanizmlariga tayanadilar. Ham ongli, ham ongsiz darajada ishlaydigan ushbu mexanizmlar sportchining o'zini o'zi qadrlashini himoya qilishga, tashvishlarni

kamaytirishga va qiyin vaziyatlarda nazorat tuyg'usini saqlashga xizmat qiladi. Ushbu mexanizmlarning rivojlanishiga hissa qo'shadigan ijtimoiy psixologik xususiyatlarni tushunish sportchining farovonligi va ish faoliyatini yaxshilash uchun juda muhimdir.

Ijtimoiylashuv va ijtimoiy ta'lim:

Ijtimoiylashuv sportchilarda psixologik himoya mexanizmlarini rivojlantirishda muhim rol o'ynaydi. Murabbiylar, jamoadoshlar, ota-onalar va boshqa nufuzli shaxslar bilan o'zaro munosabatlar orqali sportchilar o'z sportlari bilan bog'liq me'yorlar, qadriyatlar va umidlarni o'rganadilar. Ushbu ijtimoiy ta'sirlar sportchining o'z qobiliyatlari, muvaffaqiyatning ahamiyati va muayyan kurash strategiyalarining maqbulligi haqidagi e'tiqodlarini shakllantirishi mumkin [8].

Masalan, yuqori raqobat muhitida ijtimoiylashgan sportchilar o'zlarining qadr-qimmatini isbotlash uchun kuchli ehtiyojni rivojlantirishi mumkin, bu esa muvaffaqiyatsizliklar oldida o'z qadr-qimmatini himoya qilish uchun rad etish yoki ratsionalizatsiya kabi himoya mexanizmlaridan foydalanishga olib keladi. Aksincha, ko'proq qo'llab-quvvatlanadigan muhitda ijtimoiylashgan sportchilar muammolarni hal qilish yoki qo'llab-quvvatlash kabi adaptiv kurash mexanizmlarini qabul qilishlari mumkin.

O'z-o'zini taqdim etish va shaxsiyat:

Sportchilar ko'pincha jamoat imidjini boshqarish va o'ziga xoslik tuyg'usini himoya qilish uchun o'zlarini namoyish qilish strategiyalari bilan shug'ullanadilar. Ushbu strategiyalar psixologik himoya mexanizmlarini rivojlantirishga ta'sir qilishi mumkin. Masalan, ijobiy o'z-o'zini imidjini saqlab qolish haqida qayg'uradigan sportchilar o'z-o'zini hurmat qilish uchun o'z-o'zini takomillashtirish yoki o'z-o'zini motivatsiyalantirish kabi taassurotlarni boshqarish usullaridan foydalanishlari mumkin.

Bundan tashqari, o'z sportidan kuchli o'ziga xoslik hissini oladigan sportchilar o'zlarining sport identifikatorini himoya qiluvchi himoya mexanizmlarini ishlab chiqish ehtimoli ko'proq bo'lishi mumkin. Masalan, ular sportchi sifatida o'zlarini qadrlash tuyg'usiga tahdid solishi mumkin bo'lgan zaifliklar yoki muvaffaqiyatsizliklarni tan olmaslik uchun rad etish yoki repressiyadan foydalanishlari mumkin.

Kognitiv baholash va yengish:

Kognitiv baholash jarayonlari psixologik himoya mexanizmlarini ishlab chiqishda hal qiluvchi rol o'ynaydi. Sportchilarning stressli vaziyatlarni talqin qilishi va ularni yengish qobiliyati ular foydalanadigan yengish strategiyasini tanlashga ta'sir qiladi.

Vaziyatni o'ta tahlikali va o'zlariga bog'liq bo'lmagan deb biladigan sportchilar kechiktirish yoki chekinish kabi qochish mexanizmlaridan ko'proq foydalanishlari mumkin. Aksincha, vaziyatni qiyin, ammo boshqariladigan deb biladigan sportchilar maqsadlarni belgilash yoki qo'llab-quvvatlash kabi muammolarga yo'naltirilgan kurash mexanizmlarini qabul qilishlari mumkin.

Ijtimoiy qo'llab-quvvatlash va barqarorlik:

Murabbiylar, jamoadoshlar, oila va do'stlarning ijtimoiy ko'magi moslashuvchan bo'lmagan psixologik himoya mexanizmlarining rivojlanishidan himoya qiluvchi omil bo'lib xizmat qilishi mumkin. Qo'llab-quvvatlovchi munosabatlarga ega bo'lgan sportchilar qiyinchiliklarga nisbatan ancha chidamli va nosog'lom kurash strategiyalariga tayanish ehtimoli kamroq bo'lishi mumkin.

Ijtimoiy qo'llab-quvvatlash sportchilarga tegishlilik, maqsad va tasdiqlash hissini berishi mumkin. Bu, shuningdek, o'z-o'zini himoya qilish mexanizmlariga bo'lgan ehtiyojni kamaytirib, ularga yanada real va ijobiy imidjni rivojlantirishga yordam beradi.

Xulosa

Xulosa qilib aytganda, sportdagi raqobat me'yorlari, ijtimoiy dinamika va uzoq muddatli majburiyatlar sportchilarda bosimga dosh berishga yordam beradigan psixologik himoya mexanizmlarini rivojlantiradi. Ishlash uchun moslashuvchan bo'lsada, himoyaga haddan tashqari ishonish haqiqatdan yoki shaxsiy javobgarlikdan haddan tashqari qochish uchun ishlatilsa, ruhiy salomatlikka xavf tug'dirishi mumkin. Umuman olganda, ushbu ijtimoiy psixologik jarayonlarni tushunish sportchilarda chidamlilikni rivojlantirish haqida tushuncha beradi.

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Sultonov Sh.A.
Qarshi muhandislik-iqtisodiyot instituti "Foydali qazilmalar geologiyasi va razvedkasi" kafedrasida katta o'qituvchisi
Navotova D.I.
Qarshi davlat universiteti "Geografiya" kafedrasida o'qituvchisi

O'ZBEKISTONDA RANGLI METALLARNING GEOGRAFIK TARQALISHI VA FOYDALANISH XUSUSIYATLARI

Annotatsiya. Maqolada biz O'zbekistonni yerosti boyliklarini geografik tarqalishi va ulardan hozirgi kundagi foydalanish darajasini ko'rib chiqdik. Jumladan bir qator foydali qazilmalar (metall) bo'yicha O'zbekistonda tasdiqlangan zahiralar va ularni qazib olish istiqbollari, rudali foydali qazilmalarni tarqalish xususiyatlari haqida ayrim mulohazalar yuritilgan. O'zbekiston Respublikasidan qazib olinayotgan va qazib olish ko'rsatkichlari haqidagi ushbu mulohazalarimiz, hududning rangli, nodir va qimmatbaho metallar (oltin, mis, qo'rg'oshin, rux, volfram, molibden, simob va boshqalar) konlari joylashishini yaxshiroq tushunish va tushuntirishga yordamchi bo'lishiga harakat qilingan.

Kalit so'zlar: yerosti boyliklari, ma'dan, mineral-xomashyo, neft, gaz, metall, ruda, oltin, mis, qo'rg'oshin, rux, volfram, molibden, simob, nikel, qalay, kadmiy, kobalt, margimush, surma, vismut, radioaktiv elementlar, daryo, ko'l, dengiz va okean.

Sultonov Sh.A.
senior lecturer
Department of Economic Geology and Exploration of Minerals
Qarshi Engineering and Economics Institute
Navotova D.I.
lecturer
Department of Geography
Qarshi State University

GEOGRAPHIC DISTRIBUTION AND UTILIZATION CHARACTERISTICS OF COLORFUL METALS IN UZBEKISTAN

Abstract. In the article, we analyzed the geographic distribution of mineral resources in Uzbekistan and their current utilization levels. In particular, specific observations were made regarding confirmed deposits of useful minerals (metals) in Uzbekistan, their extraction prospects, and characteristics of the ore deposits. The conclusions drawn in this study aim to better understand and explain the regional presence of valuable, rare, and precious metals (gold, copper, zinc, lead,

tungsten, molybdenum, silver, and others) in Uzbekistan in order to contribute to their better understanding and clarification.

Keywords: mineral resources, mineral deposits, oil, gas, metal, gold, copper, zinc, lead, tungsten, molybdenum, silver, nickel, cadmium, cobalt, manganese, antimony, bismuth, radioactive elements, river, lake, sea, and ocean.

KIRISH (ВВЕДЕНИЕ/INTRODUCTION). O‘zbekiston o‘z yerosti boyliklari bilan haqli suratda faxrlanadi – bu yerda mashhur Mendeleev davriy jadvalining deyarli barcha elementlari topilgan. Hozirga qadar 2,7 mingdan ziyod turli foydali qazilma konlari va ma‘dan namoyon bo‘lgan istiqbolli joylar aniqlangan. Ular 100 ga yaqin mineral-xomashyo turlarini o‘z ichiga oladi. Shundan 60 dan ortig‘i ishlab chiqarishga jalb etilgan. 900 dan ortiq kon qidirib topilgan bo‘lib, ularning tasdiqlangan zahiralari 970 milliard AQSH dollarini tashkil etadi.

G‘oyat muhim strategik manbaalar – neft va gaz kondensati, tabiiy gaz bo‘yicha 155 ta istiqbolli kon, qimmatbaho metallar bo‘yicha 40 dan ortiq, rangli, nodir va radioaktiv metallar bo‘yicha 40 ta, konchilik-kimyxo xomashyosi bo‘yicha 15 ta kon qidirib topilgan.

Bir qator foydali qazilmalar (metall) bo‘yicha O‘zbekistonda tasdiqlangan zahiralari va istiqbolli rudalar jihatidan MDH mamlakatlaridagina emas, balki butun dunyoda ham yetakchi o‘rinlardan birini egallaydi. Masalan, oltin zahiralari bo‘yicha respublika dunyoda 4-o‘rinda, uni qazib olish bo‘yicha 7-o‘rinda, mis zahiralari bo‘yicha 10–11-o‘rinda, uran zahirasi bo‘yicha 7–8-o‘rinda turadi.

ADABIYOTLAR TAHLILI VA METODOLOGIYA (ЛИТЕРАТУРА/METHODS) O‘zbekistonda rangli metallurgiya mahalliy mineral xomashyo resurslari negizida XX asrning 30-yillaridan rivojlandi. Respublikada rangli, nodir va qimmatbaho metallar (oltin, mis, qo‘rg‘oshin, rux, volfram, molibden, simob va boshqalar) konlari, Qoramozor mis-qo‘rg‘oshin-rux koni, Obirahmat, Burchmulla, Oqtuz, Takob, Ingichka, Qo‘ytosh, Langar rangli metallar, Chodak, Zarmitan, Marjonbuloq, Kauldi, Kukpatos, Qizilolmalisoy oltin, Qo‘rg‘oshinkon, Oltintopgan qo‘rg‘oshin-rux, Qalmoqqir mis konlari va boshqalar topilib sanoat miqyosida o‘zlashtirilishi bilan rangli metallurgiya shakllandi.

Ruda – tarkibida metall yoki uning birikmalari ko‘p miqdorda bo‘lgan tabiiy mineral hosiladir. Ba‘zan nometall mineral xomashyolar (asbest, barit, grafit, oltingugurt) ham ruda deb yuritiladi. Ruda tabiiy boy va kambag‘al turlarga ajratiladi. Shunga qarab uni boyitish zarurligi belgilanadi. Ruda bir foydali mineralli – monomineral yoki ko‘p foydali mineralli – polimineral, jumladan, tarkibida sanoat ahamiyatiga ega bo‘lmagan (ya‘ni kam miqdorli) minerallar ham bo‘ladi. Tarkibida foydali yo‘ldosh minerallar (komponentlar) bo‘lganlari kompleks rudalar deb yuritiladi. Rudalarning tarkibida bo‘lgan minerallar miqdoriga qarab silikatli, oksidli, sulfidli, karbonatli va aralash turlari farq qilinadi.

Barcha tub cho‘kindi, magmatik va metamorfik tog‘ jinslari tarkibida bo‘lgan rudalar tub rudalar deyiladi.

Daryo, ko‘l, dengiz va okean cho‘kindilaridan olinadiganlari sochma rudalar deb yuritiladi.

Qazib olish va qayta ishlash uchun rudalarning qator xossalari ahamiyatga ega. Qattiqligi, darziligi, hajmiy og‘irligi, erish harorati, magnit va elektromagnitligi, elektr o‘tkazuvchanligi, adioaktivligi, erish va sorbsion xususiyatlari, granulometrik tarkibi va boshqalar.

Bir joyda joylashib, atroflari esa boshqa tog‘ jinslaridan iborat uyum ruda tanasi (jism) deb ataladi va u turli (yapaloq, shtokverk, tomirsimon) shakllarga ega.

Yaqin joylashgan bir nechta ruda tanalari ruda maydoni yoki konini hosil qiladi. Ruda koni bitta ruda tanasidan iborat bo‘lishi ham mumkin.

Ruda konlari qora (temir, marganets, xrom, titan, vanadiy), rangli (mis, qo‘rg‘oshin, rux, nikel), yengil (alyuminiy), noyob (qalay, volfram, molibden, simob, berilliy, litiy, tantal, niobiy), asl (oltin, platina, kumush), radioaktiv (uran, toriy, radiy), tarqoq (aktiniy, gafniy, galliy, germaniy, indiy, kadmiy, protaktiniy, reniy, rubidiy, selen, skandiy, talliy, tellur, seziiy va boshqalar) va nodir metallar konlariga ajratiladi.

Bir nechta ruda konlari katta masofaga cho‘zilib joylashganda rudali mintaqa deb nomlanadi. Masalan, Amerikaning buyuk kumushli mintaqasi Meksikadan Peru va Boliviya gacha davom etgan, Markaziy Afrikaning misli mintaqasi Zambiya va Kongo Demokratik Respublikasida 450 km masofaga cho‘zilib, 150 dan ortiq mis konlarini qamrab olgan. Janubiy Amerikaning misli mintaqasi 4 ming km ga cho‘zilib, Kolumbiya, Ekvador, Peru, Argentina, Chili mamlakatlarida joylashgan ruda konlaridan iborat.

Geografik va geologik jihatdan alohida ajralib turgan yakka yoki bir necha rudali formatsiyalarga ega bo‘lgan mintaqa rudali rayon deb ataladi (masalan, Farg‘ona surma-simob rudali rayoni, Angren-Olmaliq mis rudali rayoni, Qizilqum oltin rudali rayoni).

O‘rta Osiyo foydali qazilmalarga juda boy. Tog‘-kon sanoati O‘rta Osiyoda uzoq tarixga ega. Qadimgi konlar va metall eritish o‘choqlari, konchilar manzilgohlarining izlari O‘rta Osiyoning hamma joylarida aniqlangan. Faqat Olmaliq shahri atrofida XX asrning 30-yillarida 500 dan ortiq qadimgi konlar izlari va qoldiqlari aniqlangan. O‘rta Osiyo hududida yoqilg‘i, rudali va rudasiz foydali qazilmalar tarqalgan.

Yoqilg‘i foydali qazilmalar ko‘mir, neft, gaz va yonuvchi slanelardan iborat. Yuqori sifatli toshko‘mirning yirik koni Markaziy Qozog‘istonda joylashgan (Qarag‘anda, Ekibastuz). Uncha katta bo‘lmagan toshko‘mir konlari Farg‘ona vodiysini o‘rab turgan tog‘larda (Ko‘kyong‘oq, Qizilqiya, Toshko‘mir), Surxondaryo vodiysining shimolida (Sharq‘un, Boysun) joylashgan. Qo‘ng‘ir ko‘mirning yirik koni Ohangaron vodiysida joylashgan. Farg‘ona vodiysining sharqiy qismida ham qo‘ng‘ir ko‘mir konlari bor.

O'rta Osiyo neft va gazga ham boy. Birinchi neft koni Farg'ona vodiysida (Chimyon koni) 1880-yilda ochilgan va 1904-yilda ishga tushirilgan. Keyinchalik, Farg'ona vodiysining sharqiy qismida yana bir qancha neft konlari ochilib, ishga tushirildi (Polvontosh, Xo'jaobod, Janubiy Olamushuk va hokazo). Yirik gaz va neft konlari, shuningdek, Qoraqumda, Qizilqumda, Kaspiy bo'yida, Ustyurtda, Qarshi cho'lida, Surxondaryo vodiysida ochildi va ishga tushirildi. Oxirgi paytlarda Qozog'istonda Tengiz, O'zbekistonda Ko'kdumaloq yirik neft konlari ochildi.

Rudali foydali qazilmalardan rangli va qora metall konlari keng tarqalgan. Yirik temir ruda konlari Qozog'istonda ochilgan va ishga tushirilgan. Ulardan eng yirigi To'rg'ay supasimon o'lkasida joylashgan Sokolov-Sarbay konidir.

O'zbekiston va Qirg'izistonda ham temir ruda konlari bor, ammo ular hali ishga tushirilganicha yo'q.

Rangli metall konlari Qozog'iston past tog'larida. Tyanshan va Pomir tog'larida, Markaziy Qizilqum past tog'larida tarqalgan (Olmaliq. Jezqazg'an, Qo'ng'iro't, Muruntog', Uchquloch va b.).

Fosforit konlari Qoratog'da, Qizilqumda va boshqa joylarda topilgan. Zarafshon vodiysida, Qashqadaryo va Surxondaryo vodiylarida hamda Kaspiy bo'yida tosh tuz va osh tuzi konlari bor.

Marmar konlarining eng yiriklari O'zbekistonda Nurota tog'ida (G'ozg'on), Omonqo'tonda, Oqtoshda joylashgan.

Respublikada rangli, nodir va qimmatbaho metallar (oltin, mis, qo'rg'oshin, rux, volfram, molibden, simob va boshqalar) konlari, Qoramozor mis-qo'rg'oshin-rux koni, Obirahmat, Burchmulla, Oqtuz, Takob, Ingichka, Qo'ytosh, Langar rangli metallar, Chodak, Zarmitan, Marjonbuloq, Kauldi, Kukpatos, Qizilolmalisoy oltin, Qo'rg'oshinkon, Oltintopgan qo'rg'oshin-rux, Qalmoqqir mis konlari va boshqalar topilib sanoat miqyosida o'zlashtirilishi bilan respublikada rangli metallurgiya shakllandi.

O'zbekiston turli foydali qazilmalarga boydir. Olib borilgan ko'p yillik geologik-qidiruv ishlari natijasida respublika hududida ko'pdan ko'p mineral xomashyo turlari borligi aniqlangan va hozirda ularning ko'pchiligidan xalq xo'jaligida foydalanilmoqda.

Rangli metallar – temirdan boshqa barcha metallarning sanoatdagi nomi. Besh guruhga bo'linadi. Yengil metallar, og'ir metallar, qiyin suyuqlanadigan metallar, asl metallar, nodir metallar.

Yengil rangli metallarga alyuminiy, magniy, titan, natriy, berilliy, litiy, bariy, kaltsiy, stronsiy va kaliy (zichligi 0,53 – 5 g/sm³) kiradi.

Og'ir rangli metallar mis, nikel, qo'rg'oshin, qalay, kadmiy, kobalt, rux, margimush, surma, vismut, simoblardan (zichligi 5 – 13,6 g/sm³) iborat.

Qiyin suyuqlanadigan rangli metallar volfram, molibden, niobiy, tantal, xrom, tsirkoniy va boshqalar.

Asl rangli metallarga oltin, kumush, platina, osmiy, iridiy, rodiiy, ruteniy va palladiylar kiradi.

Nodir rangli metallarga tarqoq metallar (talliy, galliy, germaniy, indiy, reniy, gafniy, rubidiy, seziy), siyrak-yer metallari (skandiy, ittriy, lantan va lantanoidlar), radioaktiv metallar (texnetsiy, fransiy, poloniy, radiy, aktiniy, toriy, protaktiniy, uran va barcha transuran elementlar) kiradi.

Rangli metallarning ko'pchiligi tabiatda sof holda uchraydi. Masalan, Alyuminiy o'z rudalarida Al_2O_3 va $Al(OH)_3$ tarkibli birikmalar holida bo'ladi. Rudalardan gidrometallurgiya usulida avval Al_2O_3 , undan esa elektroliz yo'li bilan alyuminiy olinadi.

Mis tabiatda, asosan, tog' jinslari tarkibida mis sulfidlari va oksidlari tarzida uchraydi. Mis rudasi boyitilgandan keyin uni suyuqlantirib shteynni bessemerlash usuli bilan xomaki mis, xomaki misni termik usulda tozalab yoki elektroliz qilib sof mis olinadi.

Magniy tabiatda har xil birikmalar, minerallar, magniy rudalari tarkibida uchraydi. Magniy rudalari jumlasiga magnezit, dolomit, karnallit va boshqalar kiradi. Bu rudalar (masalan, magnezit) dan magniy oksid MgO olinadi, magniy oksiddan uglerod ishtirokida xlor o'tkazish yo'li bilan magniy xlorid $MgCl_2$ hosil qilinadi, u elektroliz qilinib, xomaki magniy olinadi. Uni qayta suyuqlantirib yoki sublimatsiya yo'li bilan sof magniy olinadi. Boshqa rangli metallar ham tegishli usullarda shu metallarning rudalaridan ajratib olinadi.

O'zbekiston hududida bir necha rudali (temir, titan, marganes, xrom), rangli (mis, qo'rg'oshin), nodir (volfram, molibden, qalay, vismut, simob, surma), qimmatbaho (oltin, kumush) metall konlari ham bor. Bulardan eng asosiylari Toshkent viloyatidagi Qalmoqqir, Sariqcheku hamda Dalnoye mis konlaridir. Qizilqumdagi Muruntov, Kukpatas va boshqa yerlarda oltinning katta zahirasi ochilgan bo'lib, uzoq yillardan buyon keng doirada qazib olinmoqda.

Rangli metallar va ularning qotishmalari xalq xo'jaligida, aviatsiya sanoatida, raketsozlik, elektrotexnika va radiotexnikada asosiy konstruksion materiallar hisoblanadi.

Rangli metallardan prokat, presslangan buyumlar, qattiq qotishmalar, metalli kukunlar, rangli, nodir va qimmatbaho metallarning turli xil tuz hamda birikmalari, shuningdek, kimyoviy o'g'itlar, qurilish materiallari kabi yo'ldosh mahsulotlar tayyorlanadi.

Yengil rangli metallardan bo'lgan alyuminiy va magniy hamda ularning qotishmalari mashinasozlikning eng muhim tarmoqlaridan bo'lgan samolyotsozlik, kemasozlik, raketsozlik sanoatining eng ko'p ishlatiladigan materiallari hisoblanadi.

Shuningdek butun jahonda elektr energiyasini iste'molchilarga yetkazishda alyuminiy va mis kabi metall simlardan foydalaniladi.

Qora metallurgiyada eng ko'p ishlab chiqariladigan temir qotishmalari – po'lat va cho'yandan tayyorlangan mahsulotlarning korroziyabardoshligi va zanglamasligi uchun ham ularning sirti rangli metallar (rux, nikel va boshqalar) bilan qoplanadi.

MUHOKAMA (ОБСУЖДЕНИЕ/DISCUSSION). O‘zbekistonda tarqalgan va qazib olinayotgan rangli metallar bir qancha guruhlariga bo‘linadi.

1. *Asosiy og‘ir metallar:* bularga mis, nikel, qo‘rg‘oshin, rux va qalay kiradi. Bu metallar o‘zining ahamiyati va ishlab chiqarilish hajmi bo‘yicha rangli metallar orasida muhim ahamiyat kasb etadi.

2. *Kichik og‘ir metallar:* bularga vismut, mishyak, surma, kadmiy, simob va kobalt kiradi. Bu metallar asosiy og‘ir metallarning tabiiy yo‘ldoshi hisoblanadi. Ular odatda yo‘ldosh komponent sifatida, lekin kamroq miqdorda ishlab chiqariladi.

3. *Yengil metallar:* bularga alyuminiy, magniy, titan, natriy, kaliy, bariy, kalsiy va stronsiy kiradi. Bu metallar boshqa metallarga qaraganda eng kichik zichlikka ega metallar hisoblanadi.

4. *Nodir metallar:* bularga oltin, kumush, platina va platinoidlar kiradi. Bu metallar atrof-muhit va korroziyali muhitga qarshi yuqori bardoshlik qobiliyatiga ega metallar hisoblanadi.

5. *Noyob metallar.* Bu metallar quyidagi guruhlariga bo‘linadi:

a) *qiyin eriydigan noyob metallar:* volfram, molibden, tantal, niobiy,

b) *engil noyob metallar:* litiy, berilliy, rubidiy va seziy.

v) *tarqoq noyob metallar:* galliy, indiy, talliy, germaniy, gafniy, reniy,

g) *noyob-yer metallari:* skandiy, ittriy, lantan va lantanoidlar.

d) *radioaktiv metallar:* radiy, uran, toriy, aktiniy.

Barcha rangli metallarning shunday o‘ziga xos xususiyatlari borki, bu xususiyatlar ularning qo‘llanish sohasi hamda xo‘jalik ahamiyatini belgilab beradi. Quyida ayrim rangli metallarning o‘ziga xos xususiyatlari keltirilgan.

Alyuminiyning kichik zichligi, yuqori qattqlikka egaligi, egiluvchanligi, korroziyaga bardoshliligi kabi xususiyatlari yangi texnika yaratuvchilari – konstruktorlarni diqqatini jalb qilmoqda. Elektr hamda isiqlik o‘tkazuvchanligi bo‘yicha u faqatgina misdan keyin turadi.

Nikelning 70 foizga yaqini o‘tga chidamli va zanglamaydigan po‘lat ishlab chiqarishda sarflanadi. Nikel boshqa metallar bilan birga qattiq va o‘ta qattiq po‘latlar tarkibiga kiradi. Texnikada tarkibida nikel bo‘lgan 3000 ga yaqin qotishma ishlatiladi.

Magniy. Magniyning boshqa metallardan farq qiladigan muhim xususiyati zichligi ($1,74 \text{ g/sm}^3$) kichikligi hisoblanadi. Olimlar magniy ishtirok etgan yengil, mustahkam, issiqqa bardoshli bir qator qotishmalar kashf etishga muvaffaq bo‘lishdi. Magniyni legirlash uchun Ti, Be, Li, Cd, Ce kabi metallar ishlatiladi.

Volfram va molibden kabi qiyin eriydigan metallar elektr pechlarida isitgich, elektr va yorug‘lik lampalari qismlari, elektr kontaktlar, buyoqlar, moylash materiallari ishlab chiqarishda ishlatiladi. Biroq bu metallarning asosiy qismi asbobsoz, tez kesar, o‘tga chidamli, yemirilishga chidamli, kislotaga bardoshli va boshqa turdagi legirlangan po‘latlar olishga yo‘naltiriladi.

Titan asosidagi qotishmalar yuqori solishtirma mustahkamlikka ega, shuning uchun uni asosiy ishlatadigan sohasi reaktiv aviatsiya va raketa hamda kosmik texnika bo‘lib qoldi.

Noyob yer elementlari – metall, qotishma, kimyoviy birikmalar ko‘rinishida qora va rangli metallurgiyada, shisha va keramika sanoatida, atom energetikasida ishlatiladi.

Metall tarkibli minerallar turiga (ko‘rinishi) ko‘ra rangli metall rudalari quyidagi asosiy guruhlariga bo‘linadi:

1. *sulfidli* – tarkibidagi metall oltingugurt bilan birikib sulfid ko‘rinishida bo‘ladi. Bunday rudalarga misli, miss-ruxli, miss-molibdenli, miss-nikelli, qo‘rg‘oshin-ruxli (polimetall) rudalar taaluqlidir;

2. *oksidli* – tarkibidagi metall turli kislorod birikmalari: oksidlar, karbonatlar, gidrooksidlar va hokazolar bilan birikkan ko‘rinishda bo‘ladi. Bunday rudalarga misol qilib alyuminiyli, oksidlangan nikelli, qalayli, mis va kamyob metall rudalarining ayrim ko‘rinishlarini keltirish mumkin;

3. *sof* – tarkibida metall erkin holda uchraydi. Tabiatda erkin holda oltin, kumush, mis, platina, vismut, simob uchraydi;

4. – *aralash* – metall sulfidli, oksidli ko‘rinishda, ayrim hollarda erkin holda bo‘ladi (mis rudalari);

5. – *xloridli* – tarkibida metall vodorod xlorid kislotasi tuzlari ko‘rinishida bo‘ladi. Bunday rudalardan magniy, shuningdek bir qator yengil va noyob metallar ajratib olinadi.

NATIJARAR (РЕЗУЛЬТАТЫ/RESULTS). O‘zbekistonda konchilik sanoati bo‘yicha 400 ga yaqin rangli metallar, ko‘mir, gaz qazib chiqaruvchi korxonalar, neft konlari, shaxta makonlari va turli konlar ishlab turibdi. Ular tarkibida yuqorida qayd etilgan Olmaliq va Angren korxonalaridan tashqari, 1950-yillari o‘z ishini boshlagan Ingichka konini, 1956-yilda o‘z faoliyatini boshlagan Chirchiqdagi O‘zbekiston o‘tga chidamli va qattiq qotishmali metallar kombinati, O‘rta Chirchiq plavikoshpat kombinati, 1970–1980-yillarda ishga tushirilgan Uchquloch, Kovuldi, Marjonbuloq kon va ruda boyitish fabrikalarini, 1966-yilda ishga tushirilgan Qo‘shbuloq koni, 1973-yildan mahsulot bera boshlagan Angren oltin boyitish fabrikasi, 1967–1969-yillarda MDH davlatlaridagi konlar orasida ulkan hisoblangan Muruntov kon-boyitish korxonasini va 1987-yilda foydalanishga topshirilgan Zarmitan konini sanab o‘tish mumkin. Ularning qatoriga “O‘zbekneftgaz qazib chiqarish” davlat aksiyadorlik birlashmasi, “O‘zbeksement”, “O‘zbekmarmar”, ikkilamchi xomashyodan alyuminiy ishlab chiqaruvchi zavod kabi yirik ishlab chiqarish birlashmalari va boshqa korxonalar kiradi. Respublikada oltin zahiralari qidirib topish va foydalanish borasida olamshumul ishlar qilinmoqda. “O‘zbekoltin” birlashmasi Qoraqo‘ton, Bichanzor, Qo‘shbuloq va Chodak konlari zamirida o‘z faoliyatini boshlagan.

1946-yilda Olmaliq mis-molibden kombinatini qurish bo‘yicha loyiha topshirig‘i tasdiqlandi. Urushdan keyingi yillarda Qo‘rg‘oshinkon va Oltintopkan

polimetall konlarida qidiruv ishlari tugallandi. 1948-yilda Olmaliqda qo‘rg‘oshin-rux ishlab chiqaruvchi kombinat qurish to‘g‘risida qaror qabul qilindi.

Qalmoqqir koni va mis boyitish fabrikasining qaytadan ta‘mirlanishi 2025-yilga borib ma‘danli ruda qazib olishni 30 mln. tonna va misli rudani qayta ishlashni 40 mln. tonnagacha yetkazish imkonini beradi;

- misli toshqollarni flotatsiya usuli bilan qayta ishlash natijasida yarim mahsulot va texnogen chiqindilardan temir va boshqa qotishmalarni olishni yo‘lga qo‘yish;

- yaqin kelajakda 40 ming tonna hajmda prokat olish maqsadida rangli metallarni chuqur qayta ishlash bo‘yicha ishlab chiqarishni yaratish.

Shunday qilib, kombinatning asosiy investitsion maqsadi – kombinatda bor xomashyolardan foydalanib, eksportga yo‘naltirilgan, yuqori darajada tez sotish mumkin bo‘lgan mahsulotlar chiqarish bazasini yaratishdir.

XULOSA (ЗАКЛЮЧЕНИЕ/CONCLUSION). Hozirga qadar 2,7 mingdan ziyod turli foydali qazilma konlari va ma‘dan namoyon bo‘lgan istiqbolli joylar aniqlangan. Ular 100 ga yaqin mineral-xomashyo turlarini o‘z ichiga oladi. Shundan 60 dan ortig‘i ishlab chiqarishga jalb etilgan. 900 dan ortiq kon qidirib topilgan bo‘lib, ularning tasdiqlangan zahiralari 970 milliard AQSH dollarini tashkil etadi.

Barcha tub cho‘kindi, magmatik va metamorfik tog‘ jinslari tarkibida bo‘lgan rudalar tub rudalar deyiladi.

Daryo, ko‘l, dengiz va okean cho‘kindilaridan olinadiganlari sochma rudalar deb yuritiladi.

Respublikada rangli, nodir va qimmatbaho metallar (oltin, mis, qo‘rg‘oshin, rux, volfram, molibden, simob va boshqalar) konlari, Qoramozor mis-qo‘rg‘oshin-rux koni, Obirahmat, Burchmulla, Oqtuz, Takob, Ingichka, Qo‘ytosh, Langar rangli metallar, Chodak, Zarmitan, Marjonbuloq, Kauldi, Ko‘kratos, Qizilolmalisoy oltin, Qo‘rg‘oshinkon, Oltintopgan qo‘rg‘oshin-rux, Qalmoqqir mis konlari va boshqalar topilgan.

O‘zbekiston hududida bir necha rudali (temir, titan, marganes, xrom), rangli (mis, qo‘rg‘oshin), nodir (volfram, molibden, qalay, vismut, simob, surma), qimmatbaho (oltin, kumush) metall konlari ham bor. Bulardan eng asosiylari Toshkent viloyatidagi Qalmoqqir, Sariqcheku hamda Dalnoye mis konlaridir. Qizilqumdagi Muruntov, Kukpatas va boshqa yerlarda oltinning katta zahirasi ochilgan bo‘lib, uzoq yillardan buyon keng doirada qazib olinmoqda.

Rangli metallar va ularning qotishmalari xalq xo‘jaligida, aviatsiya sanoatida, raketsozlik, elektrotexnika va radiotexnikada asosiy konstruksion materiallar hisoblanadi.

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*Sultonov M.G.
Jizzax politexnika instituti
Iqtisodiyot va menejment kafedrasida assistenti
Spanov M.
M. Auvezov nomidagi Janubiy
Qozog'iston davlat universiteti dotsenti*

O'ZBEKISTONDA RAQAMLI IQTISODIYOTNI JORIY ETISH MASALALARI

Annotatsiya: ushbu maqolada, O'zbekistonda raqamli iqtisodiyotni rivojlantirish, barcha sohaga keng joriy etish masalalari haqida ma'lumotlar berilgan.

Kalit so'zlar: O'zbekiston, Harakatlar strategiyasi, Raqamli O'zbekiston-2030, texnologik va biznes jarayonlari, yalpi ichki mahsulot.

*Sultanov M.G.
assistant
Department of Economics and Management
Jizzakh Polytechnic Institute
Spanov M.
associate professor
South Kazakhstan State University named after M. Auvezov*

ISSUES OF IMPLEMENTATION OF DIGITAL ECONOMY IN UZBEKISTAN

Annotation: this article provides information on the issues of development of the digital economy in Uzbekistan, wide introduction to all spheres.

Keywords: Uzbekistan, Action Strategy, Digital Uzbekistan-2030, technological and business processes, gross domestic product.

Jahon iqtisodiyotining globallashuvi va texnologiyalarning rivojlanishi sharoitida O'zbekistonning iqtisodiy taraqqiyotiga albatta raqamli iqtisodiyotni rivojlantirmasdan erishib bo'lmaydi.

2017 – 2021 yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha Harakatlar strategiyasidagi belgilangan vazifalarni bajarish maqsadida O'zbekiston Respublikasi Prezidentining 2020-yil 5-oktyabrdagi PF-6079-son Farmoniga asosan, "Raqamli O'zbekiston – 2030" strategiyasi qabul qilindi⁶¹. Shu asosida "Raqamli O'zbekiston-2030" dasturini ishlab chiqilishi va hayotga tatbiq etilishi, eng birinchi, puxta va mukammal

⁶¹O'zbekiston Respublikasi Prezidentining 2020-yil 5-oktabrdagi "“Raqamli O'zbekiston — 2030” strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risida”gi PF-6079-son farmoni.

tashkiliy-huquqiy mexanizmlarni shakllantirish, qolaversa, innovatsion g'oyalar, texnologiyalar va ishlanmalarni joriy etish bo'yicha davlat organlari hamda tadbirkorlik subyektlarining uzviy hamkorligini ta'minlash, barcha soha va tarmoqlarda ishlab chiqarish, xizmat ko'rsatishni raqamli texnologiyalar bilan qamrab olish, bu borada zamonaviy bilimlarni chuqur egallagan, intellektual salohiyatli kadrlarni yetishtirish, shu orqali, mamlakatda "axborotlashgan jamiyat" muhitini yaratishga xizmat qiladi.

Hozirgi kunga kelib jahonda raqamli iqtisodiyot taraqqiy etgan 20 mamlakatda 2 trillion AQSh dollarini tashkil etayotgani hisoblab chiqilgan. Raqamli iqtisodiyotni rivojlantirishda dunyoda peshqadam bo'lgan Buyuk Britaniyada esa u hozirning o'zida milliy yalpi ichki mahsulotning 12 foiziga yetdi. Raqamli iqtisodiyot texnologik va biznes jarayonlari, ishlab chiqarish, logistika va tayyor mahsulotlarning savdosini raqamlashtirishni nazarda tutadi. Mamlakatimizda 2020-yilning o'zida transport, geologiya, ta'lim, arxiv kabi sohalarni to'liq raqamlashtirish belgilangan va bu boradagi ishlar jadal sur'atlarda olib borilmoqda. Shu jumladan, zamonaviy infratuzilmaga ega bo'lgan "IT-park"lar ishga tushirilgani aholi va tadbirkorlik subyektlarining davlat organlari bilan kontaktsiz aloqa shakllarini ta'minlovchi "business.gov.uz" portalining ishga tushirilgani, vaqtni va mehnat resurslarini sezilarli darajada tejash maqsadida yaratilgan yagona elektron tizimi "project.gov.uz" joriy etilgani raqamli iqtisodiyot rivoji yo'lidagi muhim qadamlardan biri hisoblanadi.

Bizga ma'lumki, raqamli iqtisodiyotni joriy etishda telekommunikatsiya infrastrukturasi va internet aloqalari ham muhim rol o'ynaydi. O'zbekiston Respublikasi Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi axborot xizmati bergan ma'lumotlarga ko'ra, telekommunikatsiya infratuzilmasini rivojlantirish yo'nalishida ham bir qator ishlar amalga oshirilmoqda. Internet tarmog'iga ulanishning umumiy o'tkazuvchanlik qobiliyati 1 200 Gbit/s.ni tashkil etib, kommutatsiya markazi orqali 750 Gbit/s tezlikda Internet tarmog'iga chiqish imkoniyati yaratildi hamda tarmoqning yuklanish darajasi 76,6 foizni tashkil etmoqda. 2020-yilning 1-yanvaridan operator va provayderlarga Internet xizmatlari uchun tarif o'tgan yilning shu davriga nisbatan 34 foizga arzonlashtirilib, 1 Mbit/s uchun 56,0 ming so'mni tashkil etmoqda. Internet xizmatidan foydalanuvchilar soni 22 mln.dan ortdi, shundan mobil Internet foydalanuvchilari soni 19 mln.ni tashkil etmoqda. Respublikamiz bo'yicha 237 ta obyektga magistral telekommunikatsiya tarmoqlari kengaytirilib, telekommunikatsiya uskunalari modernizatsiya qilinib, magistral telekommunikatsiya tarmoqlari o'tkazuvchanlik qobiliyati viloyatlararo darajada 200 Gbit/s.ga, tumanlararo darajada esa 40 Gbit/s.ga yetkazildi. Zero, raqamli iqtisodiyot aqlbovar qilmas darajada katta hajmda raqamli ma'lumotlarni to'plashda davom etmoqda. 2022-yilda global IP trafik hajmi 150 700 Gbit/s

(solishtirish uchun 2017-yil 45 000 Gbit/s) chiqishi kutilayotgani davrdan ortda qolmaslikka chaqiradi⁶².

Ma'lumki, elektron tijorat raqamli iqtisodiyotning muhim bir elementi hisoblanadi. O'zbekistonda elektron tijoratni rivojlanishini shartli ravishda ikki davrga ajratish mumkin: 2015 yilgacha bo'lgan hamda undan keyingi davr.

2015-yilgacha mamlakatimizda normativ-huquqiy baza ishlab chiqish va tayyorlash bo'yicha bir qancha faol ishlar olib borildi. 2015-yildan esa O'zbekiston Respublikasida 2015-2018 yillarda mo'ljallangan elektron tijoratni rivojlantirish Konsepsiyasi qabul qilindi, va u o'rta muddatli istiqbolda elektron tijoratni rivojlantirishning asosiy yo'nalishlarini, raqobatli muhitni kengaytirishni, zamonaviy infratuzilmani tashkil qilishni hamda qo'shimcha ish o'rinlari yaratishni, shuningdek, elektron tijorat haqidagi qonunchilikni yanada takomillashtirish shakllarini va yo'llarini belgilab berdi.

O'tkazilgan ijtimoiy so'rov natijasida olingan ma'lumotlardan kelib chiqib, O'zbekistonda elektron tijoratning rivojlanishini to'xtatib turgan bir qator muammolar hamda kamchiliklarni aytib o'tishimiz mumkin:

1. Aholining elektron bitimlar tuzishga unchalik ishonmasligi;
2. Yetkazib berish qiymatining yuqoriligi;
3. Tovar va xizmatlar sifatining pastligi;
4. Firibgarliklardan qo'rqish;
5. Kompyuter savodxonligi darajasining pastligi.

Lekin, shu bilan bir vaqtda aholi o'rtasida o'tkazilgan boshqa ijtimoiy so'rovlar shuni ko'rsatadiki, O'zbekiston aholisi elektron bitimlar amalga oshirishga nisbatan tayyor, biroq ularni amalga oshirish vaqtida elektron tijoratning rivojlanishini sekinlashtiradigan bir qator muammolar mavjuddir.

Raqamli texnologiyalarni rivojlantirish va keng joriy qilish bilan bog'liq muammolardan yana asosiylari quyidagilar hisoblanadi:

- mamlakatning «raqamli suvereniteti»ga tahdid;
- davlatning raqamli iqtisodiyotning transchegaraviy rolini qayta ko'rib chiqish;
- xususiy hayotga daxl qilinishi, fuqarolarni potensial kuzatish imkoniyati;
- ma'lumotlar xavfsizlik darajasining pasayishi;
- past va o'rta malakali ish o'rinlari sonining kamayishi;
- biznes-modellar va o'zaro aloqa sxemalari murakkablik darajasining ortishi;
- iqtisodiyotning barcha sohalarida raqobatning keskin kuchayishi;
- ishlab chiqaruvchilar va iste'molchilar xulq-atvor modellaridagi o'zgarishlar;
- ma'muriy va soliq kodekslarini qayta ko'rib chiqish zaruratidir.

62R.H. Ayupov, G.R. Boltaboeva "Raqamli iqtisodiyot asoslari". Darslik. Toshkent Moliya Instituti. 2020-yil 437-bet.

Raqamlashuv va kiberxavfsizlik tushunchalari doimo yonma-yon tarzda keladi. Chunki barcha tizim va jarayonlarni raqamlashtirish bilan birgalikda, ularning texnik jihatdan mukammal va bexato ishlashini, xavfsizligini ta'minlash muhim hisoblanadi.

Ko'plab rivojlanayotgan mamlakatlar qatorida, O'zbekistonda ham barcha sanoat tarmoqlarini faol ravishda raqamlashtirish jarayonlari tizimli davom ettirilmoqda. 2020 -yilga kelib, O'zbekiston Respublikasi Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi axborot xizmati bergan ma'lumotlarga ko'ra, mamlakatda internetdan foydalanuvchilar soni 22 millionga, shu jumladan, mobil internet foydalanuvchilari 20 million nafarga yetgan⁶³

Raqamli iqtisodiyotga o'tish orqali bevosita ilm-ma'rifatni rivojlantirish imkoniyatlari ortadi. Bugungi tezkor zamonda jahon bo'ylab globallashtirish jarayonlari tobora chuqurlashib borayotgan sharoitda raqamli iqtisodiyot ilg'or davlatlar iqtisodiyotining barcha tarmoqlarida juda keng joriy etilmoqda. Ayrim mamlakatlar ushbu sohaning eng yuqori cho'qqisi hisoblangan sun'iy intellektdan faol foydalanishga o'tgan. Nufuzli xalqaro tashkilotlar olib borgan tahlillar natijalariga ko'ra, raqamli iqtisodiyot yalpi ichki mahsulotni kamida 30 foizga o'stirish, shuning barobarida, xufyona iqtisodiyotga barham berish va korrupsiyani keskin kamaytirish imkonini beradi.⁶⁴

Xulosa o'rnida aytish mumkinki, O'zbekistonda raqamli iqtisodiyotni joriy etish masalasi jadal sur'atlarda rivojlanib bormoqda. Bu o'z o'rnida raqamli iqtisodiyot sharoitida iqtisodiyotni modernizatsiya qilish, xususan korxonalarni transformatsiya qilish vazifasini dolzarbligini yana bir bora tasdiqlaydi.

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63 Ахборот технологиялари ва коммуникацияларини ривожлантириш вазирлиги. (2020). Телекоммуникация тузилмаси. <https://mitc.uz/uz/pages/communication>

64 <https://strategy.uz/index.php?news=787>

Suropov I.M.
IIO FMB 2-son IIB
bo'limi kichik serjanti

TA'LIMDA RAQAMLI TEXNOLOGIYALARDAN FOYDALANISHNING SHART- SHAROITLARI

Annotatsiya. Mazkur maqolada respublikamiz oliy ta'lim tizimida raqamli texnologiyalarni qo'llash, ularning imkoniyatlarini tahlil qilish asosida o'quv jarayonini rivojlantirishning ustuvor yo'nalishlari aniqlangan. Shuningdek, oliy ta'limda raqamli texnologiyalarni joriy etishga ilmiy asoslangan xulosalar tuzishda mavjud bo'lgan amaliyotni o'rganish, tizimlashtirish va umumlashtirish orqali ta'lim sohasida nafaqat muhim o'rin egallashi va qanday shaklda joriy etilishi bo'yicha takliflar keltirilgan.

Kalit so'zlar: raqamli texnologiyalar, axborot-kommunikatsiya texnologiyalari, oliy ta'lim tizimi, zamonaviy ta'lim, raqamli bilimlar, Internet tizimi, masofaviy o'qitish.

Suropov I.M.
junior sergeant of the department
IIO FMB No. 2 IIB

CONDITIONS OF USE OF DIGITAL TECHNOLOGIES IN EDUCATION

Abstract. In this article, the priority directions for the development of the educational process based on the use of digital technologies in the higher education system of our republic and the analysis of their possibilities have been determined. Also, by studying, systematizing and summarizing the existing practice in drawing up scientifically based conclusions on the introduction of digital technologies in higher education.

Key words: digital technologies, information and communication technologies, higher education system, modern education, digital knowledge, Internet system, distance education.

Bugungi kunda raqamli texnologiyalar hayotning barcha sohalarida faol qo'llanilmoqda. iqtisodiyot, bank, xizmat sektori shuningdek ta'lim jarayonini ham tez sur'atlarda rivojlanishiga xizmat qilmoqda. Mamlakatda yashayotgan barcha fuqarolar, jumladan yosh bolalardan tortib nafaqaxo'rlarning ham ongida raqamli texnologiyalar orqali jamiyatdagi barcha muammolarni hal qilish mumkin degan fikrni shakllantirmoqda. Bundan tashqari, ishlab chiqarish va boshqaruv jarayonlarining robotlashtirilishi, masalan bank sektorida, robotlar va ishchilar o'rtasidagi raqobat masalasi ham ko'tarilmoqda.

Raqamlardan foydalanishga asoslangan hamda joriy etilgan texnologiyalarning soʻzsiz foydasi bilan axloqiy, shaxsiy maʼlumotlarni himoya qilish, robotlar va tashkilotlar xodimlari oʻrtasidagi raqobatning huquqiy jihatlari bilan bogʻliq masalalar tobora koʻproq eʼtiborga olinmoqda.

Shu jihatdan, mamlakatimiz Prezidenti Shavkat Mirziyoev taʼkidlaganidek “Taraqqiyotga erishish uchun raqamli bilimlar va zamonaviy axborot texnologiyalarini egallashimiz zarur va shart. Bu bizga yuksalishning eng qisqa yoʻldan borish imkoniyatini beradi. Zero, bugun dunyoda barcha sohalarga axborot texnologiyalari chuqur kirib bormoqda. Albatta, raqamli iqtisodiyotni shakllantirish kerakli infratuzilma, koʻp mablagʻ va mehnat resurslarini talab etishini juda yaxshi bilamiz. Biroq, qanchalik qiyin boʻlmasin, bu ishga bugun kirishmasak, qachon kirishamiz?! Ertaga juda kech boʻladi”.

Davlat va jamiyat boshqaruvi, ijtimoiy sohada ham raqamli texnologiyalarni keng joriy etib, natijadorlikni oshirish, bir soʻz bilan aytganda, odamlar turmushini keskin yaxshilash mumkin. Raqamli iqtisodiyot bu birgina faoliyat turi emas, balki, ishbilarmonlik, sanoat obʼektlari, sifatli taʼlim va xizmatlar deganidir. “Raqamli” atamasi barcha sohalarda axborot texnologiyalaridan faol foydalanishni anglatadi. Agar oddiy iqtisodiyotda moddiy buyumlar asosiy resurs hisoblansa, raqamli iqtisodiyotda bu qayta ishlanadigan hamda uzatiladigan axborot, maʼlumotlar boʻladi. Ularning tahlilidan soʻng esa toʻgʻri boshqarish boʻyicha yechim ishlab chiqiladi.

Mazkur maqolani yozishda respublikamiz oliy taʼlim tizimida raqamli texnologiyalarni qoʻllash, ularning imkoniyatlarini tahlil qilish asosida oʻquv jarayonini rivojlantirishning ustuvor yoʻnalishlarini aniqlash maqsadi qoʻyilgan boʻlib, unda raqamli texnologiyalarning taʼlim sohasida nafaqat muhim oʻrin egallashi va qanday shaklda joriy etilishi boʻyicha tahlillar amalga oshirildi. Tadqiqot usullari sifatida oliy taʼlimda raqamli texnologiyalarni joriy etishga ilmiy asoslangan yondashuvni shakllantirishga tegishli xulosalar tuzishda normativ hujjatlarni, mavjud boʻlgan amaliyotni oʻrganish, tizimlashtirish va umumlashtirishdan foydalanildi.

Internet manbalarida xabar berilishicha, bugungi kunda atigi oʻnga yaqin davlatdagi talabalarning 95 foizida kompyuter bor. Indoneziyada esa 34 foiz yoshning internetdan foydalanishga sharoiti yetarli. Qolgan davlatlarda bu koʻrsatkich ancha past. Shu oʻrinda, Oʻzbekiston Respublikasida ham bu koʻrsatkich yuqori darajada emas. Bunga sabab esa chekka hududlarda Internet infratuzilmasining yaxshi rivojlanmaganligidir. Bu esa ayrim mutaxassislar taxmin qilayotganidek, taʼlim sifati tushib ketishiga sabab boʻlishi mumkin.

Xoʻsh, shu oʻrinda savol tugʻiladi. Biz raqamlashtirishga tayyormizmi? Xavfxatarni oldindan koʻra bilish, uning natija hamda oqibatlarini toʻgʻri baholay olish vaziyatdan talafotsiz chiqib ketishni taʼminlaydi. Dunyoda pandemiya tarqalishi ortidan mamlakatimizda iqtisodiyot, sogʻliqni saqlash, xizmat koʻrsatish sohalari singari taʼlim jarayoni uzluksizligini taʼminlash uchun ham kerakli choralar koʻrildi. Xususan, shu yilning 17 martida Prezidentimizning

“Toshkent shahrida raqamli texnologiyalarni keng joriy etish chora-tadbirlari to‘g‘risida”gi qarori qabul qilinib, mazkur qarorda ta‘limning barcha sohalarini raqamlashtirish bo‘yicha aniq vazifalar belgilab berildi.

Yurtimizdagi nufuzli xususiy o‘quv markazlari ham zamon talabidan kelib chiqqan holda onlayn ta‘limni yo‘lga qo‘ydi. Bu jarayonning o‘zi ham mamlakatimiz ta‘lim tizimida yangi bosqich boshlanganini anglatadi. Sababi, shu kungacha hali hech bir o‘quv markazi bunday tartibga o‘ta olmayotgan edi.

Ta‘lim tizimi bugungi kunda raqamli texnologiyalarga singib ketayotgani shunchaki hayratlanarli yemas, chunki, bugungi kunda axborot makonida taklif etilayotgan ko‘plab narsalarni jiddiy tahlil qilish va pedagogik asoslash uchun asos bo‘lib xizmat qiladi. So‘nggi yillarda ta‘limni «raqamlashtirish» muammolari, uning shakllanishiga ta‘siri bo‘yicha biror-bir davlat loyihasi yoki so‘rovnoma asosida tadqiqotlar o‘tkazilmaganligi ham muhimdir [3]. Shu bilan birga, Internet tizimidagi muhitning yoshlar ongiga ta‘sirining ahamiyati hukumatning, zamonaviy ommaviy axborot vositalarining ma‘ruzalarida, pedagogik jamoatchilik muhokamalarida, magistrant va tadqiqotchilarning, shuningdek deputatlarning izlanishlarida ham ko‘rishimiz mumkin.

Xulosa sifatida aytish mumkinki, bugungi kun auditoriyalari o‘n yil avvalgilaridan juda katta farq qiladi va sinf xonalari kompyuterlar, iPad, planshetlar, smart-doskalar va boshqa turdagi ta‘lim texnologiyalari bilan jihozlangan. Dunyoning boshqa joylarida bo‘lgani kabi O‘zbekistonda ham raqamli avlodning yetti ekranli avlodi - televizor, kompyuter, planshet, tablet, fablet, smartfon va smartsoatlari paydo bo‘lmoqda. Bunday zich raqamli muhitga ega bo‘lish va u bilan doimiy o‘zaro munosabat natijasida bugungi kun talabalarining fikrlashi va axborotlarga ishlov berish jarayonlari oldingi fikr yuritish va axborot jarayonlaridan tubdan farq qilmoqda. Raqamli avlod ota-onalarimiz o‘rgangan uslubda o‘qitilishi mumkin emas va bo‘lmasligi ham kerak. Bu avlodni o‘qitishda qora doska va oq bo‘rdan foydalanish ham mumkin emas. Qora doskani oqiga va bo‘rni markerga o‘zgartirish hech narsani o‘zgartirmaydi, ya‘ni zamonaviy talabalarni bilim olishga va mehnat bozorida muvaffaqiyatga erishish ko‘nikmalarini rivojlantirishga undash usuli bo‘la olmaydi. Zamonaviy axborot-kommunikatsiya texnologiyalariga asoslangan innovatsion ta‘lim texnologiyalari va didaktik modellarni ommaviy va samarali qo‘llash orqali ta‘lim tizimini raqamli avlodga moslashtirish zarur.

Shu bilan birga, ta‘lim jarayonida tadqiqotga asoslangan yondashuvdan faol foydalanish lozim va bu bilan ilmiy tadqiqotda talabalarning ko‘nikmalarini rivojlantirish va IT- kompetensiyaga asoslangan ijodiy qobiliyatlarini va ijodiy fikrlashlarini shakllantirish mumkin. Axborot va kommunikatsiya texnologiyalari – ta‘lim tizimidagi barcha muammolarga yechim emas, balki raqamli avlod uchun ma‘ruzalar va seminarlarni ma‘lumotlarga boy va interaktiv qilib amalga oshirish vositasidir. Shuni ham ta‘kidlab o‘tish lozimki, o‘qituvchilar talabalarning ehtiyojlariga yo‘naltirilgan interfaol o‘quv jarayonida asosiy rol ni saqlab qoladi.

O'qituvchining obro'si va uning faoliyatining samaradorligi faqatgina kurs mazmunidagi bilimlar darajasi va uning pedagogik qobiliyatiga emas, balki muayyan o'quv materialini to'plash, qayta ishlash va o'qitishda o'qituvchining qanchalik zamonaviy axborot-kommunikatsiya texnologiyalarini qo'llash darajasiga bog'liq bo'ladi. Boshqacha qilib aytganda, raqamli asrda ta'lim qayta ko'rib chiqilishi va ta'lim paradigmasi o'zgartirilishi shart, chunki talabalar ortiq an'anaviy uslubda o'qishni xohlamaydilar va o'qituvchilar ham bu kabi odatiy usulda o'qitishni davom ettirishlari kerak emas.

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FIELD TRANSISTOR (FT) CHARACTERISTICS AND DATA CHART

Annotation. Get the characteristics of the field effect transistor. Transistors are one of the most important semiconductor active radio components in electronic circuitry. To obtain tables of output descriptions, the data in the table can be plotted and divided into two areas. This field is called the resistive element of the output characteristics. The field-effect transistor acts as a resistance R , the value of which can be controlled by the gate voltage U_{GS} .

Keywords: Field transistor, resistor, potentiometer, input characteristics, output characteristics, multimeter, oscillograph.

Transistors are one of the most important semiconductor active radio components in electronic circuitry. We distinguish bipolar transistors, in which both electrons and holes participate in current transmission, and field-effect transistors, in which current is transmitted through doped current carriers (electrons and holes). In field-effect (field) transistors, the conductivity of current-carrying channels changes with the application of an electric field, without applying a supply. The element that generates this field is called a lock. The current-carrying electrodes are called starting current and drop current in field-effect transistors. The low-current field-effect transistors used here are symmetrical, so the start-up and drop-out currents are reciprocal [1,2].

Input Descriptions $I_D = f(U_{GS})$. In the experiment, the characteristics of the field-effect transistor, i.e., the drop current I_D as a function of the voltage U_G between the start and drop currents at a constant gate voltage U_{DS} , are written and illustrated in a diagram [3,4].

Equipment	
1 DIN A 4-pin socket plug	576 74
1 set of 10 connecting plugs	501 48
1 STE 100 Ω resistor	577 32
1 STE 1 k Ω resistor	577 44
1 STE 47 k Ω resistor	577 64
1 STE 220 Ω potentiometer	577 90
1 ta STE 1 k Ω potensimetri	577 92
1 STE BF 244 field transistor	578 77
1 1N 4007 STE Si-diode	578 51
1 DC power supply, 0...+ 15 V	21 45

1 x 6V/12V transformer	521 210
1 x 6V/12V transformer	531 120
1 dual-channel oscilloscope	575 211
2 BNC / 4 mm shielded cable	575 24
1 connecting wire, blue, 50 cm	500 422
3 pairs of cables, red and blue, 50 cm	501 45

Table 1 lists the required hardware and equipment.

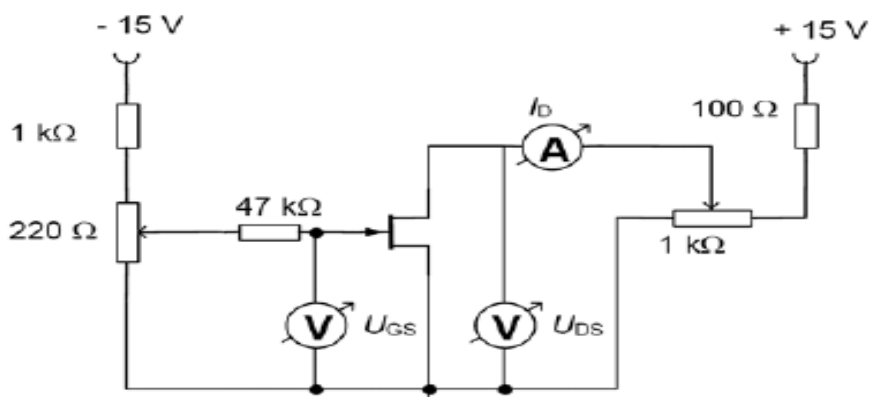
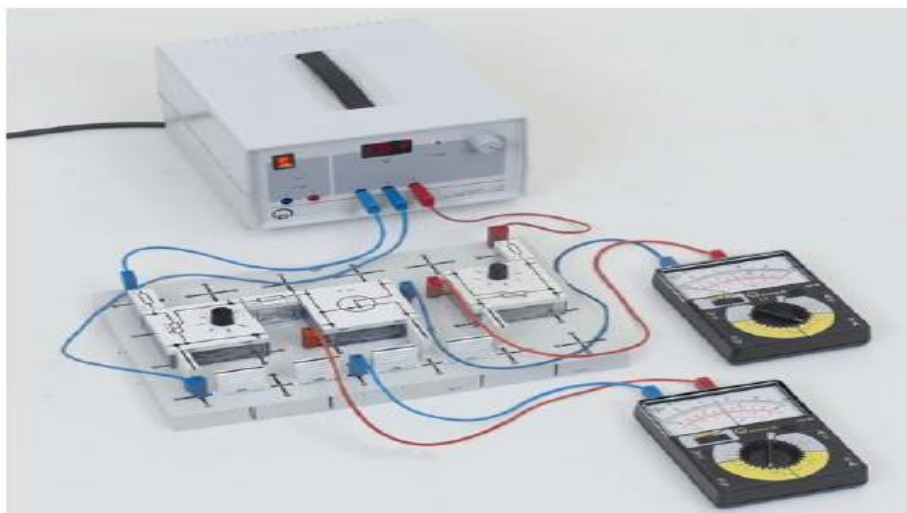


Figure 1 a) Chain of experimental objects. b) electrical circuit.

To conduct the experiment, prepare and assemble the necessary apparatus and equipment shown in Table 1.

- Prepare the experiment as shown in Figure 1. Voltage divider
- Затвор - starting current: 1 kΩ resistor and 220 Ω potentiometer (and in series

zator - 47 kΩ resistor connected to the starting current link), zatvor-starting current: 100 Ω resistor and 1 kΩ potentiometer [5]

- Pay attention to the range of measurements and the polarity of multimeters.

- First, connect a multimeter to measure the U_{GS} gate-start current voltage.

- Set the supply voltage to 15 V
- Adjust the 220 Ω potentiometer so that U_{GS} gate - current start = 0 V
- Now connect a multimeter to measure the U_{DS} drop current - start current
- U_{BE} U_{DS} drop current - start current voltage by adjusting the 1 k Ω potentiometer [6]

Increase gradually starting from 0 V

- Enter U_{DS} voltage and I_D current values in Table 1
- Experiment with U_{GS} zatvor - starting current with other voltages, i.e $U_{GS} = - 0,5$ V va $U_{GS} = - 1,0$ V — For dynamic scaling of output specifications, as shown in the diagram below, conduct an experiment
- Set the supply voltage to 5V.

Note: Because the oscilloscope current is connected to the common ground, the U_{DS} voltage is reversed. Adjust the 1k Ω potentiometer and change the U_{GS} gate-start current. U_{GS} gate - the effect of starting current voltage on the output characteristics can be observed directly [7,8].

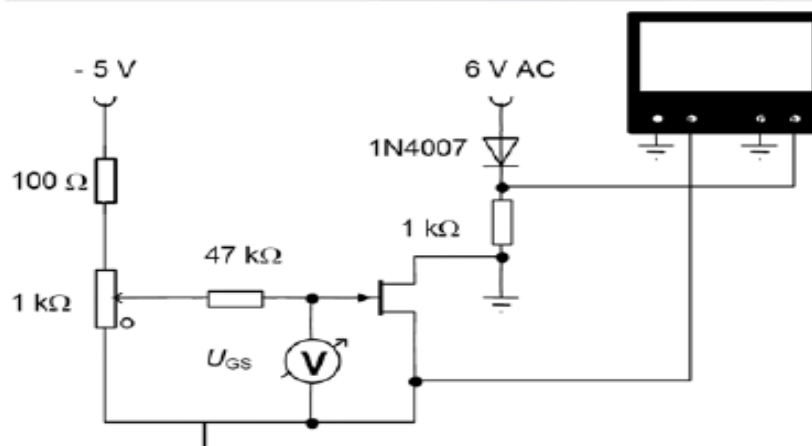


Figure 2. a) Dynamic measurement of output characteristics and b) its scheme.

Measurements are performed to dynamically measure the output characteristics (Figure 2) and the experiment is performed and the necessary actions are performed as shown in the following diagram [9,10].

$U_{GS} = 0 \text{ V}$		$U_{GS} = -0,5 \text{ V}$		$U_{GS} = -1 \text{ V}$	
$\frac{U_{DS}}{\text{V}}$	$\frac{I_D}{\text{mA}}$	$\frac{U_{DS}}{\text{V}}$	$\frac{I_D}{\text{mA}}$	$\frac{U_{DS}}{\text{V}}$	$\frac{I_D}{\text{mA}}$
0	0	0	0	0	0
0.05	0.25	0.05	0.12	0.05	0.02
0.10	0.45	0.10	0.25	0.10	0.04
0.25	1.00	0.25	0.50	0.25	0.06
0.50	1.80	0.50	0.80	0.50	0.08
0.75	2.35	0.75	1.00	0.75	0.09
1.0	2.65	1.0	1.10	1.0	0.10
2.0	3.00	2.0	1.20	2.0	0.12
5.0	3.30	5.0	1.30	5.0	0.14
10.0	3.45	10.0	1.40	10.0	0.15
13.0	3.50	13.0	1.45	13.0	0.16

Table 2: Output Descriptions $I_D = f(U_{DS})$, U_{GS} : konst

Due to field effect transistors, the measured values may differ significantly from the example. Evaluating the results, plotting the data in the table on a diagram [11].

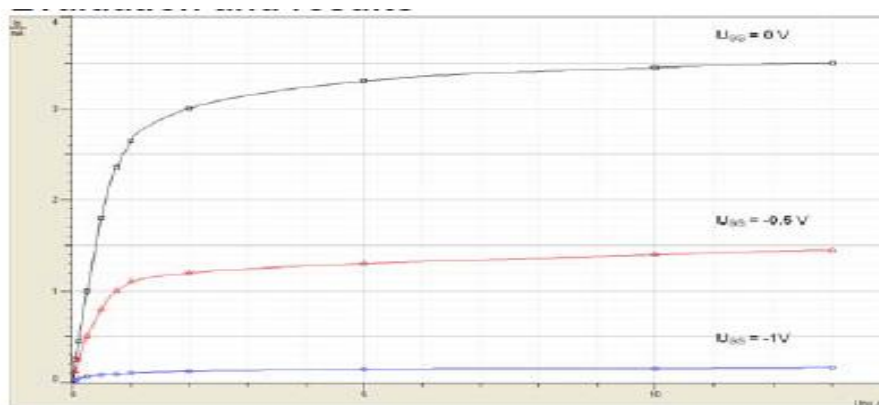


Figure 3. Output Descriptions.

To obtain tables of output descriptions, the data in the table can be plotted on a diagram and divided into two areas:

I_D start current increases linearly in the first part of the table (U_{DS} at lower voltages) U_{DS} drop current - gate voltage. This field is called the resistive element of the output characteristics. The field transistor acts as an ohmic resistance, the value of which can be controlled by the gate voltage U_{GS}

- for higher voltages U_{GS} ($> 1...2$ V) the starting current I_{DS} is almost unchanged, and the drop current I_D does not depend on the starting current voltage. This area is known as the abrupt disconnection area. The drop current I_D is controlled by the gate voltage U_{GS} . In this field, a field-effect transistor can be used as a direct current source [12,13].

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Temirova D.K.
teacher
Chair of "Foreign languages"
Karshi University of Economics and Pedagogy
Uzbekistan

FORMATION OF PROFESSIONAL LEXICAL COMPETENCE IN TEACHING THE RUSSIAN LANGUAGE

Abstract. The article talks about the issues of professional competence formation in teaching Russian to students of non-linguistic universities.

Keywords: professionally oriented competence, personal and professional activities, reading instruction, literature in the specialty, professional activity.

Russian language entry into the global educational space and the related changes in the national education system of our country place high demands on Russian language proficiency in modern conditions and determine the approach to studying the discipline "Russian language in a non-linguistic university". Russian language teaching is aimed at "ensuring that graduates of a none—linguistic university have an active command of the Russian language as a means of forming and formulating their thoughts in the field of everyday communication and in the field of the relevant specialty." [1, p.313]

Based on the socio-political, economic and ethno cultural development of our state, knowledge and study of foreign languages (including Russian) has become a necessary part of each person's personal and professional activities. All this fully applies to the professional education of future specialists, who must be ready to live and work in a rapidly changing world. To do this, they need professionally oriented vocabulary in their specialty. Modernity has changed the requirements for training specialists with knowledge of the Russian language in various professional fields.

In the context of globalization, business ties between specialists from different countries in the field of comprehensive professional cooperation are becoming increasingly important. Such contacts are the guarantee of successful solution urgent problems, rapid professional growth of specialists, improvement and development of their competence level. The transience of changes in the life of the state and the new scale and orientation associated with them, as well as the goals of reforms require a large number of specialists who practically speak one or more foreign languages, and this fact is not in doubt today.

A specialist who speaks several languages occupies a more prestigious position in society. It is becoming increasingly clear that the wealth of society in the conditions of a modern market economy and the development of information technologies is human resources; they are the main strategic factor of economic and social progress. Foreign language education plays an important role in solving

this problem. In the conditions of a modern market economy and the development of information technologies, it is becoming increasingly clear that human resources are becoming the main wealth of society, that they are the basis of a strategic factor of economic and social progress. An important role in solving this problem belongs to foreign language education. In the modern methodology of language teaching, the problem of teaching professional vocabulary is covered quite widely. Most specialists solve this problem within the framework of teaching reading literature in the specialty [2, p.4].

Much attention is paid to the issues of teaching active vocabulary in the specialties of study. Teachers use the opportunity to use a functional approach to the selection and organization of speech material, as well as to the organization of the educational process itself using models of typical situations and types of social contacts, which may be inherent in the professional activities of future specialists. But at the same time, the issues of the formation of professional lexical competence among students have not yet been fully resolved. In this regard, it becomes clear to teachers about the need for further improvement of the methodology for the formation of professional lexical competence among students of higher non-linguistic educational institutions. Russian language teachers at a non-linguistic university had one of the main tasks - to teach students to understand and translate texts in their specialty from Russian (and others) into Uzbek and vice versa.

Teaching students to freely express their thoughts and conduct conversations on professional topics was, until recently, a secondary task. However, the changes and reforms of recent years have led to the understanding that the activities of educational institutions that prepare modern specialists, not limited only to the framework of one country, and there was a need to communicate with colleagues not only from near but far abroad, both in a foreign language and in Russian. Communication in the professional sphere implies not only fluency in any language within the limits of possible social contacts, but also fluency in professional vocabulary, which a student can master in the process of reading literature in the specialty. Russian professional vocabulary is laid down in higher education institutions, therefore, it is in these educational institutions that they should develop and implement the most effective methods in the field of teaching Russian professional vocabulary to students when teaching reading. And it seems that a more effective way to improve the educational process at the university is to optimize the methodology for the formation of professionally oriented lexical competence.

It should also be noted that "professionally oriented lexical competence" is presented to us as students' knowledge of professionally oriented lexical units and the ability to use them in various typical situations of professional communication. In this case, lexical skills are understood as such fixed operations, which correspond to automated actions with lexical material in the process of receptive or reproductive speech. [3, p.151]

Various types of speech activity here should be considered as speech skills, in this case, the speech reading ability. The research conducted in the field of methods of formation of professional lexical competence in Russian when teaching reading should bring us closer to solving the issue of training specialists with a high level of professional culture. The relevance of this area of methodology is due to the fact that the requirements for specialists in technical universities are constantly increasing; the emerging need to improve the methodology of formation of lexical competence in learning the Russian language, including when teaching reading based on existing material, using new directions in the methodology of teaching languages; the need to develop such a set of exercises that would be aimed at increasing the level of mastery of professional vocabulary in teaching reading; the need to develop new methods of teaching vocabulary for special purposes, which would contribute to improving the efficiency of memorizing lexical material by students in the reading process.

Summing up the above, we can say that when working with literature in the specialty, the student's level of memorization of professional vocabulary will increase, and, consequently, the process of forming students' professional lexical competence will be more effective based on how many lexical units students have learned in the process of reading, as well as the time that will be spent on their memorization.

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ETIOLOGICAL FACTORS OF PANCREATIC DISEASES THAT ARE NOW COMMON

Annotation. Timely diagnosis and treatment of pancreatic diseases in children are one of the most difficult problems of clinical gastroenterology. There is a certain tendency towards an increase in the frequency of these diseases and at the same time, their recognition presents significant difficulties and is often accompanied by diagnostic errors. In this regard, timely diagnosis of pancreatic diseases and timely adequate treatment will improve the prognosis of the disease and reduce the incidence of complications [4].

Key words: pancreatic diseases, children, chronic pancreatitis, diagnostics, treatment.

This also applies to the identification of pancreas pathology as the underlying disease, and the differential diagnosis of inflammatory (pancreatitis) and functional changes (pancreatopathy). It is also necessary to take into account the possibility of anomalies and malformations of the pancreas, among which congenital pancreatic hypoplasia (Shwachman syndrome) is more common [1, 2]. The issue of adequate therapy for pancreatic diseases is also quite complicated, which must be differentiated depending on the presence or absence of inflammatory changes, the period of the disease and the nature of the violation of the exocrine function of the pancreas. [4].

Introduction. Currently, the frequency of pancreatitis in children with diseases of the digestive system, according to various authors, ranges from 5 to 25% [1]. A variety of pancreatic diseases occur in children; different age categories have their own specific problems. Thus, young children often suffer from pancreatic insufficiency [5]. Moderate or minor pancreatic insufficiency can accompany many gastroenterological diseases, such as celiac disease, can be a symptom of chronic pancreatitis and is often detected only during a special examination. In school-age children, inflammatory diseases of the pancreas prevail, which are not always diagnosed in a timely manner.

Purpose of the study. to study the clinical features, tactics of examination and treatment of children with pancreatic diseases hospitalized at the State Children's Clinical Hospital.

Materials and methods of research. The anamnesis, features of the clinical picture, diagnosis and treatment of children with pancreatic diseases hospitalized at the State Children's Clinical Hospital over the past 5 years were studied.

Results. Under observation were 259 children aged 4 to 17 years who were diagnosed with pancreatic diseases (acute pancreatitis - 33, chronic pancreatitis - 53, reactive pancreatitis - 22, dyspancreatism - 161 children, respectively). There were 56 children aged 4-6 years, 129 children aged 7-14 years, 64 children aged 15-17 years. There were 147 girls (57%), 112 boys (43%). Children with acute pancreatitis were hospitalized in the surgical department, the remaining patients were treated as inpatients in the pediatric department.

The clinical examination included the study of complaints, medical history and life history, physical examination, general blood and urine tests, coprogram, urine diastasis, biochemical blood test with determination of the level of total protein, amylase, glucose, ALT, AST, thymol test, alkaline phosphatase, bilirubin, ionogram, Ultrasound of the abdominal organs.

Regardless of the form of the disease, all children complained of abdominal pain, which is the most common complaint in diseases of the gastrointestinal tract [4]. On palpation, abdominal pain was detected in 94% of children. Acute pancreatitis was more common in children aged 7-14 years (65%). Children complained of intense abdominal pain, worsening after eating, painful nausea and vomiting, loss of appetite, looseness or retention of stool. The duration of abdominal pain ranged from 1-2 days to 1 month. The diagnosis was verified by a pronounced increase in the level of amylase, diastase and ultrasound dimensions of the pancreas (42%). The children received dietary therapy, infusion therapy, antispasmodics, proteolysis inhibitors, enzymes, and antibiotics as indicated. The duration of hospital treatment was 20.0 ± 5.0 bed days.

Reactive pancreatitis was diagnosed as an acute secondary disease of the pancreas for children aged 3-14 years (65%) against the background of other diseases of the gastrointestinal tract (chronic gastroduodenitis, duodenal ulcer, food allergy). The children received treatment corresponding to the main diagnosis, as well as according to indications - proteolysis inhibitors, antispasmodics, enzyme preparations. The duration of hospital treatment was 12.0 ± 5.0 bed days.

Chronic pancreatitis, characterized by fibrosis of the pancreas, was detected in 79% of cases in children aged 12-17 years. Children complained of recurrent abdominal pain, nausea, occasional vomiting, decreased appetite, and insufficient weight gain. The diagnosis was verified by a persistent increase in the level of amylase, diastase, ultrasound size and echogenicity of the pancreas (52%). In the vast majority of cases, these patients had not previously been diagnosed with acute pancreatitis, although episodes of abdominal pain were observed for 2-4 years. The duration of the last episode of abdominal pain ranged from several days to 2 months. The children received Ovomin, Omez, antispasmodics, and enzymes. The duration of hospital treatment was 17.0 ± 2.5 bed days.

Dyspancreatism (ICD-10 code K 86.9 - unspecified pancreatic disease), according to our observations, was typical for children aged 7-14 years and amounted to 78%. The disease develops against the background of other diseases

of the gastrointestinal tract. The duration of abdominal pain ranged from several days to 1 month. The diagnosis was verified by complaints of decreased appetite, pain in the upper abdomen, which usually have a pulling or aching character, changes in the character of stool, pain on palpation at the points of the pancreas, amylase and diastase levels close to normal, and ultrasound signs of insignificant unstable increase in the size of the pancreas due to edema, without changes in echogenicity. The children received a hypoallergenic diet, antispasmodics, and enzyme preparations. The duration of hospital treatment averaged 17.0 ± 3.0 bed days.

Conclusions. Diseases of the pancreas in children are more common (76.5%) at school age; In most cases (63%), damage to the pancreas in children is functional in nature; Diagnosis of chronic pancreatitis in children presents certain difficulties; in case of recurrent abdominal pain syndrome, it is necessary to conduct an in-depth clinical examination for timely diagnosis.

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Tolibjonov O.O.
assistant
Andijan Institute of Agriculture and Agrotechnologies
Abdullayev B.O.
assistant
Andijan Institute of Agriculture and Agrotechnologies

USEFUL PROPERTIES OF POMEGRANATE AND CULTIVATION TECHNOLOGY

Abstract. Pomegranate cultivation has been developing since ancient times. Pomegranate has very healing properties, even pomegranate peel is considered to have great properties. Pomegranate is loved and eaten all over the world, at the same time, there are many types of pomegranate. In this article, you can find out about the healing properties of pomegranate and what properties it has. At the same time, there is information about the organization of pomegranate gardens.

Key words: Pomegranate (Punisa granatum L.), agrotechnics, Kuva, Namangan, Andijan, Denov, Sarosiy and Kitab (Varg anza) districts.

Pomegranate (*Punisa granatum L.*) is a subtropical fruit plant belonging to the Pomegranate family; 2-10 m tall tree or shrub. The original homeland of pomegranate corresponds to the territory of ancient Persia - present-day Iran. In addition, the studied literature is the home of the pomegranate in Central Asia, Azerbaijan, Iran and Afghanistan; It has been widely written about the occurrence of wild species around the Mediterranean Sea, in the south of Central Asia, in the Crimea, the Caucasus, Iran, Afghanistan, Old Asia and Dagestan. Today, the pomegranate bush is grown in many parts of the world. In particular, it is grown in the dry climate of California and Arizona, in Russia, in the Kandahar region of Afghanistan, in Egypt, Cyprus, Tirinf, Hala Sultan Tekke, and similar countries on the northern coast of Africa. Although pomegranate is not native to Korea and Japan, a lot of work has been done on pomegranate cultivation, and many varieties of pomegranates are grown in these countries. It is widely used to obtain pomegranate-red dye from the pomegranates grown here together with the fruit. In Europe, in the southern parts of Italy, it can be recognized that pomegranate groves have been growing dramatically in recent years. Pomegranate seedlings planted mainly from Azerbaijan are cultivated in the south of France. Currently, pomegranate bushes are grown on 85,000 hectares around the world, and an average of 800,000 tons of pomegranate fruits are grown from them per year. In Uzbekistan, Kuva, Namangan, Andijan, Denov, Sarosiy and Kitab (Varg anza) districts are famous for their excellent quality pomegranates.

Pomegranate has many healing properties. There is a saying in the folk language that "how many seeds are in a pomegranate, it is a cure for as many

pains." This is not said for nothing. Pomegranate fruit contains 80% water, 12-15% sugar, 19% ascorbic acid, pure organic acids - malic, lemon, shovelic acid. There are B group vitamins B1, B2, B6, B9 and carotene, vitamin A, as well as minerals such as K, Mg, Co, Fe, Ca, P. Pomegranate increases blood flow, has the property of rejuvenating the body due to the presence of antioxidant substances. In addition, different medicinal preparations are prepared from the bark of the pomegranate fruit, flowers, leaves and roots of the tree.

Pomegranate contains substances that have a disinfecting effect, which helps to fight against intestinal disorders and diarrhea. Pomegranate is called the fruit of youth. This is due to the large amount of antioxidants in its composition. These substances slow down oxidation processes in the body, in other words, slow down the aging process. Fun fact: green tea has less antioxidants than pomegranates.

Tincture or juice made from the bark is used for respiratory diseases, skin rashes, diarrhea, cough medicine, colon inflammation, nausea, worms. It is used for weight loss, bleeding gums, diarrhea, lowering blood pressure, and treating cancer. That is why it is not for nothing that pomegranate is called a cure for 1000 pains.

We can see that pomegranate fruit is also mentioned in hadiths. Imam Al-Zamakhshari gives the following information in his work "Al, Kashshof". Dates are fruits and food, pomegranates are fruits and medicines. That is why Abu Hanifah, may God have mercy on him, raised the issue that "If a person swears that he will not eat fruit, and eats pomegranates or dates, he is not a swearer."

Taking these into account, this fruit has been venerated and used as an ointment for various ailments since ancient times. Pomegranate fruit is stored in two ways.

Pomegranate storage methods during the growing season. Pomegranate fruit can also be damaged by strong sunlight. In order to prevent this, it is necessary to wrap pomegranate fruits in a paper funnel. It prevents various types of heat and burns. This method is very useful.

Methods of harvesting and storing pomegranate fruit in warehouses. When picking a pomegranate, be careful not to get the thorn into the fruit and damage it. This will cause the quality of the pomegranate to deteriorate later. Put each pomegranate in a white cellophane bag and place the crown side facing the ground. Pomegranates should be placed up to 5 layers. If they go overboard, they crush each other. It is better to build a barn with a straw wall. If it is built in the other way, it will evaporate the air and cause the pomegranate to rot. The bottom of the barn should be plain ground. Doors are placed on all four sides. The doors are open. It ensures the exchange of pomegranate air. In this way, various pathogens (disease-causing microorganisms) cannot harm. If a pathogen (disease-causing microorganism) or a pest falls on a certain pomegranate, it ensures that others are not infected. (UzMTRK is the national television and radio channel of Uzbekistan.)

Another method. Straw is stored in walled warehouses. Pomegranates are spaced 50 cm apart. The cane is laid out and the cane is placed on its side. Pomegranate is damaged both when the weather warms up and when it cools down. The air temperature should be maintained from +1 to +10 C. Then it is well preserved. In such methods, it is stored for a long time until May.

1. In India, paper is shredded, put into cardboard boxes, and then covered with a cellophane bag, and the cardboard mouth is closed. It is stored in warehouses and sent to exports in the same way. This opens the way to cooperation with very distant countries. This method ensures that pomegranate fruits are not damaged and of good quality during export.

2. It is kept in a very special way in Afghanistan. Bake the clay and make it in the shape of a long right angle. Pomegranates are picked inside and clay is baked on top and covered in a ceramic form. Nothing will harm such pomegranates. The quality is also preserved until the clay pot is cracked. This method is a very useful and effective way to store pomegranate fruit for a long time.

Pomegranate seedlings are mainly planted in spring - at the end of March - beginning of April. The depth of the seedling planting pit is 60 cm, and the width is up to 75 cm. Before planting seedlings, the land should be plowed with plantation plows to a depth of 40-50 cm. After the seedlings are planted, it is watered by furrows. 2-3 days after watering, the seedlings are straightened and, if necessary, soil is added to the bottom of them. Pomegranate seedlings are irrigated 10-12 times during the vegetation period in the first year of planting (at the rate of 600-700 m³ per hectare). Pomegranate soil moisture is kept at 75-80% compared to field moisture capacity. The last water is given in the first ten days of October. Watering should be done after each watering as the soil matures. Plant bases and rows are softened. The plant is thinned 4-5 times between rows in the summer. In autumn, pomegranate bushes are made into pillows and buried with soil.

Pomegranate bushes are grown without burial in the southern regions, where there is no severe cold in winter and the temperature does not fall below 15-16°C. During the first two years, the inter-rows are left for black plowing, and in the following years, sidereal crops are planted in the inter-rows.

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STRENGTHENING THE PROCESS OF BORROWING FOREIGN LANGUAGE WORDS

Annotation. This article identifies and discusses such important parameters of the process of mastering foreign words as long-term, gradual, uneven and communicative relevance.

Key words: controversy, completely Russified, foreign dominance, under oppression, feeling of hopelessness, purists of the past, immoderation and irrelevance.

In relation to borrowed words, two extremes often collide: on the one hand, the oversaturation of speech with foreign words, on the other, their denial, the desire to use only the original word. At the same time, in polemics they often forget that many borrowed words have become completely Russified and have no equivalents, being the only name for the corresponding realities (remember Pushkin: But trousers, tailcoat, vest - all these words are not in Russian...). The lack of a scientific approach to the problem of mastering foreign language vocabulary is also manifested in the fact that its use is sometimes considered in isolation from the functional and stylistic consolidation of linguistic means: not taking into account that in some cases turning to foreign language book words is stylistically not justified, while in others it is mandatory, since these words form an integral part of the vocabulary assigned to a certain style serving a particular sphere of communication.

The development of almost every natural language is characterized by the process of borrowing words from other languages. Nevertheless, native speakers often treat this process itself, and especially its results, foreign words, with a fair amount of suspicion. Why take something from others, isn't it possible to get by using the means of your native language? Why do we need an 'image' if there is an 'image', why a 'summit' if we can say 'summit meeting'? Why is the now fashionable 'remake' in cinematography better than the usual 'remake'? And is 'consensus' stronger than 'agreement'?

Often a foreign word is associated with something ideologically or spiritually alien, even hostile, as was the case, for example, in the late 40s during the fight against sycophancy to the West. But there are other times in the history of society when a more tolerant attitude towards external influences and, in particular, towards the borrowing of new foreign words prevails. Such a time can be considered the end of the last century and the beginning of the current one, when such political, economic and cultural conditions arose and exist.

In Russian speech, first in the professional environment, and then outside it, terms related to computer technology appeared: the word computer itself, as

well as display, file, interface, printer and much more, names of sports (new or renamed): windsurfing, skateboarding, arm wrestling, kickboxing, freestyle, etc.

Everyone has heard of numerous economic and financial terms such as barter, broker, voucher, dealer, distributor, investment, marketing, monetarism, futures loans, etc. Many of them were borrowed a long time ago, but were circulated mainly among specialists. However, as the phenomena denoted by these terms became acutely relevant for the whole society, highly specialized terminology went beyond the professional environment and began to be used in the press, in radio and television programs, in the public speech of politicians and businessmen.

Active borrowing of new and expansion of the scope of use of previously borrowed foreign language vocabulary occurs in less specialized areas of human activity: it is enough to recall such widely used words as image, presentation, nomination, sponsor, video, show (and their derivatives: video clip, video equipment, video cassette, video salon; show business, talk show, showman), thriller, hit, disco, disc jockey and many others.

Among the reasons that contribute to such a massive and relatively easy penetration of foreign language neologisms into our language, socio-psychological reasons occupy a certain place. Many native speakers consider a foreign word to be more prestigious than the corresponding word in their native language: the presentation looks more respectable than the usual Russian presentation, exclusive is better than exceptional, top models are more chic than the best models. True, it must be said that there is some semantic demarcation between one's own and someone else's words: a presentation is a ceremonial presentation of a film, book, etc.; Most often, an interview is exclusive, and it is apparently impossible to say about someone (without the intention of joking) "exclusive stupid" or exclaim: "What an exclusive cheese!"

The greater social prestige of a foreign language word, felt by many, in comparison with the original one, sometimes causes a phenomenon that can be called an increase in rank: a word that in the source language names an ordinary, ordinary object, in the borrowing language is attached to the object, in one sense or another more significant, more prestigious. Thus, in French the word boutique means 'shop, small store', and having been borrowed by our fashion designers and businessmen, it acquired the meaning 'fashion clothing store': About the same thing happens with the English word shop: in Russian the name 'shop' is not applicable to any store, but only to one that sells prestigious goods, mainly Western-made (no one would call an ordinary grocery store a "shop"). The English hospice 'shelter, almshouse' turns into a hospice - an expensive hospital for hopeless patients with maximum comfort, facilitating the process of dying. And even the Italian puttana, once in the Russian language, does not mean any kind (as in Italian), but mainly currency.

How to evaluate the current intensification of the borrowing process? How should we react to the fact that foreign words often displace native Russian words from use?

Before answering these questions, let's look at which areas of communication are most susceptible to foreign language influence.

Most often, new foreign words can be found in the press and in other media, for example, on television, in programs dedicated to economic or political life, fashion, music, cinema, sports. In oral public speech, for example, in radio and television interviews on everyday topics, in speeches at parliamentary meetings, the use of foreign words-neologisms is often accompanied by clauses such as: so-called monetarism, as is now commonly expressed, the electorate, etc., since, focusing on mass listener, the speaker feels a connection with him more directly and acutely than the author of a newspaper or magazine article. Some of the borrowings are used not only in their direct meanings, but also figuratively, metaphorically: television marathon, economic resuscitation, biased press, political elite, rating of lies, etc., and this phenomenon is also characteristic mainly of the language of the media.

Everyday speech does not experience any noticeable influx of foreign words, and this is understandable: being for the most part bookish or special words, borrowings are used mainly in the genres of book speech, in texts of a journalistic, scientific and technical nature.

There are also social differences in attitudes towards foreign words, especially new ones: people of the older generation are, on average, less tolerant of foreign vocabulary than young people; with an increase in the level of education, borrowing becomes easier; Representatives of technical professions pay less attention to what word they see or hear in the text - Russian or foreign - than representatives of humanitarian professions. I emphasize: this is on average, in general, but a more complex attitude towards foreign words is possible.

Now let's try to answer the questions posed above.

Regarding the intensification of the borrowing process: there is no need to panic. They often speak and write about a foreign language flood that is flooding the Russian language, about the dominance of foreigners, under the yoke of which it is perishing, and such statements give rise to a feeling of hopelessness. But we must not forget that language is a self-developing mechanism, the action of which is regulated by certain laws. In particular, language can clean itself, get rid of what is functionally redundant and unnecessary.

This also happens with foreign words. In any case, the history of the Russian language testifies to precisely this property. Who now knows the words *proprietor* (owner), *indigestia* (indigestion), *amantha* (beloved), *supirant* (admirer, admirer), *repantir* (women's hairstyle with curls hanging on both sides of the face), *suspicia* (suspicion) and many others that were used in the Russian language of the 19th century? It is unlikely that decrees were issued ordering these words to be expelled from Russian speech - they are outdated, replaced by themselves as

something unnecessary. On the other hand, how much did the purists of the past achieve by calling for the prohibition of the use of words such as egoism (instead, 'selfishness' was proposed), quotation (suggested as synonymous replacements for 'link, excerpt'), posture (instead, 'body position' was invented), compromise (instead it was recommended to say: 'present in an unfavorable way'), ignore (V.I. Dal believed that this word was impermissible), etc.?

Of course, immoderate and inappropriate use of foreign words is unacceptable, but immoderation and inappropriateness are harmful when using any word. Of course, neither linguistic scientists, nor journalists and writers should sit idly by, dispassionately watching how their native speech is clogged with foreign language. But nothing can be done here with bans. We need systematic and painstaking scientific and educational work, the ultimate goal of which is to cultivate good linguistic taste. And good taste is the main condition for the correct and appropriate use of linguistic means, both foreign, borrowed, and our own, original ones.

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ROBOT KO'Z ANALIZATORI YORDAMIDA YUZ TASVIRNI TANIB OLISH VA IDENTIFIKASIYALASH USULLARINI TANLASH VA TAHLIL ETISH

Annotatsiya. Ushbu maqolada hozirgi vaqtda videotasvir oqimlarini identifikatsiyalash masalarini echishda turli hil amaliy dasturlar majmuasi mavjud bo'lib, ulardan biometric tizim muommolarini hal qilishda robot ko'z analizatori tizimidan olingan rangli videotasvir oqimlarining yuz tasvirini identifikatsiyalashning dasturiy ta'minot tuzilmasi tahlili keltirilgan.

Tayanch suzlar: raqamli tasvir, Open MP texnologiyasi, intensivlik, piksel, vektorlashtirish, ekstremal nuqtalar, shaxs yuzi tasviri.

*Turapov U.U.
Muldanov F.R.
Jizzakh Polytechnic Institute*

SELECTION AND ANALYSIS OF FACE IMAGE RECOGNITION AND IDENTIFICATION METHODS USING ROBOT EYE ANALYZER

Abstract. This article currently presents a variety of practical programs for solving problems of identifying video image streams, including analysis of the structure of software for identifying facial images in streams of color video images received from a robot eye analyzer system and presenting a solution to problems of a biometric system.

Key words: digital image, Open MP technology, intensity, pixel, vectorization, extreme points, human face image.

Pobot ko'z analizatori tizimi olingan rangli videotasvir oqimlarini identifikatsiyalash usullarining tahlili, rangli videotasvirdan olingan ma'lumotlarni identifikatsiyalashning o'ziga xos xususiyatlari, hamda rangli videotasvir oqimi ob'ektlarini identifikatsiyalashning matematik, dasturiy va texnik ta'minotini yaratishning umumiy tushunchalarini o'z ichiga oladi.

Video oqimlardagi olingan ma'lumotlar asosida shaxs yuzni ma'lumotlar bazasi (MB)dagi yuz tasvirlar bilan aniqlash va tanib olish, hamda solishtirish mezonlari, algoritmlari va dasturiy ta'minotini ishlab chiqishdan iborat. Ushbu maqsadga erishish uchun quyidagilar:

- mavjud biometrik tizimlarning tahlili;
- tanib olish mezonlarining tasnifini ochib berish;

- yuzni tanib olishda asosiy farqlanuvchi belgilarni aniqlash;
- yuzni identifikatsiyalash va tanib olish tizimini loyihalash.

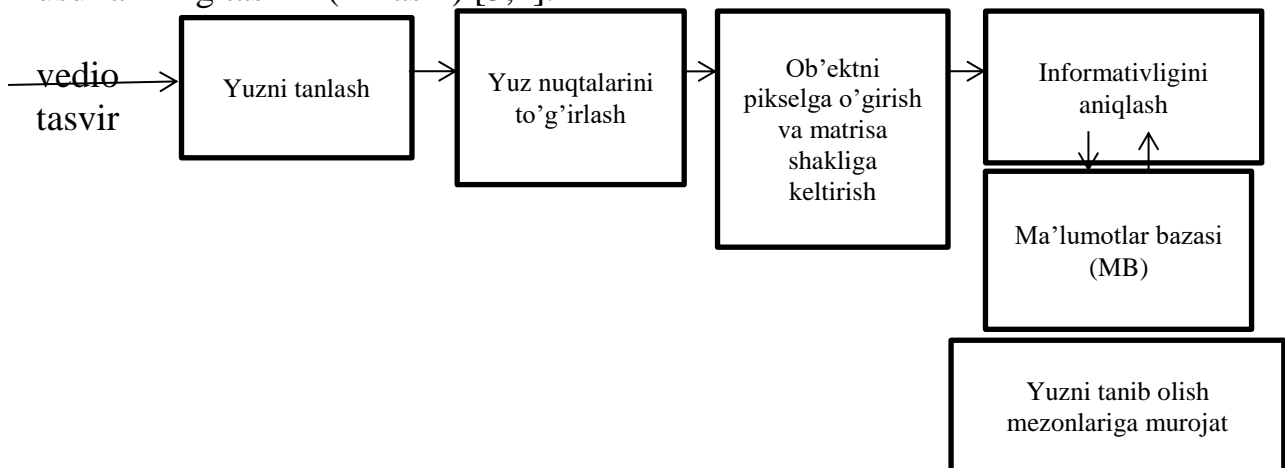
Videotasvirdagi shaxsning yuzini tanib olish jarayoni odatda raqamli tasvir yoki xizmat qiluvchi turli xil usullar to'plamidan iborat. Bu jarayon quyidagicha ko'rinadi: tizim kameradan tasvirni olgandan so'ng, yuz chegaralari algoritmlar (aniqlash bosqichi) yordamida aniqlanadi. Keyin tanib olish bosqichiga keladi, bunda yuz o'zgartiriladi MBsidagi tasvir va qidirilayotgan tasvir pikselga o'giriladi va matritsa shakliga keltiriladi, natijada 2 ta tasvir koeffitsient korrelyatsiya usulida ustun yoki satrlar hisoblab chiqiladi va to'g'ridan-to'g'ri ma'lumotlar bazasida saqlangan standart yuzlari bilan taqqoslanadi.

Taqqoslashning ikki yakuniy bosqichi mavjud bo'lib:

1. «1:1» sxemasi bo'yicha namunalarni solishtirish. Shaxsni aniqlash uchun tizim biometrik namunani ma'lumotlar bazasida saqlangan bitta biometrik shablon bilan solishtiradi va «U shablon bilan solishtirilgan odammi?» degan savolga javob beradi.

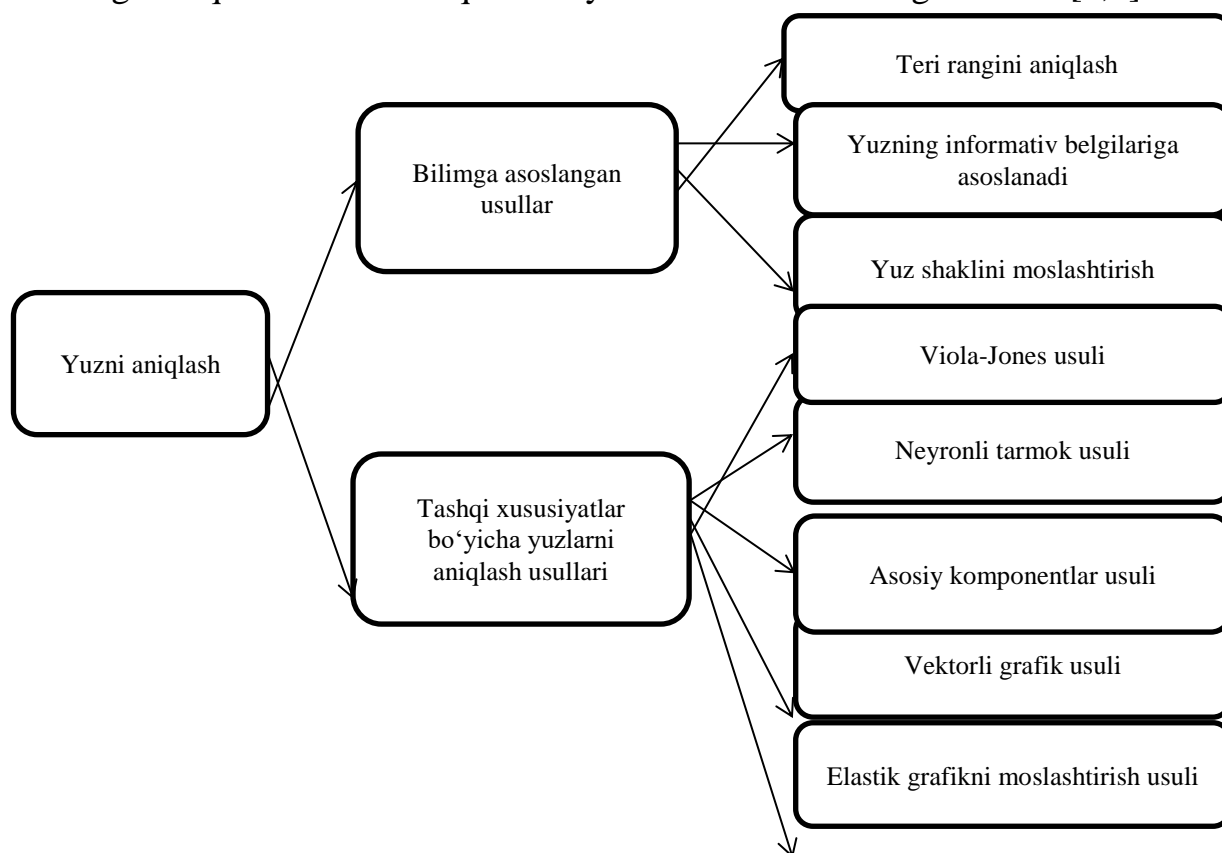
2. Identifikatsiya: namunalarni «1:N» sxema bo'yicha solishtirish. Shaxsni aniqlash uchun tizim biometrik namunani ma'lumotlar bazasida saqlangan barcha yuz shablonlari bilan solishtiradi va «bu kim?» degan savolga javob beradi.

Video tasvirlardan olingan raqamli ma'lumotlar ko'rinishidagi tasvir kompyuterga uzatiladi, u yuz sohasining joylashishini uning asosiy xususiyatlariga (ko'zlar, og'iz, qoshlar, burun va boshqalar) ko'ra aniqlaydigan maxsus algoritmi (1-rasm) va dasturiy ta'minoti yaratilgan. Dasturni rivojlantirish va takomillashtirish maqsadida tasvirlarni aniqlash, tanib olish va identifikatsiyalashda lokal mezondan biri korrelyatsiya koeffitsientni asosida tasvirlarni «1:N» sxema bo'yicha taqqoslash va ob'ektini qaysi sinfga tegishli ekanligini aniqlab berish algoritmi va dasturi yaratildi [1,2]. Bunday usullar ko'p, ammo ularning barchasini ikkita toifaga bo'lish mumkin: inson tajribasiga va malakali bilimiga asoslangan usullar va tashqi xususiyatlar bo'yicha yuzni aniqlash usullari (test tasvirlarini qayta ishlash orqali tizimni o'qitish bosqichini amalga oshirish kerak bo'lgan usullar). Ushbu aniqlash usullarining tasnifi (2- rasm) [3,4].



1- rasm. Yuzni tanib olishning umumiy sxemasi.

Bilimga asoslangan usullar, uning xususiyatlari, shakli, tuzilishi yoki terining rangi haqidagi ma'lumotlardan foydalanadi. Ushbu usullarda ma'lum qoidalar to'plami (yuzning xususiyatlari) ajralib turadi, ular inson yuzi deb hisoblanishi uchun tanlangan shablon ramkaga mos kelishi kerak. Barcha qoidalar, shaxs yuzining ma'lum belgilar holati yoki solishtirish jarayonida shu belgilar holati e'tiborga olinadi, shaxs boshqaradigan barcha rasmiylashtirilgan bilim e'tiborga olinadi. Misol uchun, asosiy qoidalar: ko'z, burun va og'izning joylari yuzning qolgan qismiga nisbatan yorqinligi bilan farqlanadi; yuzdagi ko'zlar har doim bir-biriga nisbatan nosimmetrik tarzda joylashgan bo'ladi, natijada shunga o'xshash xususiyatlarga asoslanib, algoritmlar tuziladi, ular bajarish paytida tasvirdagi qoidalar mavjudligini tekshiradi [5]. Bir xil usullar guruhiga umumiyroq usul - shablon bilan solishtirish usuli kiradi. Ushbu usulda, yuzning alohida joylarining xususiyatlarini tavsiflash orqali ularning berilgan nisbiy holati yuz standartini (shablonni) aniqlaydi, u bilan asl tasvir keyinchalik solishtiriladi. Bilimga asoslangan usullar keng qo'llaniladi va tizim yaxshi ishlaydi, lekin ular faqat yaxshi piksellar soniga ega bo'lgan sharoitlarda shovqinsiz va oddiy fonga ega tasvirlarda yaxshi ishlaydi. Video oqimidagi kadrlarda "yuzlarning turli burchaklari va burilishi" holatlari ko'rinishidao'rnatilgan kameralarda ma'lumotlar olinadi va yorug'likni mosligi va fondagixalaqit beruvchi tashqi xususiyat omillar ham hisobga olinadi [6,7].



2- rasm. Yuzni aniqlash usullari tasnifi

Tashqi xususiyatlar bo'yicha yuzlarni aniqlash usullari muammosiga boshqa tomondan yondashiladi, ular inson miyasida sodir bo'ladigan jarayonlarni aniq rasmiylashtirishga harakat qilmaydi, balki matematik statistika usullaridan foydalangan holda yuz tasvirining farqlanuvchi naqshlari va xususiyatlarini bilvosita ochib berishga harakat qiladi. Bunday usullarda yuzni aniqlashda ma'lum belgilarni to'rtburchakka olinib, to'rtburchaklarni sanab o'tish orqali amalga oshiriladi, natijada ko'rilayotgan tasvir tasvir qaysi sinfga mansubligini aniqlanadi [8]. Bunday katta hajmdagi usul ortiqcha va yuqori hisoblash murakkabligiga ega. Hisob-kitoblar sonini kamaytirish uchun va yuzlarni topish jarayonini tezlashtirish uchun mualliflar ko'rib chiqilgan qismlar sonini kamaytirish uchun turli xil qo'shimcha usullardan foydalangan [9,10].

Quyida yuzni aniqlashning eng dolzarb va diqqatga sazovor usullaridan bir nechtasi muhokama qilib o'tamiz:

Viola - Jones ob'ektni aniqlash usuli (Viola-Jones object detection). Usul 2001 yilda Pol Viola va Maykl Jones tomonidan taklif qilingan va birinchi usul edi. Usul real vaqtda tasvirni qayta ishlashda yuqori natijalarga erishgan. Usul ko'plab ilovalarga ega, jumladan, kompyuterni ko'rish kutubxonasining bir qismi sifatida Open CV (cvHaarDetectObjects funksiyasi). Ushbu usul 2-bo'limda batafsil muhokama qilinadi. Ushbu usulning afzalliklari:

- ishning foydalanishi yuqori tezligi bilan ajralib turadi (kaskad tasniflagichidan foydalanish tufayli);
- 30 dan ortiq to'rtburchakga olingan yuz belgilari asosida aniqlash, yuqori aniqligi daraja olib keladi.

Kamchiliklari:

- tizimni o'rganishga uzoq vaqt ketadi. Algoritm ko'p sonli test tasvirini tahlil qilishi kerak;
- tizimda yuzning holatida cheklovlar mavjud.

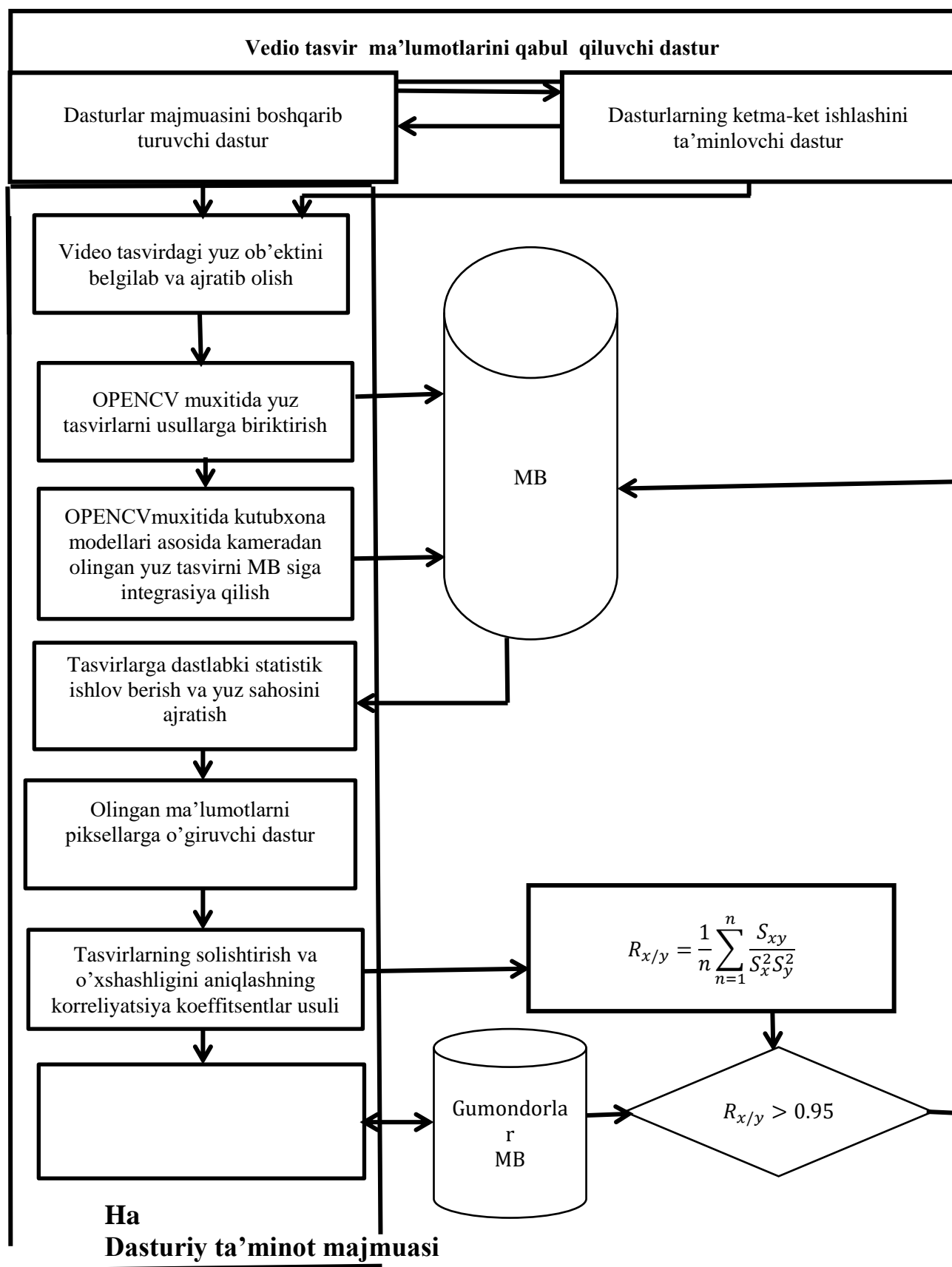
Elastik grafikni moslashtirish usuli (Elastic graph matching). Bu usul 2D modellashtirishga tegishli bo'lib, uning mohiyati yuzlarni tavsiflovchi grafiklar asosida taqqoslash natijasida aniqlash yotadi (yuz burchaklar va qirralarning individual joylashuvi bilan panjara sifatida tasvirlangan). Tanib olish tartibi quyidagicha - asosiy tanib olish belgisini tavsiflovchi mos yozuvlar grafigi tuziladi va antropometrik nuqtalarga nisbatan yuz tuzilishi ta'sirida deformatsiyalanadi: ko'zlar, quloqlar, burun chizig'i, lablar kengligi va boshqalar orasidagi masofalar muhim jihatlari e'tiborga olinadi. Antropometrik nuqtalar qanchalik ko'p ishlatilsa, tanib olish tizimi shunchalik aniq bo'lib boraveradi, lekin bitta ob'ektni qayta ishlash vaqti ham sezilarli darajada oshib boradi [11]. Usulning kamchiliklari:

- tanib olish algoritmining murakkabligi sezilarli hisoblash quvvatidan foydalanish zarurligiga olib keladi;
- ma'lumotlar bazasiga yangi shablonlarni kiritishning murakkab tartibi;
- analitik tizim tezligi ma'lumotlar bazalari hajmiga teskari proporsionalligidir.

Yashirin Markov modellari, bu usul shablonlar bazasi bilan ob'ektni statistik taqqoslashga asoslangan. Yashirin Markov modellari signallarning statistik xususiyatlaridan foydalanadi va ularning fazoviy xususiyatlarini ham hisobga oladi. Model elementlari: holatlarning dastlabki ehtimoli, kuzatilgan holatlar to'plami, yashirin holatlar to'plami, o'tish ehtimoli bo'lgan matritsasi yaratiladi. Matritsaning har bir elementi o'zining Markov modeliga ega. Shaxsni tanib olish jarayonida barcha holatlar to'plami yaratiladi [12]. Markov modellari tekshirilishida va ob'ekt bo'yicha kuzatishlar ketma-ketligi mos keladigan model tomonidan yaratilishida eng yuqori kuzatilgan ehtimoli saralab topiladi

Kamchiliklari:

- javob tezligi pastligi;
- narxi past diskriminatsiya va sub-optimal algoritim o'rganish;



3-rasm. Robot ko'z analizatori tizimining funksional sxemasi.

Asosiy komponentlar tahlili. Bu usulning maqsadi ma'lumotni sezilarli darajada yo'qotmaslik bo'lib va ko'plab yuzlarga tegishli «odatiy» tasvirlarning eng yaxshi tasvirlaydigan xususiyatlar maydonini hisobga olib qisqartirib borishdan iborat. Yuzni tanib olish muammosida u asosan yuzni past o'lchamli vektor sifatida ko'rsatish uchun ishlatiladi, keyin esa ma'lumotlar bazasidagi mos yozuvlar vektorlari bilan taqqoslanadi. O'quv namunasida bir marta olingan xos vektorlar to'plami, o'z vektorlarining salmoqli kombinatsiyasi bilan ifodalanishi mumkin bo'lgan yuz tasvirlari olinib, qolgan qismini kodlash uchun ishlatiladi, bu keyinchalik ma'lumotlar bazasida koeffitsientlar vektori sifatida saqlanadi, bu esa bir vaqtning o'zida ma'lumotlar bazasida qidiruv kaliti bo'lib xizmat qiladi. Asosiy komponentalar usuli ilovalarida o'zining yaxshi tomoni isbotlagan. Biroq, yuzning tasvirida yuz ifodasi yoki yoritilishida sezilarli o'zgarishlar bo'lsa, usulning samaradorligi sezilarli darajada pasayadi. Asosiy komponent usuli pastki bo'shliqni yuz sinflari orasidagi farqlash uchun emas, balki kirish ma'lumotlar to'plamini maksimal darajada yaqinlashtirish maqsadida tanlaydi.

Vektorli grafik usuli - bu o'xshash boshqariladigan o'rganish algoritmlari to'plami, vazifalari uchun ishlatiladi, regressiya tenglamasi tuzilib taxlil etiladi. Yordamchi vektorlar to'plamining mohiyati yuzlar tasvirlarida asosiy belgilar sinfini tanlanadi va tasvirlardan ajratib turuvchi xususiyat fazosining giperplanni topishdan iborat. Ikkita sinfni ajratib turadigan, muhim bo'lgan giperplanlar orasidan har bir sinfdan masofa maksimal bo'lgan giperplanni tanlab olinadi.

Ushbu usulning afzalliklari:

- qayta tayyorlashga yuqori qarshilik;
- neyron tarmoqlarga nisbatan yuqori tezlik;
- shovqinga sezgirlikni kamaytirish qobiliyati aniqligi.

Kamchiliklari:

- usulning aniqligi ko'plab usullarga qaraganda past.

DMning asosiy qismlari quyidagilardan iborat:

- olingan ma'lumotlarni matritsa shakliga o'girib olish va matritsa ustida statistik qayta ishlash va identifikatsiyalash jarayonini qo'llash;
- qidirilayotgan tasvirni ma'lumotlar bazasidan aniqlash, tanib olish va identifikatsiyalashda informativ belgilar majmuasini shakllantirishda mezonlar tanlovi amalga oshirish;
- tasvirlarni aniqlash, tanib olish va identifikatsiyalashda lokal mezonlar tanlovini tashkil etish;
- natijalar tahlili va joriy e'tilishi.

Mualliflar tomonidan yaratilgan dasturiy majmuaning tarkibidagi dasturlar va videotexnologiyalardan olingan yuz tasvirni MBdagi mavjud tasvirlar bilan solishtirish va tanib olish mezoni sifatida koeffitsient korrelyatsiya usulini qo'llash algoritmining blok-sxemasi(3-rasm) keltirilgan.

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HEALTH-SAVING TECHNOLOGIES IN INCLUSIVE AND DISTANCE EDUCATION WHEN TEACHING PEOPLE WITH DISABILITIES

Annotation. The article explores the issue of providing education for individuals with disabilities, along with the potential and available resources of distance learning. It identifies distance learning as the most efficient and effective method for educating such individuals, given their unique circumstances, in a contemporary educational setting, utilising cutting-edge information and communication technologies. Significant attention is paid to the topic of inclusive education, including its basic ideas, the chances and prospects it creates for people with disabilities or special needs, and how it uses health-benefiting technology in modern psychological and educational practice.

Key words: Information and communication technologies, electronic educational resources, distance education, health-saving educational technologies, information and educational environment, innovative educational procedures, inclusive practice, electronic, pedagogy.

Pedagogical innovations encompass the entire realm of education, beginning with the preparation of a teacher who serves as an expert, consultant, designer, and technologist of innovative directions and concluding with the preparation of the educational process's actual organizer. They involve a personal and creative process for organizing the educational process.

Due to the need to adapt to particular market conditions, the emergence and growth of the market for educational resources and the establishment of an efficient educational system have presented the educational structures of Russia and higher educational institutions that offer postgraduate and higher professional education in particular with a number of problems of theoretical and practical significance. By analysing the characteristics of contemporary socioeconomic progress linked to informatization, several deductions can be made concerning the trajectory of growth in the domains comprising the Russian educational services market [8]. One of the foremost challenges in contemporary education pertains to its development process, which necessitates universal accessibility and guarantees educational opportunities for individuals with special needs (henceforth referred to as "inclusive education"). This imperative is founded upon the subsequent fundamental tenets:

An individual's worth is not contingent upon their accomplishments and capabilities; each person is capable of emotion and thought; each individual has the right to express themselves and be heard; All individuals are interdependent; genuine education is only possible within the context of genuine relationships; all individuals require the friendship and support of their peers; for all learners,

progress is more likely to be made in areas where they excel than in areas where they fall short; UNESCO additionally introduced the concept of "inclusive education" alongside the term "integrated education." The notion of inclusive education, which integrates general and special education in an organic manner to facilitate social adjustment for children experiencing "social dislocations" caused by genetic and biological developmental disorders ("social dislocations"), originated with Lev Vygotsky in the 1930s. Vygotsky was among the first to demonstrate the necessity of this approach for the effective implementation of social compensation for a child's physical defecation. According to Tony Booth, a British researcher specialising in inclusive education, "integration and inclusion are two stages of the same process: complete inclusion in the educational system follows the establishment of a simple presence" [2, p. 102].

Alternating the term "integrative" with "inclusive" signifies a shift in comprehension regarding this process as well as the attainment of an additional level at which students are not merely unified into a singular entity (from "to integrate"—to unite into a singular entity), but are also fully integrated into society (from "to include"—to support, incorporate, or possess in its composition).

Humanistic ideas say that each person is unique and special, that everyone has the right to a good life no matter what their physical condition is, and that everyone has the right to have all the values and achievements of modern society. These ideas led to the idea of inclusive education.

The global community's stance on this matter is as follows: inclusive education serves as a preliminary measure towards the ultimate objective of establishing an all-encompassing society wherein every child and adult can participate and make contributions to society, irrespective of their abilities, gender, age, ethnic origin, presence or absence of developmental disorders, or HIV infection. Diversity is esteemed and appreciated in such a society, and efforts are made to actively oppose prejudice and discrimination in politics, daily life, and institutional activities [7].

Presently, it is critical to emphasize that inclusive practice has the potential to serve as a "crystallization point" for numerous innovative processes in education, thereby achieving the following contemporary objectives:

- 1) provision of continuing education;
- 2) implementation of a competency-based paradigm [10].

Global transformations of this magnitude are unattainable without performing a thorough system analysis, selecting a suitable methodology, and devising an appropriate model to guide the implementation of the proposed innovation. Diverse sectors of the Russian economy are implementing the international reformation effort known as informatization, with differing levels of achievement. An effort is being made to establish a unified information and pedagogical space in Russia as one of the development objectives. The influence of contemporary

information technologies on higher professional education is substantial. As a result of scientific and technological advancements that stimulate the globalisation of the economy, the information society [4] demands the immediate acquisition and continuous refining of knowledge.

Under the conditions of education's informatization, the content, methodologies, and organisational structures of academic endeavours must be drastically altered. When a computer is incorporated into the pedagogical system as a technical tool for instruction, it necessitates the complete adaptation of all other components to the computer. This adaptation would result in the development of an entirely new and flawless pedagogical technology that capitalises on the computer's didactic capabilities. By distinguishing the challenges that emerge in the context of education's informatization from those of conventional pedagogy and emphasising their significance, scientists conclude that they require a distinct subfield within pedagogy. Particularly, A.A. Andreev emphasises that a new pedagogy, which the author conventionally advocates to name "e-pedagogy" [1], is required for the effective planning and implementation of educational processes in information and educational environments. Inclusive education aims to establish a pedagogical approach that is centred around individuals, acknowledging their unique qualities and diverse learning requirements. The goal of inclusive education is to develop a more adaptable method of instruction and learning that can accommodate students with varying learning requirements. All individuals will benefit if teaching and learning become more efficient as a result of the changes introduced by inclusive education, not just those with special needs.

Inclusion pertains to the endeavour of augmenting the level of individual student engagement in both the scholastic and social spheres of an establishment while concurrently diminishing the extent to which students are isolated in all institution-wide activities. Inclusion necessitates a comprehensive restructuring of an educational institution's culture, regulations, internal norms, and practices to accommodate the diverse array of students, each possessing distinct personal attributes and requirements. Instead of being a problem requiring resolution, the diversity and distinction among students constitute the most valuable asset that ought to be utilised in the educational process.

The World Health Organisation estimates that approximately one billion individuals are afflicted with disabilities worldwide. Educational institutions and universities in the majority of Western nations accommodate them similarly to those that accommodate able-bodied individuals. It should be acknowledged that inclusion is still an endeavour in our country. Nearly 10% of the population of our nation is disabled at present. Each year, the development of specialised programmes is required for 120,000 students. As of now, a mere 30,000 students with disabilities are enrolled in domestic universities, representing a mere 4% of the overall capacity [10]. An essential objective of health-saving pedagogy is to

identify work and leisure schedules for students that prevent overwork, postpone fatigue, and guarantee optimal performance over extended study periods. This undertaking assumes heightened significance when contemporary methodologies for addressing the issue of inclusive education and distance learning for individuals with disabilities are considered. It has been established that homeostasis, the body's capacity to maintain a constant internal milieu in defiance of external alterations, is the physiological foundation of health [15]. The body is able to maintain homeostasis through interactions with the environment due to the adaptation process. An inequilibrium among the bodily systems and processes inevitably results in a breach of the internal environment's parameters: the body becomes ill. In this particular scenario, the state of discomfort will endure for the duration of the process of restoring the parameters that regulate the body's normal condition. And if the body is unable to attain the previous parameters required to maintain equilibrium in its internal environment, it may attempt to do so with alternative parameters that have been altered. Concurrently, the overall state of the body may deviate from the expected norm, materialising as a pathological condition. Consequently, adaptation processes encompass not only the optimisation of bodily functions but also the maintenance of equilibrium within the "organism-environment" system. Whenever substantial changes occur in the "organism-environment" system, the adaptation process is activated to ensure the formation of a new homeostatic state that permits physiological functions and behavioural responses to operate at peak efficiency. As a result, health, being an intrinsic condition, necessitates regulation through a feedback mechanism that guarantees oversight of the body's internal milieu and preserves its consistency in the face of external fluctuations. By instituting a distance form of education without a strict territorial reference, it is possible to obtain additional thematic information from the most knowledgeable and "interesting" instructors and to elucidate its particulars with tutors (teachers) in real time. With the intention of preserving their child's physical fitness, parents can create a more ergonomically secure learning environment when arranging a distance learning course at home, as opposed to traditional educational settings. The scope and framework of emotional learning are undergoing a complete transformation. The dynamic between the instructor and the learner, who constitute the educational process, ought to have the same degree of authenticity as in a traditional, full-time classroom setting. Furthermore, given the potential limitations of the online mode in imparting essential social and emotional competencies comparable to those covered in traditional face-to-face instruction, it is imperative that attendance requirements for online courses remain as rigorous as those for traditional face-to-face education. structures [13]. However, it is crucial to recognise that distance education should not be interpreted as an escape from reality, a means of confining a student with disabilities to their residence, or a hindrance to social interaction; rather, it should be regarded as an opportunity to enhance their educational experience in accordance with their unique

circumstances and social standing. Distance learning effectively diminishes adherence to a rigid learning schedule. Class durations can vary from 15 minutes to 1.5 hours, contingent upon the subject matter and cohort. This flexibility can alleviate the psychological strain and stressful aspects that students may experience while striving to master specific academic disciplines, topics, and sections.

Electronic communication methods facilitate the development of non-linear work schedules, in which individual students within a given section complete assignments at their preferred speed and sequence. Tutors are able to promptly address challenging topics by forming subgroups online, where further deliberation on the necessary subjects occurs. By facilitating "self-learning" and supplementing students with psychological preparation, gamification techniques substantially enhance their capacity to withstand stress while enduring professional retraining [13].

Contemporary inclusive practice is in dire need of specialists to acquire new competencies and knowledge. Specialists who possess not only pertinent work experience and a pedagogical or psychological education but also a high level of professionalism in fields such as special pedagogy and psychology are currently the most sought-after. Tutors, for instance, are an example of a field that is nascent within the domestic education system and requires specialists with adequate training [8]. Therefore, advanced training and retraining of specialists from educational institutions engaged in inclusive practice [9] is one of the high-priority areas for the implementation of inclusive education in our nation. Presently, the state of inclusive education in Russia is entangled in a labyrinth of complications and inconsistencies that demand the adoption of special comprehensive measures for their resolution.

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Tursunov A.R.
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Navoiy davlat konchilik va texnologiyalar universiteti

O‘ZBEK TILSHUNOSLIGIDA SO‘ZYASALISHINING SINXRONIK, DIAXRONIYA USULLARI

Annatsiya: Yasama so‘z tarkibidagi ma’no mustahkamlovchi omil ekanligi bu olimlarning tadqiqotlarida belgilab berilgan. Tarixiy va hozirgi zamon morfologiyasini o‘rganish bo‘yicha ham jiddiy tadqiqot yuzaga kelganligi aytiladi. Ma’lumki, morfologiya aslida grammatik shakl haqidagi ta’limot.

Kalit so‘zlari: lingvistika, oldin, turk tili, forma, tarixiy va hozirgi zamon.

Tursunov A.R.
associate professor

Navoi State University of Mining and Technology

SYNCHRONIC AND DIACHRONIC METHODS OF WORD FORMATION IN UZBEK LINGUISTICS

Annotation. It has been determined in the researches of these scientists that the meaning of the artificial word is a strengthening factor. It was said that a serious study of the historical and modern morphology has also taken place. It is known that morphology is the study of grammatical form.

Key words: linguistics, before, Turkish language, form, historical and present tense.

XX asrda o‘zbek tilshunosligi morfologiya sohasining taraqqiyotida yirik olimi Said Usmonovning xizmati alohida o‘rin tutadi. S.Usmonov 1953 yilda tilshunos T.Ibrohimov rahbarligida “Hozirgi zamon o‘zbek tilida undovlar” mavzusidagi nomzodlik dissertatsiyasini himoya qilgan.

Bu ish uning morfologiyaga oid dastlabki jiddiy ishi edi. Shundan so‘ng olimning morfologiyaga oid qator ishi nashr qilindi. “So‘z va uning morfologik strukturasi haqida” alohida qo‘llanma” (1957), “Bosh kelishik formasida takrorlangan so‘zning semantik va grammatik xususiyatiga doir” (1957), “Ba’zi fe’l formalari haqida” (1966), “Hozirgi o‘zbek tilida so‘zning morfologik tuzilishi” (1963), “Tillarning morfologik klassifikatsiyasi va turkiy tillarda agglyutinatsiya” (1963), “So‘z yasovchi affiksoid” (1969), “O‘zbek tilida so‘zning grammatik formalari” (1964), “Hozirgi o‘zbek tilida so‘z formalarining qo‘llanish xususiyati va til tipologiyasi masalasi” (1964), “So‘zning morfologik va funksional analizi haqida” (1965) kabilar shular jumlasidan. [1]

S.Usmonovning umuman turkiy tillar, shu jumladan, o‘zbek tili morfologiyasi taraqqiyotini belgilab berishdagi barcha qarashi, ayniqsa, uning

“Morfologicheskie osobennosti slova v sovremennom uzbekskom yazыke” (“Hozirgi o‘zbek tilida so‘zning morfologik xususiyati”) fundamental tadqiqotida o‘z ifodasini topdi. S.Usmonov tilni morfologik jihatdan tasniflashga e‘tiborning Yevropa tilshunosligida XVIII asr oxirida boshlanganligini qayd etib, aka-uka Shlegel, keyinroq Shteyntal, nihoyat, Ya.Grimm, A.Shleyxer, A.I.Tomson qarashida bu holatga e‘tibor berilganini ta’kidlaydi. Tilni flektiv va agglyutinativ til tarzida ikki guruhga ajratish, fleksiya hamda agglyutinatsiyaning o‘ziga xos jihati bo‘yicha barcha qarashni tahlil etgan tilshunos S.Usmonov “agglyutinatsiya” terminini tilshunoslikka birinchi marta Lassen olib kirgan bo‘lsa-da, biroq agglyutinatsiya nazariyasini F.Bopp yaratganligini qayd etadi. S.Usmonov agglyutinatsiyaga yondashishda alohida yo‘nalish shakllanganligiga alohida e‘tibor qaratadi. Chunki turkiy til morfologiyasiga oid tadqiqotni amalga oshirishda bu masalaga aniqlik kiritilishi juda muhim ekanligi unga ma’lum edi.

S.UsmonovFerdinad de Sossyurnibelgilaydi. Ferdinad de Sossyurningagglyutinatsiyagaxosuchxususiyatniko‘rsatibberganliginiqaydetadi. Olim agglyutinatsiyani o‘zakka ketma-ket (yoki asosga), bir zanjirga bog‘lanishning a‘zosi, qismi tarzida qo‘shimchaning qo‘shilib kelishi, shu asosda grammatik ma‘noning ifodalanishi tarzida baholangan uchinchi yo‘nalish vakillariga alohida e‘tibor qaratib, A.Shleyxer, V.A.Bogorodskiy, V.V.Radlov kabi olim qarashlariga o‘z munosabatini bildiradi.

S.Usmonov so‘zning grammatik shakliga alohida e‘tibor qaratdi. Ma’lumki, morfologiya aslida grammatik shakl haqidagi ta’limot. So‘z shakl, grammatik shakl; sintetik va analitik shakl haqida muhim fikr aytgan olim grammatik ma‘no va funksiya bo‘yicha so‘zshakl ko‘rinishini belgilaydi.

XX asr o‘zbek tilshunosligining morfologiya sohasida V.V.Reshetov, Ye.D.Polivanov, A.N.Kononov, S.N.Ivanov, A.M.Shcherbakning asari ilmiy-amaliy hamda metodik asos vazifasini o‘taydi. Bu borada, albatta, V.V.Reshetovning “O‘zbek tili fonetikasi va grammatikasi asosi” (1960) kitobining o‘rni alohida ekanligini ta’kidlash zarur.

50-yillarda O.Qosimxo‘jaeva, B.Madvaliev, A.Xo‘jaev, Z.Ma‘rupov, S.Ferdaus, S.Fuzailov, A.Sulaymonov kabi olim o‘zbek tilshunosligi morfologiya sohasi taraqqiyotiga katta hissa qo‘shgan bo‘lsa, 60-yillarga kelib, A.G‘ulomov, A.Borovkov kabi olim bilan hamkorlik qilgan mashhur turkolog A.N.Kononov bu sohada katta ish qildi.

Turkiyshunoslik va o‘zbek tilshunosligida XX asrning50-yillaridan boshlab so‘z yasalişining asosiy masalalari bo‘yicha muhim tadqiqotlar orasida A.G‘.G‘ulomovning asarlari o‘zining teran fikrlari, yangi ilmiy xulosalarga boyligi bilan ajralib turadi. Jahon tilshunosligida qo‘lga kiritilgan yutuqlardan foydalangan holda, boy ilmiy tarixiy manbalarimiz, badiiy asarlar, xalq og‘zaki ijodi va sheva dalillarini o‘ziga xos ilmiy uslub va tafakkur,zakovat bilan tadqiq etgan olim umumtilshunoslik rivojiga ulkan hissa qo‘shganligi keyingi yillardagina e‘tirof etilmoqda. Bu e‘tirof tilshunoslikning boshqa sohalari qatori to‘liq ma‘noda so‘z yasalişini sohasiga ham taalluqlidir. [2]

A.G'.G'ulomov bu xil holatlarga nisbatan quyidagicha baho beradi: "so'zning ma'nosi uning tarkibidagi qismlarning semantik xususiyati bilan bog'liq" degan fikr hamma vaqt ham shu qismlarning ma'nosi yig'ilib, o'sha so'zning ma'nosini hosil qiladi, shunga teng bo'ladi, degan mazmunni anglata bermaydi". Masalan, suvoq, suvoqchi, suvoqchilik kabi holatlarda yasalmaning ma'nosi qismlarining ma'nosidan tug'lsa, andavalamoq so'zining "xaspo'shlamoq" ma'nosi so'z qismlardan anglashilgan ma'nodan boshqacharoq ko'rinishni olgan.

So'z yasalishi, olimning fikricha, "bir vaqtlilik" (sinxronik) munosabatga tayanadi, "har vaqtlilik" (diaxroniya) esa davrlar bo'yicha o'zgarish, taraqqiyotini tushuntirishda ishlatiladigan tamoyillar majmuidan iborat: "Har qanday yasalma (hosil qilingan–yasalib chiqqan element) dastlabki ("birlamchi") emas, balki keyingi (ikkilamchi) hodisadir: u boshqa bir hodisaga tobe (ma'no va boshqa jihatlardan), uning semantik va struktural xususiyatlari o'sha dastlabki hodisa orqali aniqlanadi. So'z yasalishi tahlilida tarixiy, diaxronik faktlar zarur bo'lib qolgan o'rinlaridagina, qiyos uchun keltiriladi, hisobga olinadi, lekin asosga olinmaydi. A.G'.G'ulomovning ishlarida umumiy tilshunoslikdagi "tilning ichki formasi (shakli)" (V.fonGumboldt), "so'zning ichki formasi (shakli)" (A.A.Potebnya) hodisalariga ham munosabat bildirilib, yasama so'zning paydo bo'lish sabablari, uning motivatsiya asoslari qayd etiladi: "Yangi so'z hayotning talabi bilan tug'iladi. Bu talab-jamiyatning shu bilan aloqador holdaongning taraqqiyotiga bog'liq...u hamma yangiliklarning, dinamikaning, hamma o'zgarishlarning tug'ilish manbaidir". [3]

Tarixiy va hozirgi zamon morfologiyasini o'rganish bo'yicha ham jiddiy tadqiqot yuzaga kelganligi aytiladi. Bundan tashqari, Yevropa va jahon tilshunosligida, yirik tadqiqot qilinib, uning barcha yutug'i o'zbek tilshunosligiga tatbiq etila boshladi.

Xulosa o'rnida shuni alohida ta'kidlash joizki, N.A.Baskakov, A.N.Kononov, S.N.Ivanov kabi yirik olimning o'zbek tilshunoslari bilan uchrashuvlari, muloqoti natijasi sifatida ham morfologiyaning jiddiy tadqiqotchilari safi F.Kamolov, T.Ibragimov, S.Usmonov, A.G'ulomov kabi qator olimlar bilan kengaydi. A.Hojiev, M.Sodiqova, R.Qo'ng'urov, I.Qo'chqorto'ev, A.H.Sulaymonov ("Hozirgi o'zbek adabiy tilidan so'ng ko'makchilar"), A.Abduazizov, I.Rasulov, X.Komilova, A.Madg'oziev, K.Nazarov kabi yirik tadqiqotchi, morfologiya sohasining jonkuyari ular safidan o'rin olgan bo'lsa, aynan 70-yillar boshidan M.A'lamova, M.Narimonova, M.Jo'raboeva, Yo.Tojiev, A.Berdialiev, T.Mirzaqulov, S.Maxmatqulov, S.Sultonsaidova kabi ko'plab tilshunos olimlarimiz tomonidan morfologiya sohasida jiddiy ilmiy izlanishlar boshlab yuborildilar.

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Umarova D.R.
acting associate professor
Tashkent State Transport University

THE ROLE OF MARKETING IN THE ECONOMIC DEVELOPMENT OF UZBEKISTAN

Abstract: the article examines the role of marketing in the economic development of Uzbekistan. The influence of large retail chains on the modernization of retail outlets is shown.

Keywords: marketing, effective marketing, retailer.

Economic development is usually understood as an increase in national production, which leads to an increase in the per capita gross national product (GNP). The Concept of socio-economic Development of the Republic of Uzbekistan until 2030 provides for ensuring macroeconomic stability and sustainable economic growth, increasing competitiveness, investment and export potential of economic sectors, creating favorable conditions for the development and protection of entrepreneurship, reducing the level of tension in the labor market, increasing incomes and reducing poverty.

Marketing as a functional business discipline can be understood as a dynamic process of society, through which business entrepreneurship is productively integrated with the goals of society and human values. It is in marketing that the consumer satisfies individual and social values, needs and desires. Marketing focuses on the customer, that is, on the person making decisions within the framework of a social structure and within the framework of a system of personal and social values. Therefore, marketing is the process by which the economy is integrated into society to meet human needs

Although marketing cannot create purchasing power, it can uncover and channel what already exists. Increased economic activity leads to the expansion of sales markets, which creates the prerequisites for economies of scale in distribution and production, which may not have existed before.

Marketing is also the most accessible multiplier for managers and entrepreneurs in a developing country. Marketing in developing countries is the developer of standards for products and services, as well as standards of conduct, integrity, reliability, foresight and concern about the main long-term impact of decisions on the customer, supplier, economy and society. The presence of large retail chains such as “Korzinka.uz” and others working in the cities of Uzbekistan influenced the modernization of retail outlets in the surrounding areas. Thus, a different attitude towards the customer, the seller, the supplier and the product itself now prevail among local retailers. In addition, it has forced other more localized retailers to adopt modern methods of pricing, inventory management, and communication.

Marketing has acquired an important place for the economic development of the whole country. It has also become necessary to achieve the goal of public welfare. As a result, marketing is considered the most important activity in a commercial enterprise, while at an early stage of development it was considered the last activity.

Marketing discovers the needs and desires of society, produces goods and services in accordance with these needs, and creates demand for these goods and services. They go ahead and promote products that make people aware of them and create demand for products that encourage customers to use them. Thus, it improves the standard of living of society.

Although marketing cannot create purchasing power, it can uncover and channel what already exists. Increased economic activity leads to the expansion of sales markets, which creates the prerequisites for economies of scale in distribution and production, which may not have existed before.

The marketing environment of an enterprise is a combination of certain factors of both its internal and external environment (characteristics, means, forces), which determine in a complex: the circumstances in which the enterprise has to conduct marketing activities; prospects for its success in the future. The term "marketing environment" is usually applied to any form of business organization (no matter large, medium or small). Non-profit companies, manufacturing companies, and trade enterprises have a marketing environment. It consists of two groups of factors: external and internal. External factors form the external, and internal, respectively, the internal marketing environment. The external environment, as its name implies, is located outside the object, outside it. And the inner one is folded inside the object itself. Together, both components make up the overall marketing environment of the organization.

First of all, the factors of the internal marketing environment include those characterizing the company's internal properties that produce the strongest impact on the marketing activities of the company. In the first place among such factors, the structure of the enterprise (senior management, other departments and divisions), the management's policy in the field of marketing, the goals and objectives of other structural units related to marketing activities. Also, among the factors of the internal marketing environment, the orientation of the enterprise to the needs and demands of consumers, the financial capabilities of the company, the work of the marketing services of the organization are highlighted. The external marketing environment, unlike the internal one, is located outside the enterprise itself, which does not affect its formation in any way. Therefore, environmental factors cannot be controlled and controlled in any way.

Such factors include:

- needs and demands of consumers;
- actions and behavior of suppliers;
- activities of competing companies;

- development of science and technology at the state level trends in the cultural development of society;
- the conditions and circumstances in which an organization is forced to conduct marketing activities in the market.

The successful exploitation of marketing activities creates, supports and increases the demand for goods and services in society. To meet this increased demand, Uzbek companies must increase their production levels, in turn, raising their income. This increase, in turn, increases national income. Further effective marketing leads to the export of an addition to national income. This is useful for the entire society of the Republic of Uzbekistan.

There are many scientific studies in the world on trends and prospects for the development of digital marketing in small businesses. The use of digital platforms in the activities of small businesses, the spread of specialized forms of e-commerce to small producers and consumers, the formation of a healthy competitive environment in the economy, the creation of new jobs, the development of methods for turning digital marketing into a modern tool for small businesses, improving the effectiveness of digital marketing, the organization of scientific and innovative centers for small business development, the development of programs marketing research in this regard is one of the priority areas of research.

In recent years, Uzbekistan has created a whole system of programs and institutions aimed at stimulating small businesses and private entrepreneurship, organizing modern flexible industries aimed at producing competitive products in demand on the foreign market. The Development Strategy of the New Uzbekistan for 2022-2026 defines such tasks as "...creating conditions for the organization of entrepreneurial activity and the formation of permanent sources of income for the population, bringing the share of the private sector in gross domestic product to 80 percent, in exports to 60 percent"². To date, the digitalization process is considered as the main, most effective mechanism aimed at improving the efficiency, competitiveness and optimization of the activities of any enterprise, regardless of its scale. The development of technology, in particular the advent of mobile devices and applications, has made it easier to do business in many ways. Moreover, consumers are increasingly using their smartphones and tablets to establish contact with sellers and suppliers and purchase various goods from them. For this reason, many small businesses have had to review and significantly update their marketing and advertising strategies - which mainly consisted of traditional methods such as direct mail, television and radio advertisements, as well as print advertisements - in order to best meet the needs and satisfy modern consumers. The digitalization of all sectors of the Uzbek economy has also affected small businesses and entrepreneurs.

The use of information technology to support the activities of small businesses and entrepreneurship is a necessary measure to ensure their competitiveness in the market. Despite the existence of various programs aimed

at supporting the development of small and medium-sized businesses in Uzbekistan, so far this segment of the economy remains very vulnerable, influenced by large business, dependent on it.

The increasing availability of digital technologies and the development of digital infrastructure in the Republic of Uzbekistan is a factor contributing to the introduction of information technologies into the activities of small businesses. However, small businesses face many problems in this area: a lack of digital skills and specialists, a lack of budget and interest.

Digital marketing for small businesses helps reach a wider audience. This allows you to target the people who are most likely to buy your product or service. There are various interpretations of the concept of digital marketing in the specialized literature. According to I. V. Alekseev, the purpose of Internet marketing is to study the nature of the interrelationships of economic entities in the Internet space to create universal structures designed to meet the needs of society through profit.

From the point of view of E. O. Kitaeva, Internet marketing is a system of promotion and various types of advertising, in particular banner advertising, in online communities.

Describing digital marketing, A.D. Baranov points out the need to separate contextual, banner advertising, email newsletters, SEO and SMM.

The subject of this study is small enterprises of the food industry of Uzbekistan. The modern food industry is directly dependent on innovation, as consumers need the best quality products for less money.

The popularity of confectionery products in Uzbekistan is explained by the fact that oriental sweets and candies are an integral part of the hospitality of the country's residents, necessary parts of any celebration, an object of gastronomic tourism for residents of other countries, an object of export to the world market.

The main tasks of digitalization in the food industry today are:

- increasing the transparency of processes;
- increasing digitalization in marketing and sales;
- further digital transformation of production;
- improvement of quality control of manufactured food products.

When promoting the confectionery business, it is necessary to take into account all the features of demand and sales during the year.

There are 4 main trends in the promotion of this market segment in Uzbekistan:

1. Updating the assortment. It is necessary to update the assortment of each confectionery company in order to keep up with the trends. It is necessary to keep an eye on new products: new flavors, shapes, fillings.

2. Updating the packaging. Not only the weight is updated, but also the packaging design. Expensive custom-made gift packages are becoming increasingly popular.

3. Confectionery products are emotionally perceived products, therefore, in order to attract the consumer, the name and packaging design of "sweet" products must be bright and creative.

4. Unusual positioning. Most pastry shops classify their products as "elite", exclusive products. They present their product "tasty".

Offering premium products and confectionery services. Chocolatiers, exclusive candies, handmade chocolates will always be in demand in a place where there is a demand for expensive exclusive goods.

They help to attract new customers, consolidate trusting relationships with existing consumers. This is a marketing method based on consumer psychology. During the tasting, it will be psychologically more difficult for a potential client to refuse to buy this product, because he tried it, feeling its advantages and possible usefulness for himself. If your products are really of good quality and have their own zest, then the company will increase customer demand for this product. The consumer will purchase your products both during and after the tasting.

Participation in exhibitions and fairs. Quite a few products are successfully demonstrated there. At the exhibition, you can demonstrate a new product, a new packaging design to customers and after the exhibition analyze which products the buyer is interested in, which means they will make a profit in the future. It is easy to find new regular customers at exhibitions. Taking into account the above features of the confectionery services market, the most effective tools for promoting confectionery services can be identified.

To sum up, we can say that with the advent of digital marketing, the scale and prospects for profit for enterprises have increased significantly, but, from the point of view of buyers, consumer loyalty is still lacking, while the inability of buyers to taste material goods by touch, smell, taste before making an online purchase can become a serious limitation to get ahead of digital marketing over traditional methods. Competition between producers, especially among local producers, is intensifying in the market of food enterprises in Uzbekistan.

Nevertheless, the capacity of the confectionery market in Uzbekistan is far from full saturation, the range and range of products presented is small, and sales volumes are only increasing, which as a result leads to the fact that competition in this market will only increase, both among existing market participants and between existing and newly emerging domestic and foreign manufacturers.

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*Umirov I.I.
Jizzax Politexnika instituti TVM kafedrası v.b. dotsenti
Islamov J.B.
Jizzax Politexnika instituti talabasi*

AVTOBUS YO'NALISHLARIDA HARAKAT XAVFSIZLIGINI OSHIRISH

Annotatsiya: ushbu maqolada, avtobus yo'nalishlarida harakat xavfsizligiga oid qoidalar hamda uning xavfsizligini oshirish choralari haqida ma'lumotlar berilgan.

Kalit so'zlar: harakat, jamoat transporti, avtobus, mikroavtobus, ikki tomonlama, maxsus chiziq, jadvallarni tuzish, dispecherlik xizmati.

*Umirov I.I.
associate professor
Department of TVM
Jizzakh Polytechnic Institute
Islamov J.B.
student
Jizzakh Polytechnic Institute*

ENHANCING TRAFFIC SAFETY ON BUS ROUTES

Annotation: this article provides information on the rules regarding traffic safety on bus routes as well as measures to improve its safety.

Keywords: movement, public transport, bus, minibus, two-way, special line, scheduling, dispatch service.

Ko'chalardagi bir tomonlama harakatda va jamoat transportining harakatlanish qismi bir tomonlama bo'lganda, ikki tomonlama harakat ham bo'lishi mumkindir. Buning uchun yo'laklarda maxsus chiziq chiziladi, ular umumiy yo'nalishga qarama-qarshi holatda bo'ladi. Bu yo'ldan faqat yo'lovchi tashiydigan transport vositalari (avtobus, mikroavtobus) hamda maxsus avtomobillar harakatlanishi uchun ruxsat etiladi.

Shaharlardagi jamoat transport vositalarida yo'lovchilarning katta qismi tashiladi, shuning uchun ham harakat xavfsizligiga alohida e'tibor qaratishimiz lozim. Transportni tanlash bo'yicha savollar, yo'nalish chizmalarini ishlab chiqish, jadvallarni tuzish, dispecherlik xizmati, ya'ni jamoat transport vositalari bilan bog'liq masalalar ushbu izlanishda ko'rilmaydi. Bu maqolada faqatgina umumiy yer usti transportining harakati bilan bog'liq masalalar ko'riladi. Bu masalalar transportning qulayligi va xavfsizligini ta'minlash, hamda imtiyozli harakatlanish sharoitlarini yaratish bilan bog'liqdir. Harakatning qulayligi asosan

birinchi navbatda transport vositalarining ushlanib qolmasligi, yo'l va ko'chalardagi, bekatlardagi harakati to'xtab qolmasligi bilan bog'liq jarayon.

100 ming kishidan ortiq aholi soniga ega shaharlarda jamoat transportlarining turlari va yo'nalishlari hisob-kitoblarga asoslangan holda tanlanadi.

Jamoat transportining oddiy turlarini yuk tashishga qodirligi yo'lovchilar salonining bo'sh maydoni 4 odam/m² ga to'lish me'yorida, tezyurar turlarida 3 odam/m² me'yorida aniqlanadi.

Qatnov yo'lining tezligi va jamoat transportining turli turlarining yuk tashishga qodirligini 1-jadvalga binoan qabul qilish kerak bo'ladi.

1-jadval

Transport turlari	Qatnov yo'lining o'rtacha tezligi, km/soat	Bir yo'nalishdagi transport turining yuk tashishga qodirligi, daqiqa, km/soat
60 tagacha yo'lovchini sig'diruvchi avtobuslar.	18-20	3-4
60 ta yo'lovchidan ziyod Avtobus-ekspreslar.	18-20	5-6
Trolleybuslar	20-25	8-10
120 tagacha yo'lovchini sig'diruvchilar.	18	4-6
120 ta yo'lovchidan ortiq.	18-20	6-8
120 tagacha yo'lovchini sig'dira oladigan tezyurarlar.	18-20	9-12
120 ta yo'lovchidan ortiq.	25-30	12-20
5 vagonli.	25-30	20-24
8 vagonli poezdlar.	40-45	25-30
Tarkibidagi metropoliten elektrlashtirilgan temir yo'l	40-45	45-50
Monorelsli yo'l	50-60	35-60
	60-70	10-30

Piyodalarning yashash joylaridan yoki ishdan to yaqin jamoat transport bekatigacha bo'lgan yo'l masofasi 400 metrdan oshmasligi kerak.

Jizzaxning yakka imoratli tumanlarida, yirik va katta shaharlarda bu miqdor 600 metrgacha, o'rtacha va kichik shaharlarda esa 800 metrgacha ko'paytirilishi mumkin.

Yirik shaharlar va Jizzaxning umumshahar markazida piyodalarning to jamoat transport bekatlarigacha yo'l uzunligi 250 metrdan, ommaviy dam olish va sport joylarida 800 metrdan oshmasligi lozim.

Shahar transportlarining yer ustidagi turlari uchun to'xtash joylar orasidagi masofa 600 metrdan oshmasligi, ekspres yo'nalishli avtobuslar uchun 800-1200 metr, metropoliten uchun 1000-2000 metr, elektrlashtirilgan temir yo'l uchun 1500-2000 metrdan oshmasligi zarurdir. Yo'llarini alohida xomaki yo'llarga yotqizgan ma'qul. Ikki yo'lli alohida ko'tarma yo'lining kengligi butun yo'lining uzunligida chizish maydonchalarini hisobga olgan holda qabul qilinadi, u 10 metrdan kam bo'lmasligi kerak, bir yo'lligi esa 3,8 metr qabul qilinadi.

Avtobus va to'xtash joylarini chorrahadan keyin 20 metrdan yaqin bo'lmagan masofada joylashtirish tavsiya etiladi. Bir yo'nalishdagilar uchun to'xtash joylarini chorraha bilan bir tomonga joylashtirish kerak bo'ladi. Chiqish maydonchasining uzunligi bir yo'nalishdagilar uchun 20 metr, bir qancha yo'nalishlar uchun 30 metr va oshiqroq olish kerak, chiqish maydonchasining minimal kengligi 1,5 metr olinadi.

Avtobuslarning to'xtash joylari qoidasi bo'yicha ko'chalarning kesishish joyida o'rnatiladi. Agar kesishish joyidan uzoqda joylashtirilsa, avtomobillarga halaqit berishi mumkin. Izlari ham maxsus bo'laklarda o'rnatiladi. Izdan yurmaydigan transport vositalari uchun ko'chalar kesishish joyidan keyin bekat o'rnatish maqsadga muvofiqdir, bunda qulaylik, harakat xavfsizligi va yo'nalishga halaqit bermaslik hukm suradi.

To'xtash bekatini kesishish joyidan keyin tursa, piyodalar avtobuslarning orqasidan o'tadilar hamda yo'lni bemalol ko'rib, transportga halaqit bermaydilar. Agar ko'chalarning kesishish joyidan avval bekat o'rnatilsa, avtomobilni va uning harakatini bemalol kuzatishimiz mumkin. Bunda yana transport vositalarining harakati, shart-sharoitlari qiyinlashadi. Bir tomondan o'ngga buriladigan avtomobillar va svetoforning chirog'ini kutib turgan avtomobillar, avtobus yoki mikroavtobusga bekatda uzoq ushlanib qolishga sabab bo'lib, bu esa transport vositalarining harakatiga birmuncha qiyinchilik tug'diradi. Boshqa tomondan bekatda uzoq turib qolgan avtobuslar boshqa transport vositalariga halaqit beradi. Bu esa umumiy harakatga jiddiy tomondan zarar yetkazadi. Odatda bekatlarda turgan haydovchilar svetofor chiroqlariga qarab harakat qiladi. Agar yo'lovchi avtobusga chiqib yoki tushib bo'lganda svetoforda qizil chiroq yonsa, haydovchi bekatda yana turib qoladi, bu esa o'z navbatida kutayotgan keyingi transport vositasiga to'sqinlik qiladi. Natijada bir qancha tirbandlik yuzaga keladi. Agar yo'lovchi avtobusga chiqib yoki tushib turgan vaqtda svetoforda yashil chiroq yonsa, haydovchi shoshib qoladi, ko'p holatlarda yo'lovchiga ham qaramay haydab ketadi.

Tavsiya qilinadigan tadbirlar quyidagilar:

1. Svetofor chiroqlarining yonishini o'zgartirish (ya'ni 2 tartib oralig'ida o'rnatish).
2. Jamoat transport vositalariga maxsus bo'laklar ajratish.
3. Avtobus bekatlaridagi kesishish va o'tish yo'lakchalarini tashkil etish.
4. Katta ko'chalarda o'ng tomondan transport vositalarining harakatlanishini, to'xtash va to'xtab turishini taqiqlash.
5. Hujjatlardagi me'yoriy uzunlikda jamoat transportlariga to'xtash joyi va yo'lakchalar ajratish.
6. Piyoda va yo'lovchilarning qatnov qismiga chiqishiga ruxsat etmaslik zarur.

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*Umirova G.Sh.
Jizzax politexnika instituti
Iqtisodiyot va menejment kafedrasi assistenti
Khurmatov B.
Abu ali Ibn Sino nomidagi Tojikiston
Davlat tibbiyot universiteti o'qituvchisi*

MAMLAKATIMIZDAGI MONOPOLIYAGA QARSHI KURASHISHNING RAQOBAT MUHITINI SHAKLLANTIRISH

Annotatsiya. Ushbu maqolada, mamlakatimizdagi monopoliyaga qarshi kurashishning raqobat muhitini shakllantirish yo'llari, monopol faoliyatni oldini olish shu bilan birgalikda O'zbekistonda raqobat muhitini shakllantirish jarayonidagi istiqbollarini ko'rib chiqish haqidagi ma'lumotlar berilgan.

Kalit so'zlar: raqobat muhiti, bozor, monopoliya, monopoliyaga qarshi kurashish, kichik biznes va xususiy tadbirkorlik, soliq tizimi.

*Umirova G.Sh.
assistant
Department of Economics and Management
Jizzakh Polytechnic Institute
Khurmatov B.
teacher
Tajik State Medical University named after Abu Ali Ibn Sina*

FORMING THE COMPETITIVE ENVIRONMENT OF THE FIGHT AGAINST MONOPOLY IN OUR COUNTRY

Annotation: this article provides information on ways to form a competitive environment of antitrust in our country, prevention of monopolistic activity, and at the same time consider the prospects for the formation of a competitive environment in Uzbekistan.

Key words: competitive environment, market, monopoly, fight against monopoly, small business and private entrepreneurship, tax system.

Bugungi vaqtda yurtboshimiz tomonidan olib borilayotgan keng ko'lamli islohotlar asosida tadbirkorlarimiz ham raqobatbardosh mahsulotlar ishlab chiqarishmoqda. Buning zamirida bozor iqtisodiyoti sezilarli darajada rivojlandi. Jahon bozoriga o'zbek brendi ostida juda ko'p mahsulotlar eksport qilinib sotilmoqda. Shuni aytib o'tish joizki, bunday natijalarga erishish uchun albatta arzon, sifatli va raqobatbardosh mahsulotlari ishlab chiqarish bilan erishishimiz mumkin. Raqobatbardosh mahsulotlar albatta bozorni rivojlantiradi.

Hammamizga ma'lumki, har bir sohada sog'lom raqobatga amal qilinishi natijadorlikni ta'minlashga xizmat qiladi.

O'zbekistonda raqobat muhitini shakllantirish hamda uning istiqboldagi yo'nalishlarini belgilash uchun eng avvalo bozorning hozirgi vaqtdagi real holatini o'rganish, uni tahlil qilish juda muhim bo'lgan omillardan biri hisoblanadi. Mamlakatimizda raqobat muhiti hozirgi kunda ancha rivojlangan bo'lib, uning shakllanishi uchun barcha tashkiliy-huquqiy shart-sharoitlar yaratilgandir. Shu bilan bir qatorda, ayrim tizimlarda monopollashishni ko'rishimiz ham mumkin.

Monopol faoliyatni oldini olish hamda qonunbuzarliklarga yo'l qo'ymaslik uchun eng avvalo qaysi tarmoqlarning monopollashganligini yoki bozorda ustunlik mavqeini egallab turganligini bilishimiz zarur. Shu maqsadda hozirgi kunda respublikamizda ko'pgina xorij davlatlaridan farqli ravishda monopolist korxonalar davlat reestri yuritib kelinmoqda. Ushbu reestrda tovar bozorida 65 foizdan ortiq ulushga ega bo'lgan hamda qonunchilikda belgilangan ayrim holatlarda monopoliyaga qarshi davlat organi qaroriga muvofiq tovar bozoridagi ulushi 35 foizdan yuqori bo'lgan xo'jalik yurituvchi subyektlar kiritib boriladi.

Mamlakatimizda raqobat muhiti bugungi kunga kelib qay darajada rivojlanganligini ushbu reestrda yuzaga kelayotgan o'zgarishlar va boshqa bir qator ko'rsatkichlar orqali bilib olishimiz ham mumkin. Raqobatni rivojlantirish hamda kichik va xususiy tadbirkorlikni rivojlantirish masalasiga qaratilgan bir qator chora-tadbirlarning amalga oshirilishi orqali bu borada juda katta yutuqlarga erishildi.

Kichik biznes va xususiy tadbirkorlikning rivojlanishi, monopolist korxonalar raqobatchi bo'lgan yangi xo'jalik yurituvchi subyektlarning tashkil etilishi hamda ular tomonidan raqobatbardosh tovar (ish, xizmat)lar ishlab chiqarilishi natijasida tovar bozorida o'z ustunlik mavqeini yo'qotgan monopolist korxonalar - Monopolist korxonalar davlat reestri ro'yxatidan chiqarildi.

Hozirgi vaqtga kelib, respublikada nodavlat mulkning har xil shakllarini rivojlantirish uchun barcha zarur huquqiy va iqtisodiy shart - sharoitlar yaratilgan. Respublika iqtisodiyotning turli tarmoqlarida yaratilayotgan mahsulotning kattagina qismi kichik biznes va xususiy tadbirkorlik subyektlari hissasiga to'g'ri kelmoqda. Bu yutuqlar mamlakatimizda olib borilgan iqtisodiyotni erkinlashtirish siyosati hamda hukumatimiz tomonidan aniq chora-tadbirlar tizimi ishlab chiqilganligining samarasidandir.

Respublikamizda davlat tomonidan qo'llab-quvvatlanayotgan tadbirkorlik subyektlari juda tez sur'atlarda rivojlanib bormoqda. Davlat tomonidan tadbirkorlik subyektlariga soliq va boshqa imtiyozlarning berilishi hamda ularni qo'llab-quvvatlovchi turli institutlarning tashkil qilinishi shular sirasiga kiradi. Jumladan, xo'jalik yurituvchi subyektlarning soliq yukini kamaytirish bo'yicha bir qancha ijobiy ishlar ham amalga oshirilmoqda, O'zbekistonda aholi va tadbirkorlarning soliq yukini kamaytirish rejalashtirilmoqda. Bu haqda Yangi O'zbekistonning 2022–2026 yillarga mo'ljallangan taraqqiyot strategiyasini

2022-yilda amalga oshirish bo'yicha —Yo'l xaritasida nazarda tutilgan. Loyihaga ko'ra, aholi va tadbirkorlik subyektlariga soliq yukini kamaytirish bo'yicha chora-tadbirlar ishlab chiqildi hamda korxonalarining mol-mulk solig'i stavkasini 2 foizdan 1,5 foizga kamaytirish belgilandi⁶⁵.

Shuningdek, Respublika bo'yicha qo'shimcha 200 ta sanoat zonalarini tashkil etish rejalashtirilmoqda. Bunda:

- sanoat zonalarining har biriga kamida 15 ta korxonani joylashtirish;
- elektr, tabiiy gaz, suv tarmoqlari va yo'l infratuzilmasi yetkazib berishni to'liq Davlat byudjeti mablag'lari hisobidan amalga oshirish (buning uchun 2022 yilda 1,5 trln. so'm ajratish)⁶⁶.

Bularning barchasi kichik va xususiy biznesni izchil rivojlantirish uchun kuchli rag'batlantiruvchi omillar yaratadi.

Respublikada faoliyat yuritayotgan kichik biznes subyektlari tomonidan ishlab chiqarilgan mahsulot (ish, xizmat)larning yalpi ichki mahsulotdagi ulushi ham yildan yilga ortib bormoqda. Kichik biznes va xususiy tadbirkorlikning roli va o'zni tobora mustahkamlanib borayotganining o'zi iqtisodiyotimizning tarkibida bo'layotgan ijobiy o'zgarishlardan dalolat bermoqda.

Monopoliyaga qarshi faoliyatning funksional va institutsional jihatlaridan samarali foydalanish asosan soliq tizimida olib borilayotgan islohotlar asosiy o'rinda turadi. Soliq tizimi iqtisodiyotning ajralmas bir qismi bo'lib, mamlakatni ijtimoiy hamda iqtisodiy rivojlantirishning ustuvor yo'nalishlariga erishishda muhim mexanizm sifatida yorqin namoyon bo'ladi.

Xulosa qilib aytganda, soliq mexanizmini takomillashtirish, uni to'lash intizomiga qattiq rioya qilish, soliq qonunbuzarligiga yo'l qo'ymaslik, soliq to'lovchilar va soliq organlari xodimlarining ma'naviyatini yuksaltirish korxonalarining monopoliyaga qarshi faoliyatning raqobat muhitini shakllantirishning institutsional jihatlaridan samarali foydalanishni ta'minlashda muhim omillardan biri hisoblanadi.

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*Usmanova S.S.
Jizzax Politexnika instituti "Iqtisodiyot
va menejment" kafedrasi assistenti
Tovboyeva O.O.
Zomin milliy tabiat bog'ining ekoturizm
mutahassisi va "HELLO ZOMIN"
MCHJ sayyohlik firmasi rahbari*

JIZZAX VILOYATI MADANIY VA MEROS TURIZMI MARSHRUTINI YARATISH TURIZMNI RIVOJLANTIRISH STRATEGIYASI

Annotatsiya: ushbu maqolada Jizzax viloyati madaniy va meros turizmi marshrutini yaratish turizmni rivojlantirish strategiyasi haqida ma'lumotlar yoritilgan.

Kalit so'zlar: sayyohlik marshrutlari, tashrif buyuruvchilar, turizm salohiyatini, potensial munosabatlar.

*Usmanova S.S.
assistant
"Economics and Management" department
Jizzakh Polytechnic Institute
Tovboyeva O.O.
Ecotourism specialist
Zomin National Nature Park and head of "HELLO ZOMIN" LLC tourist
company*

TOURISM DEVELOPMENT STRATEGY TO CREATE A CULTURAL AND HERITAGE TOURISM ROUTE OF JIZZAK REGION

Abstract: this article provides information about the tourism development strategy of creating a cultural and heritage tourism route of the Jizzakh region.

Key words: tourist routes, visitors, tourism potential, potential relations.

Mamlakatimizda ham so'nggi yillarda sayyohlik marshrutlari mashhur bo'lib, ekologik xilma –xil va tarixiy hududlarga sayyohlar ko'proq jalb qilinmoqda. Tashrif buyuruvchilarni vaqt va pul sarflashga jalb qilish imkoniyatini oshirish marshrutni rivojlantirishga e'tibor yetarlicha o'smagan, bu tashrif buyuruvchilarni sayyohlik ob'ektlarini o'rganishi bilan bog'liq bir qator muammolarni keltirib chiqaradi. Biroq, Jizzax viloyatidagi Zomin milliy qo'riqxonasi yirik turistik hudud sifatida mahalliy va xorijiy sayyohlarni o'ziga jalb qiladi. Xorijiy sayyohlarni madaniy meros ob'yektlariga, Peshog'or qishlog'i hududidagi ziyoratgoh Xo'jai serob ota, Ko'k to'nli ota, Peshog'or g'ori maskanlariga chorlash va sayyohning qolishi uchun yetarlicha qo'nimgohlar

tashkil etilmagan. Sayyohning cheklangan vaqti bor, u bir kundan kamroq vaqtdan keyin boshqa ob`yektgа tashrif buyuradi shahar tashqarisidagi diqqatga sazovor joylar, shahar ichidagi yo'l-yo'riqlarning yomonligi ham muammoga yordam beradi.

Marshrutlar turizm aniqlanishidan ancha oldin sayyohlik mahsulotning muhim qismlaridan biri edi. Yuqoridagi asoslanib, hududdagi potentsial yo'lni aniqlash lozim, sayyohlarni ko'paytirish orqali turistlarni madaniy va tarixiy diqqatga sazovor joylar bilan bog'lash bo'yicha harakatchan, uzluksiz dasturlarni faollashtirish lozim. Viloyatning turizm salohiyatini o'rganish, hudud va uning tarixi, turistik ob'yektlari va o'ziga xos xususiyatlari to'g'risida turli tillarda kontentlar yaratishni, ularni targ'ibot hamda turpaketlar yaratishda yordam ko'rsatish, nazariy bilim va amaliyotning uyg'unligini ta'minlagan holda professor va o'qituvchilarning izlanishlari, talabalarning turizm sohasidagi nazariy bilimlarini amaliyotda qo'llash imkoniyatlarini kengaytirish, hududlardagi aholi tomonidan turizm xizmatlarini ko'rsatish sifatini yaxshilash hamda kadrlarning malakasini oshirishda ko'maklashish maqsadida O'zbekiston Milliy universiteti bilan hamkorlikda chora tadbir dasturi ishlab chiqilgan. Viloyatdagi barcha ziyoratgohlar imkoniyatlarini to'liq ishga solib, 2023 yilda 20 ming nafar ziyoratchini jalb qilish bo'yicha dasturi ishlab chiqildi. Joriy yilda viloyatimizga 140 ming nafar xorijiy turistlarni jalb qilish orqali 31mln dollar turizm xizmatlar eksportini amalga oshirish vazifasi qo'yilgan. Joriy yilning o'tgan davri mobaynida viloyatga tashrif buyurgan sayyohlar soni 667 ming nafardan oshgan. Bunda, mahalliy sayyohlar soni – 607ming; yillik reja 806 ming (yillik rejaga nisbatan 75%)ga xorijiy sayyohlar soni –60ming 365nafar; yillik reja 140ming nafar (yillik rejaga nisbatan 43.1%), sayyohlar tashrifi kuzatilib, eksport ulushi 12.958mln, yillik reja 31mln (yillik rejaga nisbatan 42%)ga yetkazildi. Bundan tashqari, sayyohlar oqimini ko'paytirish va turizm infratuzilmasini rivojlantirish bo'yicha viloyatning SH. Rashidov, Zomin, Yangiobod va G'allaorol tumanlaridagi 11 ta mahallalarni turizmga ixtisoslashtirish yuzasidan reja ishlab chiqildi. Natijalar shuni ko'rsatdiki, marshrut guruhi potentsial munosabatlarga asoslangan holda aniqlangan har bir turizm ob'ekting mezonlari va ular orasidagi mavjudlik hisobga olinishi lozim. Marshrutni amalga oshirish uchun, jamoat transporti va uni qo'llab-quvvatlash vositalarini yaxshilashga jiddiy ehtiyoj bor. Marshrutlar turizm identifikatorini ko'rsatadigan mahsulot va xizmatlarning modeli yoki namunasidan aniqlanishi mumkin, aniq joylashuv xaritasi shakllantirilishi maqsadga muvofiq bo'ladi. Qadimgi marshrut yo'nalishlari tog` so'qmoqlari, dara, adir yonbag'irlari va yassi tekislik yo'llari mavjudligini anglatadi. Sayohat, sayohatning yangi imkoniyatlarini, hatto asosan turizm va dam olish uchun qurilgan yo'llarni ham anglatardi. So'nggi paytlarda turistik diqqatga sazovor joy sifatida sayyohlik marshrutlarining rivojlanishi katta ahamiyat kasb etmoqda yillar va tashrif buyuruvchilarni vaqt va pul sarflashga jalb qilish uchun ko'proq potentsialga ega. Shuning uchun ham ushbu maqola turizmda muhim rol

o'ynaydigan qulayliklarga qaratilgan. Viloyatda turizm ob'ektlari qayta tiklandi, biroq ularga kirish imkoniyati pastligi sababli sayyohlar yetib borishlari qiyin hududlar ham mavjud, marshrutlar va yo'l sharoitlari, yo'l bo'yi xizmat ko'rsatish sohasi yomon holatda. Boshqacha qilib aytganda, nosoz yo'l va ob'ektlarning mavjudligi turistlar soniga sezilarli ta'sir ko'rsatadi. Bundan tashqari, ko'plab madaniyat va meros ob'ektlarida avtobus bekati yo'q va jamoat transportidan foydalanish imkoniyati yo'q, shuning uchun odamlar shaxsiy transportni afzal ko'radilar. Sayyohlik avtobuslari tarmog'ining pastligi va yo'qligi odamlarning jamoat transportidan foydalanishiga va boshlang'ich nuqtadan belgilangan joyga bir nechta transport o'zgarishlarini kiritishiga olib kelayapti. Keyin tog' yonbag'rlari ko'rinishidagi hududlarning nosoz yo'l tuzilmasi turistlarning jamoat transportiga kirish imkoniyati ham to'sqinlik qiladi, chunki u miqdor jihatidan etarli emas va kutish vaqtining uzunligidan ko'rinib turibdi. Turizm marshrutining rivojlanishiga ishonch hosil qilish uchun amalga oshirish strategiyalari zarur. Bundan tashqari, Zomin tumaninig shimoldan janubga tarqalib ketgan madaniy va meros ob'ektlari uchun qulay turistik faoliyatni hisobga olgan holda, yangi turistik xizmatlar dasturini ishlab chiqish lozim. Zomin milliy qo'riqxonasida sayohat tashkil qilishdagi cheklovlarni hisobga olgan holda, turistik marshrutlarni ishlab chiqish turizm ob'ektiga, xususan, madaniyat va meros maskanlariga kirishni osonlashtirish juda muhimdir.

Marshrutni ishlab chiqish usullari. Turistik marshrut - turistlarning tarixiy va tabiiy yodgorliklarga, shuningdek, boshqa joylarga, masalan, to'xtash joylariga ketma-ket tashrif buyurishini belgilaydigan harakat yo'li.

Marshrutni sayyohlik kompaniyasi yoki turistlar mustaqil ravishda ishlab chiqishi mumkin. Sayyohlik agentligi tomonidan tashkil etilgan marshrut bo'ylab o'tishda ishtirokchilarga gid xizmatlari, ekskursiyalar, shuningdek, boshqa xizmatlar ko'rsatiladi. Sayohatlar (sayrlar, sayohatlar, ekskursiyalar) oldindan tanlangan marshrutlar bo'ylab amalga oshiriladi va ular ma'lum muddat va maqsadga ega. Turistik marshrut - bu ma'lum bir hududga va maxsus ob'ektlarga bog'langan va turli darajadagi tafsilotlar bilan tasvirlangan sayohat, sayohatning geografik jihatdan aniqlangan marshrut. Marshrut - bu sayohat davomida u tomonidan ketma-ket tashrif buyurgan barcha geografik nuqtalar va joylar ro'yxati bilan ko'rsatilgan sayyohning yo'nalishi bo'lib, u yo'nalishdagi to'xtashlar (turishlar) o'rtasida harakatlanish uchun turist foydalanadigan transport turlarini ko'rsatadi. Marshrutning boshlang'ich va tugash nuqtalari sayohatning boshlang'ich va tugash nuqtalari hisoblanadi. Yo'nalishning boshlanishi turistga shartnomada ko'rsatilgan birinchi turistik xizmatni ko'rsatish joyi, marshrutning oxiri esa oxirgi turistik xizmat ko'rsatish joyi hisoblanadi. Marshrut bo'ylab harakatlanishiga ko'ra marshrut chiziqli, halqali, radial va qo'shma yo'nalishlarga bo'linadi.

Ma'lumotlarni yig'ish jarayonlari birlamchi va ikkilamchi so'rovlar bilan amalga oshiriladi. Birlamchi so'rov to'g'ridan-to'g'ri asosiy manfaatdor tomonlar bilan o'tkazilgan suhbatlar orqali ma'lumotlarni to'plash bilan amalga oshiriladi.

Bundan tashqari, Zomin shahridagi madaniy-tarixiy turizm yoʻnalishlarini rivojlantirishga taʼsir koʻrsatuvchi va muhim ahamiyatga ega boʻlgan beshta asosiy respondentlar: Zomin shaharsozlik agentligi, Madaniyat va turizm boʻlimi, Zomin tumani muzeyi, sayyohlik agentliklari, eng qadimgi turizm obʼyektlari majmui menejerlaridan maʼlumotlar toʻplanadi. Ikkilamchi soʻrovlar tegishli idoralar, meʼyoriy va dasturiy hujjatlar, rejalashtirish va nazariy tavsifiy tahlil sifatida oldingi tadqiqotlar orqali soʻrovlar orqali oʻtkaziladi. Turistik marshrutni ishlab chiqishda turizm obʼektining xususiyatlari va mezonlarini ishlab chiqish zarurati tugʻiladi. Amalga oshirish nuqtai nazaridan, Zomin sayyohlik marshrutlarini amalga oshirishda toʻgʻri strategiyani shakllantirish uchun manfaatdor tomonlarning fikrlari zarur edi. Turizm obʼekti mavzusidan tahlil qilingan madaniyat va meros obʼektiga asoslangan, obʼektlar oʻrtasidagi oʻxshashlik, bir nechta agentlar tomonidan turpakatlarning mavjudligi va shahar tashqarisidan va chet eldan mehmonlar kelganda hukumat doiralariga murojaat bir muncha noqulaylik keltirib chiqarardi. Hozirgi kunda bu kabi noqulaylik va byurokratik munosabatlarga chek qoʻyilmoqda.

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*Usmonov A.U.
Samarqand davlat universiteti 2-bosqich doktoranti
Tuxtamuratova D.D.
Buxoro davlat pedagogika instituti 2-bosqich talabasi*

KOGON SHAHRIGA GEOGRAFIK VA GEODEMOGRAFIK TAVSIF

Annotatsiya. Ushbu maqolada ijtimoiy hayotni hududiy tashkil etilishining asosiy shakllaridan biri bo'lgan shaharlar haqida, jumladan Kogon shahrining tabiiy, ijtimoiy-iqtisodiy geografik va geodemografik xususiyatlari atroflicha yoritilgan.

Kalit so'zlar: O'rta shahar, aholi dinamikasi, Kogon shahri, geodemografiya, transport markazi, qulay geografik o'rin.

*Usmanov A.U.
Doctoral student of the 2nd stage
Samarkand State University
Tukhtamuratova D.D.
Student of the 2nd stage
Bukhara State Pedagogical Institute*

GEOGRAPHICAL AND GEODEMOGRAPHICAL DESCRIPTION OF KAGAN CITY

Annotation. In this article, cities, which are one of the main forms of territorial organization of social life, including the natural, socio-economic, geographical and geodemographical features of the Kagan city, are described in detail.

Key words: Medium-sized city, population dynamics, Kagan city, geodemography, transport center, comfortable geographical location.

Kogon shahri viloyat markazidan (Buxoro shahri) 12 km uzoqlikda Buxoro aglomeratsiyasi hududida joylashgan. Kogon shahri – Buxoro viloyatida o'zining ma'muriy, iqtisodiy ahamiyatiga ko'ra ikkinchi shahar hisoblanadi. Kogon shahriga 1888-yilda temir yo'l stantsiyasi sifatida asos solingan. O'rganilayotgan vaqtda Buxoro viloyati iqtisodiy hayotida ham biroz bo'lsada jonlanish kuzatildi.

Aholisi. Ayni paytda, Kogon shahri yirik sanoat va transport markazi hisoblanib, unda 64,0 ming kishi yashamoqda (01.01.2023 y). Viloyatning asosiy temir yo'l tuguni hisoblangan Kogon shahri aholisining soni, viloyat jami shahar aholisining 8,6 (viloyat jami aholisining 3,2) foiziga teng.

Shahar bugungi kunda o'rta shaharlar toifasiga mansub bo'lib, bunday shaharlar respublikada 22 ta, Zarafshon iqtisodiy rayonida esa 4 tani tashkil etadi.

1-jadval

Zarafshon mintaqasi o'rta shaharlarining aholi soni dinamikasi

T/r	Shaharlar nomi	Aholi soni, ming kishi									
		1926	1939	1959	1970	1979	1989	2000	2010	2021	2023
1	Kattaqo'rg'on	14,5	25,9	34,1	44,0	53,0	58,3	66,1	77,8	91,7	93,4
2	Zarafshon				14,7	35,3	47,4	53,3	72,5	85,1	85,6
3	Urgut	3,7	16,5	10,5	14,7	20,4	36,9	49,4	58,8	69,2	71,1
4	Kogon	10,4	17,6	21,1	34,1	41,8	47,9	52,9	55,3	61,5	64,0

Izoh: Jadval aholi ro'yxatlari va O'zbekiston Respublikasi Prezidenti huzuridagi statistika agentligi ma'lumotlari asosida muallif tomonidan tuzilgan.

Shahar aholi sonining o'sish dinamikasi tahlil qilinganda, aholi soni oxirgi yuz yilda doimiy ravishda o'sish qayd etganini ko'rish mumkin (1-jadval). 1926-yilda shaharda 10,4 ming kishi istiqomat qilgan bo'lsa, 30 yildan ko'proq ichida shahar aholisi 2 barobarga oshgan. Keyingi 2 marta ko'payishi uchun esa bundanda qisqa vaqt ya'ni 20 yil yetarli bo'lgan. Ya'ni 1959-1979-yillar oralig'ida shahar aholisi soni birmuncha tezroq o'sganini ko'rishimiz mumkin.

2023-yil boshida tug'ilganlar 1733 kishi (o'g'il bolalar 878 ta, qiz bolalar 855 ta), o'lganlar 366 kishi (erkaklar 168 kishi, ayollar 198 kishi). Tabiiy ko'payish 0,8 promilleni tashkil qiladi. Mazkur yilda ko'chib kelganlar 494 kishi, ko'chib ketganlar esa 456 kishiga teng. Qiziq tomoni shundan iboratki, maxanik ko'payish musbat saldogaga ega. Tuzilgan nikohlar soni 486 ta, ajrashishlar esa 128 tani tashkil qiladi.

2-jadval

Kogon shahri 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	Qozoqlar	225	0.37
6.	Tojiklar	4542	7.54
7	Tatarlar	1201	1.99
8	Ozarbayjonlar	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	Boshqalar:	1052	1.74
	JAMI:	60164	100.0

Aholisi asosan o'zbeklar, shuningdek, tojik, rus, tatar va boshqa millat vakillari ham yashaydi. Aholining aksariyat qismi temiryo'l transportida ishlaydi.

Sanoati. Bu yerda sanoatning rivojlanishiga uni hududidan o'tkazilgan temir yo'l ijobiy ta'sir qildi.

Shuning uchun sanoat rivojlanishi asosan temir yo'l stantsiyasi – Yangi Buxoro⁶⁷ da kuzatildi. 1917-yil arafasida Yangi Buxoroning iqtisodiy salohiyati oshib, u yirik sanoat markaziga aylandi. Ana shu davrda manzilgohda 15 ta sanoat korxonasi mavjud edi.

1926-yilda o'tkazilgan aholi ro'yxati davrida shahar manzilgohlarning yangi shakli shahar tipidagi posyolkalar (sh.t.p) vujudga keldi. Dastlabki aholi ro'yxatiga ko'ra, O'zbekistonda 17 ta sh.t.p. lar ro'yxatga olingan bo'lib, ular orasida Buxoro viloyatning yagona manzilgohi Yangi Buxoro (Kogon) ham bor edi. O'sha davrda shahar aholisi 5 ming kishidan ortmas edi.

1929-yil Yangi Buxoro (Kogon) shaharlar qatoriga qo'shildi. Kogon – Qarshi – Termiz – Dushanbe temir yo'lining qurilishi manzilgohning transport tuguni sifatidagi ahamiyatini yanada oshirdi va unga shahar maqomini olib berdi. Shundan so'ng shaharda ko'plab sanoat korxonalari – yog'-moy, paxta tozalash, ohak zavodlari va vagon ta'mirlash korxonasi ishga tushirildi. Natijada shaharning nafaqat transport ahamiyati, balki sanoat ahamiyati ham ortdi.

1959-yilda Gazli-Kogon gaz quvuri o'tkazilib, gaz kompressor stansiyasi barpo etilishi shahar sanoati shakllanishiga sezilarli ta'sir ko'rsatdi. Shaharda hozirgi kunda 30 dan ortiq sanoat korxonalari bor. Shaharda yengil va oziq-ovqat, kimyo sanoati yaxshi rivojlangan. Kogon shahri viloyat sanoat mahsulotlarining 4,7 % qismini tashkil qiladi. Tarmoqlar bo'yicha tahlil qilinganda, Kogon shahri viloyat oziq-ovqat sanoati mahsulotlarining 11,6 %, to'qimachilik mahsulotlari ishlab chiqarishning 6,2 %, kiyim ishlab chiqarishning 8,1 %, kimyo mahsulotlari ishlab chiqarishning 7,4 %, rezina va plastmassa buyumlar ishlab chiqarishning 17,0 %, metallurgiya sanoati mahsulotlarining 48,2 %, kompyuterlar, elektron va optik mahsulotlar ishlab chiqarishning 58,3 %, Avtotransport vositalari, treylerlar va yarim pritseplar ishlab chiqarishning 53,9 % ulushi ishlab chiqariladi.

Shaharda ijtimoiy soha obyektlari ham yaxshi rivojlangan. Shaharda 11 ta umumta'lim maktabi, 21 ta maktabgacha ta'lim tashkiloti, 5 ta shifoxona muassasi, 22 ta ambulator-poliklinikalar, 1000 ga yaqin tibbiyot xodimi, 1 ta axborot-kutubxona markazi

Kogon shahri geografik o'rning qulayligini quyidagi holatlar bilan izohlash mumkin:

- ❖ Kogon shahridan xalqaro ahamiyatga ega Toshkent – Turkmanboshi (Krasnovodsk) va Moskva – Dushanbe temir yo'llarining o'tganligi;
- ❖ shahar hududidan Buxoro – Qarshi, Denov – Urganch, Termiz – Nukus kabi avtomobil yo'llarining o'tganligi;
- ❖ viloyat markazi – Buxoro shahriga yaqin joylashganligi;
- ❖ Buxoro viloyatining asosiy sanoat mintaqasi – Buxoro - Qorovulbozor o'qi ichida joylashganligi;

⁶⁷ Kogon shahri 1888-yilda Yangi Buxoro nomi bilan tashkil topgan. 1935-yildan keyin shahar Kogon nomi bilan atalgan.

❖ Jayron pitomnigi va To‘dako‘l suv ombori singari turistik va rekreatsion obyektlarga yaqinligi;

❖ Kogon atrofida xilma-xil qurilish materiallari va boshqa qazilma boylik konlarining mavjudligi va h.k.

Xulosa. Yuqoridagi xususiyatlar Kogonning qulay geografik o‘rinda joylashganligidan dalolat beradi. Albatta, bular orasida shaharning transport geografik o‘rni muhim hisoblanadi. Qolaversa, aynan mana shu omil Kogon shahrining vujudga kelishi uchun ham bosh omil bo‘lib xizmat qilgan. Kogon hududidan o‘tgan xalqaro va respublika darajasidagi yo‘llar shahar ijtimoiy-iqtisodiy rivojlanishiga ijobiy ta‘sir ko‘rsatdi. Natijada Kogon nafaqat Buxoro viloyatining balki, O‘zbekistonning janubi-g‘arbdagi asosiy darvozasiga aylandi.

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MONITORING OF HIGH BLOOD PRESSURE DEPENDING ON SOME MEDICAL AND SOCIAL RISK FACTORS

In this article the analysis of the detection as prehypertension and hypertension depending on the major risk factors. Acting on risk factors, we contribute to the prevention of damage to target organs, leading to the development of high blood pressure. It is of great importance in the prevention of cardiovascular diseases and their complications.

Key words: prehypertension, hypertension, risk factors, population.

As is known, the wide prevalence of arterial hypertension (AH) in the adult population and its unfavorable prognosis determines increased professional interest in all aspects of this disease. Naturally, not only cardiologists, but also doctors of all specialties, especially specialists in the field of epidemiology and prevention of cardiovascular diseases, should not remain aloof from this serious medical and social problem, since the “intervention” of hypertension in the form of a pandemic of modern humanity continues [1,3]. In connection with the above, the development of unified approaches to early diagnosis, treatment and prevention of hypertension in the modern population is very important, timely and in demand.

Even in the last century, experts from international organizations came to the conclusion and argued that the so-called risk factors, which include hypertension, have an extraordinary impact on the burden of non-communicable diseases [5]. In such an epidemiological situation, the only cost-effective and sustainable approach to the control of chronic diseases, including hypertension and other risk factors (RFs) in the public health system is the implementation of epidemiological monitoring of risk factors and the participation of the population in preventive measures [2,4].

Purpose: analysis and comparative assessment of the detection of prehypertension and arterial hypertension depending on some medical and social risk factors in the Fergana Valley.

Materials and methods: The material for this study was the results of a one-time epidemiological study of random representative samples from the unorganized male and female population aged > 15-70 years living in Andijan. 2 samples were formed, among the female and male population > 15-70 years old. The survey coverage was 280 (76.9%) and 323 (89.5%) people. A comprehensive

survey of the population was carried out using biochemical, epidemiological, instrumental, clinical and survey research methods.

Results: having studied some medical and social risk factors, we were able to identify certain epidemiological trends in this aspect. Table 1 presents a comparative description of the detection rate of PrH and hypertension in the population > 15-70 years old, depending on professional activity.

Table 1

Comparative characteristics of the detection of PrH and hypertension in a population > 15-70 years of age, depending on professional activity

Characteristics of the marital status of those surveyed	n	High blood pressure				Difference statistics by t-test (P)		
		PrH (1)		AH (2)		P<0,05	P<0,01	P<0,001
		available PrH n (%)	not available PrH n (%)	available AH n (%)	not available AH n (%)			
Workers	132	102 (77,3)	30 (22,7)	71 (53,8)	61 (46,2)	1-2	-	-
Entrepreneurs	166	26 (15,7)	140 (84,3)	6 (3,4)	160 (96,3)	-	-	1-2
Unemployed	301	29 (9,7)	272 (90,3)	25 (8,4)	276 (91,6)	-	-	-
Unfavorable social status	6	4 (66,7)	2 (33,3)	3 (50,0)	3 (50,0)	1-2	-	-

As can be seen from the data presented in table 1, the detection rate of high blood pressure (HBP) varies significantly depending on the type of professional activity and is: among workers on average 65.6% (77.3% PrH and 53.8% AH, P <0.05), among entrepreneurs - 19.1% (15.7% PrH and 3.4% AH, P <0.001), among the unemployed - 18.1% (9.7% PrH and 8.4% AH, P>0.05) and in persons with unfavorable social status (USS) – 58.4% (66.7% PrH and 50.0% AH, P<0.05).

To the greatest extent, cases of PrH and hypertension are associated with USS; HBP is determined with high frequency in the working population group and the number of people with prehypertension is significantly greater than that of hypertension.

When analyzing the comparative characteristics of the detection of PrH and AH among the surveyed population, depending on housing conditions (Table 2), we found that in the group of the population with satisfactory living conditions, the frequency of HBP is 44.9% (28.5% PrH and 15.9% AH, P<0.05), among people with good conditions – 47.9% (27.9% PrH and 20.0% AH, P>0.05) and in the presence of poor living conditions – 23.1% (14.3% PrH and 8.8% AH, P<0.05).

Table 2

Comparative characteristics of the detection of PrH and hypertension in a population > 15-70 years of age, depending on living conditions

Characteristics of living conditions	n	High blood pressure				Difference statistics by t-test (P)		
		PrH (1)		AH (2)		P<0,05	P<0,01	P<0,001
		available PrH n (%)	not available PrH n (%)	available AH n (%)	not available AH n (%)			
Satisfactory	207	59 (28,5)	148 (71,5)	33 (15,9)	174 (84,1)	1-2	-	-
Good	305	85 (27,9)	215 (71,2)	61 (20,0)	244 (80,0)	-	-	-
Bad	91	13 (14,3)	78 (85,7)	8 (8,8)	83 (91,2)	1-2	-	-

In general, the data obtained indicate that with the deterioration of the living conditions of those surveyed, the frequency of HBP increases to 67.5% compared to the rates of HBP in the group of people with good living conditions (47.9%), that is, almost in 1.5 times ($P<0.05$).

Conclusions: based on the results of the study, we can conclude that periodic epidemiological studies aimed at identifying prehypertension and arterial hypertension, depending on the main, most common risk factors, provide reliability and accessibility for assessing true situations regarding high blood pressure.

Thus, evidence-based prevention of behavioral risk factors can prevent the epidemic of arterial hypertension, that is, simple changes in behavior and lifestyle can significantly contribute to the prevention of dangerous cardiovascular complications and improve public health.

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*Valixanova M.K.
"Iqtisodiyot va menejment" kafedrası
Jizzax politexnika instituti
Averin A.Yu.
katta o'qituvchisi
Penza davlat universiteti "Iqtisodiyot va moliya" kafedrası*

KORXONALARDA SIFATNI BOSHQARISH TIZIMLARINI JORIY ETISHNING XORIJIY TAJRIBALARI

Annotatsiya. Ushbu maqolada korxonalarda sifatni boshqarish tizimlarini joriy etish masalalari hamda uning xorijiy tajribalari ko'rib chiqilgan.

Kalit so'zlar: iste'mol, sifat, mahsulot, samaradorlik, mehnat unumdorligi.

*Valikhanova M.K.
Department of "Economics and Management"
Jizzakh Polytechnic Institute
Averin A. Yu.
senior teacher
Department of "Economics and Finance"
Penza State University*

FOREIGN EXPERIENCES OF IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEMS IN ENTERPRISES

Abstract. This article examines the issues of introducing quality management systems in enterprises and its foreign experiences.

Key words: consumption, quality, product, efficiency, labor productivity.

Sifatni boshqarishning AQSH tajribasi. Ikkinchi jahon urushidan keyingi davrda sanoatdagi yirik yo'qotishlar natijasida, barcha davlatlarda iste'mol mahsulotlariga bo'lgan talab oshib ketdi. Tarixda AQSH xududi hech qachon jang maydoniga aylanmagan. Shu bois, sobiq askarlarining uyiga qaytishi bilan butun dunyo ehtiyojlarni qondirish uchun AQSH sanoati jadal ravishda o'sib, muzlatgichlar, televizorlar, avtomobillar va radiopriyomniklarni cheklanmagan miqdorda ishlab chiqara boshlagan. 40–50 yillarda Amerikada ishlab chiqarilgan mahsulotlarning sifati past edi. Faqat rejalashtirilgan hajmda mahsulot ishlab chiqarishga e'tibor berilgan.

Sifatning past darajasi oqibatida sarflanadigan katta xarajatlar AQSH sanoati uchun jiddiy muammoga aylangan. Taniqli Amerika korxonalari barcha joriy xarajatlarning 20-25%ini mahsulotlarning nuqsonlarini aniqlash va bartaraf qilishga sarflagan. Boshqacha qilib aytganda, korxonalar ishchilarining chorak qismi hech narsa ishlab chiqarishmagan, ular birinchi safar noto'g'ri bajarilgan ishlarni

tuzatishgan. Agar bunga korxonadan chetga chiqqan va bozorga kelib tushgan nuqsonli buyumlarni ta'mirlash yoki almashtirib berish xarajatlarini qo'shadigan bo'lsak, u holda past darajadagi sifat oqibatida sarflanadigan umumiy xarajatlar ishlab chiqarish xarajatlarining 30 va undan ko'p foizini tashkil qilgan.

AQSHning ko'plab mutaxassislari Amerikada mehnat unumdorligi va uning raqobatbardoshligi o'sishiga past sifatli mahsulot asosiy to'siq bo'ladi, deb baholashgan.

Amerika sanoati uchun sifat darajasini oshirish yoki mag'lub bo'lishdan boshqa muqobil yo'l bo'lmagan. Sifat muammosini hal qilishda ko'pincha Amerika mahsulotini raqobatchilardan himoya qiluvchi turli proteksionistik choralar: tariflar, kvotalar, to'lovlarini qo'llangan.

Amerika tadbirkorlarining talabi bilan AQSH ma'muriyati Amerikaning avtomobil, po'lat, maishiy elektronika, motosikllar va h.k. ni ishlab chiqaruvchilarini himoyalash yuzasidan proteksionistik choralar ko'rgan. Mahsulotning sifati asosiy masadga aylangan Amerikaning yetakchi kompaniyalarida ham sifatga iste'molchilarning ehtiyojlarini qondirish yo'li emas, balki ishlab chiqarish xarajatlarini kamaytirish vositasi sifatida qaralgan.

SHu bilan birga, AQSH firmalarining dadil fikrlovchi boshqaruvchilari Amerika mahsulotlarining sifatini oshirish zarurligini anglab yetdilar. Buning uchun quyidagilarni rivojlantirishga qaror qilishgan:

- 1) ishchilarni motivatsiyalash;
- 2) sifat to'garaklari;
- 3) statistik nazorat qilish usullari;
- 4) xizmatchilar va boshqaruvchilarning tafakkurini yuksaltirish;
- 5) sifat xarajatlarini hisobga olish;
- 6) sifatni oshirish dasturlari;
- 7) moddiy rag'batlantirish;

AQSHda 80 – yillarning boshida sifatni boshqarish sifatni rejalashtirish bilan birgalikda olib borildi va bu sifat xizmatining muhim yutug'i bo'ldi.

O'sha davrda AQSHda E.Demingning ikkita kitobi: "Sifat, unumdorlik va raqobatbardoshlik" va "Inqirozdan chiqish" nashrdan chiqqan. Bu monografiyalarda "14 qoida" nomi bilan tanilgan Demingning falsafasi o'rin olgan bo'lib, ular umumiy sifat (Total Quality) ning asosini tashkil qilgan.

AQSHda sifat muammosi teran anglay boshlangan. Amerika sanoatida resurslar, salohiyat, qadr – qimmat va yuqori ish haqi to'lanadigan yuqori pog'ona rahbariyati mavjud. Mashhur Amerika mutaxassisi A. Feygenbaumning ta'rifiga ko'ra, "sifat – yevangelizm emas, oqilonalastirish taklifimas va shior ham emas, u hayot tarzidir".

Buyurtmachilar (iste'molchilar) ning talablarini qondirish sifat sohasidagi inqilobning negizi hisoblanadi. Konveyerdagi har bir ishchi o'zidan oldingi ishchi mahsulotlarining iste'molchisi hisoblanadi. SHuning uchun, har bir ishchining vazifasi navbatdagi ishchini qoniqtirishdan iborat.

Sifat sohasida Amerika tajribasini tahlil qilgan holda uning quyidagi o'ziga xos xususiyatlarini qayd qilamiz:

- matematik statistika usullari orqali mahsulot ishlab chiqarish sifatini qattiq nazorat qilish;
- miqdor va sifat ko'rsatkichlari bo'yicha ishlab chiqarishni rejalashtirish jarayoniga e'tibor berish, rejalar bajarilishining ma'muriy nazorati;
- firmani boshqarishni takomillashtirish.

Mahsulotning sifatini muntazam oshirishga qaratilgan choralar AQSH ning Yaponiyadan katta farqlar bilan ortda qolishini bartaraf etdi. Bu o'z navbatida yagona, global bozorga aylanayotgan jahon bozorida raqobat kurashini kuchaytirib yubordi.

Sifatni boshqarishning Yaponiya tajribasi. 1945 yildan beri ko'plab yapon kompaniyalari sifatga asoslangan raqobatbardoshlikka erishdilar. 1930-yillarda AQShda paydo bo'lgan sifat nazorati Yaponiyaga ko'chirildi va yanada rivojlandi. Yaponiya menejerlari va xususiy korxonalari urushdan keyingi iqtisodiy inqirozga g'ayratli munosabatda bo'lishdi, oldingi sifatsiz va tashkiliy muammolarni hal qilishdi. Sifat nazorati ularning korporativ strategiyalarining muhim elementi bo'lib, butun Yaponiya sanoatida keng tarqalgan. Avtomobil sanoati yangi raqobatbardoshlikning yorqin namunasidir, bunda sifat va ishonchlik hal qiluvchi ahamiyatga ega. Yaponiyadagi kompaniya menejerlari va xususiy korxonalarining o'quv jarayoni, o'z-o'ziga yordam va tashabbuslarini tushunish orqali foyda olishimiz mumkin.

Yaponiya ishlab chiqaruvchilari Ikkinchi jahon urushidan keyin Yaponiya sanoat bazasini qayta tiklash uchun amerikalik mutaxassislar tomonidan ishlab chiqilgan sifat nazorati nazariyalarini qabul qildilar. Doktor Kaoru Ishikava kabi yapon mutaxassislari keyinchalik ishlab chiqarish jarayonining barcha bosqichlarida umumiy sifat nazorati kontsepsiyasini yaratish uchun ushbu g'oyalarni ishlab chiqdilar. AQShdagi ko'plab yirik ishlab chiqaruvchilar ushbu usullarni qo'llagan, ammo kichikroq ishlab chiqaruvchilar ham buni qila olmasligi uchun hech qanday sabab yo'q edi.

Yapon korxonalari o'zlarining go'daklik davrida ham tinimsiz innovatsion bo'lib, sifat va samaradorlikka e'tibor qaratgan. 1950-yillardan boshlab, Yaponiya sanoati sifatni doimiy ravishda yaxshilash maqsadini qabul qildi, keyinchalik umumiy sifat menejmenti yoki TQM deb nomlandi. Asosiy tamoyillar hozir shunchalik keng tarqalganki, ularning bir vaqtlar inqilobiy bo'lganligini tushunish qiyin.

Asrning o'rtalarida sifat nazorati odatda ishlab chiqarishning yakuniy nuqtasi sifatida tushunilgan. Biror narsa chiziqdan chiqqandan so'ng, jamoa sifat standartlariga mos kelishini tekshiradi. Demak, sifat nazorati jazolash, ishlab chiqarishni salbiy tekshirish edi.

Sifatni nazorat qiluvchi odam xatoni ko'rsatib, boshqalarni yomon ko'rsatgan odam edi. Va sifat nazorati jazo bo'lganligi sababli, ishchilar xatolarni

tuzatishdan ko'ra yashirishga rag'batlantirdilar. O'sha qarama-qarshi munosabatlar yuqori sifatning dushmani edi.

Ajablanarlisi shundaki, avtosanoatda nuqsonli mashinani dilerga jo'natish va uni sotish o'rniga zavod uchun muammoga aylantirish rag'batlantirildi. Va keyin diler muammoni xizmatga ko'rsatishga harakat qilishi mumkin.

Umumiy sifat menejmenti (TQM) bu fikrni butunlay o'zgartirdi. Xatolarni aniqlash jarayonni qayta ko'rib chiqish uchun imkoniyat edi. Nima uchun zavod doimiy qalinlikdagi po'lat plitalar ishlab chiqarmadi? Nega ko'p mashina eshiklari shitirladi? Menejerlar ishchilarga ishlab chiqarishni qayta ko'rib chiqish va sifat nazorati bilan shug'ullanish imkoniyatini berishlari kerak edi. Menejerlar ishchilarni sifat bo'yicha o'zlarining sheriklari deb hisoblashlari kerak edi.

Yuqori sifatli Yaponiya eksporti. 1970 va 1980-yillarda biz yapon eksportining yuqori sifatini va Yaponiyaning sifat nazorati amaliyotini yapon madaniyatining uyg'un tabiati bilan bog'laydigan ingliz tilidagi boshqaruv kitoblarini topa boshladik. Qanday bo'lmasin, Yaponiya mehnatni boshqarish bo'yicha hamkorlikka o'ziga xos tarzda mos edi. Ammo bu g'alati tushunchaning hech qanday asosi yo'q edi. Haqiqat esa buning aksi edi.

Shunday qilib, TQM Yaponiyaga AQShdan olib kelingan yana bir xorijiy texnologiya edi. U Ikkinchi jahon urushidan keyin AQSH istilosi davrida Yaponiyaga aholi ro'yxatini o'tkazishda yordam berish uchun kelgan amerikalik muhandis U.Eduards Demingdan kelib chiqqan. V. Edvards Deming sifatni nazorat qilish nazariyalari haqida bir necha ma'ruza qildi. Bu muzokaralar yapon muhandislari va ishbiarmonlarini hayratda qoldirdi. Sony asoschisi va bosh direktori Morita Akio Demingning ma'ruzalari o'zgaruvchan tajriba sifatida gapirdi. Yaponiya olimlari va muhandislari ittifoqi Deming sharafiga sifat nazorati bo'yicha ajoyib yutuqlarni nishonlash uchun mukofot yaratdi.

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Xaitova L.A.
QDU magistranti lingvistika (ingliz tili)
Khaitova L.A.
master's student
QSU Linguistics (English)

ZAMONAVIY MEDIATILSHUNOSLIKNING KOGNITIV VA PRAGMATIK JIHLTLARI

Annotatsiya. Ushbu maqolada mediatilshunoslik hamda uning kognitiv va pragmatik jihatlari haqida fikr va mulohazalar keltirilgan.

Kalit so'zlar. Tilshunoslik, lingvistika, kognitiv, pragmatik, til, kognitiv tilshunoslik, media tarmoq, OAV.

Khaitova L.A.
master's student
QSU Linguistics (English language)
Khaitova L.A.
master's student
QSU Linguistics (English)

COGNITIVE AND PRAGMATIC ASPECTS OF MODERN MEDIA LINGUISTICS

Abstract. This article presents thoughts and comments about media linguistics and its cognitive and pragmatic aspects.

Key words. Linguistics, linguistics, cognitive, pragmatic, language, cognitive linguistics, media network, mass media.

The field of linguistics is the most necessary part of the society, and as the language develops, so does the society. The field of linguistics has a very ancient history, and its study began in ancient India. There are many subfields of linguistics, and in this article we want to focus on pragmatics and cognitive linguistics. Not long ago, the term cognitive linguistics entered the field of linguistics. Therefore, it is no exaggeration to say that it is one of the most pressing issues of modern linguistics today. It is worth noting that the interaction between language and consciousness, problems, connections, the importance and role of language in conceptualizing and categorizing the world, and in cognitive processes based on human experience, in order to generalize with the individual cognitive abilities of a person, that is, understanding and understanding is a new linguistics that studies the relationship between language and their mutual influence and its forms.

Cognitive linguistics is also complicated because it studies concepts and linguistics closely. Because the concept is different for each individual and it is based on the environment in which he grew up. Cognitive linguistics has been officially studied as a separate field since 1989. This year, a conference was first organized in the German state of Duisburg within the framework of cognitive linguistics. The participants of this symposium formed the International Association for Cognitive Linguistics, and since then the interest and research in cognitive linguistics has increased. In cognitive linguistics, we see a new stage in the study of the complex relationship between language and thought, a problem that is mainly characteristic of Russian theoretical linguistics.

As an independent direction in modern linguistics, the formation and development of media linguistics depends on a number of factors related to both linguistic and information technologies and socio-cultural spheres of social life. The mass media is considered as the authority of the public environment, and especially the mass media language has been studied as a tool with social power. Language is a transparent phenomenon. The media often claim neutrality, thereby creating an environment for reflecting public opinion and reflecting the opinions and judgments and arguments of newsmakers.

One of the most important conditions for the emergence of mediallynguistics is the following.

- In particular, the rapid growth of information and communication technologies (ICT), manifested in the creation of a global media network;

- formation and development of a single information space as a new virtual environment of text communication;
- formation and scientific understanding of the concept of "media language", determining its functional and stylistic features and internal structure;

- to realize the need for a comprehensive approach to the study of speech in mass media, based on the joint efforts of representatives of various humanities;

- consideration of media language learning within media studies

- a new independent science, the topic of which is a comprehensive analysis of the historical development, current state and characteristics of the entire mass communication complex.

Undoubtedly, the concept of media text, noted in all works devoted to the production of speech in mass media, is an important theoretical component of media linguistics. The essence of this concept can be summarized as follows: in traditional linguistics, the meaning of the text can be defined as "the coherent and mutual integrity of spoken and written language". In the media text, the person thinks about the world as a real reality, and this thinking is recorded in a verbal-non-verbal form similar to the characteristics of a person's perception of the world and his thinking. It is this situation that justifies the need to move from the research based on the principle of "thing in itself" from within the linguistic units to the search for the "base point" that allows studying the media communication language as a functional whole from the outside. The analysis of linguistic

phenomena allows to clearly define what role language plays in the process of media communication only if it is carried out together with extra-linguistic phenomena.

Thus, the media text is not only a product of mass media: the active trend of modern mass media is the saturation and integration of information at the intersection of journalism, computer technologies, advertising and PR, social networks, etc. Scholars of various fields are thinking about its interpretation: grammar, text linguistics, medialogistics, psycholinguistics, etc. Accordingly, today we have different approaches to studying the text.

Speaking about the main features of the use of language in the mass media, researchers have noted that the influence of mass speech on modern speech is very large and requires careful, systematic study. A detailed study of some media languages led to the expansion of the concept of "media language", which in turn was reflected in the separation of the oral and media or audiovisual levels. On the other hand, considering the language of mass media as a mixed type of sign system that combines verbal and audiovisual codes made it possible to determine the linguistic characteristics of each specific mass media. Finally, a characteristic feature of the language of print media is the interaction of its verbal and graphic components. The type and size of the font, the presence of images, the use of colors, the quality of the paper, the arrangement of the material in the lines - all this is closely related to the line of words and forms a single unit - the syncretic language of the press.

Cognitive and pragmatic aspects of modern media linguistics occupy a great place in our cultural life.

The cognitive aspect describes the learning tools of receiving, recording and analyzing information in the process of communication and information acquisition through media linguistics. This aspect expresses the variability of media linguistics, including structural and structural-decreasing information.

Pragmatic aspect, in media linguistics, describes people's communication with themselves, conveying messages to other people, language, and including methods of conveying messages in the process of communication, appropriateness of language to the context, relationships between personalities. This aspect explains the connection of media linguistics with social, economic and political problems and tasks.

Cognitive and pragmatic aspects of modern media linguistics provide insight into human relationships, spirituality, activities and thought processes. In these aspects, media linguistics has an important impact on changes in our spirituality and cultural life.

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*Xojyazova D.Sh.
Urganch davlat universiteti
"Geografiya" yo'nalishi 1-bosqich talabasi
O'zbekiston Respublikasi*

GLOBAL IQLIM O'ZGARISHINING XORAZM VOHASIGA TASIRI

Antonatsiya. Maqolada bugungi kunda global iqlim o'zgarishlarining Xorazm vohasi iqlimi hamda tabiatiga, uning komponentlariga salbiy ta'siri yoritilgan bo'lib, ushbu muammolarni bartaraf qilishda jahon hamda respublikamiz miqyosda olib boriladigan va olib borilishi lozim bo'lgan chora-tadbirlar to'g'risida taklif va tavsiyalar berilgan.

Kalit so'zlar: konvensiya, "Kioto protokoli", issiqxona gazlari, antropogen ta'sir, tabiiy landshaftlar, landshaft komponentlari, cho'llashish, regional iqlim.

*Xojyazova D.Sh.
student of the 1st stage
"Geography" course
Urganch State University
Republic of Uzbekistan*

THE EFFECT OF GLOBAL CLIMATE CHANGE ON THE OASIS OF KHORAZM

Abstract. The article describes the negative impact of global climate changes on the climate and nature of the Khorezm oasis, its components, and the measures that should be taken and should be taken to eliminate these problems at the global and national level. suggestions and recommendations are given.

Key words: convention, Kyoto Protocol, greenhouse gases, anthropogenic impact, natural landscapes, landscape components, desertification, regional climate.

Kirish. Sayyoramizda umumiy haroratning ko'tarilishi, atrof-muhitni ayniqsa atmosfera havosining ifloslanishi butun insoniyat qalbida xavotir uyg'otmoqda. Atmosfera havosiga chiqarilayotgan zararli gazlarning miqdori shu qadar ko'pki, u nafaqat haroratning, balki sayyoramizning barcha mintaqalarida iqlimiy o'zgarishlarning salbiy oqibatlari va ayanchli holatlariga sabab bo'lmoqda. Iqlim o'zgarishi insoniyat faoliyatining bugungi kuni va bizning ertangi kunimiz bo'lgan kelajak avlodlarning hayot sifatiga salbiy ta'sir qilmoqda. Insoniyat oldida turgan bu murakkab muammo va vaziyatlar uzoq vaqtlardan beri chuqur muhokamalarga sabab bo'lmoqda.

Iqlim o'zgarishlari muammosining salbiy oqibatlarini yumshatish bo'yicha tezkor choralar ko'rilishi zarurligini e'tiborga olgan holda, O'zbekiston Respublikasi 1993 yilda Birlashgan Millatlar Tashkilotining "Iqlim o'zgarishi bo'yicha Doiraviy Konvensiyasi"ni, 1998 yil noyabrda esa "Kioto Protokoli"ni imzoladi. "Kioto Protokoli" O'zbekiston tomonidan imzolanganidan so'ng 1999 yil 20 avgustida ratifikasiya qilindi.

Asosiy qism. Bugungi kundagi global muammo – antropogen ta'sir ostida iqlim o'zgarishining tabiiy landshaftlarga salbiy ta'siri yaqqol ko'zga tashlanadi, bu esa ilmiy yondashuv bilan chora-tadbirlar ko'rish zarurligini taqozo etadi.

Global iqlim o'zgarishlari, ya'ni havo haroratining ko'tarilib borishi Orolbo'yi, Qizilqum, shu jumladan Xorazm vohasida ekologik vaziyatning yanada keskinlashuviga olib kelmoqda. Bunga sabab qilib ushbu hududlarning cho'l zonasida joylashganligi hamda cho'llashish jarayoniga kuchli moyilligi bilan izohlash mumkin. Bu hududlarda ayniqsa suv taqchilligi muammosi eng dastlabki bo'y ko'rsatadigan jarayon bo'lib, ushbu hududlar aholisi yashash sharoiti, qishloq xo'jaligi hamda maishiy hayotiga keskin ta'sir ko'rsatadi. Iqlim o'zgarishi natijasida suv resurslari miqdori va ularning hosil bo'lish jarayoni yildan-yilga o'zgarib turadi.

Tadqiqotlar shuni ko'rsatadiki, global miqyosda havo haroratining isishi har 30 yillikda Yer shari kengliklarini 150-200 kilometr shimolga surilishiga olib keladi. Shu jarayonga bog'liq ravishda ushbu hudud tabiiy landshaft komponentlari ham o'zgarib borishi kuzatiladi [2].

Mana shunday ma'lumotlarni chuqur tahlil qilgan holda, bugun sayyoramizda yuz berayotgan iqlim o'zgarishlari bilan shug'ullanib kelayotgan mutaxassis-olimlar — issiqxona gazlarining miqdorini iqlim tizimiga xavfli antropogen almashuvining oldini oladigan darajada barqarorlashtirish maqsadiga etishish uchun nima qilish zarurligi haqida bosh qotirishmoqda [2].

Iqlim o'zgarishining qishloq xo'jaligiga ta'siri yerlar degradatsiyaga uchragan, cho'llashish kengayib borayotgan Xorazm vohasida yaqqol seziladi. Bundan tashqari, ko'plab daraxtlarni kesish, suv ifloslanishi, tabiiy landshaftlarni qishloq xo'jaligi, sanoat va boshqa maqsadlarda o'zlashtirish jarayonida antropogen cho'llanish jarayonlari ham iqlim isishi muammosining ko'lamini yanada oshirib yuboradi.

Vohada iqlim o'zgarishi yozda yuqori harorat va kuchli shamollar mavjudligini kuchaytirib, inson salomatligi uchun zararli kimyoviy moddalar bilan zaharlangan chang bo'ronlarini olib yuradi, tuproq yuzasidan suvning bug'lanishini tezlashtiradi, qishloq xo'jaligi ekinlarining rivojlanishi va hosildorligiga salbiy ta'sir ko'rsatadi.

Mutaxassislar Xorazm vohasidagi iqlim o'zgarishlarini o'rganish natijasida bu hududda quyidagi salbiy oqibatlar yuzaga kelishini aniqladi. Ya'ni, yozgi haroratning maksimal o'sishi 43°C dan 53°C gacha ko'tarilgan, qishda esa o'rtacha harorat -27°C dan -32°C gacha pasayganligi kuzatilgan [1].

Xorazm vohasida o'rtacha yillik harorat 14,5°C, o'rtacha yillik yog'in miqdori 80 mm atrofida. Avvallari Orol dengizi to'lib turgan davrda ushbu havzada doimiy bug'lanish kuzatilgan va u yerda namlik birmuncha yuqori bo'lgan, ya'ni hududda qulay regional mikroiklim vujudga kelib, Xorazm vohasi iqlimi va tabiatiga ijobiy ta'sir ko'rsatib kelgan edi.

Ushbu muammolarni bartaraf qilish, oldini olish hamda kishilik jamiyatiga salbiy ta'sirini kamaytirish maqsadida O'zbekiston Respublikasi 2016yil 19 aprel kuni "Parij bitimi"ga qo'shilgan. Ushbu Parij bitimida O'zbekistonga yuklatilgan majburiyatlar doirasida mamlakatda iqlim o'zgarishi masalalariga moslashish dasturini ishlab chiqish maqsadida maxsus loyihalar amalga oshirilmoqda. Chunonchi, loyiha doirasidagi ilk tadbir Xorazm viloyatida o'tkazildi. Mazkur loyiha BMT Taraqqiyot dasturi va Yashil iqlim jamg'armasi tomonidan moliyalashtirimoqda.

Iqlim o'zgarishining Xorazm vohasiga salbiy ta'sirini yumshatish maqsadida, birinchi navbatda hududni ko'kalamzorlashtirish, ya'ni daraxt ekish, shu jumladan Amudaryo suvini to'g'ri taqsimlash, sanoat korxonalaridan to'g'ri foydalanish kabi bir qancha chora-tadbirlar yig'indisini birvarakayiga qo'llash zarur.

Iqlim o'zgarishlari muammosi ustida bugungi kunda respublikamizdagi ko'plab mutaxassis olimlar tadqiqotlar olib borishmoqda. Jumladan, bu borada Xorazm vohasi olimlari tomonidan olib borilayotgan keng qamrovli izlanishlar ham diqqatga sazovor bo'lib, bu izlanishlar natijasida quyidagi tavsiyalar ilgari surilmoqda:

1. Iqlim o'zgarishi sharoitida ekinzorlarning mikroiklimini maqbul ahvolga keltirish. Umuman, mikroiklimni boshqarish;

2. Suvni tejoyvchi uslublarni keng qo'llanishi orqali cho'llanish jarayonini sekinlashtirish;

3. Tuproqning sho'rlanish sur'atini keskin darajada sekinlashtirish choralari ko'rish;

4. Mahalliy daraxtlar yordamida degradatsiyalanuvchi yerlarda o'rmonchilikni tashkil qilish;

5. Tabiiy sovuqdan maqsadli foydalanish va boshqalar.

Albatta, olimlarimiz tomonidan taqdim qilinayotgan yuqoridagi tavsiyalarni amaliyotga tadbiriq etish usullari ishlab chiqilgan bo'lib, ular bugungi kunda iqlim o'zgarishlarining salbiy oqibatlaridan himoyalashda, qolaversa, qishloq xo'jaligini barqaror rivojlantirishga to'g'ri yondashishda muhim ahamiyat kasb etadi.

Xulosa. Xulosa qilib aytganda, iqlim o'zgarishining fizik, iqtisodiy va ijtimoiy-siyosiy oqibatlari majmuini yengish insoniyat kelajagini qay tarzda davom qildirishi bilan tavsiflanadi. Shuning uchun, yuqoridagi taklif va tavsiyalardan kelib chiqib mahalliy, regional, mamlakatlararo qarorlar qabul qilish orqali ushbu dolzarb va yechimini kutayotgan muammoni bartaraf qilish kechiktirib bo'lmaydigan vazifamizdan biridir.

Shu jumladan, Xorazm vohasida tabiiy suv havzalari tizimini saqlash, biologik xilma-xillikni saqlash, biologik resurslarni tiklash, hayvonot va o'simlik dunyosini saqlash, sun'iy ko'llar yaratish hisobiga kichik mikroiklimi qulay hududlar (vetlandlar) yaratish, eng ko'p suv talab qiladigan paxta va sholi ekin maydonlarini keskin qisqartirish orqali ushbu muammoga yechib toppish hamda vohada insonlar hayoti uchun qulay iqlim sharoitini saqlab qolish mumkin.

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*Xolmatova M.F.
Sharof Rashidov tuman
1-son kasb-hunar maktabi
"Umumta'lim fanlar" kafedrasi, Huquq fani o'qituvchisi*

HUQUQIY ONG VA HUQUQIY MADANIYAT SHAKLLARI HAMDA UNING RIVOJLANISHI

Annotatsiya: Ushbu maqola huquqiy ong va huquqiy madaniyatni rivojlantirish, hamda uning huquqiy asoslarini yaratish, jamiyatda fuqarolar ayniqsa yosh avlodning huquqiy bilim va ko'nikmalarini shakllantirishga qaratilgan ishlar haqida ma'lumotlar keltirib o'tilgan.

Kalit so'zlar: Huquq, madaniyat, huquqiy ong, jamiyat, guruh, shaxs, fuqarolik jamiyati, demokratiya, qonun, ijyimoiy-iqtisodiy, islohot, siyosat, shaxsiy mafaat, jamiyat mafaati, g'oya, huquqiy ta'lim-tarbiya.

*Kholmatova M.F.
teacher of law
Department of "General Education"
Sharof Rashidov district
Vocational school No. 1*

FORMS OF LEGAL CONSCIOUSNESS AND LEGAL CULTURE AND ITS DEVELOPMENT

Annotation: this article cites information about the development of legal consciousness and legal culture, as well as the creation of its legal framework, work aimed at the formation of legal knowledge and skills of citizens in society, especially the younger generation.

Keywords: law, culture, legal consciousness, society, group, person, civil society, democracy, law, economic, reform, politics, personal mafaat, community mafaat, idea, legal education.

Mamlakatimizda mustaqilligimizning dastlabki yillaridan boshlab huquqiy davlat va fuqarolik jamiyati barpo etishning asosiy sharti sifatida xalqimizning huquqiy bilimi va madaniyatini yuksaltirish, huquqshunos kadrlar tayyorlash tizimini tubdan yaxshilash, qabul qilingan qonun va qarorlarning mazmun-mohiyatini aholiga chuqur o'rgatishga katta e'tibor qaratilib kelinmoqda.

Bugungi kunda fuqarolik jamiyatini shakllantirish jarayonida huquqiy madaniyatni yuksaltirishga erishish, tom ma'noda huquqiy ongni yuksaltirish davr talabiga aylanib ulgurdi. Fuqarolarda yuksak huquqiy tafakkur shakllanmas ekan, turli xil nomutanosibliklar albatta kelib chiqaveradi. Huquqiy madaniyatni shakllantirish va shu orqali qonun ustuvorligiga erishish nafaqat jamiyatning,

balki o‘sib kelayotgan yoshlar uchun qimmatlidir. Huquqiy davlat, fuqarolik jamiyati qurishning zarur sharti qonunlarga so‘zsiz itoat etishdir.

Yurtimizda yosh avod tarbiyasi davlat siyosati darajasiga ko‘tarilgan. Shuningdek, ularni qonunlarga hurmat ruhida tarbiyalash ham eng muhim vazifalar sirasiga kiradi. Huquqiy demokratik davlat qurishda o‘sib kelayotgan yosh avlodning huquqiy bilimlarni mukammal egallaganligi muhim ahamiyat kasb etadi. Mukammal ta‘lim-tarbiya olgan avlod hech qanday huquqbuzarlik yoki jinoyatlar ko‘chasiga aslo kirmaydi. Shuningdek, turli yot g‘oyalar ta‘siriga tushib qolmaydi.

Huquqiy davlatning eng muhim belgilaridan biri bu— qonun ustuvorligini ta‘minlash va yuksak darajadagi huquqiy ong hamda madaniyatga ega bo‘lgan barkamol avlodni tarbiyalash mazkur islohotlarning bosh bo‘g‘inini tashkil etadi. Jamiyatdahuquqiyongvahuquqiy madaniyatni yuksaltirish, mamlakatimiz aholisi va yoshlari ongida qonunlarga hurmat ruhini singdirish masalalari juda muhimdir. Inson o‘zini huquqiy jihatdan yetuk, bilimli deb hisoblashi uchun birinchi navbatda unda jamiyatda o‘rnatilgan huquq normalariga nisbatan hurmat ruhi shakllangan bo‘lishi lozimdir. O‘tgan yillar mobaynida o‘tkazilayotgan islohotlarning qonuniy zamiri yaratildi. Ijtimoiy-siyosiy hayotning huquqiy asoslari izchillik bilan mustahkamlandi.

Vatanimizning rivojlanishi va islohotlarning muvaffaqiyati juda ko‘p jihatdan xalqning huquqiy ongi hamda madaniyati darajasiga bog‘liq jarayondir. Yuksak huquqiy madaniyat demokratik jamiyat poydevori va huquqiy tizim yetukligining ifodasidir.

Huquqiy ong - bu qonunga, davlat organlari faoliyatiga, shu bilan birgalikda, shaxslarning huquqiy tartibga solish sohasida sodir etilgan harakatlariga munosabatni ifodalovchi g‘oyalar, his-tuyg‘ular yig‘indisidir. Huquqiy ongning ijtimoiy ong shakli sifatidagi o‘ziga xosligi uning odamlarning ijtimoiy va individual hayotining intellektual ifodasi ekanligida namoyon bo‘ladi. Huquqiy ong huquq tizimining quyidagi elementlari bilan chambarchas bog‘liqdir:

- huquqiy normalar
- huquqiy tamoyillar
- huquqiy munosabatlar
- huquq ijodkorligi jarayonlari.

Huquqiy madaniyat – bu huquqiy ongni amalga oshirishdir. Boshqacha qilib aytganda, huquqiy madaniyat - bu huquq ijodkorligi faoliyati natijalarida (qonunlarning sifati va asosliligi), huquqni qo‘llash jarayonida (huquqni muhofaza qilish va huquqni muhofaza qilish organlari xodimlarining xulq-atvor madaniyati) ifodalangan obyektivlashtirilgan huquqiy ongidir.), yuridik institutlarning (sud, prokuratura va boshqalar) faoliyatida, shuningdek, oddiy fuqarolarning xatti- harakatlarida.

Huquqiy madaniyatning turlari uning tashuvchisiga qarab ajratiladi:

- 1) Jamiyatning huquqiy madaniyati;

- 2) Guruhning huquqiy madaniyati;
- 3) Shaxsning huquqiy madaniyati.

Jamiyatning huquqiy madaniyati - bu butun jamiyatning huquqiy faolligi va ong darajasini bildiruvchi umumiy madaniyatning ma'lum bir qismidir. Keng ma'noda jamiyatning huquqiy madaniyatini ma'lum bir davr uchun to'plangan barcha huquqiy bilim va tajribalar yig'indisi sifatida belgilashimiz mumkin.

Jamiyat huquqiy madaniyatining rivojlanish darajasini ko'rsatuvchi ko'rsatkichlar bu:

- Qonunchilikning rivojlanish darajasi
- Huquqiy normalarni talqin qilish sifati
- Aholining huquqiy faoliyati
- Huquqiy bilimlarga talab darajasi va mavjudligi
- Huquq normalarida umuminsoniy va milliy tamoyillarning o'zaro

bog'liqligi

- Qonun hujjatlari talablariga subyektlar tomonidan rioya qilish darajasi

Ijtimoiy guruhning huquqiy madaniyati - bu ma'lum bir ijtimoiy guruhning huquqiy ongi va huquqiy xulq-atvori darajasining holati hisoblanadi.

Ijtimoiy guruhlarning huquqiy madaniyati quyidagi bir qancha xususiyatlar bilan ajralib turadi:

- Qonunchilik va qonunchilikni bilish
- Qonunga rioya qilish
- Kerakli narsalarni bajarish qobiliyati huquqiy hujjatlar
- Xalq va qonun tomonidan berilgan kuchdan foydalanish qobiliyati
- Fuqarolarning huquqiy tarbiyasi

Shaxsning huquqiy madaniyati - bu yakka shaxs, shaxs madaniyatidir. U quyidagi elementlardan iborat:

- Qonunni bilish va tushunish
- Qonunga rioya qilish va qonuniy inson xatti-harakati
- Huquqiy xulq-atvor darajasi
- Huquqiy psixologiya va mafkura

Xulosaaytishimiz mumkinki, "Jamiyatda qonunlarga hurmat ruhini qaror toptirish - demokratik huquqiy davlat qurishning garovidir!". Shunday ekan, qonunlarning samarali ishlashi uchun albatta fuqarolarning huquqiy ongini, huquqiy madaniyatini, huquqiy mafkurasini yuksaltirish juda muhimdir. Aholining barcha tabaqalari, ayniqsa yosh avlodning huquqiy bilim saviyasini yuqori darajaga ko'tarish bilan biz qonun buzilishlari, adolatsizliklar, jinoyatlarning oldini olgan bo'lamiz. Sababi, har bir fuqaro iqtisodiy va siyosiy islohotlar jadal o'tkazilayotgan hozirgi davrda qayerda ishlamasin, xizmat qilmasin, o'qimasin, har qadamda huquqiy bilimga ehtiyoj sezishi tayindir.

Zamonaviy davrda insonlarning huquqiy ongi va huquqiy madaniyatini barqaror rivojlanish yo'liga olib chiqish uchun huquqiy ongning umumiy darajasini ko'tarish fuqarolarning huquqiy nigilizimini yengishga qaratilgan chora- tadbirlarni qabul qilish va amalga oshirish zarurati va ehtiyojini keltirib

chiqaradi. Biz jamiyatda avvalo qonun va qonunga hurmat har bir insonning shaxsiy ishonchiga aylanishi uchun harakat qilishimiz zarur.

Huquqiy jamiyatda bosqichma-bosqich shakllanib boradigan shaxsning ehtiyojlari va manfaatlarini maqsadga muvofiq ravishda shakllantirish, qonun ustuvorligini va qonuniylikni mustahkamlashning samarali vositalaridan biri sifatida ushbu tadbirlar orasida huquqiy madaniyat va huquqiy ong, huquqiy ta'lim alohida o'rin tutishi lozim. Huquqiy tarbiyaning maqsadi birinchi galda qonunlarga hurmatni shakllantirish bo'lishi kerak.

Foydalanilgan adabiyotlar:

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*Xolmirzaev N.N.
Qo‘qon universiteti
“Ta‘lim” kafedrasi dotsenti v.b.
falsafa fanlari bo‘yicha (PhD)*

SOG‘LOM TURMUSH TARZINI SHAKLLANTIRISHDA TARBIYA VA SPORTNING AHAMIYATI

Annotatsiya. Maqolada sog‘lom turmush tarzini shakllantirishda mavjud muammolarni, ularni oldini olish yo‘llari, hamda bu borada tarbiya tizimi va sportning ahamiyati haqida fikr yuritiladi.

Kalit so‘zlar. Sog‘lom turmush tarzi, ma‘naviy tarbiya, ijtimoiy roliklar, sport o‘yinlari, “Sport-sog‘lomlashtirish kuni”

*Kholmirzaev N.N., PhD
associate professor
"Education" Department
Kokand University*

THE IMPORTANCE OF EDUCATION AND SPORTS IN FORMING A HEALTHY LIFESTYLE

Abstract. The article discusses the existing problems in the formation of a healthy lifestyle, ways to prevent them, and the importance of the education system and sports in this regard.

Key words. Healthy lifestyle, spiritual education, social roles, sports games, "Sports-health improvement day"

Shiddat bilan rivojlanayotgan hozirgi zamonda inson omili muhim ahamiyat kasb etmoqda. Bugungi kunning oldimizga qo‘yayotgan dolzarb vazifasi iqtisodiy, ijtimoiy, siyosiy, jihatdan asoslangan o‘ziga xos turmush tarzini yaratishdir. Ana shunday sharoitda barqaror taraqqiyotni belgilovchi muhim omillar sifatida kishilarda, hususan yoshlarda sog‘lom hayot, sog‘lom turmush tarzini shakllantirishga e‘tibor qaratish butun jamoatchilik oldida turgan muhim vazifalardan biriga aylandi.

Tarixdan ma‘lumki ota-bobolarimiz sog‘lom turmush tarzini yaratishga jiddiy e‘tibor qaratgan. Kezi kelganda qadimgi ma‘naviy manbalarda ham ushbu masalaga alohida e‘tibor qaratilganligini ta‘kidlab o‘tish joiz. Jumladan Zardushtiylik dinida ham yaqin qarindoshlar o‘rtasida nikoh munosabatlarini o‘rnatilishiga yo‘l berilmaganligi shundan dalolat beradi. Bu o‘z navbatida hozirgi zamon tibbiyoti rad etayotgan qarindosh-urug‘lar o‘rtasida yuz berayotgan nikohning salbiy oqibatlarini bobolarimiz yaxshi tushunganliklaridan darak beradi.

Binobarin sogʻlom turmush tarzini yaratish kechagi yoki bugungi voqelik emas, balki uning oʻq ildizlari uzoq oʻtmishga borib taqaladi. Hususan turmush tarzining sogʻlom negizlarini yaratish toʻgʻrisidagi tasavvurlar qadimgi davr yunon faylasufi Gippokratning “Sogʻlom turmush tarzi haqida”gi risolasida muhim oʻgitlar koʻrinishida bayon qilinadi. Risolasi muallifining fikriga koʻra, sogʻlom turmush tarzini qaror toptirishda tibbiy nuqtai nazardan inson jismoniy salomatligi, muhitning tashqi omillari – iqlim, tuproq kabilar bilan birga, kishilarning hayot tarzimamlakatlar qonunlari odamdagi jismoniy va ruhiy xususiyatlar ham katta rol oʻynaydi.

Hukumatimiz tomonidan olib borilayotgan siyosatning asosiy tamoyillaridan biri bu sogʻlom turmush tarzi asosida barkamol avlodni tarbiyalab voyaga yetkazish ekanligini inobatga olsak yuqorida keltirilgan dalillar biz uchun yoʻnalish beradi. Bu borada hozirgi kunga kelib sogʻlom turmush tarzini yoshlar oʻrtasida shakllantirish va ommaviy hayot yoʻsiniga aylantirish uchun quyidagilarga eʼtibor qaratish kerak deb hisoblaymiz.

- Tozalik, ozodalik va pokiza xayot tarziga doimo amal qilish, toʻgʻri ratsional ovqatlanish, zararli illatlar, xususan spirtli ichimliklar ichish va kayf beruvchichekish vositalaridan foydalanmaslik, jismoniy mashqlar bilan muntazam shugʻullanish va boshqalar;

Biz yuqorida koʻrsatgan omillar sogʻlom turmush tarzini yaratish boʻyicha avloddan- avlodga oʻtib kelayotgan dasturul-amal desak mubolagʻa boʻlmaydi. Zero ushbu vositalar yordamida sogʻlom turmush tarzini yaratishga erishish mumkin. Ammo shuni taʼkidlash joizki, sogʻlom turmush tarzini shakllantirishga toʻsiq boʻladigan omillar ham yoʻq emas.

Bugungi kunda sogʻlom turmush tarzini shakllantirishga toʻsiq boʻlayotgan va bartaraf etilishi lozim boʻlgan ushbu omillarni misol keltirish mumkin.

- XXI asrning chegara bilmas muammolaridan biri narkobiznesning kuchayishi, milliy gʻoyaga zid boʻlgan yot gʻoyalarning tarqatishga boʻlgan urinishlarning koʻpayib borayotganligi, turli hildagi yuqumli kasalliklarning tez va osonlik bilan tarqalib borishi va hakazo... Bunga jumladan orttirilgan immunitet tanqisligi sindromi yaʼni OITSni misol keltirishimiz mumkin. Ayni paytda erta turmush qurish yoki qarindoshlar oʻrtasida yuz berayotgan nikoh qurish holatlarining mavjudligi, halqaro terrorizming keng quloch yoyishi, gʻarb televideniyalari orqali berilayotgan behayo filmlar namoyishi, ommaviy maʼdaniyatning salbiy illatlari ham oldimizda turgan bartaraf etilishi lozim boʻlgan dolzarb vazifalardan biriga aylangan.

Sogʻlom avlodni voyaga yetkazish va ularni xalq koriga yaraydigan malakali kadrlar qilib tarbiyalash bosh maqsadimiz ekan bu sohada hali koʻplab xayrli ishlarni bajarashimizga toʻgʻri kelishini yuqorida koʻrsatilgan omillar isbotlab turibdi. Shuni inobatga olgan xolda sogʻlom turmush tarzini shakllantirishga toʻsiq boʻlayotgan omillarni bartaraf etish uchun hammamiz birdek masʼul ekanimizni unutmasligimiz lozim.

Sogʻlom turmush tarzini yaratish uchun quyidagi jihatlarga eʼtibor qaratish toʻgʻrisida oʻz tavsiyalarimizni kiritishni lozim topdik.

- Erta turmush qurishning salbiy oqibatlari yoritilgan filmlarni televideniya namoyishini yanada koʻpaytirish, turli yuqumli kasalliklar profilaktika choralarini yanada kuchaytirish hamda targʻibot-tashviqot ishlari jarayonida zamonaviy axborot-tehnologiyalari imkoniyatlaridan unumli foydalanish, jismoniy mashqlarni meʼyorida va muttasil bajarib borish, televideniya orqali koʻrsatuvlar va filmlar namoyishi chogʻida tamaki chekib turish holatlari tushirilgan tasvirlarni olib tashlash, zero bu norasmiy reklamani keltirib chiqaradi. Shuningdek yoshlar kompyuter oʻyinlari orasida zoʻravonlikni targʻib qiluvchi oʻyinlar yoʻqligini nazorat qilib borish ham foydadan holi boʻlmaydi.

Hozirgi kunga kelib sogʻlom hayot kechirishning muhim omillaridan biri boʻlgan sport sohasiga davlat siyosati darajasida eʼtibor qaratilmoqda. Buning sababi sportning sogʻlom turmush tarzi va barqaror taraqqiyot omillardan biriga, hamda xalqlar oʻrtasidagi tinchlik va hamjihatlikni taʼminlovchi vositaga aylanganidir.

Sport mamlakatni dunyoga tanitadigan va dovrugʻini koʻtaradigan muhim vositalardan biridir. Ayni paytda mamlakatimizda bolalar sporti sohasiga har qachongidan ham katta eʼtibor qaratilayotganligi bejiz emas. Mamlakatimizda uch bosqichli sport oʻyinlari tizimi yaratilganligi yoshlarni kelajakka munosib voris boʻlish uchun tayyorlovchi muhim omil vazifasini oʻtamoqda. Aynan shu sababdan mamlakatimiz bolalar va yoshlar sporti doirasida katta yutuqlarni qoʻlga kiritmoqda. Ayni paytda bu xarakterlar oʻz samarasini berayotganligini barchamiz oʻz koʻzimiz bilan koʻrib guvoh boʻlmoqdamiz. Jumladan mamlakatimiz yoshlar futbol jamoasining Argentina maydonlarida oʻtkazilgan jahon chempionatida chorak finalgacha yetib borishi futbolimiz tarixidagi eng katta yutuqlardan biri boʻlganligini hali koʻpchilik unutmagan boʻlsa kerak. Hozirgi kunga kelib sport sohasida katta yutuqlar qoʻlga kiritilayotgan boʻlsada hali oldinda bajarilishi kerak boʻlgan ayrim masalalar ham yoʻq emas. Jumladan hozirda bolalar sportini yanada rivojlantirish va sportni yoshlarni doimiy hayot yoʻsiniga aylantirish uchun bizning fikrimizcha quyidagi omillarga eʼtibor qaratish muhimdir.

Maktabgacha taʼlim muasasalarida jismoniy tarbiya mashgʻulotlarini koʻpaytirish, maktabgacha taʼlim muasasalaridayoq bolalarni qaysi sport turiga iqtidori borligini aniqlash va shu sport turiga yoʻnaltirish muximdir. Zero bu tadbir kelajakda professional sportchilarning yangi avlodinshakllantrishga sabab boʻladi. Shu bilan birgalikda bolalar sportini rivojlantirish jamgʻarmani rahbarligida sportning turli sohalarida tumanlarda bolalar ligalarini tashkil etish va uni muttasil faoliyat olib borishini taʼminlash sportning ommalashishiga va sogʻlom turmush barpo etishga yordam beradi. Ayni paytda gimnastika sport turini yoshlar, ayniqsa qizlar oʻrtasida yanada ommalashtirish, bolalar va oʻsmirlar sport maktablarini moddiy texnik bazasini oʻstirish xam sogʻlom bola tugʻilishida va tarbiya topishida katta rol oʻynaydi. Korxonalar va tashkilotlarda

xaftaning aynan bir kunini, misol uchun juma kunini “Sport-sog‘lomlashtirish kuni” deb e’lon qilish va shu kunda xodimlar o‘rtasida jarayonga xalal bermagan xolda turli sport musobaqalari tashkil etish ishchi xodimlar uchun madaniy xordiq bo‘lib, ayni paytda ularda ishchanlikni xam oshiradi. Televideniylar orqali sport bu katta hayotga qo‘yilgan dastlabki qadam ekanligini ochib beruvchi va sportning ijobiy oqibatlari yoritilgan reklamalar berib borish va shu kabi teledasturlar sonining ortishi xam foydadan xoli bo‘lmaydi. Zero ushbu omillar sog‘lom turmush tarzini shakllantirish va rivojlantirishga poydevor bo‘ladi.

Xulosa o‘rnida aytish mumkinkiumuman olganda hozirgi paytda mamlakatimizda sportga hamda sog‘lom turmush tarzigaqaratilayotgan e’tibor tahsinga sazovordir. Shu bilan birgalikda yuqorida ko‘rsatilgan ob’ektiv omilarni hayotga tadbiiq etish foydadan holi bo‘lmaydi.

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*Xolmirzaev N.N.
Qo‘qon universiteti
“Ta‘lim” kafedrasida dotsenti v.b.
falsafa fanlari bo‘yicha (PhD)*

URBANIZATSIYA MUAMMOLARINI BARTARAF ETISH YUZASIDAN HAYOTIY TAKLIFLAR

Annotatsiya. Maqolada mamlakatimizda olib borilayotgan urbanizatsiya siyosati, bu boradagi muammolar, ularni bartaraf etish yuzasidan chiqarilgan prezident farmoni va unda belgilangan vazifalar, hamda mazkur muammolar yuzasidan takliflar to‘g‘risida so‘z boradi.

Kalit so‘zlar: Urbanizatsiya siyosati, urbanizatsiya muammolari, prezident farmoni, kelajakka takliflar, cheklangan muvofiqlashtirish.

*Kholmirzaev N.N., PhD
associate professor
"Education" Department
Kokand University*

VITAL SUGGESTIONS FOR ELIMINATING THE PROBLEMS OF URBANIZATION

Abstract. The article talks about the urbanization policy being carried out in our country, the problems in this regard, the presidential decree issued in connection with their elimination and the tasks defined in it, as well as the proposals regarding these problems.

Key words: Urbanization policy, urbanization problems, presidential decree, proposals for the future, limited coordination.

Urbanizatsiya sohasidagi davlat siyosati jarayon va mintaqaga qarab o‘zgaradi. Bu borada barcha hududlarning o‘ziga xos xususiyatlari mavjud. Biroq, ba’zi umumiy ustuvorliklar va vazifalar mavjudki ular barcha uchun birdek amal qiladi. Xususan, A.A. Lapinskasning fikricha iqtisodiy rivojlanish, ijtimoiy tenglik va atrof-muhitni muhofaza qilish muvozanatini ta’minlovchi barqaror urbanizatsiyani rag‘batlantirish masalasi dunyoning istalgan davlati uchun xosdir⁶⁸. Bizning nazarimizda shahar infratuzilmasi va xizmatlari, jumladan, energiya, transport, suv va kanalizatsiya bilan ta’minlashni yaxshilash muammosi ham sohadagi eng muhim hamda barcha uchun birdek hal etilishi lozim bo‘lgan masalalar sirasiga kiradi. Qayd etish joiz hayot sifati, samaradorlik va aloqalarni yaxshilash uchun innovatsiyalarni, hamda aqlli shaharlarni rivojlantirishni

⁶⁸ Лапинскас А.А. Современная специфика корпоративных отношений на примере вертикально-интегрированной компании. Журнал. Записка Горного института. – 2018, Т.233 С.563

ragʻbatlantirish masalalari bugungi kunda shaharlashtirish sohasidagi dolzarb muammolardan hisoblanadi. Zero bu inson ongi va tafakkuri bilan bogʻliq xolda yechiladigan hamda taqdim etiladigan jarayonlardir. Shuningdek, shaharni samarali rejalashtirish va boshqarish orqali ularni oʻsishiga erishish, hamda yerdan foydalanishni boshqarish ham ustivor vazifalar qatoriga kiradi. Yana sohada olib borilgan tadqiqotlardan maʼlumki shahar boshqaruvi va markaziy, hamda mahalliy hukumatlar, shuningdek, fuqarolik jamiyati va xususiy sektor oʻrtasidagi hamkorlikni kuchaytirish masalasini urbanizatsiya taraqqiyoti jarayonidagi muhim ijtimoiy omillar sifatida koʻriladi. Shu bilan birga soʻngi yillarda dunyoda, shuningdek mamlakatimizda shaharlashtirish sohasida qator muammolar kun tartibiga chiqdiki ular toʻgʻrisida fikr yuritishni oʻrinli deb hisoblaymiz. Kuzatishlarimiz hamda olib borilgan tadqiqotimizdan kelib chiqqan xulosalarga koʻra hozirgi kunda urbanizatsiya siyosatining kechiktirmasdan hal etish zarur boʻlgan mamlakatimizga xos boʻlgan bir qator muammolari sifatida quyidagilarni misol keltiramiz.

1. Urbanizatsiya loyihalari uchun masʼul boʻlgan turli davlat idoralari oʻrtasidagi cheklangan muvofiqlashtirish va hamkorlikning yoʻqligi yoki qarama-qarshi siyosatlar, takrorlashlarning mavjudligi;

2. Barqaror shahar infratuzilmasi, shu jumladan transport, suv taʼminoti va kanalizatsiya, energiya va telekommunikatsiya tizimlarida muammolarning ortib borayotganligi;

3. Barcha fuqarolar uchun arzon va qulay uy-joylar bilan taʼminlash masalasining hamon kun tartibida ekanligi;

4. Sifatli taʼlim, sogʻliqni saqlash va boshqa ijtimoiy xizmatlarda barqarorlikning mavjud emasligi;

5. Oliy taʼlim muassasalarida sohaga oid kadrlarni tayyorlash tizimining talablarga javob bermasligi;

6. Jamoat xavfsizligi va favqulodda vaziyatlarga javob berishning samarali tizimlari zamon talablariga toʻliq javob bermasligi;

7. Ijtimoiy hamjihatlikni ragʻbatlantirish va ijtimoiy izolyatsiyani kamaytirish uchun foydalanish mumkin boʻlgan jamoat joylari, bogʻlar va madaniy va dam olish maskanlarining kamligi;

8. Fuqarolar turmushini qoʻllab-quvvatlash va investitsiyalarni jalb qilish uchun iqtisodiy imkoniyatlar va ish oʻrinlari yaratish jarayonlarining sustligi yoki xoʻjakoʻrsinga bajarilayotganligi;

9. Haddan tashqari gavjumlik va uy-joylarning nomutanosib qurilganligi;

10. Yoʻl harakatining tirbandligi;

11. Haddan tashqari zichlik;

Yuqorida koʻrsatib oʻtilganidek mamlakatimizda urbanizatsiyaning kechiktirmasdan hal etish zarur boʻlgan qator muammolari sirasini yana davom ettirishimiz mumkin, ammo ushbu masalalarni bartaraf etishning oʻzi qolgan biz taʼkidlamoqchi boʻlgan muammolarga yechim boʻladi nazarimizda.

Ta'kidlash joiz sohada kamchiliklar mavjud bo'lishiga qaramay mamlakatimiz so'nggi yillarda ko'plab sohalarda bo'lgani kabi shaharlashtirish sohasida salmoqli yutuqlarga erishib kelmoqda. Bunga fikrimizcha yurtboshimiz tomonlaridan olib borilayotgan oqilona siyosat tufayli erishmoqdamiz desak mubolag'a bo'lmaydi. Tan olish kerak so'ngi yillarda asrlarga tatigulik ishlarni amalga oshirildi. Xususan biz so'z yuritayotgan shaharlashtirish sohasida ham ulkan yutuqlar qo'lga kiritildi. Ammo hamon mazkur sohada o'z yechimini kutayotgan muammolar talaygina bo'lib, ushbu kamchiliklarni bartaraf etish maqsadida mamlakatda urbanizatsiya jarayonlarini tubdan takomillashtirishning asosiy yo'nalishlarini belgilab bergan, yuqorida ta'kidlab aytganimiz PF-5623-son Prezident farmoni qabul qilinib, unda mavjud kamchiliklarni bartaraf etish maqsadida davlat siyosatining asosiy yo'nalishlarini belgilab berildi.

Unda belgilangan asosiy yo'nalishlardan kelib chiqib yuqorida ko'rsatilgan muammolarning quyidagi potensial yechimlarini taklif etamiz.

1. Urbanizatsiya va rejalashtirish bo'yicha qarorlar qabul qilish jarayonlarida mahalliy hamjamiyatlarning ishtirokini oshirish: Qayd etish joiz O'zbekistonda shaharsozlik siyosatini ishlab chiqish va amalga oshirishda mahalliy hamjamiyatlar va aholining fikrlari yetarli darajada inobatga olinmay kelmoqda. Zero bir necha loyihalar o'z vaqtida ohiriga yetmay to'xtab qolayotganligi, ularni aslida bir necha mutasaddilar qabul qilayotganligi fikrimizni isbotidir. Bunga misol sifatida Buxoro shahrida qurilishi rejalashtirilgan keyinchalik esa fuqarolar hoxish istaklari va asosli e'tirozlari bilan qurilishi to'xtab qolgan xalqaro turizm markazini keltirishimiz mumkin.

2. Urbanizatsiya loyihalarini moliyalashtirishning yetarli emasligi. Bunda ko'pincha ajratilgan mablag'lar rejalashtirilgan ishlarga muvofiq kelmaslik xolatlari uchraydi. Mamlakatimizda shahar sharoitini yaxshilash bo'yicha katta sa'y-harakatlarga qaramay, ulkan loyihalarni, xususan, qishloq hududlarini rivojlantirishga qaratilgan loyihalarni amalga oshirish uchun ko'proq moliyaviy resurslar talab etiladi. Mahalliy hokimiyatlarning mablag'lari yetarli emasligi markaziy hokimiyat tomonidan ajratilishi zarur bo'lgan mablag'larga ehtiyoj zarurati fikrimizni tasdiqlaydi.

3. Sohadagi muammolardan yana biri urbanizatsiya loyihalari uchun mas'ul bo'lgan turli davlat idoralari o'rtasidagi cheklangan muvofiqlashtirish va hamkorlik qarama-qarshi siyosatlar, takrorlashlar yoki resurslarning isrof qilinishi xolatlarning mavjudligi. Mamlakatimizda olib borilayotgan barcha islohotlardan maqsad inson qadrini ulug'lash va unga munosib turmush sharoiti yaratish hisoblanadi. Zero odamlar bugungi kundan rozi bo'lib yashamoqlari kerak. Ammo xali xanuz urbanizatsiya sohasidagi qator ishlar tartibga solinmay kelayotganligi bor gap. Bunga misol tariqasida kadastr va soliq hujjatlarini o'z vaqtida turli anglashilmovchiliklar bilan faoliyat ko'rsatayotganligi ko'rsatsak bo'ladi.

4. Mazkur muammo doirasida hukumatning urbanizatsiya maqsadlari doirasida atrof-muhitni muhofaza qilish choralari yanada ko'proq e'tibor

qaratish lozim. Uni hisobga olmaslik atrof-muhitning yomonlashishiga va yashash joyining yo'qolishiga olib kelishi mumkin. Buni Toshkent shahri va viloyatlardagi qator shaharlarda besabab kesib yuborilayotgan manzarali daraxtlar misolida aytishimiz mumkin. Bu kabi xolatlar o'zini uzoq kuttirmay chang-to'zon ko'tarilishi, xavoning xaddan tashqari ifloslanishi kabi muammolarni keltirib chiqaryotganligini hammamiz ko'rib turibmiz va jafosini chekmoqdamiz.

Xulosa o'rnida aytish mumkinki O'zbekiston urbanizatsiya sifatini oshirish va mavjud muammolarni bartaraf etish bo'yicha salmoqli sa'y-harakatlarni amalga oshirmoqda. Kelajakda faoliyatni takomillashtirish uchun imkoniyatlar mavjud bo'lsa-da, O'zbekiston hukumati hozirgi vaqtning o'zidayoq mamlakatda adolatli va barqaror rivojlanishga erishish yo'lida to'g'ri yo'nalishda qadam tashlamoqda.

Foydalanilgan manbalar va adabiyotlar ro'yhati:

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4. Xolmirzayev N.N.1 Evolution of social activity and some aspects of its formation in young people. Ekonomika i sotsium, 2021- elibrary.ru №-2-1, 395-396 <https://www.elibrary.ru/item.asp?id=45679718>
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*Xolmirzaev N.N.
Qo‘qon universiteti
“Ta‘lim” kafedrasida dotsenti v.b.
falsafa fanlari bo‘yicha (PhD)*

URBANIZATSIYA SIYOSATIDA MAVJUD MUAMMOLAR VA ULARNI BARTARAF ETISH YUZASIDAN TAKLIFLAR

Annotatsiya. Maqolada davlatimizda so‘ngi yillarda davlat dasturlari doirasida olib borilgan uy-joy siyosati, undagi korrupsion xolatlar, gegemonizm alomatlari hamda shaffoflikni ta‘minlash sohasida amalga oshirish zarur bo‘lgan vazifalar bo‘yicha takliflar xususida so‘z yuritiladi.

Kalit so‘zlar: Uy-joy siyosati, korrupsiya, shaffoflikni ta‘minlash, gegemonizm, davlat dasturlari.

*Kholmirzaev N.N., PhD
associate professor
"Education" Department
Kokand University*

EXISTING PROBLEMS IN URBANIZATION POLICY AND PROPOSALS FOR THEIR ELIMINATION

Abstract. The article talks about the housing policy carried out within the framework of state programs in recent years in our country, corrupt situations in it, signs of hegemony, and proposals for tasks that need to be implemented in the field of ensuring transparency.

Key words: Housing policy, corruption, transparency, hegemony, state programs.

So‘ngi yillarda mamlakatimizda turli sohalarda katta o‘zgarishlar yuz berib, bularning natijalari ko‘plab ekspertlar tomonidan e‘tirof etib kelinmoqda. Xususan urbanizatsiya sohasida mamlakatimizda katta ishlar amalga oshirib kelinmoqda. Ayniqsa uy-joylar qurilishi sohasida. Bularning natijalari sifatida shaharlarda o‘z yechimini kutayotgan bir qator muammolar bartaraf etilayotgani xalqimizni quvontirayotgani ayni haqiqat. Buning uchun mamlakatimiz turli darajadagi dasturlarni bajarish maqsadida har yili davlat byudjetidan milliardlab mablag‘lar ajratilmoqda.

Ta‘kidlash joiz sifatli uy-joylar qurish bo‘yicha topshiriqlar berilmoqda, ammo sohada korrupsiyaning mavjudligi ajratilgan mablag‘lardan maqsadli foydalanish imkoniyatini yo‘qqa chiqarmoqda. Jumladan 2022 yilning dastlabki 9 oyi mobaynida yuklatilgan vazifa va topshiriqlar ijrosida kamchilikka yo‘l qo‘ygan va o‘z vazifasini lozim darajada bajarmagan 427 nafar mas’ullar

intizomiy va 724 nafari ma'muriy javobgarlikka tortildi, 3040 nafar shaxs rasman ogohlantirildi.

“Qurilish sifati va ish hajmlarini to‘liq bajarilishi o‘rganilib, 1553 ta holatda sifatsiz bajarilgan 32,3 mlrd so‘mlik hamda 793 ta holatda hisobotlarga qo‘shib yozilgan 37,9 mlrd so‘mlik ishlar bartaraf ettirilishi orqali kelib chiqishi mumkin bo‘lgan huquqbuzarliklarning oldi olindi”, - dedi Abdurahim Muhiddinov⁶⁹. Misollarni davom ettirar ekanmiz quyidagilarni ham ko‘rsatishni joiz bildik. Qurilish va uy-joy kommunal xo‘jaligi vazirligi tashabbusi bilan ommaviy axborot vositalari xodimlari uchun tashkil qilingan pressturda Toshkent shahrining bir qator tumanlarida qurilish me‘yorlari va talablariga mos kelmaydigan yoki noqonuniy ravishda qurilishmontaj ishlarini olib borayotgan korxonalar faoliyati o‘rganildi. Xususan, presstur davomida Shayxontohur tumanidagi Labzak ko‘chasida buyurtmachi “Mustahkam qurilish” qo‘shma korxonasi tomonidan qad rostlayotgan 25 qavatli turar joy inshooti qurilishi amaldagi tartib qoidalarga mos emasligi aniqlandi. Mazkur ob‘ektda O‘zbekiston Respublikasi Vazirlar Mahkamasining 200-sonli qarori bilan belgilangan talablarga amal qilinmagan holda, ya’ni, hududiy nazorat inspeksiyasi ro‘yhatidan o‘tmay turib ish olib borilayotgani ma’lum bo‘ldi. Toshkent shahar Qurilish va uy-joy kommunal xo‘jaligi sohasida hududiy nazorat qilish inspeksiyasi mutaxassislarining ta’kidlashicha, noqonuniy faoliyat uchun korxonalar rahbarlari bir necha bor ogohlantirilgan. Shunga qaramasdan, ayni paytda binoning 10--qavatigacha qurilish montaj ishlari bajarilmoqda. Bu haqida tuman hokimi, sudi va prokuraturasiga ham xatlar kiritilib, oradan bir necha oy o‘tgan bo‘lsada, biroq ular hanuzgacha lom-mim, deyshmaganini qanday tushunish mumkin?⁷⁰

Ammo qonunchiligimizga ko‘ra har xil ob’ektlarning qurilishi ostida yer maydonlarini ajratishda O‘zbekiston davlat arxitektura va qurilish qo‘mitasi, O‘zbekiston Respublikasi ekologiya va atrof muhitni muhofaza qilish davlat qo‘mitasi, O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligining Sanitariya-epidimiologiya xizmati, Davlat yong‘in nazorati va ularning hududiy bo‘linmalarining ijobiy xulosalari bo‘lishi majburiy hisoblanadi. Ta’kidlangan organlar aholi yashash punktlari maydonlarida mavjud tabiiy atrof-muhitni va inson salomatligiga salbiy ta’sir ko‘rsatadigan har qanday ishlab chiqarishni joylashtirilishiga ruxsat bermaslik xuquqiga ega⁷¹. Bundan shunday xulosa qilish mumkinki sohada gegemonizm elementlari mavjud. Gegemonizm - mohiyatan dunyo barqarorligiga yo‘naltirilgan yoki bunga hizmat qilishi kerak bo‘lgan jahon siyosatiga zid hodisa bo‘lib, ijtimoiy taraqqiyot, jamiyat barqarorligi va xavfsizligini izdan chiqaradi... Gegemonlik hech qachon umumbashariy rivojlanish ishiga xizmat qilmagan. Lekin hozirgi nozik davrda uning salbiy ta’siri

69 «Обод кишлоқ» ва «Обод маҳалла» дастури ижросидаги камчиликлар учун мингдан ортиқ масъул жавобгарликка тортилди. <https://www.gazeta.uz/uz/2022/10/12/monitoring>

70 Қурилишда ўзибўларчилик ва ноқонуний ишлар кетмайди. О‘zbekiston bunyodkori газетаси № 37-38 (690-691) 4-бет (12 б)

71 Сатторов З.М. Экология. дарслик: Тошкент.: “Сано стандарт”, 2018 йил. 234-бет (360 бет)

yanada yaqqolroq sezilmoqda⁷². Buni bosh prokuratura vakilining quyidagi fikrlari isbotlaydi. Unga ko‘ra ob‘ekt pudratchisini tanlashdagi korrupsiya holatlarini oldini olish maqsadida pudratchilarning reytingini haqqoniy tarzda, inson omilisiz aniqlash va tender o‘tkazishda adolatli raqobat muhitini ta‘minlash yuzasidan takliflar ishlab chiqilib, hukumat tomonidan ushbu takliflarni amaliyotga tatbiq etish choralari ko‘riladi.

Yuqoridagilardan kelib chiqib sohadagi korrupsiyalarni yo‘qotish maqsadida qator ishlarni amalga oshirish maqsadga muvofiq. Jumladan,

- Buyurtmachi tomonidan davlat xaridlarini amalga oshirishi yuzasidan olib borilgan barcha ma‘lumotlarni oshkor qilish;

- jamoatchilik monitoring guruhlarini tashkil etish orqali jamoatchilikning ijtimoiy faolligini olirish;

- shaffoflikni ta‘minlash, ya‘ni barcha xujjatlar saytga joylashtirilishini ta‘minlash va boshqalar.

Xulosa o‘rnida aytish mumkinki urbanizatsiya sohasida mavjud korrupsion holatlarni barataraf etishni xoxlasak barcha hujjat ishlarni elektronlashtirish, xususan tenderlarni. Xorijiy qurilish kompaniyalarini keng jalb etish va ilmiy yechimlarga to‘liq amal qilish zarur.

Foydalanilgan manbalar va adabiyotlar ro‘yhati:

1. «Obod qishloq» va «Obod mahalla» dasturi ijrosidagi kamchiliklar uchun mingdan ortiq mas‘ul javobgarlikka tortildi. <https://www.gazeta.uz/uz/2022/10/12/monitoring>

2. Qurilishda o‘zibo‘larchilik va noqonuniy ishlar ketmaydi. O‘zbekiston bunyodkori gazetasi № 37-38 (690-691) 4-bet (12 b)

3. Sattorov Z.M. Ekologiya. darslik: Toshkent.: “Sano standart”, 2018 yil. 234-bet (360 bet)

4. Falsafa. Qomusiy lug‘at, Toshkent: Sharq, 2004. – 83-bet B.494

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⁷² Фалсафа. Қомусий луғат, Тошкент: Шарқ, 2004. – 83-бет Б.494

*Xolmirzayev J.E.
Jizzax davlat pedagogika universiteti
Geografiya va iqtisodiy bilim asoslari kafedrası o'qituvchisi*

GLOBAL IQLIM O'ZGARISH DAVRIDA JIZZAX VILOYATI SUV RESURSLARINING HOZIRGI HOLATI HAQIDA MULOHAZALAR

Annotatsiya. Iqlim o'zgarishi davrida Jizzax viloyatining tabiiy sharoitini hisobga olgan holda, suv resurslarining holati va ularining landshaftlarga ta'siri bilan birgalikda viloyatining ekologik holati tahlil qilingan.

Kalit so'zlar: global iqlim o'zgarishi davri, tabiiy sharoit, geografik omillar, Jizzax viloyatining suv resurslari, ekologik madaniyat va ta'lim.

*Kholmirzayev J.E.
teacher
Department of Geography and Basics of Economic Knowledge
Jizzakh State Pedagogical University*

CONSIDERATIONS ON THE CURRENT STATE OF WATER RESOURCES OF JIZZAK REGION DURING GLOBAL CLIMATE CHANGE

Abstract. Taking into account the natural conditions of the Jizzakh region in the period of climate change, the state of water resources and their impact on the landscape, the ecological state of the region was analyzed.

Key words: period of global climate change, natural conditions, geographical factors, water resources of Jizzakh region, ecological culture and education.

**Suvning geografik qobiqdgi ishini miqdor jihatdan
quyosh radiyatsiyasi bilan taqqoslasa bo'ladi, sifat
jihatdan esa uning o'rnini hech narsa bosa olmaydi.**

V.I.Vernadskiy

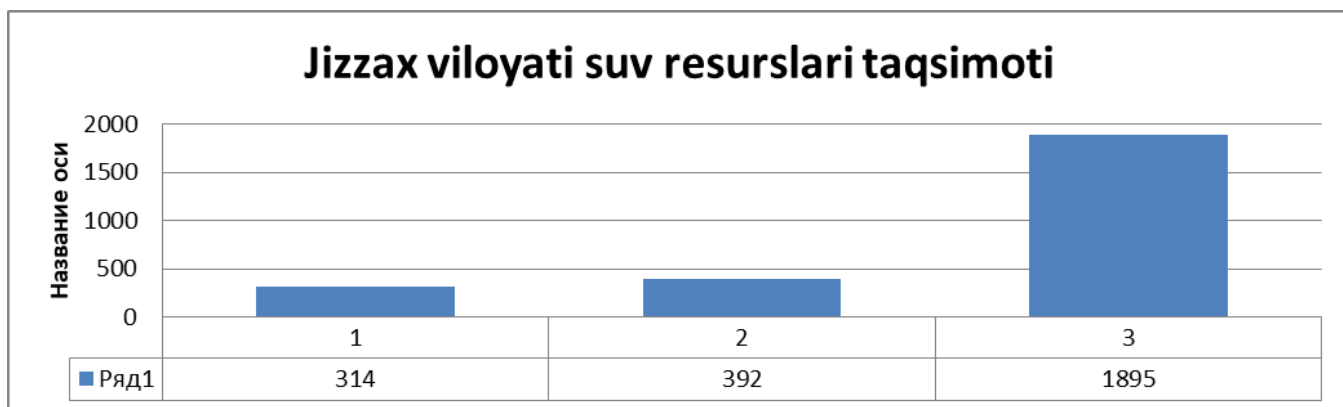
Bugungi kunda jahonda suv taqchilligi muammosi tobora keskinlashib borayotgan dolzarb muammolardn biriga aylanib bormoqda. Dunyo axolisi sonining tobora ortib borishi, hayot farovonligi darajasini yaxshilashga intilish eng avvalo iste'mol qilinayotgan suvga bo'lgan talabning ekstensiv o'sishiga olib kelmoqda. Jahonda 1987 yillardan boshlab suvdan foydalanish darajasi yiliga o'rtacha 1.3 %ga o'sib bu tendentsiya 2050 yilga qadar oshib borishi kuzatilmoqda. Bu mavjud holatdagidan bir necha baravar 20-30 % ga oshib borishi kutilmoqda [2].

Jizzax viloyatida ham suv resurslaridan foydalanish samaradorligini oshirishning ko'plab nazariy-amaliy, metodologik va iqtisodiy-ijtimoiy asoslarini takomillashtirish bo'yicha qator, tadqiqotlar olib borilmoqda: Hususan, suv resurslaridan foydalanishni samarali tashkil etish, suvdan foydalanish xarajatlarini hamda tariflarini maqbul tarzda shakllantirish; suv resurslaridan foydalanishning ekologik samaradorligini oshirish, moliya mexanizmining umumiy ta'sirini aniqlash va uning ta'sirchanligini kuchaytirish; moliya mexanizmi alohida tarkibiy qismlarining suv resurslaridan foydalanish samaradorligini oshirishdagi ta'sirini baholash kabi yo'nalishlarda tadqiqotlar olib borilmoqda.

Bizga ma'lumki suv resurslarining hosil bo'lishida quyidagi tabiiy-geografik omillar ta'sir etadi: havzaning geografik o'rni, geologik tuzilishi, relyefi, iqlim sharoiti, tuproq va o'simlik qoplami, gidrografik sharoiti (muzlik, ko'l, botqoqlik) kabi omillar muhim ahamiyat kasb etadi. Iqlimning daryolarni tuyinishidagi ahamiyati va ularning suv rejimiga ta'sirini iqlimshunos olim A.I.Voeykov ta'biri bilan aytganda "Daryolar o'z havzalari iqlimining maxsulidir", degan ibora o'z kuchini yo'qotmagan [1].

Jizzax viloyatining iqlimi qishi sovuq, yozi issiq va quruq bo'lgan keskin kontinental mo'tadil iqlim tipiga kiradi. Hududimiz o'zi shundog'am dengiz va okeanlardan uzoqda, jazirama issiq va qaxraton sovuq bo'ladigan suv resurslari juda cheklangan hududda joylashgan. Tabiiy sharoit har qanday hududning rivojlanish omili hisoblanai. Shunday ekan bizning viloyatimiz ham suv resurslariga bo'lgan talab juda yuqori. Suv resurslari avvalo tabiiy sharoit omillari ta'sirida shakllanadi. Bizda esa bu ancha cheklangan. Shunday ekan biz doimo suv resurslarini potensialini oshirish va ekologik nuqtai nazardan asrab-avaylash ustida tadqiqotlar olib borishimiz kerak. Keyingi yillarda axoli soni (1.5 mln) ancha oshib borayotganini, kerak bo'lsa hali yana ancha oshishini pragnoz qiladigan bo'lsak biz barcha omillarni birma-bir o'ylab ko'rishimiz kerak.

Sirdaryo-Zarafshon Jizzax viloyatining Irigatsiya tizimlari havza boshqarmasi(ITHB)ning statistik ma'lumotlari va olib borilgan tadqiqotlar tahlil qilinganda Jizzax viloyatining umumiy suv balansi 2601 mln m³ ni tashkil etadi. Bu qishloq xo'jaligida foydalaniladigan suv bilan birgalikda. Shundan 2601 mln m³ suvni 100% deydigan bo'lsak, 314 mln m³ suvni 12% viloyatning o'zida ichki tarmoqlarida shakllanadi. Shundan eng asosiy suvni Janubiy Mirzacho'l kanalidan oladi bu esa 1895 mln m³, ya'ni 73% ni tashkil etadi. Ikkinchi o'rinda Zarafshon daryosidan Tuyatortar kanali orqali 392 mln m³ da suv kirib kelib bu 15% ni tashkil etadi[1]. Biz mazkur statistik ma'lumotlarni tahlil qilishimizdan maqsad viloyat hududida juda ko'plab qishloq xo'jalik ekinlari ekiladi ekinlarni esa viloyatni o'zida shakllanadigan daryolardan emas balki chetdan boshqa viloyatlardan kirib keladigan gidrografik ob'ektlarga bevosita qaram ekanligini anglatadi. Ya'ni o'rtacha 88% Sirdaryo (Janubiy Mirzacho'l kanali) va Zarafshon daryosi (Tuyatortar) dan kirib kelsa, 12% ichki tarmoqlar xisobiga Jizzax viloyati hududida hosil bo'ladi.



Izoh: 1-Jizzax viloyatiniki; 2-Tuyatortar kanali; 3-Janubiy Mirzacho'l kanalini.

Viloyatning tekislik qismi yer osti suvlari yuzada joylashgan. Tog'oldi tekisliklarida kuchli bug'lanish natijasida tuproq sho'rlangan. Tuproq harorati bir metr chuqurlikkacha yil davomida turli darajada isiydi. Yozda (VI – VII) tuproq yuzasi ba'zi yillarda 29 – 60 °S dan 65 – 68°S (o'rtacha oylik) gacha qiziydi. Ba'zi yillarda qish oylarida ya'ni, dekabr – fevral oylarida tuproqning 40 sm chuqurlikkacha muzlashi kuzatilgan.

Ma'lumki, viloyat iqlim sharoitining o'zgarishi har yili turli darajada bo'ladi. Viloyat iqlim sharoitini 2000 – 2013 yillarda Jizzax, Do'stlik, G'allaorol, Lalmikor, Baxmal va Yangiqishloq meteorologik stansiyalarda kuzatilgan oxirgi 13 yillikdagi havo harorati va yog'in miqdorlari ma'lumotlari asosida o'rganildi. Ushbu ma'lumotlar asosida viloyat hududidagi meteorologik stansiyalarda qayd etilgan yillik yog'in miqdorlarining yillararo o'zgarishi turlicha o'zgarganligini kuzatish mumkin. Tahliliy ma'lumotlardagi oxirgi 13 yillikda yog'in miqdorining o'zgarishini tahlil qilish imkonini beradi. Viloyatda yog'in miqdorining eng katta qiymati 2002 yili (632,3 mm) Baxmal meteorologik stansiyasida kuzatilgan. Yog'in miqdorining eng kichik qiymati Do'stlik meteorologik stansiyasida 2006 yil (140,6 mm) kuzatilgan. Viloyatning markazi Jizzax shahridagi Jizzax meteorologik stansiyasida esa o'sha yili 311,2 mm ni tashkil etgan. G'allaorol meteorologik stansiyasida esa o'sha yili 275,6 mm ni tashkil etgan. Viloyat hududida joylashgan Jizzax, Do'stlik, G'allaorol, Lalmikor, Baxmal va Yangiqishloq meteorologik stansiyalarda kuzatilgan havo harorati va yog'in miqdorlari ma'lumotlari asosida viloyatning iqlim sharoiti o'rganildi. Ichki suvlarning hosil bo'lishi bevosita iqlim sharoitiga bog'liq hususan, joyning geografik o'rniga bog'liq bo'lib, uzoq yillar uchun xos bo'lgan quyidagi omillar bilan aniqlanadi: yog'inlarning miqdori, yog'ish jadalligi, yog'in miqdorining yil ichida taqsimlanishi, qor qoplaminin qalinligi va uning suvliligi, havo harorati va namlik darajasi, shamol va uning tezligi, yo'nalishi. Ichki suvlarning hosil bo'lish jarayonida daryo va ko'llarning to'yinish manbalari, va, umuman uning gidrologik rejimi havzasining iqlim sharoitiga bog'liqdir. Daryo havzasida hosil bo'lgan suv miqdori unga yoqqan yog'in miqdori bilan aniqlansa, havzada yo'qotiladigan suv miqdori, ya'ni bug'lanish havo harorati, namlik va shamol

bilan aniqlanadi. Ikkinchi tomondan, havo haroratining ko'tarilishi daryo havzasidagi qor qoplami va muzliklar erishini, natijada, daryoga yanada ko'proq suv qo'shilishini ta'minlaydi.

Jizzax viloyati halq xo'jaligi turli tarmoqlarini rivojlantirish suv resurslari bilan ta'minlanganligiga bog'liqdir. Viloyat hududida qadimdan suv tanqisligi mavjud. Buning asosiy sababi viloyatning yirik suv manbalari, jumladan Sirdaryo va Zarafshondan ancha uzoqda joylashganligidir. Suv resurrlaridan samarali foydalanish mamlakatimiz xalq xo'jaligi ko'pgina tarmoqlarining barqaror rivojlanishida muhim ahamiyat kasb etadi. Jumladan xalq xo'jaligini rivojlantirishda suvning ahamiyati juda kattadir [3].

Ma'lumki, arid iqlimli hududda joylashgan viloyat hududi qishloq xo'jaligining rivojlanishi sug'orma dehqonchilikka asoslangan. Shu tufayli viloyatda suv resurslaridan foydalanish samaradorligini oshirish va qishloq xo'jaligi ekin maydonlari mahsuldorligini ko'tarishda suv resurslarining o'rni juda muhimdir. Mazkur iqlimiy omillarning ta'siri natijasida Jizzax viloyatida shakllangan suv manbalari yetarlicha ta'minlanmagan. Viloyatda barcha umumtabiiy geografik sharoitidan kelib chiqib ikkita yirik Sangzor va Zominsuv dadryosi va bir qancha yozda qurib qoluvchi mayda soy-buloqlar shakllangan bo'lib, bu esa aholining iste'mol darajasi hamda halq xo'jaligining 4/1 qismiga ham yetmaydi [4].

Mazkur iste'molni qoplash maqsadida Sirdaryo daryosidan Janubiy Mirzacho'lkanali va Zarafshon daryosidan Tuyatortar kanali olib kelingan.

Viloyatning iqlimi, yer maydoni kabi tabiiy geografik hususiyatlari hali kelajakda ko'plab istiqbolli rejalarni amalga oshirish mumkinligini ko'rsatadi. Chunki qishloq-xo'jaligida yetishtiriladigan maxsulotlar salmog'i respublikamiz iqtisodiyotida muxim o'rin tutadi. Shuning uchun xam bugungi kunda sug'oriladigan tuproqlarning unumdorligini oshirish, qishloq-xo'jaligida asosiy ekinlar paxta va donli ekinlarning mo'ljalidagi hosilini yetishtirish bilan bir vaqtda tuproq unumdorligini saqlab qolish, uni ilmiy asosda boshqarish va muxofaza qilish yo'llarini ishlab chiqish davr talabidir[5]. Biz bugungi va ertangi vatanimizning gullab yashnashi, ozod va obod vatan qurish yo'lida tinmay mehnat qilishimizda be'vosita va bivosita qishloq xo'jaligining suv va meliorativ yerlar xosildorligini o'rni kattadir. Biz kelajakda suv resurslarining holati iqlimiy omillarga bevosita bog'liq ekanligini o'quvchilarga va boshqa barcha ommaga turli yo'llar bilan tushuntirish targ'ibot-tashviqot ishlarini olib borishimiz kerak. Iqlimdagi o'zgarishlar esa suv havzalari manbalariga ta'sir etadi. Iqlimning normal jarayoniga esa bevosita antropogen ta'sir ham muhim ta'sir etadi. Jumladan texnokratik jarayonlar, sanoat-karxonalari kabi ko'plab ekologik ta'sirlar shular jumlasidandir. Kelajakda iqlim o'zgaruvchanligi va uning oldini olish, global iqlimiy o'zgarish jarayonlariga befarq bo'lmaslik oldimizda turgan dolzarb masalalardan biri bo'lib qolmoqda.

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*Xushmurodov F.M.
g.f.f.d(PhD).v.b.dotsent
Ahmedova K.
Qarshi davlat universiteti talabasi
Hamroqulova Sh.
Qarshi davlat universiteti talabasi*

QASHQADARYO VILOYATI SUG‘ORMA DEHQONCHILIGINING SHAKLLANISHIDA YER RESURLARIDAN FOYDALANISHNING TABIY SALOHIYATI

Annotatsiya. Agrolandshaftlardan xo‘jalikda foydalanish maqsadlarida o‘rganish ularning tabiiy salohiyatini baholash va antropogen ta‘sir natijasida o‘zgarishini maqsadga muvofiq tashkil etish muhim amaliy ahamiyatga ega. Maqolada qishloq xo‘jaligini rivojlantirish maqsadida hududlarda shakllanadigan agrolanshaftlarda tabiiy va antropogen resurslaridan foydalanilinishni optimallashtirish landshaftlarni tahlil qilishda tutgan o‘rni qarab chiqilgan.

Tayanch so‘zlar: GIS, agrolandshaft, sug‘orma dehqonchilik, qishloq xo‘jaligi, yer fondi, geotextizimlar, agroiqlim resursi, barqarorlik, landshaft indikatsiya, ekologik landshaft.

*Khushmurodov F.M., PhD
associate professor
Ahmedova K.
student
Karshi State University
Hamroqulova Sh.
student
Karshi State University*

THE NATURAL AUTHORITY OF USING LAND RESOURCES IN THE FORMATION OF IRRIGATION AGRICULTURE IN KASHKADARYA REGION

Abstract. The study of agricultural landscapes for economic use, assessment of their natural potential and the appropriate organization of their changes as a result of anthropogenic impact are of great practical importance. When analyzing landscapes, the article examines the role of optimizing the use of natural and anthropogenic resources of agricultural landscapes formed in the regions for the purpose of agricultural development.

Key words: GIS, agrolandscape, irrigated agriculture, agriculture, land fund, geotextiles, agroclimatic resource, sustainability, landscape indication, ecological landscape.

Kirish va dolzarbligi. Sug'orma dehqonchilik insonning hayoti va faoliyati kechadigan muhit, tabiiy laboratoriya va estetik idrok qilish manbai bo'lib, inson munosabatlarida landshaftlar tabiiy resurslarga ega bo'lgan hamda genofond saqlanadigan tabiiy sistemadir. Insonning xo'jalik faoliyatini o'rganishda nafaqat ishlab chiqarish va sotsial-maishiy vaziyat, balki antropogen landshaftning tabiiy xossalarini va unda yuzaga kelgan geoekologik vaziyatni baxolash muhim ahamiyatga ega. Bugungi kunda insonlarning moddiy farovonligini yaxshilash, qishloq xo'jalik yerlarining mahsuldorligini oshirish uchun agrolandshaftlarni shakllanishini va rivojlanishini o'rganish, balki antropogen landshaftning tabiiy xossalarini va unda yuzaga kelgan geoekologik vaziyatni baxolash muhim ahamiyatga ega.

Maqolaning maqsadi va vazifalari. Tadqiqotning asosiy maqsadi Qashqadaryo viloyati sug'orma dehqonchiligining landshaftlarga o'zaro ta'sirining o'rganishdan, agrolandshaftlar shakllanishiga tabiiy va antropogen omillarning ta'sirini baholash hamda muhofaza qilishning ekologik geografik asoslarini ishlab chiqishdan iborat. Maqolada Qashqadaryo vohasida yer resurslari tahlili va agrolandshaftlar to'g'risidagi masalalar, uning manbalari yoritiladi.

Metodlar va o'rganilish darajasi. Tadqiqotni olib borishda dala tadqiqot, kartografik, aerokosmik, ekologik-landshaft tamoyili, tizimli yondashuv, landshaft indikatsiya GIS texnologiyalari, statistik, adabiyotlar va fond materiallari bilan ishlash kabi metodlardan foydalanilgan.

Qashqadaryo havzasi landshaftlarini o'rganish va landshaft kartalarini tuzishning ayrim nazariy va uslubiy masalalari L.N.Babushkin va N.A.Kogay (1964, 1965), T.V.Zvonkova (1965), S.A.Nishonov (1967), Poslavskaya, M.F.Rasulov (1968), M.U.Umarov, I.A.Hasanov (19), S.I.Abdullayev va R.Usmonova (1997-2002), F.M.Xushmurodov (2017-2023) va boshqa tadqiqotchilarning ishlarida yoritilgan.

Asosiy qism (natijalar va ularning muhokamasi).

Qadimdan insonlar tomonidan o'simliklarning madaniylashtirilishi natijasida agrolandshaftlar xosil bo'la boshlagan. V.A. Nikolayev (1987), "agrolandscape - bu tabiiy va antropogen resurs ishlab chiqaruvchi va atrof-muhitni o'zgartiradigan geosistema, qishloq xo'jaligi faoliyati obyektlari" - deb ta'rif bergan. Uning fikricha landshaftlarni rivojlanishi va o'zgarishi turli xil antropogen ta'sir natijasida yuz beradi. Agrolandshaft deganda biron bir qishloq xo'jaligi tizimi tushunilmaydi, faqat tabiiy landshaftga xos bo'lgan bir xil geosistemalar darajasidagi ma'lum (mintaqaviy) o'lchov tushuniladi. Bu qishloq xo'jaligi ishlab chiqarishi tomonidan o'zgartirilgan tabiiy landshaftdir [2]. Ta'kidlash lozimki, hozirgi vaqtda ijtimoiy va sanoat taraqqiyotida antropogen

omillar ta'sirini tabiiy landshaftlar barqarorligiga, shu jumladan agrolandshaftlar barqarorligiga ta'sirini kamaytirish asosiy muammolardan hisoblanadi. Ba'zan inson faoliyati tabiatda qaytarib bo'lmaydigan salbiy oqibatlariga olib keladi va bu holat vaqt o'tishi bilan ekologik inqirozga olib kelishi mumkin.

BMT ning oziq ovqat va qishloq xo'jaligi tashkiloti (FAO) ma'lumotlariga ko'ra, Yer yuzasining 78 foizida dehqonchilikning rivojlanishi uchun jiddiy tabiiy cheklovlar mavjud, 13 foizi maydon past, 6 foizi o'rtacha va 3 foizi yuqori mahsuldorlikka ega. 2019-yilda butun quruqlikning 37,6 foizi qishloq xo'jaligida foydalanilgan, shu jumladan 10,6 foizi haydaladi, 25,8 foizi yaylovlar va 1,2 foizi ko'p yillik ekinlar uchun foydalaniladi. Ta'kidlash lozimki, butun yer yuzasining inson tomonidan o'zlashtirilgan joylarining katta qismini agrolandshaftlar tashkil qiladi. Agrolandshaftlarning tarqalish chegarasi ma'lum bir hududlarda agroiqlimiy resurslarga, suv bilan ta'minlanganlik darajasiga, yer yuzasining tuzilishiga, tuproq va boshqa sharoitlarga bog'liq.

Firstova Y.G. va Kozlova I.V.larning keltirishi bo'yicha M.N. Lebedinskiy (1989) agrolandshaftni inson faoliyati o'zgartiradigan obyekt sifatida ham, tabiiy va antropogen qishloq xo'jaligining o'ziga xos kompleksi bo'lgan hudud sifatida o'zgarishi, tabiatni boshqarish samaradorligiga ta'sir ko'rsatadigan va kishilar yashash joyi sifatida ko'rib chiqish kerakligini ta'kidlaydi [4]. Insonning xo'jalik faoliyati ta'siri ostida deyarli o'zgarmagan tabiiy landshaftlar hozirgi paytda sayyoramizning xo'jalikda o'zlashtirish qiyin hududlardagina saqlanib qolmoqda. Qashqadaryo vohasi qadimdan dehqonchilik qilingan hududlardan hisoblanadi. Shu sababli bu yerda tabiiy landshaftlar tarixiy davrlarda ancha katta maydonlarda insonning xo'jalik faoliyati tufayli o'zgaririlgan.

V.V.Lyutova ta'rifiga ko'ra, (2013) agrolandshaft - bu tabiiy landshaftning o'ziga xos xususiyatlarini inobatga olgan holda o'zgartirish asosida yaratilgan antropogen landshaft. Qishloq xo'jaligida foydalanish uchun agrolandshaft paydo bo'lish jarayonida ba'zi tarkibiy qismlar faoliyati, yani landshaft komponentlari orasidagi evolyutsion aloqalar o'zgaradi [7]. M.I. Lopirev ta'rifiga ko'ra esa, (1995) agrolandshaft deganda bir-biriga bog'langan tabiiy komponentlar, qishloq xo'jaligi va yerni boshqarish tizimining elementlari, umumiy ekologik tizim belgilari bo'lgan nisbatan avtonom suv, issiqlik va boshqa rejimlarga ega bo'lgan yer massasini tushunamiz. U agrolandshaft tuzilishini tabiiy va iqtisodiy tizimini taqdim etadi [6]. Qishloq xo'jaligidagi yerlardan samarali foydalanish uchun tabiiy landshaftlar birlamchi bo'lgan va ishlab chiqarish vositalari ya'ni, agrolandshaft mavjud bo'lgan hududlarni ekologik-landshaft tashkil qilishi katta ahamiyatga ega. Ta'kidlash lozimki, agrolandshaft tizimlarini tadqiq qilishda modda va energiyaning o'zgarishi qonunlarini bilish, ularga qishloq xo'jaligini ishlab chiqarish bilan moslashtirish, uni ekologik xavfsiz va iqtisodiy jihatdan maqbulligini aniqlash mumkin. Shu jihatdan, agrolandshaftlarning asosiy xususiyatlari va ularning inson faoliyati jarayonida o'zgarishining asosiy yo'nalishlari V.A.Kovda (1972), A.I.Kurakova (1976), V.A.Nikolayev (1979), V.M.Chupaxin (1982) va boshqalar tomonidan

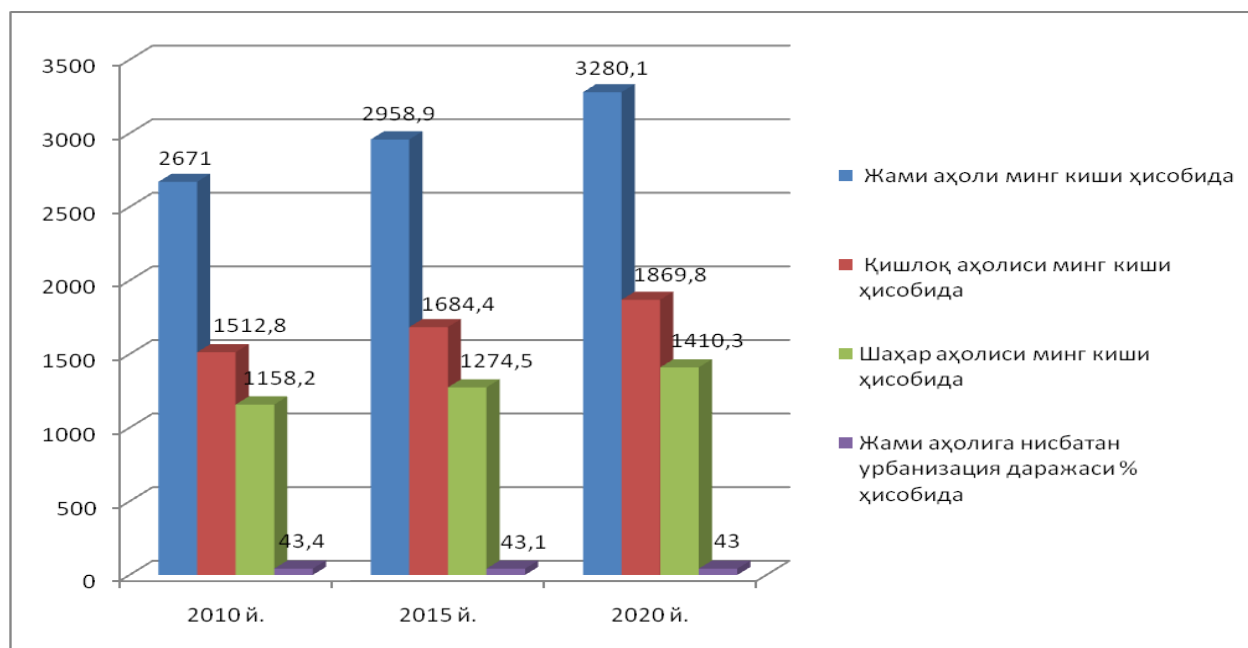
o'rganilgan. L.I.Kurakova (1976) quyidagi agrolandshaft turlarini ajratadi: lalmikor, sug'orma, yaylov va o'rmon xo'jaligi landshaftlari. Xar bir landshaft turida sodir bo'ladigan o'zgarishlar aniq dalillar bilan ochib berilgan (gidrotermik, fizik-mexanik, kimyoviy va boshqa sharoitlar) [5]. A.Abdulkosimov (1966) voha landshaftlarining quyidagicha ta'rifini beradi: voha cho'llarida bir necha asr mobaynida inson faoliyati ta'sirida shakllangan, daraxt, buta, o'tlar bilan koplangan, sug'orma dexkonchilik keng rivojlangan o'ziga xos landshaft kompleksidir [2].

A.A.Yurtayevning (2011) fikricha, qishloq xo'jaligi yerlarining tarkibi va maydoni qishloq xo'jaligining ixtisoslashuvi va intensivlik darajasiga qarab belgilanadi. Qishloq xo'jaligining agrolandshaft resurslari va ixtisoslashuvi har bir region uchun o'ziga xos va regionlar bo'yicha farq qiladi [8]. Ta'kidlash lozimki, qishloq xo'jalik ishlab chiqarish resurslari qishloq xo'jalik mahsulotlarini yetishtirishda qatnashadigan resurslarning quyidagi turlarini birlashtiradi: a) agroiqlimiy – madaniy o'simliklarning mahsulot berishi yoki yaylov uchun zarur bo'lgan issiqlik va nam resurslari; b) tuproq-yer resurslari – biomassa - tuproq ham tabiiy resurs va ishlab chiqarish vositasi sifatida qaraladi; c) o'simlik ozuqa resurslari – chorvaning ozuqa bazasi bo'lib xizmat qiladigan biotsenozlarning resurslari; d) suv resurslari – dehqonchilikda sug'orish va chorvachilikda foydalaniladigan resurslar. Bundan tashqari qishloq xo'jalik ishlab chiqarishini tashkil etishda relyefning xususiyatlarini tabiiy sharoit sifatida e'tiborga olish muhim amaliy ahamiyatga ega.

Qashqadaryo viloyatida antropogen landshaftlarning shakllanishi va aholi joylashuvi bir-biri bilan uzviy bog'langan. Olib borilgan tadqiqotlar asosida O'rtacha baland tog'lar va baland tog'lar etaklarida joylashgan Shahrisabz, Yakkabog', Kitob tumanlarida aholi eng zich joylashgan antropogen landshaftlar tarkib topganligini ko'rish mumkin..

Qashqadaryo viloyati aholisi yildan yilga ortib borayotganligi kuzatildi buni 1-rasmdan ko'rish mumkin. Viloyat aholisi 10 yil davomida 600 ming kishiga ortgan, ammo urbanizatsiya darajasi past ko'rsatkichga ega. Buning sababi qishloqlarda ijtimoiy-iqtisodiy sharoit va hayot farovonligining yaxshilanishi hamda qishloq aholisida tug'ilish ko'rsatkichining yuqori ekanligidir.

Qashqadaryo viloyatining aholisi.



Manba: Qashqadaryo viloyati statistika boshqarmasi ma'lumotlari

O'rta Osiyo janubiy qismining markazida joylashgan Qashqadaryo havzasi tog'lik-tekislik relyefiga ega bo'lib, landshaftlarning gorizontallik va balandlik zonallik xususiyatlari issiqlik va namlanish sharoitlariga, aholining joylanish xususiyatlariga, relyefiga va inson tomonidan o'zlashtirilgan joylar va boshqa omillarga bog'liq.

Qashqadaryo vohasining landshaftlari qadimdan insonning xo'jalik faoliyatida foydalanilgan. Shu sababli vohaning katta qismida ayniqsa uning tekisliklarida landshaftlar turli darajada antropogen o'zgarishlarni kechirgan va ularni tavsiflashda antropogen omillarning rolini ham albatta e'tiborga olmoq lozim.

Qashqadaryo vohasi qishloq xo'jaligi ishlab chiqarishi uchun iqlimning bir qator qulay imkoniyatlariga ega. Qashqadaryo vohasining geografik o'rni va uning yer yuzasi tuzilishi bu hudud agroiklimining tarkib topishida muhim ahamiyatga ega. O'rta Osiyo agroiklimshunoslik ilmining mutaxassislaridan L.N.Babushkin va N.A. Kogaylar Qashqadaryo havzasining tekislik qismini uchta, ya'ni Quyi Qashqadaryo, G'uzor va Shahrizabz agroiklimiy rayonlarga ajratadi [3]. Qashqadaryo viloyati ham tekislik, ham tog'li hududlar doirasida joylashganligi uchun tekislik va tog'lik agroiklimiy rayonlari guruhi alohida – alohida ajratiladi. Bunday ajratishning negizida tekisliklarda namlik va issiqlikning hududiy o'zgarish omili, tog'larda esa iqlim elementlarining balandlik zonalanish qonuni asosida tarqalish sababi yotadi.

Qashqadaryo vohasida o'lkaning qishloq xo'jaligi qadimdan an'anaviy tarzda rivojlanib kelmoqda. Shuning uchun vohada eng katta maydonni

антропоген faaliyet bilan bog‘liq bo‘lgan qishloq xo‘jalik landshaftlari – agrolandshaftlaregallaydi. Qashqadaryo viloyati yer fondi va uning tarkibidagi tuzilmaviyo‘zgarishlarni tahlil qilish, ularning asosiy va ustivor yo‘nalishlarini aniqlash agrolandshaftlardan samarali foydalanish va madaniy landshaftlarni tashkil etishda muhim o‘rin tutadi (2-rasm).

Qashqadaryo viloyati o‘zining egallab turgan yer maydoni bo‘yicha O‘zbekistonda tarkibidagi eng yirik viloyatlardan hisoblanib, uning umumiy yer maydoni 2856,8 ming gektarni tashkil etadi. Qashqadaryo viloyati statistika boshqarmasi ma‘lumotlariga ko‘ra 2020 yil yanvar holatida viloyatda 2143,3 ming gektar qishloq xo‘jalik yerlari bo‘lib, shundan o‘rmonlar 109,1 ming gektarni, bog‘lar va tokzorlar 35,7 ming gektarni tashkil etadi. Sug‘oriladigan yerlar 417,2 ming va lalmi yerlar 253,2 ming gektardan iborat. Lalmikor yerlar o‘rtacha yillik yog‘in miqdori 250 mm dan oshadigan hududlar hisoblanib, qishloq xo‘jaligi ekinlarini yetishtirish faqat yog‘inlar hisobiga amalga oshiriladi. Qashqadaryo vohasining mavjud yer resurslari lalmikor dehqonchilikda ancha katta miqyoslarda foydalanish imkoniyatini beradi. Qashqadaryo viloyatida haydalib, ekin ekiladigan yerlar maydoni 670,5 ming gektar yoki umumiy maydonning 23,7% ga yaqin bo‘lib, shundan 253,2 ming gektari yoki jami ekin maydonlarining 9,1% lalmikor dehqonchilikda foydalaniladi.

Viloyat maydonining 20,2 ming gektar yoki 0,70% maydoni bog‘lar, 9,9 ming gektar yoki 0,35% maydoni tokzorlar, 8,6 ming gektar yoki 0,30% maydoni tutzorlar, 1,5 ming gektar yoki 0,01% maydoni ko‘chatlar, 21,9 ming gektar yoki 0,76% maydoni bo‘z yerlar, 1406,8 ming gektar yoki 49% maydoni yaylovlar tashkil etadi. Viloyatning yaylov sifatida foydalaniladigan hududlari chuqur o‘zgarishga uchramagan tabiiy-antropogen yerlardir.

Qashqadaryo vohasida barcha turdagi antropogen landshaftlar tarqalgan. Bu hududda ayniqsa, qadimiy aholi manzilgohlari, lalmikor va obikor dehqonchilik bilan bog‘liq bo‘lgan seliteb va agrolandshaftlar keng tarqalgan. Yuqoridagilarni tahlil qilish asosida Qashqadaryo vohasida agrolandshaftlarning quyidagicha turlarini ajratish mumkin: obikor landshaftlar; lalmikor landshaftlar; bog‘lar va ko‘chatlar; tokzorlar; tutzorlar; bo‘z yerlar; yaylovlar va boshqa turdagi landshaftlar. Bu turdagi landshaftlarni kichik turlarini ham qishloq xo‘jalikda foydalanish turi va maqsadlariga qarab yana ajratish imkoniyati bor. Masalan, tabiiy yaylovlarni tog‘, dasht, cho‘l, quruq to‘qay va o‘rmon yaylovlarga ajratish mumkin. Sug‘oriladigan hududlarda paxtachilik, g‘allachilik, sabzavotchilik qilinadigan hududlarning landshafti va xakozo. Chalacho‘l landshaftlarning iqlim sharoitlari dehqonchilik va chorvachilik uchun qulay. Tog‘-chalacho‘l landshaftlari tarqalgan hududlar g‘alla yetishtiriladigan lalmikor dehqonchilikda foydalaniladi. Bundan tashqari, bu yerda bog‘dorchilik, uzumchilik va go‘sht-sut yo‘nalishidagi chorvachilik ham rivojlangan. Adirlar va past tog‘larning landshaftlari yaylovlari va pichanzorlar sifatida foydalaniladi.

Sug‘orish dehqonchilikni intensivlashtirish va tabiiy landshaftlarni o‘zgartirishning kuchli omili bo‘lib, u o‘z ichiga bir qancha majmualar xo‘jalik

tadbirlarini biriktiradi: qurilish, irrigatsiya sistemalari (kanallar, suv omborlari va b), yer tuzish, qishloq xo‘jalik maydonlarini va aholi tomorqalarni sug‘orish, qishloq xo‘jalik ekinlarini qayta ishlash va boshqalar. Natijada sug‘oriladigan yerlarda tabiat komponentlari (relyef, hayvonot va o‘simliklar dunyosi, tuproq, grunt suvlari, mikroiklim va.b) sezilarli ravishda o‘zgaradi. Arid iqlimli Qashqadaryo viloyatning Qarshi cho‘li yerlarini sug‘orish natijasida qayta sho‘rlanish, zax bosish (botqoqlanish), irrigatsiyali eroziya, cho‘kish va boshqa salbiy ta’sirlar kuzatiladi.

Mavjud ma’lumotlarga ko‘ra hozirda viloyatda sug‘oriladigan yerlarning 45% dan ortiq turli darajada sho‘rlangan. Sug‘oriladigan yerlarning kengayishi asosan Qarshi cho‘lida sug‘orilayotgan yerlarning qayta sho‘rlanishi natijasida kengayib bormoqda.

Qarshi cho‘lini majmual o‘zlashtirish va sug‘orishga tayyorlash oldidan o‘tkazilgan tadqiqotlar-bu yerda o‘zlashtirish mumkin bo‘lgan 1,0 mln. gektar maydonning 200 ming gektar i (20%) sho‘rlanmagan, qolgan 80% maydonlardagi tuproqlar turli darajada sho‘rlanganini ko‘rsatgan edi. Kuchli sho‘rlangan tuproqlar G‘uzordaryo va Qashqadaryoning konussimon yoyilmalarida, janubiy – sharqiy tog‘oldi tekisliklarida va qadimiy qoldiq platolar atrofida mavjud [1].

O‘rganishlar natijasida Qashqadaryo viloyati statistika boshqarmasi ma’lumoti bo‘yicha (2020 yil 1-yanvar holati) viloyatda jami sho‘rlanmagan maydon 54.8%, jami sho‘rlangan maydon 45.2% bo‘lib, shundan kuchli sho‘rlangan maydon 1,9 %, kuchsiz sho‘rlangan maydon 35,9% va o‘rtacha sho‘rlangan maydon 7.4% ni tashkil etadi [10].

1-jadval

Qashqadaryo viloyati sug‘oriladigan yer maydonlarining tuproq sho‘rlanish darajasi (2020 yil 1- yanvar holatida)

T/r	Tumanlar	Meliorativ nazoratda turgan sug‘oriladigan maydon, gektar	SHO‘rlanish darajasi buyicha bo‘linganligi (0-100sm kalinlikda) gektar				
			sho‘rlanmagan	jami sho‘rlangan maydon	Шу жумладан,		
					kuchsiz sho‘rlangan	o‘rtacha sho‘rlangan	kuchli sho‘rlangan
1	G‘uzor	34979	12231	22748	17888	4242	618
2	Dehqonobod	2926	2926	-	-	-	-
3	Qarshi	50375	27327	23030	20350	2052	628
4	Koson	73632	26722	46910	36035	8175	2700
5	Qamashi	34844	18601	16243	13143	2480	620
6	Kitob	20282	20282	-	-	-	-
7	Mirishkor	63358	37068	26290	24420	1719	151
8	Muborak	35014	6153	28861	20660	5361	2840
9	Nishon	57235	22610	34625	23940	8851	1834
10	Kasbi	50537	19193	31344	26096	5039	209

1 1	Chiroqchi	30227	27999	2228	2028	200	-
1 2	Shaxrisabz	26125	26125	-	-	-	-
1 3	Yakkabogʻ	34598	34568	30	20	10	-
	Jami:	514114	281805	232309	184580	38129	9600
	Foizda(%)	100%	54.8%	45.2%	35.9%	7.4%	1.9%

Manba: Qashqadaryo viloyati statistika boshqarmasi ma'lumoti (2020 yil 1- yanvar holati)

Yuqoridagi ma'lumotlardan ko'rish mumkinki, Dehqonobod, Kitob, Shaxrisabz tumanlari tog'li zonada joylashganligi, oqar suvlar bilan yaxshi ta'minlanganligi va yog'in miqdorining ancha ko'pligi uchun sho'rlangan yerlar kuzatilmaydi. Qashqadaryo viloyatining cho'l zonasi hisoblangan Nishon, Koson va Muborak tumanlari kuchli sho'rlangan maydonlarning ko'pligi jihatidan yetakchi o'rinni egallaydi. Qamashi, Qarshi va G'uzor tumanlarida esa sho'rlanish darajasi o'rtacha. Tumanlararo sho'rlanish darajasining turlichaligi tuproq tarkibi va iqlimiy omillarga bog'liq holatda ro'y beradi. Shu bilan birga tog' va tog' oldi hududlarida joylashgan tumanlarda sho'rlanmagan yerlarning salmog'i nafaqat yuqori darajada saqlanib qolmoqda, balki olib borilayotgan meliorativ va agrotexnik tadbirlar ta'sirida yanada yaxshilanmoqda. Mamlakatimiz qishloq xo'jaligida amalga oshirilayotgan tarkibiy o'zgarishlar natijasida yuqori zonada joylashgan tumanlarda paxta maydonlari qisqartirilib, g'alla, pichan, bog'dorchilik, sabzavot ekinlari katta maydonlarni egallaydi. Bu esa qishloq xo'jaligi ekinlarini almashlab ekish imkonini yaratib, olib borilgan agrotexnik tadbirlar natijasida tuproq sifatining yaxshilanishiga olib kelganligini ko'rsatadi.

Tadqiqot natijalari asosida Qashqadaryo vohasida cho'llanish jarayonlarinin turlarini ajratildi (2-jadval).

2-jadval

Qashqadaryo viloyatida cho'llanish jarayonining tiplari

№	Cho'llanish tiplari	Foydalanilishi	Cho'llanishga qarshi kurash chora-tadbirlari
I	Eol jarayonlar rivojlangan qumli cho'llar	Chorvachilik	Fitomelioratsiya (saksovul, qandi, cherkez)
II	Deflyatsiya jarayonlari rivojlangan lyosli va sho'rxokli cho'llar	Chorvachilik	Fitomelioratsiya va ko'p yillik butalar ekish. Yaylovchilikni tartibga solish
III	Tuproqlari ikkilamchi sho'rlangan jarayonlar	Sug'orish dehqonchiligi	Agrotexnik chora-tadbirlar
IV	Tuproqning gumussizlanishi degumizatsiya jarayoni	Qadimdan sug'orma dehqonchilik	Fan-texnika yutuqlaridan va tabiiy o'g'itlardan foydalanish

V	Errozion jarayonlar rivojlangan tog oldi tekisliklari	Lamikor dehqonchilik va chorvachilik	Errozion jarayonlarga qarshi chora-tadbirlar (ko'p yillik butalar ekish)
VI	Suv eroziyasi rivojlangan yalong'ochlangan tog' yonbag'irlari	Chorvachilikda va rekreatsiyada	Tog' yonbag'irlarini terassalashtirish (daryolar va soylar havzalari bo'ylab) va o'rmon agromelooratsiyasini amalga oshirish

Manba: Xushmurodov F, 2023

Qashqadaryo vohasida insonning turli xildagi faoliyati bilan bog'liq bo'lgan landshaftlarning o'zgarishi va antropogen landshaftlarning yuzaga kelishi sodir bo'lgan. Bu yerda tubdan o'zgartirilgan texnogen landshaftlar, seliteb landshaftlar, suvli (akval) landshaftlar vujudga kelgan. Ammo ularning maydoni agrolandshaftlar bilan band bo'lgan landshaftlarning maydoniga nisbatan ancha kam va ularning aksariyat katta qismini yirik masshtabli xaritalardagina ajratish mumkin.

Xulosa. Har qanday joyning tabiat kompleksini o'z rivojlanish tartibiga, individual xususiyatlariga ega bo'lgan ekologik-geografik tizim deb qarash oqilona foydalanishning asosini tashkil qilishini e'tiborga olib, Qashqadaryo vohasidagi mavjud yerlardan oqilona foydalanish – dehqonchilikni tarmoqlarini yanada rivojlantirishda va tuproq unumdorligini saqlab qolishda katta ahamiyatga egaligi asoslanildi. Ta'kidlash lozimki, agrolandshaftlar tabiiy sifatlaridan tashqari yangi ijtimoiy sifatlarga ega bo'ladi. Aynan takrorlanmaydigan rivojlanishning mavjudligi tufayli tabiiy qonuniyatlarga bo'ysunadigan komplekslarga antropogen landshaftlarni hosil qiladi. Qashqadaryo viloyati agrolandshaftlari va landshaftlarning sho'rlanish darajasi 1: 300 000 masshtabda kartasi tuzildi.

Yuqoridagilar Qashqadaryo vohasining agrolandshaftlaridagi salbiy jarayonlarning rivojlanishini aniqlash, bashorat qilish va zarur bo'lganda ularni yanada sig'imli hamda ekologik barqaror agroekotizimlarni yaratishga moslashtirish imkonini beradi. Bu esa yurtimizda qishloq xo'jalik ekinlaridan yuqori hosil oishda, hosildorlik miqdorini bashoratlashda muhim ahamiyatga ega.

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*Xushmurodov F.M.
g.f.f.d(PhD).v.b.dotsent
Qarshi davlat universiteti talabasi Ahmedova Kamola
Qarshi davlat universiteti talabasi Hamroqulova Shahrizoda*

QASHQADARYO VOHASI CHO'L LANSHAFTLARI TABIIY RESURSLARIDAN SAMARALI FOYDALANISH JIHA TLARI

Annotatsiya: maqolada cho'l landshaftlari tabiiy resurslaridan oqilona foydalanish va cho'llanishni yuza keltiruvchi tabiiy va sun'iy omillar haqida bayon etilgan. Cho'llanishning sug'oriladigan hudud ijtimoiy-iqtisodiy rivojlanishiga ta'siri hamda ikkilamchi sho'rlanish jarayonida yerdan foydalanishning geografik-ekologik muammolari qarab chiqilgan.

Tayanch so'zlar: Cho'llanish, arid, degradatsiya, sho'rlanish, landshaft, sug'orma dehqonchilik.

*Khushmurodov F.M., PhD
associate professor
Akhmedova K.
student
Karshi State University
Hamroqulova Sh.
student
Karshi State University*

ASPECTS OF EFFECTIVE USE OF THE NATURAL RESOURCES OF THE DESERT LANDSCAPE OF THE KASHKADARYA OASIS

Annotation. The article describes the rational use of irrigated land resources, as well as natural and man-made causes that lead to desertification. The implications of desertification on the socio-economic development of the irrigated area, including the topographical and environmental issues associated with land usage in the secondary salinization process, are addressed.

Key words: Desertification, arid, degradation, salinization, landscape, irrigated farming.

Kirish. Bugungi kunda insoniyat oldida turgan eng jiddiy ekologik va sotsial-iqtisodiy muammolardan biri, bu cho'llanish muammosidir. Cho'llanish - bu tabiiy-geografik va antropogen jarayonlarning o'zaro ta'siri yig'indisi bo'lib, arid hududlardagi ekosistemalarni yemirilishi, organik hayot shakllarining degradatsiyalashuvi va bu hududlarning tabiiy-iqtisodiy imkoniyatlarining pasayishi tushuniladi. YUNESKO ma'lumotlariga ko'ra, yer yuzining 1/3 qismi cho'llanish xavfi ostida bo'lib, dunyoning arid hududlarida yashayotgan

millionlab insonlarning hayot tarziga ham ta'sir qiladigan muammodir. Inson xo'jalik faoliyatining kuchli ta'siri natijasida O'zbekiston hududida cho'llanish jarayoni chuqurlashib va kengayib borishi kuzatilmoqda. Cho'llanish jarayonlari 210 mln. gektar maydonni egallab yotgan O'rta Osiyoning arid hududlari uchun ham xarakterli. Tadqiqotlarga ko'ra, O'zbekiston hududining 60%dan ko'proq maydonida har xil darajada cho'llanish jarayoni sodir bo'lmoqda [2; 10-168 b.]. S. Abbosovning ketirishicha, O'rta Osiyoning, xususan Orol dengizi havzasida, cho'llanish jarayoniga duchor bo'lgan landshaft majmualarining umumiy maydoni A.G.Boboyevning (2000) bergan ma'lumoti bo'yicha 1 405 840 km² ga teng. Shundan kuchsiz cho'llangan yerlar 837 714 km² ni (59,6%), mo'tadil cho'llangan yerlar 474 356 km² ni (33,7%) va kuchli cho'llangan yerlar 93 770 km² ni (6,7%) tashkil etadi.

Cho'llanish, asosan arid mintaqa uchun xos bo'lib, yer, suv, o'simlik va boshqa resurslarning degradatsiyalashuvidir (fr.degradatsiya – asta-sekin yomonlashuvi), yog'in miqdorining kamayib borishi bilan iqlimning quruqlashishi, cho'l hududlari maydonining kengayishi natijasida yuzaga keladigan tabiiy ekosistemalarning buzilishidir. Qurg'oqchil (arid) iqlim mintaqasida cho'llar maydonining 1960 yillardan boshlab keskin kengayishi avvalo mamlakatlarda aholi sonini to'xtovsiz oshib borishi, mamlakatlarning aholini oziq-ovqat bilan ta'minlash, maqsadida qishloq xo'jaligini rivojlantirish uchun ekin maydonlarining kengayib borganligi hamda ma'lum ma'noda qurg'oqchilikning tez-tez sodir bo'lganligi bilan bog'liqdir. Tadqiqot sifatida Qashqadaryo vohasida sodir bo'layotgan cho'llanish jarayolaridan ba'zi omillari tahlil qilindi.

Metodlar va o'rganilish darajasi. Mavzuni o'rganishda muhim ilmiy yondoshuv va tamoyillardan ekologik-landshaft tamoyili, tizimli kompleks yondashuv tadqiqotning asosini tashkil etib, landshaft indikatsiya, bunda aerokosmik, kartografik, paleogeografik, geografik-taqqoslash, statistik, geoinformatsion modellashtirish (GIS modellashtirish) va boshqa usullardan foydalanish asosiy natijaga erishish imkonini beradi. Arid zonalarda cho'llanish jarayonlarni keng ko'lamda tadqiq etish bilan bir qatorda cho'lshunos olimlar bu muammoning nazariy va amaliy masalalarini ishlab chiqishgan. Xalqaro ahamiyatga ega bo'lgan bunday dolzarb geoekologik muammoga A.G.Boboyev (1986, 1990, 2000), A.P.Petrov (1972), I.S.Zonn (1981, 1984), N.T.Nechayeva (1978), N.S.Orlovskiy (1981), G.F.Radchenko (1983), A.A.Rafiqov (1988), V.M.Chupaxin (1990), A.A.Abdulqosimov, S.B.Abbasov (1977-2010), L.A.Alibekov (1997-2010), I.Q.Nazarov (1997-2010) F.M.Xushmurodov (2021-2023) va boshqalarni ilmiy maqolalari, monografiyalari bag'ishlangan.

Asosiy qism. Dunyoning barcha mamlakatlarida, shu jumladan O'zbekistonda ham tan olingan va amalga oshirilayotgan barqaror rivojlanish konsepsiyasi tabiat, iqtisodiyot va ijtimoiy sohalarning teng huquqliligiga asoslanadi. Barcha hududlarda, jumladan Qashqadaryo vohasida ham tabiat resurslaridan oqilona foydalanish, ularni muhofaza qilish, hamda mavjud

ekologik muammolarning yechimini topish, barqaror rivojlanishning asosidir. Shu nuqtai nazardan tabiatdan foydalanish va uni muhofaza qilish barqaror rivojlanishning muhim vositasi hisoblanadi.

Ayniqsa iqlim o'zgarishi sharoitida hudud aholisi va dehqonchilik faoliyatiga uzoq o'tmishdan beri xavf soladigan, mohiyatan arid iqlim mintaqalariga xos, ammo bugungi kunda butun insoniyatning kelajak faoliyatiga tahdid soluvchi suv tanqisligi, qurg'oqchilik masalasidir. Keyingi yillarda qurg'oqchilik xavfi vaziyatlarning davriyligi va ko'lami ham murakkablashib bormoqda. Qurg'oqchilik umumiy ma'noda atmosfera yog'inlari, yer usti yoki yer osti suvlarining uzoq vaqt davomida yetishmovchilik holatidir. Yetuk cho'lshunos olim S.B.Abbasovning yozishicha, P.Meygs (1955) iqlim ko'rsatkichlariga asoslanib, dunyoning qurg'oqchil hududlar kartasini tuzgan. Uning hisobi bo'yicha yer yuzida arid hududlarning umumiy maydoni 48810 ming km² ni, yoki quruqlikning 33,6% ini tashkil etadi. Shundan o'ta qurg'oqchil (ekstraarid) zonasiga 4% i, arid zonasiga 15% i va chala arid zonasiga 14,6% ito'g'rikelishnita'kidlagan [3;11b.].R.Jumaboyev va Matchanov M.larning keltirishicha, qurg'oqchilikning sodir bo'lishi va mohiyatiga qarab tadqiqotchilar (Alam va boshq., 2014; Panagoulia, 2015) meteorologik qurg'oqchilik, gidrologik qurg'oqchilik, qishloq xo'jaligi qurg'oqchiligi va ijtimoiy-iqtisodiy qurg'oqchilikka ajratganlar [4; 150-154 b.]. Meteorologik qurg'oqchilikning sababi yog'in miqdorlarining doimiy miqdordan kamayishi oqibatida vujudga keladi. Qashqadaryo vohasi arid iqlim mintaqasida joylashganligi sababli atmosfera yog'inlarining o'rtacha miqdori 75-100 mm atrofida, bug'lanish esa juda katta. Gidrologik qurg'oqchilik daryo yoki suv yig'ish havzasidagi suv tanqisligining oqibatidir. Quruq va issiq iqlimli sharoitlarda qishloq xo'jalik ekinlaridan yuqori hosil olish bevosita sun'iy sug'orish bilan bog'liq. Bunday sharoitlarda faqat sug'orish yer resurslari hosildorligini oshirishning eng muhim va zaruriy usuli hamda dehqonchilikni boshqarishning albatta amalga oshirilishi lozim bo'lgan shartidir. Qashqadaryo viloyati vegetatsiya davrining nam bilan ta'minlanganligi jihatidan Qarshi, Nishon dashtlari (hududning quyi qismidagi g'arbiy tekislik) kamroq namlangan. Bu yerda janubi-g'arbdan Sandiqli cho'lining ta'siri seziladi, yillik yog'inlar miqdori 146-190 mm. Yoz faslining uzoq davom etishi oqibatida hududda yillik haroratning kattaligi natijasida bug'lanish 1700 mm ga yetadi, bu esa o'z navbatida namlik taqchilligi (defitsit)ni vujudga keltiradi. Vohaning tekislik qismini termik (10°C dan yuqori faol haroratlar miqdori 5000-5300°C dir) resurslariga ko'ra juda issiq zonaga kiradi. G.T.Selyaninov gidrotermik koeffitsiyenti 0,11 – 0,17 ga teng. Agroiqlimiy rayonning gidrotermik koeffitsiyenti 0,10 bo'lganligi uchun bu rayonni namlanish sharoitlariga ko'ra juda quruq zonaga kiritish mumkin. Zero, yuqoridagilarga asosan vohaning tekislik qismi qurg'oqchil hududda joylashganligi sabab qishloq xo'jalik sug'orma dehqonchilik asosida shakllangan.

Mutaxassislarning ma'lumotiga ko'ra, har soniyada dunyo bo'ylab 23 gektar yer cho'llanib boryapti. Bu holat davom etaversa, 2050 yilga borib, Yer yuzining 95 foizi cho'llanishi va bu 3 milliarddan ziyod odamni oziq-ovqat tanqisligida qoldirishi mumkin. Har daqiqada O'zbekistonning 9 kvadrat metr hududi cho'llanib boryapti. Cho'lshunos olim prof. L.Alibekovning ma'lumoticha qurg'oqchil iqlimli yerlarning jami maydoni taxminan 40 mln. km², ya'ni quruqlikning taxminan 25% ini tashkil yetib, yer yuzasi aholisining 20% i (800 mln. kishi) istiqomat qiladi [2; 60-168 b.].

Cho'llanishga asosan tabiiy va antropogen omillar ta'sir ko'rsatadi. N.F.Reymers (1990) ma'lumotlariga ko'ra, antropogen cho'llar quruqlik yuzasining 10 mln. km² maydonini yoki 6,7 %ini tashkil etadi. Ayrim tadqiqotchilarning fikricha cho'llarning katta qismi inson faoliyatining mahsulidir. Hozirgi paytda sayyoramizdagi quruqlik maydonining turli darajadagi cho'llanish yana 25 mln km² maydonda rivojlanmoqda. Antropogen omillarga yerlarni noto'g'ri sug'orish hamda qishloq xo'jalik yerlarining yerlarning ifloslanishi, tabiat resurslaridan nooqilona foydalanish, ya'ni sanoat chiqindilari, tosh, qum va minerallarni qazib olish kabilar kiradi. V.A. Rafikovning [5; 200-b.] ta'kidlashicha, hozirda Janubiy Orolbo'yi xududida cho'llanish jaraenlarining quyidagi shakllari kuzatilmoqda: - yerlarni sho'rlanishi; - ko'l va suv havzalarining qurishi; -yerlarni degradatsiyaga uchrashi; - yer usti va osti suvlarining sho'rlanishi; - sug'oriladigan yerlarni suv bosishi; - tuproq hamda tuzlarning ko'chishi va boshqalar.

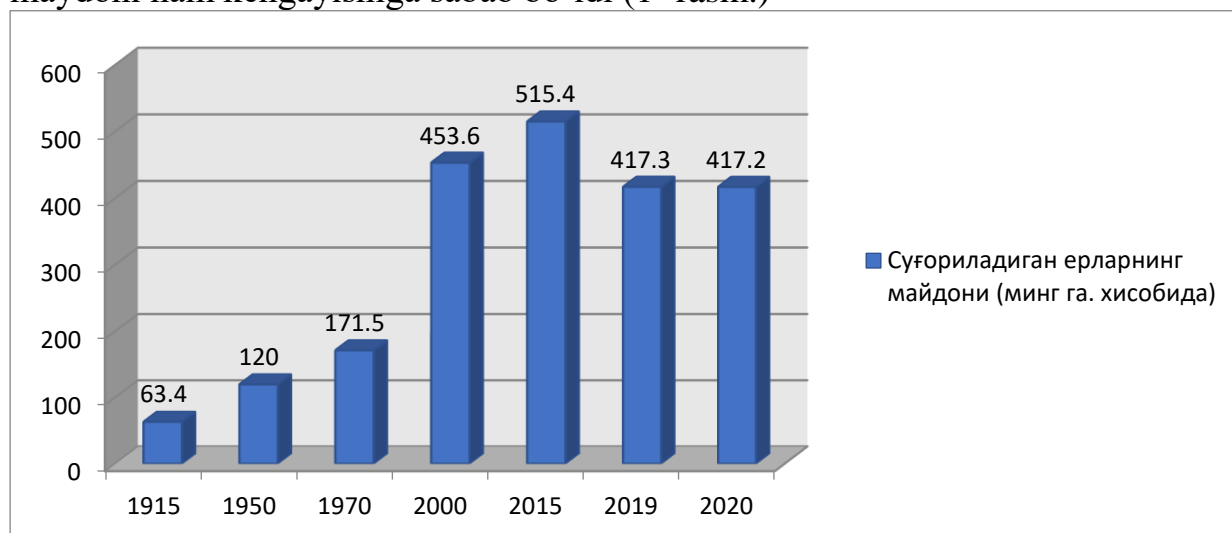
Cho'llanishga qarshi kurashish muammosi dastlab global darajada BMTning 1977-yilda Nayrobi shahrida o'tkazilgan konferensiyasida cho'llashishga qarshi kurash bo'yicha harakat Rejasi qabul qilingan. Cho'llanishga qarshi kurash bo'yicha Xalqaro Konvensiya (1994) cho'llanishni quyidagicha ta'riflaydi: "Cho'llanish iqlim tebranishi va inson faoliyatini ham o'z ichiga oladigan turli omillar tufayli qurg'oqchil rayonlarda yerlarning degradatsiyasini bildiradi".Ayniqsa, O'rta Osiyoning markazida joylashgan Qashqadaryo vohasi hududida cho'llanish jarayoni asosan yer resurslaridan nooqilona foydalanish, chorva mollari sonining ortishi, cho'llardagi butasimon o'simliklarning o'tin sifatida kesilishi, tog'-kon sanoatining rivojlanishi, ya'ni tabiiy va antropogen omillar ta'sirida shakllanmoqda. O'zbekistonning 70% dan ortiq hududi cho'l va chala cho'l mintaqalarida joylashganligi sababli sug'oriladigan yerlarda sho'rlanish, shamol va suv eroziyasi, yaylovlarda grunt suvlari sathining ko'tarilishi kabi hodisalar keyingi vaqtlarda katta maydonlarda ro'y bermoqda. Buning oqibatida qishloq xo'jaligida foydalaniladigan yerlarning mahsuldorligi borgan sari pasayib, oziq ovqat, yem-xashak va sanoat xom ashyolarini yetishtirib berish murakkablashib, tabiiy landshaftlarning qashshoqlanishi kabi landshaftlarning miqdor va sifat buzilishlari yuz bermoqda.

Dunyoning barcha ilk sivilizatsiyalari sug'oriladigan dehqonchilik hududlarida paydo bo'lgan va rivojlangani kabi, O'rta Osiyoda ham dehqonchilik asosan sun'iy sug'orish asosida yuzaga kelgandir. Natijada sug'orma

dehqonchilik bir qator salbiy ekologik oqibatlariga sabab bo‘ladi va cho‘llanishga olib keladi. L. Alibekovning (2010) takidlashicha, bular asosan sug‘orish (irrigatsion) eroziya; tuproq agroirrigatsion madaniy qatlamining to‘planishi; tuproq-gruntning ikkilamchi sho‘rlanishi; grunt va tuproqning zaxlashi (botqoqlashuvi); yer usti va yer osti suvlarining ifloslanishi; daryolarning sayozlashuvi; joy relyefining cho‘kishi bilan namoyon bo‘ladi [2; 23-168 b.].

Qashqadaryo vohasi ham qadimdan sug‘oriladigan va sug‘orma dehqonchilik rivojlana borgan hududlardir. Vohaning sug‘oriladigan dehqonchilik zonalarida qishloq xo‘jaligiga suv eroziyasi, shamol eroziyasi, gravitatsion jarayonlar, sel hodisalari, loyqa bosishi, botqoqlanish, sho‘r bosish, qatqaloq hosil bo‘lishi kabi tabiiy geografik jarayonlari eng ko‘p salbiy ta‘sir ko‘rsatishini kuzatish mumkin. Viloyatda uzoq tarixiy davrlar davomida ko‘plab suv inshootlarining barpo etilishiga bog‘liq holda sug‘oriladigan yerlarning maydoni kengaya borgan. Qashqadaryo vohasida 5157 km dan ortiq kanallar mavjud bo‘lib, ushbu kanallar orqali qishloq xo‘jaligi ekinlari va aholi xo‘jaliklari uchun xizmat qilmoqda. Ammo bu kanallarning ko‘pchiligi o‘tgan asrning oxirgi choragida qurilgan bo‘lib, hozirda agrotexnik talablarga to‘liq javob bermaydi. Chunki ushbu kanallarning ma‘lum qismi betonlashtirilmagan bo‘lib, ulardan yerosti suvlariga sizayotgan suv natijasida hududning yerosti suvlari sathi ko‘tarilishiga olib keldi. Buni oldini olish uchun voxada drenajlar yetishmaydi. Qarshi cho‘lida har bir gektar sug‘oriladigan maydonga 50 pog.m. zovur to‘g‘ri kelishi kerak, lekin bu ko‘rsatkich deyarli 23 pog.m. dan oshmaydi[6; 98-101 b.].

Qashqadaryo havzasining o‘rta va quyi oqimlariga ularning eng katta massivlari to‘g‘ri keladi. Keyingi yillarda viloyatdagi sug‘oriladigan yerlar maydonining kengayishi meliorativ holatini yaxshilashni talab qiladigan yerlar maydoni ham kengayishiga sabab bo‘ldi (1- rasm.)



1-rasm. Qashqadaryo viloyatining sug‘oriladigan yer maydoni (1915-2020 yy.).

Qashqadaryo viloyatining sug‘oriladigan yer maydonining 1915-2020 yillar davomida o‘zgarish diagrammasini tahlil qilish shuni ko‘rsatadiki, keyingi

yillarda qurg'oqchilik va cho'llanish natijasida sug'oriladigan yer maydonlari kamayib bormoqda, buni quyidagi ma'lumotlardan bilish mumkin. Qashqadaryo viloyati statistika boshqarmasi [7;] 2020 yil yanvar holati ma'lumoti bo'yicha, viloyatda (0-100 smqalinlikda) sho'rlangan maydon 232309 ga jami maydonga nisbatan 45.2% bo'lib, shundan kuchli sho'rlangan maydon 9600 ga, kuchsiz sho'rlangan maydon 184580 ga va o'rtacha sho'rlangan maydon 38129 ga ni tashkil etadi. Hozirgi kunda sug'oriladigan yerlarning 8 foiziga yaqini yoki 325 ming gektari meliorativ holati yomon yerlar hisoblanadi.

Sug'oriladigan tuproqlarning sho'rlanish darajasi ham daryoning quyi qismi tomon qonuniy ravishda ortib boradi. Masalan, Qashqadaryo daryosining togli qismida sug'oriladigan tuproqlarda sho'rlanish yo'q hisobida. Ushbu holat o'z navbatida, Qarshi cho'li tuproqlari sho'rlanish darajasining yuqoriligi hamda yer osti suvlari sathining ko'tarilishi tufayli yuz berganligidan dalolat beradi. Bu hududlarda sho'rlangan maydonlarning kattaligi Qarshi cho'lida arid zonada joylashganligi va tuproq tarkibi va tuproq qoplamida bug'lanish miqdorining yuqoriligi bilan bog'liq. Binobarin, Qarshi cho'li uchun doimiy yuza oqimining yo'qligi, quruq o'zanlarning mavjudligi va tuproq – gruntlarning yuqori darajada sho'rli, tushadiga yog'inlarga nisbatan bug'lanishning ancha ko'pligi xosdir. Qarshi cho'lining o'ziga xos xususiyatlarini hisobga olmay yerlarni o'zlashtirilishi natijasida katta maydonlarda tuproq yuvilishi, eroziya hodisalarining turli ko'rinishlari, yer osti suvlari sathining ko'tarilishi natijasida sho'rtob va sho'rxoklanish kabi jarayonlar kuzatiladi. Buning oqibatida esa ko'plab buzilgan landshaftlar vujudga keldi.

Ayni paytda tuproqlarning va suvlarning sho'rlanish darajasi agrotexnik tadbirlarning nooqilona olib borilishi, ya'ni mineral o'g'itlardan meyoridan ortiq foydalanish va zararkunandalardan himoya qilish maqsadida zaharli kimyoviy vositalaridan foydalanilib kelinganligi oqibatida xam kuchayib bormoqda. Ayniksa, vohaning arid tekisliklarida yog'inning juda kamligi, tuproqdan namning ko'p bug'lanishi, tuproqlarni sho'r bosishini kuchaytiradi. Havo haroratining sutkalik va yillik amplitudasining keskin o'zgarib turishi nurashni kuchaytiradi. Masalan, Qarshi cho'lining Qarshi, Koson, Nishon tumanlarida tarqalgan tuproqlar sho'rlanishga o'ta moyil yerlar bo'lib, ular doimo sug'orish va zax qochirish melioratsiyasiga muhtoj hudud hisoblanadi. Qarshi cho'lining markazida yer osti sizot suvlari oqmas yoki juda kam oqadigan tipga mansub bo'lib, bu suvlar tarkibidagi tuzlar konsentratsiyasi tog'li hududlarga nisbatan yuqoridir. Bundan tashqari bu tumanlarda o'ziga xos bo'lgan garmsel, afg'on kabi shamollarining bo'lib turishi oqibatida tuproqning mayda zarralarini uchirib ketishi natijada tuproq hosildorligi kamayishi hamda atmosferada chang-to'zon ko'tarilib havoning ifloslanishi va changli kunlar haftalab davom etishi kuzatiladi.

Cho'llanish jarayonlari rivojlanishiga nafaqat yuqoridagi ko'rsatilgan muammolar balki ayrim hududlardagi kon- qidiruv ishlari ham sabab bo'lmoqda. Cho'l landshaftlarining ayrim hududlardagi degradatsiya jarayonlari kon-qidiruv hamda neft-gaz qazib olish bilan tadbirlari bilan bevosita bog'liqdir [1; 89-133

b.]. Ishga tushirilgan neft va gaz quvurlari yoki quduqlarning atroflarida tabiiy jarayonlarning o'zgarishini kuzatish mumkin. Qashqadaryo viloyatida vujudga kelgan degredatsiyalashgan yerlar qishloq xo'jalik ekin maydonlariga, yaylovlarga va ekosistemalariga katta zarar yetkazmoqda. Shuningdek, hudud tabiatiga antropogen ta'sirning kuchliligi landshaft– ekologik muammolarni keltirib chiqarmoqda hamda ekotizimlarning o'zaro modda va energiya almashinuvida va muvozanatini buzilishiga sabab bo'lmoqda.

Xulosa o'rnida, arid hududlarda agrolandshaftlardan foydalanishni optimallashtirishda quyidagi tadbirlarni amalga oshirish maqsadga muvofiq: yer tuzilishi meyorda shakllanishi va saqlanishi amalga oshirish orqali agrolandshaftlar xilma-xilligi va barqarorligini ta'minlash; sug'orma dehqonchilikda tomchilab sug'orishni amalga oshirish; yaylovlarda chorva boqishni oqilona tashkilashtirish va yaylov o'simliklarini muhofaza qilish; kon qazib olishda foydalaniladigan texnikalarning harakatlanishini tartibga solish; zovur va drenajlardan samarali foydalanishni amalga oshirish; landshaftlarda tabiiy senozlarni tiklash va saqlashni ta'minlaydi. Zero, qishloq xo'jaligida ekinlarni almashlab ekish, meliorativ va agrotexnik tadbirlarni tashkil qilish natijasida tuproq sifati yaxshilanib, cho'llanishni oldini olish imkonini yaratadi. Tuproqlarni sho'r bosishini va yer unumdorligi va ekin hosilini oshirilishini ta'minlash uchun insonlarda tabiatga bo'lgan munosabatini o'zgartirilsa maqsadga muvofiq bo'ladi.

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*Yakubjonov I.A.
Qo‘qon davlat pedagogika instituti
«Sport va harakatli o‘yinlar» kafedrasida dotsenti
Irmatov Sh.A.
Qo‘qon davlat pedagogika instituti
«Jismoniy madaniyat metodikasi» kafedrasida
katta o‘qituvchisi
Yakubjonova F.I.
Qo‘qon davlat pedagogika instituti
«Sport va harakatli o‘yinlar» kafedrasida
katta o‘qituvchisi*

INSON AQLIY QOBILYATINI JISMONIY MASHQLAR ORQALI RIVOJLANTIRISH

Annotatsiya: Maqolada sog'lom turmush tarzi asoslari va talabalarning aqliy yukiga moslashuvi ko'rib chiqiladi. Jismoniy faoliyat talabalarining Oliy o'quv yurtlarida o'qitish jarayonida aqliy qobiliyatini yaxshilashga yordam beradigan asosiy omil sifatida taqdim etiladi.

Kalit so'zlar: sog'liqni saqlash, vosita faoliyati, aqliy qobiliyat, jismoniy mashqlar, hissiy stress, ijobiy ta'sir.

*Yakubjonov I.A.
associate professor
Department of Sports and Action Games
Kokand State Pedagogical Institute
Irmatov Sh.A.
senior lecturer
Department of Methods of Physical Culture
Kokand State Pedagogical Institute
Yakubjonova F. I.
senior lecturer
Department of Sports and Action Games
Kokand State Pedagogical Institute*

DEVELOPMENT OF HUMAN MENTAL ABILITY THROUGH PHYSICAL EXERCISES

Abstract. The article discusses the basics of a healthy lifestyle and adaptation of students to mental stress. Physical activity is presented as the main factor contributing to the improvement of students' mental abilities in the process of studying in higher educational institutions.

Key words: health, motor activity, mental abilities, physical exercises, emotional stress, positive influence.

Kirish

Yaxshi sogʻliq-bu shaxsning ijtimoiy va biologik funksiyalarini bajarishi uchun zarur asosdir. Yangi materiallarni samarali oʻzlashtirish muammosi oliy oʻquv yurtlarida tahsil olayotgan talabalarga duch keladigan asosiy muammolardan biri, yuqori hissiy stress fonida yuzaga keladigan faoliyatning yangi sharoitlarida adaptiv imkoniyatlarning kuchayishi fonida, yangi maxsus ma'lumotlarning katta miqdori bilan tanishish, avitaminoz va gipodinamiya sharoitida kuchlanish nafas olish, yurak-qon tomir tizimlari va boshqa organlar va tizimlardagi turli xil oʻzgarishlarni keltirib chiqaradi, bu esa ortiqcha ish va sogʻliq muammolariga olib keladi.

Psixofizyologik va ijtimoiy-psixologik komponentni oʻz ichiga olgan turli jihatlarida taʼlim yukini oʻrganish ilmiy tadqiqotlarning talab qilinadigan yoʻnalishi hisoblanadi.

Aqliy yuklarga moslashish mexanizmlarini shakllantirish va takomillashtirish shartlaridan biri vosita harakati boʻlib, u optimallashtiruvchi va noqulay omil sifatida harakat qilishi mumkin — bu irratsional ravishda qoʻllanilishi bilan jismoniy faoliyat tananing turli funksiyalarini qayta tiklashga, aqliy qobiliyatiga, eʼtiboriga, operatsion fikrlashga, qayta ishlangan ma'lumotlarning hajmiga taʼsir qiladi.

Adabiyotlar tahlili

Sportchining tanasi atrof-muhit bilan bogʻliq emas. Jismoniy yukning omillaridan biri va u maʼlum bir oʻzgarish mashqlarida ritmik ravishda takrorlanishi kerak. Akademik V. V. Parin, vaqtinchalik rivojlanish va organizmni oʻz-oʻzini yangilash algoritmlarini bilish, uning organlari va tizimlarini optimal faoliyat rejimini yaratish, katta oʻquv yuklariga moslashish jarayonida insonning funktsional holatini moslashtirish va prognozlash muammolarini hal qilish uchun zarur deb hisobladi. Tanlov natijalari biorhythms tufayli hal qiluvchi boʻlishi mumkin emas.

Yuqori oʻrin, rekord, birinchi navbatda, toʻgʻri qurilgan taʼlim tizimining samarasidir. Sport amaliyotida qoʻllaniladigan bioritmologiya muammosi, birinchi navbatda, sportchini allaqachon maʼlum boʻlgan va taxmin qilingan biologik ritmlarning har qanday bosqichida toʻgʻri kun va soatda eng yuqori tayyorgarlikka olib keladigan taʼlimni qurishning optimal shakllarini ishlab chiqishdan iborat. Talaba shaxsiyatining muhim xususiyati uning aql zakovatidir. Razvedka fikrlash qobiliyati, oqilona bilimdir.

Zakovat aqliy qobiliyatlarni ifodalaydi, uning shakllanishi va rivojlanishi hayot davomida sodir boʻladi, lekin asosan maktabda oʻquvchiligi va talabalik yillarida namoyon boʻladi. Optimal tanlangan vosita faoliyati rejimi, jismoniy mashqlar, aqliy jarayonlarga ijobiy taʼsir koʻrsatadi, kuchli intellektual faoliyatga aqliy qarshilikni shakllantiradi. Buning uchun optimal vaqt va intensivlikning

jismoniy mashqlarini bajarish kerak, bu ularning aqliy qobiliyatini oshirishga olib keladi.

Tadqiqot metodologiyasi

Har qanday vosita faoliyati organizmdagi metabolik jarayonlarning oshishiga olib keladi. Optimal tanlangan yuklar aqliy va jismoniy samaradorlikni oshiradi. Shubilan birga, intellektual va jismoniy faoliyatning hajmi va intensivligida sezilarli o'sishi odamlarda tez charchashga va mehnat samaradorligining pasayishiga olib keladi. Shu bilan birga, axborotni qayta ishlash tezligi sekinlashadi, xotira buzilishi va nazariy materiallarni assimilyatsiya qiladi. Charchoqning paydo bo'lishi tananing haddan tashqari kuchlanishining boshlanishi haqida ogohlantiruvchi signaldir.

Ko'pgina tadqiqotchilar vosita faoliyati va aqliy qobiliyatlari o'rtasidagi munosabatlarning turli jihatlarini o'rganish bo'yicha ish olib boradilar. Shu bilan birga, insonning intellektual faoliyati eng yuqori darajaga yetgan vosita faoliyatining maqbul darajasi hali aniqlanmagan. Ushbu faolligining pasayishi bilan metabolizm va mushak retseptorlari orqali miyaga kiradigan ma'lumotlar kamayadi, bu miyaning tartibga soluvchi funksiyasini buzadi va barcha organlarning ishiga ta'sir qiladi. Shunday qilib, nafas olish va yurak-qon tomir tizimlarining funksiyasini rag'batlantirish orqali mushaklarning buzilishining oldini olish uchun faqat mushak-skelet tizimini ishlab chiqish o'sib borayotgan organizmning normal o'sishi va rivojlanishi uchun sharoit yaratishi mumkin.

Miyaning samarali faoliyati, tananing deyarli yarmi mushaklardan iborat bo'lgan turli xil tizimlardan doimiy ravishda impulslarni qabul qilishi kerak. Mushaklar ishi tufayli miyaga juda ko'p sonli nerv impulslari kiradi, uni boyitadi va uni samarali holatda saqlaydi. Tanadagi intellektual faoliyatni amalga oshirish vaqtida skelet mushaklarining kuchlanishini aks ettiruvchi mushaklarning elektr faolligi kuchayadi. Miya yuki qanchalik katta bo'lsa va aqliy charchoq qanchalik kuchli bo'lsa, umumiy mushaklarning kuchlanishi yanada oshadi.

Jismoniy faoliyatning intellektual faoliyat bilan aloqasi quyidagi qonunlarda namoyon bo'ladi. Tanadagi kuchli intellektual faoliyat vaqtida yuz ifodasi kontsentratsiyaga aylanadi, lablar qisqaradi va bu his-tuyg'ularni yanada yorqinroq va hal qilish qiyin bo'lgan vazifadir. Tanadagi biron bir organini assimilyatsiya qilish paytida, tizzaning qo'shilishini to'g'rilaydigan va taklanadigan mushaklar ongsiz ravishda kamayadi va kuchayadi. Buning sababi shundaki, qattiq mushaklardan markaziy asab tizimiga o'tadigan impulslar miyaning ishini rag'batlantiradi, unga kerakli ohangni saqlashga yordam beradi.

Ularning faoliyati juda yaqindan e'tibor, his-tuyg'ular, nutq uchun mas'ul asab markazlari bilan bog'liq, chunki jismoniy harakat va muvofiqlashtirilgan harakatlar talab qilmaydigan harakatlar davomida, tez-tez, bo'yin va elka kamar, shuningdek, yuz va nutq apparati mushaklari muskullar qotirmang. Uzoq muddatli va intensiv yozish bilan stress asta-sekin barmoqlardan elkama-kamar va elkaning mushaklariga o'tadi. Asab tizimi miya yarim korteksini

faollashtirishga va ish faoliyatini davom ettirishga intiladi. Bunday ishni uzoq vaqt davomida bajarish bunday ogohlantirishlarga moyil bo'lib, natijada inhibitsion jarayoni boshlanadi, samaradorlikni pasaytiradi, chunki miya yarim korteksi davom etayotgan nerv stimulyatsiyasi bilan kurasha olmaydi va u butun mushak tizimiga tarqalib keta boshlaydi. Undan qutulish, mushaklarni ortiqcha stressdan ozod qilish jismoniy mashqlar, faol harakatlar yordamida amalga oshirilishi mumkin.

Miya va asab tizimining ishlashi juda uzoq vaqt davomida qo'llab-quvvatlanishi mumkin, muqobil kuchlanish va turli mushak guruhlarini ritmik, keyinchalik gevşeme va cho'zish bilan kamaytirish mumkin. Ushbu turdagi harakatlar yugurish, yurish, konkida uchishga xosdir. Samarali intellektual faoliyat uchun o'qimishli miya va o'qimishli tanadir, asab tizimining aqliy zo'riqishlarni yengishga yordam beradigan mushaklardir. E'tibor, xotira, idrok ma'lumotlarini qayta ishlash faoliyati va barqarorligi bevosita tananing jismoniy tayyorgarlik darajasiga bog'liq. Ruhij jarayonlarning oqimi tananing jismoniy xususiyatlariga bog'liq-chidamlilik, tezlik, kuch va boshqalar.

Shunday qilib, intellektual faoliyat tugagunga qadar, jarayonda va undan keyin oqilona tanlangan jismoniy yuk miyaning ishlash intensivligiga bevosita ta'sir qiladi. Bunday vaziyatda muhim nuqta maksimal ishlash darajasiga eng yaxshi erishish mumkin bo'lgan vosita faoliyatining darajasini aniqlashdir. To'liq tiklanishning ta'siri faqat insonning jismoniy tayyorgarlik darajasiga mos keladigan yuklarning ma'lum bir darajasida bo'lishi mumkin. Shu bilan birga, kichik jismoniy faoliyat sezilarli ta'sir ko'rsatmaydi. Haddan tashqari yuklar ortiqcha ishlashga va samaradorlikning sezilarli pasayishiga olib keladi.

Amalga oshirilgan ishlarni sarhisob qiladigan bo'lsak, intensiv jismoniy kuchlarning aqliy faoliyatiga ta'siri himoya jarayonlarini faollashtirishda namoyon bo'ladi, bu ularni o'qitish va aqliy qobiliyatini oshirishning muhim vositasidir.

Yurish, chopish, orqa bilan harakat qilish va h.k. kabi dinamik mashqlar miyada himoya-adaptiv jarayonlarning mexanizmlari va usullarini kengaytirishga yordam beradi. Xulosa qilib aytish mumkinki, umumiy rivojlanish darajasida jismoniy tarbiya va sport bilan shug'ullanish kabi sog'liqni saqlash va umumiy jismoniy holatni yaxshilash usullari o'quvchilarning ilmiy ishiga ijobiy ta'sir ko'rsatadi.

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Biologik ritm tananing hayot sharoitlariga moslashishiga imkon beruvchi mexanizmdir. Faqat ushbu mexanizmning yaxshi ishlashi bilan mashg'ulotlarda yuk va dam olishning oqilona, maqsadga muvofiq rejimini yaratish mumkin.

Biologik ritmlarni hisobga olish oqilona ovqatlanish, aqliy va jismoniy faoliyat, sportchining tanasini tiklashning farmakologik vositalaridan foydalanish uchun zarurdir. Faqat inson hayotining kundalik, ko'p kunlik, yillik va ko'p yillik ritmlarining namoyonlari haqida fikr yuritib, sportchini o'quv jarayonining barcha bosqichlarida tayyorlashni oqilona rejalashtirishingiz mumkin.

Tahlillar va natijalar

Inson tanasining o'z biologik ritmlarini va o'quv jarayonida ularning qonunlarini hisobga olish juda muhimdir. Biologik ritmlarning maqbul maqsadga muvofiqligi nafaqat ularning mustaqilligi bilan, balki tashqi ritmlarning ta'siri, shu jumladan, jismoniy faoliyatning ritmikligi uchun ma'lum bir moslashuvning qobiliyati bilan ham bog'liq. 9 dan 12 soatgacha va 16 dan 17 soatgacha bo'lgan davrda amalga oshiriladigan eng samarali mashqlar. Biroq, musobaqalar ko'pincha noqulay soatlarda belgilanadi. Biroq, bu holda siz kunning qulay soatlarida mashq qilishingiz kerak va musobaqadan oldin faqat 1-2 hafta oldin siz kelgusi chiqishlar uchun treningni o'tkazishingiz mumkin. Shuni ta'kidlash kerakki, treningning maqsadi-eng yuqori ko'rsatkichga erishish va maxsus og'ir yukning eng katta ta'siri, agar u tananing optimal his qilish soatlarida taklif etilsa bo'ladi.

Inson-tashqi chastotali ta'sirlar (sportdagi jismoniy faoliyat) ta'siri ostida rezonans javob berishi mumkin bo'lgan murakkab tartibga solingan tizimi. Biologik rezonans biosistemadagi salinimlarni amplitüdün keskin ortishi bo'lib, tashqaridan taklif qilingan majburiy salinimda, tizim o'zi asta-sekin yaqinlashib kelayotgan chastota bilan bog'liq. Tananing o'zida mavjud bo'lgan chastotalar eng ko'p qabul qilinadi.

Insonning biologik soatlari tabiiy ichki ritmlarga moslashtirilishi va ularni tashqi muhitning tegishli ritmlariga moslashtirishi kerak, ulardan biri jismoniy yuk bo'lib, ritmik ravishda takrorlanadigan ta'lim effektlari bilan qurilgan bo'lishi kerak. Hozirgi vaqtda o'quv jarayoni tashkil etilgan ko'plab tarkibiy qismlar o'z chegaralariga yetdi. O'quv jarayonini sifatli takomillashtirish hisobiga sport yutuqlarining o'sishi uchun zaxiralarni izlash kerak edi. Bunday zaxiralardan biri sportchilarning funktsional faoliyatida biologik ritmlarning qonunlarini qo'llashdir.

Sportni rivojlantirishning hozirgi darajasida o'quv jarayonini boshqarishning eng muhim omillaridan biri-sport yutuqlarini prognoz qilish, shuningdek, sportchining tanasining funktsional holatidir. O'qituvchi tomonidan mablag'lardan foydalanishga ilmiy yondoshish uchun asos inson biologik rivojlanishining qonunlari bo'lishi kerak. Tirik organizmda yuzaga keladigan turli fiziologik jarayonlarni tushunish va to'g'ri talqin qilish, shuningdek, biologik ritmlarning tabiatini bilmasdan ularni maqsadli boshqarish mumkin emas. Ritm-tirik organizmning asosiy xususiyati. Tana holatining o'zgarishi biologik ritmlarning namoyon bo'lishidir. Biologiyada ritm tushunchasi muhimdir. Barcha tirik mavjudotlar ichki ritmga ega. Bundan tashqari, butun yer sayyorasida va umuman kosmosda ritmik jarayonlar mavjud.

Xulosa

Ritmlar bir-biriga mos keladi. Ritmlarni sinxronlashtirishda tabiat ajoyib kamolotga erishdi. Eng keng tarqalgan gipotezaga ko'ra, tirik organizm mustaqil salnım tizimi. Bu tananing atrof-muhitdagi davriy o'zgarishlarga muvaffaqiyatli moslashishiga imkon beradi. Faqat ritmik apparatni tashqi tebranishlar vaqtida sozlashi mumkin bo'lgan organizmlar omon qoldi. Tirik organizmlarda kuzatilgan ritmik tebranishlar kosmik va geofizik omillarning penetratsion xususiyatlarining doimiy ta'siri natijasidir. Funktsiyalarning o'zgarishi ularning ishonchligining asosiy shartlaridan biridir. Amaliy ishning katta shaxsiy tajribasi jismoniy tayyorgarlikning turli xil variantlari va inson tanasiga bo'lgan tizimi qonunlariga rioya qilish orqali tananing sun'iy ritmini "qo'llash" mumkinligini ko'rsatadi.

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Yakubov F.U.
docent
Jizzakh Politechnic Institute
Rahimov A.B., PhD
docent
Jizzakh Politechnic Institute

METHODS OF IMPROVING STUDENTS' SPEAKING COMPETENCE IN TEACHING FOREIGN LANGUAGES IN TECHNICAL UNIVERSITIES

Abstract. English is the most widely spoken language in the world. Therefore, this language is taught as a second language in schools, colleges and universities around the world. However, English is included in the curriculum based on each field of study. In this article, the author details the speech development exercises in English classes at technical universities.

Keywords: technique, English, teaching technology, methods, reading mechanism, speech development, etc.

The future of any society is determined by the level of development of its education system, which is an integral part of it and a vital necessity. Today, reforming and improving the system of continuing education in our country, which is on the path of independent development, raising it to a new level of quality, the introduction of advanced pedagogical and information technologies and improving the efficiency of education has become a state policy. With the development of pedagogical technologies and their integration into the educational process, as well as the rapid exchange and improvement of information technology, everyone has the opportunity to strengthen their professional training and skills. The application of innovative pedagogical technologies in foreign language education - the orientation of the individual in accordance with the requirements of society, the organization of education on the basis of these requirements, the formation of the individual as a comprehensively mature staff to create favorable conditions for the manifestation and development of the language. Another distinctive feature of pedagogical innovative technologies is the priority of student activities, the fact that the student or pupil is a key figure in the educational process. The correct formation of knowledge, lexical, grammatical, pronunciation concepts in the educational process, the correct structure of the system of knowledge in the mind of the student, the ability to self-control are part of innovative pedagogical technologies. Today, the most effective teaching methods in the educational process, guaranteed to achieve the goals set by teachers, form the basis for students to develop the ability to think independently, make free decisions, solve their problems, get out of different situations without difficulty. such teaching methods capable of preparing are the

most advanced feature of pedagogical technology. Today, at the initiative of the President, great attention is paid to language learning in our country. If we look at the above, we will once again be convinced of the importance of language in the development of our country.

After the independence of our country, the interest in teaching foreign languages has grown and lots of opportunities are created for children. As the first President Islam Karimov said, "At present, great importance is attached to the teaching of foreign languages in our country. This, of course, is not in vain. There is no need to underestimate the importance of perfect knowledge of foreign languages for our countries, which today are striving to take their rightful place in the world community, for our people, who are building their great future in cooperation with our foreign partners". As a logical continuation of these ideas, the Presidential Decree of December 10, 2012 "On measures to further improve the system of teaching foreign languages" expanded the opportunities for learning foreign languages. According to that, textbooks have been created for students of secondary schools and vocational colleges. In accordance with these requirements, classrooms are equipped with stands and new information and communication technologies. Today, foreign language skills are getting an integral a part of vocational training. Specialists in various fields have a high level of cooperation with foreign partners, in order that they have a high demand for learning. In modern society, foreign languages are getting a crucial a part of vocational training. Such knowledge is first acquired by people in schools, colleges, lyceums, and later in institutes, training courses, or by familiarizing themselves with basic information sets that help them learn a foreign language independently. Today, there is a large collection of teaching materials for people with different levels of language skills. Success in achieving this goal depends on the sensible methods and skills of teachers.

The possibilities of using Internet resources are huge. The Global Internet provides students and teachers anywhere in the world with access to any information they need: regional geographic materials, news from young people's lives, articles from newspapers and magazines, and more. In the classroom, a number of didactic problems can be solved using the Internet in English: the formation of reading skills and competencies using global network materials; improving students' writing skills; replenish students' vocabulary; shaping students' motivation to learn English. In addition, this work aims to expand the horizons of school students, exploring the possibilities of Internet technology to establish and maintain business relationships and connections with peers in English-speaking countries. Students can take part in online tests, quizzes, competitions, Olympiads, correspondence with their peers in other countries, conversations, video conferences, etc. The meaningful foundations of mass computerization are related to the fact that the modern computer is an effective means of optimizing the mental working conditions, in general, any form of it. There is one peculiarity of the computer, which is determined by its use as a tool

for teaching others and as an aid in the acquisition of knowledge, which is its inanimate object. The machine can be in a “friendly” relationship with the user and sometimes “supports” it, but it never shows signs of anger and doesn’t let you feel bored. In this sense, the use of computers is probably the most useful in individualizing certain aspects of teaching. At present, priority is given to communication, interactivity, authenticity of communication, language learning in a cultural context, autonomy of education and humanity. These principles allow the development of intercultural competence as an integral part of communicative ability. The ultimate goal of foreign language teaching is to teach fluency in a foreign language environment and the ability to respond adequately in a variety of situations, viz. communication. Today, new methods of using Internet resources are opposed to teaching traditional foreign languages. To teach communication in a foreign language, you need to create real, real-life situations that encourage material learning and develop adequate behavior (i.e., the so-called principle of communication authenticity). New technologies, especially the Internet, are trying to fix this error.

In short, the use of innovative methods in English lessons develops students' logical thinking skills, fluency, and the ability to respond quickly and accurately. Such methods stimulate the student's desire for knowledge. The student strives to prepare thoroughly for the lessons. This makes students active participants in the learning process. In conclusion, modern language teaching is aimed at shaping a more cultured individual who has the skills to self-analyze and systematize new knowledge. Innovative methods are an integral part of modernizing the entire system. With this in mind, teachers can become acquainted with the most advanced approaches and then combine them and use them in their work to achieve significant growth in the education system. Many organizations are moving to a new level, using multimedia capabilities to send and receive information. The use of computers and other devices determines the success of the whole educational process.

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REKLAMA TARIXI VA UNING RIVOJLANISH BOSQICHLARI

Annotatsiya. Dunyo tilshunosligida inson va til nisbiyligi omili, tillarning o'zaro aloqalari, lisoniy hodisalarning mohiyati kabi masalalarni tadqiq qilish ilmiy va amaliy ahamiyatga egadir. Bugungi rivojlangan jamiyatda turli xizmat va mahsulotlar ko'lami kun sayin ortib bormoqda va ularni ommaga taqdim etishda esa reklama hayotimizning ajralmas qismiga aylanib ulgurdi. Reklamalarni adresatga yanada tushunarli bo'lishi uchun uni taqdim etilayotgan xizmat va mahsulotlar xaqidagi ma'lumotlar bilan boyitish ma'lumot-axborot matnlarini yaratishga turtki bo'ldi. Bu jarayon filologlar va reklama bo'yicha mutaxassislarining e'tiborini o'ziga jalb qildi. Biz ushbu maqolamizda reklama tushunchasi va uning tarixi xaqida so'z yuritmoqchimiz.

Kalit so'zlar: reklama, reklama matni, reklama turlari, reklama tarixi.

Yunusova S.A.
teacher

Uzbek State University of World Languages

HISTORY OF ADVERTISING AND ITS DEVELOPMENT STAGES

Abstract. In world linguistics, it is of scientific and practical importance to research such issues as the factor of human and language relativity, the interrelations of languages, the essence of linguistic phenomena. In today's developed society, the range of various services and products is increasing day by day, and in presenting them to the public, advertising has become an integral part of our life. In order to make the advertisements more understandable to the addressee, enriching them with information about the offered services and products has motivated the creation of informative texts. This process attracted the attention of philologists and advertising experts. In this article, we want to talk about the concept of advertising and its history.

Keywords: advertising, advertising text, advertising types, advertising history.

Reklama dunyoning aksariyat mamlakatlarida keng qo'llaniladigan adresant va adresat o'rtasidagi aloqa vositasidir. XXI asrni reklama sanoatisiz tasavvur qilish qiyin. So'nggi yillarda reklama jamiyatda shunchalik ommalashib ravnaq topdiki, u kundalik hayotimizdan mustahkam o'rin egalladi. Deyarli har bir inson ommaviy axborot vositalari, internet, radio reklamalar yoxud tashqi reklama orqali berilgan xabar va ma'lumotlar yordamida o'zi uchun kerakli mahsulotlarni sotib oladi yoki ulardan foydalanadi. Uning shu darajada rivojlanib,

ommalashishida rangli bosma nashrlarning rivojlanishi, kompyuter texnologiyalari va Internetning paydo bo'lishi va shiddat bilan ommalashuvi, sun'iy yo'ldosh aloqasining yanada rivoj topishi kabi omillar ta'siri muxim ro'l o'ynadi.

O'zbek tilining izohli lug'atida reklama so'zi "Reklama (fr. *reclamer* < lot. *reklamere* – qattiq qichqirmoq)- muayyan tovar yoki xizmat turlari haqida xaridorni xabardor qilish, ularga nisbatan talab ehtiyojni yuzaga keltirish yoki kuchaytirish maqsadida ana shu tovar va xizmatlar to'g'risida berilgan ma'lumot" [1, 373] deya ta'riflangan.

Reklama matni bilan bog'liq o'rganishlarni olimlar talqinida ko'rib chiqar ekanmiz, reklama janri va uslubini aniqlash muammosi tizimli reklamani qamrab olgan fanlar mavjud bo'lmagan o'sha davrlarda ham ularni qiziqtirganiga guvoh bo'ldik. D. Lich o'z tadqiqotida reklamani "muayyan ijtimoiy sharoitda qo'llanilishi bilan boshqalardan farq qiluvchi til turi" deya ta'riflagan[2,210] va shu bilan uning o'ziga xosligini – nutqning boshqa janrlaridan farqini ochib bergan edi. Ushbu yo'nalishning ilk rus tadqiqotchilari D. E. Rozental va N. N. Koxtev esa reklama matnining asosiy xususiyatlariga to'xtalib, unda alohida aniq o'ziga xoslik yo'qligini ta'kidlagan[3, 125] (ushbu qarash o'sha davr reklama matnlari uchun xosdir). Shuningdek, olimlar uni rus tilining beshta asosiy funktsional nutq turlariga kiritmagan edi. Biroq ulardan farqli o'laroq, zamonaviy tadqiqotchilar reklamani ommaviy axborot vositalarining bir turi, reklama matnini esa jurnalistik nutqning janri sifatida tasniflaydilar. Chunki u ikki vazifani bajaradi: axborot berish va ta'sir qilish[4, 145-148]. Bu ikki vazifa uni boshqa jurnalistik janrlardagi matnlarga yaqinlashtiradi. Shu bilan birga, reklamada ushbu vazifalarni amalga oshirish muayyan o'ziga xos xususiyatlarga ega. Reklama matnida axborot mazmuni sotuvchining manfaatlari bilan belgilanadi, shuning uchun axborot vazifasi biroz torayadi. Shu bilan birga, reklamalarda ko'pincha mahsulot yoki xizmat haqida noxolis ma'lumotlar ham mavjudligini kuzatishimiz mumkin. Reklama matnining ta'sir etuvchi vazifasi ham o'zgarishi mumkin: uning asosiy maqsadi adresatni ma'lum bir xizmat yoki mahsulotdan foydalanishga "majbur qilishdir". Shunday qilib, reklama matnida oddiygina bajariladigan ikkala vazifani pragmatik vazifaga o'zgartirish mavjud bo'lib, bu o'z navbatida reklama janrining o'ziga xosligiga olib keladi. Yuqoridagi fikrlarni umumlashtirib, shuni xulosa qilishimiz mumkinki, reklama janri - bu reklama muallifining turli niyatlarini "amalga oshiradigan" janrlari (ya'ni xabar berish yoki xabardor qilish, ma'qullash, biror narsani tasdiqlash yoki adresatni ishontirish, taklifi yoki va'dasi va boshqalar)ni birlashtira oladigan murakkab nutq janridir.

Zamonaviy reklamada maqsadli auditoriyani jalb qilishda uning adabiy, madaniy va tarixiy an'analariga murojaat qilish muhim rol o'ynaydi. Shunday ekan reklama tarixiga nazar tashlar ekanmiz, uning yaratilish g'oyasi qadim davrlarga borib taqalganiga guvoh bo'lamiz. Reklamanning rivojlanish tarixi insoniyat jamiyatining rivojlanishi va uning iqtisodiy hayoti bilan chambarchas

bog'liq bo'lib, reklama tarixi bir necha rivojlanish bosqichlarini o'z ichiga qamrab oladi. Ularning har biri o'ziga xos xususiyatlar bilan ajralib turadi. Reklama ilmiy nuqtai nazardan tadqiq qilinar ekan, nazariyotchilar uning tarixini turli voqea-hodisalar bilan bog'laydilar. Ilk reklama alomatlari qadimgi Yunon va Rimda paydo bo'lgan degan farazlar mavjud. Bunga dalil sifatida quyidagi ma'lumotlarni keltirishimiz mumkin. Reklama deb atash mumkin bo'lgan eng oddiy ko'rinishlar bizning eramizdan oldin ham qadimgi Rimda gladiatorlar jangi, qullar va uy hayvonlari savdosi haqidagi e'lonlar shaklida mavjud edi. Dunyoning qadimgi davlatlarida juda o'zgacha xarakterdagi ma'lumotlarni tarqatishning eng muhim vositasi jarchilar bo'lib, ular tamonidan berilgan ma'lumotlar-siyosiy chaqiriqlar va qoralashlar, mashhur qo'mondonlarni sharaflashdan to sof tijorat reklamasigacha xilma-xil xususiyatga ega edi. Eng dastlabki reklamalar o'ziga jalb qiluvchi bir necha suratli yorqin va murakkab tasvirlardan iborat bo'lgan va reklamada hech qanday oq-qora matnlardan foydalanilmagan. Madaniyat rivojlanishining dastlabki bosqichlaridayoq reklama yozma matn shaklida paydo bo'la boshlagan edi. Reklama tarixiga nazar tashlasak, 1440 yilda Iogan Gutenberg almashtirib bo'ladigan harf-shriftini ixtiro qilib, reklama olamini yangilashga ulkan hissa qo'shdi. Reklama rivojlanishidagi yangi sifat pog'onasi 1450 yilda Gutenberg tomonidan bosmaxonaning paydo bo'lishi va matbaa ixtirosi bilan boshlanadi. Birinchi marotaba reklamaga mo'ljallangan matbuot afishalari, varaqa va gazeta e'lonlari shu ixtiro bois yuzaga keladi. Keyinchalik, fotografiyaning paydo bo'lishi bilan reklama matni fotosuratlar bilan to'ldirila boshlandi, ular bir tomondan ma'lumotlarga ishonchlilik va haqiqatni, ikkinchi tomondan, jozibadorlikni berar edi. 1704 yili "Boston nyusletter" gazetasida dastlabki reklama e'lonlari chop etila boshlanadi. 1844 yili "Sazern Massenjer" jurnalida birinchi marta jurnal reklamasi chop etiladi. Yillar o'tib sekin asta rivojlanish ortidan ilk reklama agentliklari paydo bo'la boshlaydi. Tom ma'nodagi reklama agentligi 1841 yilda Filadelfiyada Uolna Palmer tomonidan tuzilgan. Shu yili bu reklama agentligi o'z tijorat faoliyatini boshlaydi. 1890 yili birinchi "NW Ayer & Son" reklama agentligi o'z faoliyatini boshlaydi. 1886 yilda Germaniyada reklama haqida birinchi qonun qabul qilinadi. XIX asrda fotografiyaning paydo bo'lishi bu borada katta voqelik bo'ldi. 1920 yil 2 noyabr Peterburgda radioeshittirishlar boshlanadi. 1941 yil efirda birinchi teleko'rsatuv, 1955 yil rangli televideniye, XX asrning 70 yillarda internet paydo bo'ldi. XIX asrda ixtisoslashgan reklama idoralari va reklama byurolari paydo bo'ldi. XX asrda reklama evolyutsiyasi otkritkalar, teatr dasturlari, yorliqlar, qadoqlash materiallari kabi ko'rgazmali reklamaning turli shakllarining paydo bo'lishiga olib keldi. Yangi davr kino va televideniyeining paydo bo'lishi bilan reklama faoliyatiga tengsiz imkoniyatlar berdi. Kabel televideniyesi va Internetning paydo bo'lishi bilan eng yangi texnik vositalar yordamida turli xil ijodiy g'oyalarni amalga oshirish uchun tobora ko'proq yangi imkoniyatlar ochilmoqda. Bugungi kunda reklama nafaqat aniq pragmatik va estetik tarkibiy qismga ega bo'lgan eng so'nggi texnik yutuqlar bilan ta'minlangan axborot vositasi, balki kuchli raqobat

omilidir. Asta-sekin reklama biznesi tashkiliy shakllar va texnik vositalarni takomillashtirish yo'lida rivojlanishda davom etmoqda.

Yurtimizda reklamaning rivojlanish tarixi bosqichlariga nazar tashlar ekanmiz, uning tarixi juda qadim zamonlarga borib taqalishining guvohi bo'lishimiz mumkin. Ko'pchilik tarixchilar reklamaning axborot tashuvchi vosita sifatidagi muqaddimasi qadimgi sivilizatsiyalarda boshlangan deb hisoblashadi. Bunga asos sifatida sopol, yog'och yoki toshdagi yozuvlar, ko'chalardagi peshlavhalar reklamaning ilk shakllari edi deyishimiz mumkin. Chunki kishilar o'qish, yozishni bilmas, reklama bevosita turli tasvirlar ko'rinishida amalga oshirilardi. Masalan: poyafzal ustaxonasida biror bir oyoq kiyimi osib qo'yilardi. E'tibor bersangiz, bunday "ibtidoiy usul"lar hali-hanuz ayrim joylarda (do'kon, ustaxona, shahobchalarda) ko'zga tashlanadi. Qadimda buyumlarga ma'lumotlarning turli belgilari qo'yilgan. Kulolchilik buyumlariga xattotlar reklamaga xizmat qiluvchi shakllarni ko'chirgan. Xalq bozorlarida sotuvchilarning o'z mollari haqidagi baland ovozda yangragan maqtovlari ham qadimda reklamaning ilk ko'rinishlari boshlanganidan dalolatdir.

Xulosa o'rnida shuni ta'kidlash mumkinki, har bir mamlakatda reklama ushbu mamlakat auditoriyasiga qaratilgan bo'lib, u ma'lum bir davlat aholisi uchun mo'ljallangan bo'ladi. Yagona narsa shundaki, turli mamlakatlarda iste'mol qilinadigan mahsulotlar va xizmatlar bir-biriga to'g'ri keladi, biroq shu bilan birga reklama o'ziga xos xususiyatlarga ega bo'lib, ma'lum bir til madaniyati tashuvchilariga ta'sir qiladi. Bejizga J. Russel[5] haqli ravishda reklamani "*jamiyat ko'zgusi*" deb atamagan edi. Reklama nafaqat ishlab chiqaruvchilar, balki iste'molchilar uchun ham muhimdir. Reklama jamiyatning harakatlantiruvchi kuchi bo'lib, unda sodir bo'layotgan barcha o'zgarishlarni o'zida aks ettiradi.

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*Ziyaviddinov D.O.
assistant*

*"Construction of Buildings and Structures"
Jizzakh Polytechnic Institute*

Arifov A.A.

201-21M master's student

*group "Construction of Buildings and Structures"
Jizzakh Polytechnic Institute*

Abdunabiyev A.Q.

201-21 student

*"Construction of Buildings and Structures" group
Jizzakh Polytechnic Institute*

Jamolova M.X.

assistant

department "Design of Buildings and Structures"

Samarkand State University of Architecture and Construction

ADAPTATION OF THE EXTERIOR WALL CONSTRUCTION OF A MULTI-STORY RESIDENTIAL BUILDING MADE OF REINFORCED CONCRETE PANELS TO HEAT - PHYSICAL REQUIREMENTS

Abstract. In this article, thermal and physical calculations based on Building Code for the winter season of the external wall structure of a 9-story residential building built of reinforced concrete panels, located in the Zargarlik massif of the city of Jizzakh, are presented.

Key word: 9 – floor, winter season, temperate climate, energy efficient, thermal insulation, penoplex, 1st level of thermal protection.

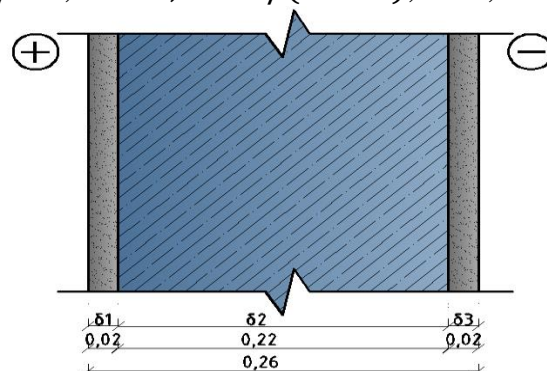
INTRODUCTION

49% of all energy consumed in 1 year in the Republic of Uzbekistan is accounted for by oil equivalent buildings. This indicator leads to spending a lot of energy and money not only for the state, but also for people. Energy loss in buildings. The loss of heat energy through external barrier constructions differs depending on the number of floors in buildings, the material of the surrounding walls, the year of construction, service life, and the quality of construction works. We consider energy loss in buildings in relation to the total percentage depending on the number of floors in residential buildings: Through external walls: it is 30 – 35% in one and two – floor buildings; up to 42% in five- floor buildings; and in nine- floor buildings it is up to 49%. Through the window: in one – two – floor buildings, it is 25%; five – floor makes up 32%; 35% in nine – floor buildings; 10 to 20% of heat is lost through the foundation of the building, the basement covering and the roof construction. Also, residential buildings in operation in the

territory of the Republic and our regions make up 50-60% of the total buildings. Thermal protection of such buildings does not fully meet current modern requirements. This leads to excessive consumption of electricity and gas in buildings that are being operated. This is one of the urgent problems of today.

MAIN PART

Thermal-physical calculation of external wall construction of 9 floor residential buildings located in Zargarlik Square of Jizzakh city. The external wall structure of the building is made of reinforced concrete panels, and when calculating its total heat transfer resistance, we determine the necessary information for thermal-physical calculations in Building Code 2.01.01-22 and 2.01.04-18. The city of Jizzah is located in the dry zone in terms of humidity; The calculated outdoor air temperature of the city of Jizzah has an average temperature of 0,98 with the provision of the coldest day: $t_o^1 = -22$ °C; average temperature when it is 0,92: $t_o^1 = -19$ °C; the average temperature of the coldest five days is 0,92: $t_o^5 = -19$ °C; the average temperature of the coldest three days is 0,92: $t_o^3 = t_o^1 + t_o^5 / 2 = -19 - 19 / 2 = -19$ °C; average temperature of July: $t_o = +28,6$ °C; maximum amplitude of daily fluctuations of outdoor air temperature in July: $A_{t.o} = 24,9$ °C; maximum and average solar radiation: $J_{max} = 746$ vt/m², $J_{med} = 172$ vt/m²; The minimum value of the average wind speed for July with a repeatability of 16% and more in terms of directions: $V = 2,6$ m/s; the relative temperature and relative humidity of the indoor air of the living room: $t_{in} = 18$ °C; $\varphi_{in} = 55$ %; humidity mode of the room - moderate; condition of operation of the wall - A; the thickness of the reinforced concrete panel is 220 mm, it is plastered with a 20 mm thick lime-sand plaster from the inside, and from the outside with a 20 mm thick sand-cement plaster. We determine their volumetric weight, heat transfer coefficient and heat absorption coefficient. Reinforced concrete panel: $\gamma = 2500$ kg/m³, $\lambda = 1,92$ Vt/(m · °C), $S = 17,98$ Vt/(m² · °C); lime - sand plaster: $\gamma = 1600$ kg/m³, $\lambda = 0,7$ Vt/(m · °C), $S = 8,69$ Vt/(m² · °C); sand - cement plaster: $\gamma = 1800$ kg/m³, $\lambda = 0,76$ Vt/(m · °C), $S = 9,60$ Vt/(m² · °C);



1- figure. Calculation scheme of the wall construction made of reinforced concrete panel. 1st layer (δ_1) Plaster made of lime-sand mixture, 2nd layer (δ_2) reinforced concrete panel, 3rd layer (δ_3) plaster made of cement-sand mixture.

Normative temperature difference according to the function and type of construction of the furnace: $\Delta t_o = 4^\circ\text{C}$; heat transfer coefficient of internal and external surfaces of the structure: $\alpha_{in} = 8,7 \frac{\text{Vt}}{\text{m}^2} \cdot ^\circ\text{C}$ and $\alpha_o = 23 \frac{\text{Vt}}{\text{m}^2} \cdot ^\circ\text{C}$; a coefficient that takes into account the position of the outer surface of the barrier structure in relation to the outside air: $\rho = 0,4$.

Thermal-physical calculation of reinforced concrete outer wall construction for winter.

We determine the total heat transfer resistance of the reinforced concrete panel structure: $R_{tot} = R_{in} + R_c + R_o = \frac{1}{\alpha_{in}} + \frac{\delta_1}{\lambda_1} + \frac{\delta_2}{\lambda_2} + \frac{\delta_3}{\lambda_3} + \frac{1}{\alpha_o} = 0,325 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$.

We determine the thermal inertia of the structure:
 $D = \frac{\delta_1}{\lambda_1} \cdot S_1 + \frac{\delta_2}{\lambda_2} \cdot S_2 + \frac{\delta_3}{\lambda_3} \cdot S_3 = \frac{0,02}{0,7} \cdot 8,69 + \frac{0,22}{1,92} \cdot 17,98 + \frac{0,02}{0,76} \cdot 9,60 = 2,55 \quad 4 > D = 2,55$

calculated temperature of the outside air $t'_o = -19,0^\circ\text{C}$ we accept. The required value of resistance to heat transfer for the structure:

$R_{tot}^R = \frac{(t_{in} - t_o) \cdot n}{\Delta t_o \cdot \alpha_{in}} = \frac{(18 - (-19)) \cdot 1}{4 \cdot 8,7} = 1,06 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$. $R_{tot} \geq R_{tot}^R$ we check that the

condition is fulfilled: $R_{tot} = 0,325 > R_{tot}^R = 1,06 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$ the condition was not met.

Therefore, it is necessary to increase the thermal protection of the external wall structure of the residential building made of reinforced concrete panels. It should correspond to the heat transfer resistance given in table 2 – a of Building Code 2.01.04-18. First of all, the heating period and its degree day should be determined: $D_d = (t_i - t_{med.t}) \cdot Z_{h.p}$. Average daily temperature during the heating period:

$t_{med.t} = \frac{1,7+3,6+9,1+8,3+3,0}{5} = 5,14^\circ\text{C}$; We determine the degree day for the heating period: $D_d = (18^\circ\text{C} - 5,14^\circ\text{C}) \cdot 143,5 = 1414,9 \text{ }^\circ\text{day}$. So,

according to Building Code 2.01.04-18, the heat transfer resistance given for the 9-floor residential building operated by Jizzakh city Zargarlik Square according to the first level of thermal protection: $R_{tot}^R = 1,5 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$ We will check the

fulfillment of the condition stated in Building Code 2.01.04-18:

$R_{tot} = 0,325 > R_{tot}^R = 1,5 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$ the condition was not met. Therefore, the density of the wall of the residential building from the outside: $\gamma = 45 \text{ kg}/\text{m}^3$, thickness 40 mm, $\lambda = 0,031 \text{ Vt}/(\text{m} \cdot ^\circ\text{C})$, $S = 0,36 \text{ Vt}/(\text{m}^2 \cdot ^\circ\text{C})$ basalt slab covering, density over it $\gamma = 600 \text{ kg}/\text{m}^3$, thickness 30 mm, $\lambda = 0,26 \text{ Vt}/(\text{m} \cdot ^\circ\text{C})$, $S = 3,24 \text{ Vt}/(\text{m}^2 \cdot ^\circ\text{C})$ We increase its heat protection by plastering with cement-perlite

plaster: $R_{tot} = R_{in} + R_c + R_o = \frac{1}{\alpha_{in}} + \frac{\delta_1}{\lambda_1} + \frac{\delta_2}{\lambda_2} + \frac{\delta_3}{\lambda_3} + \frac{\delta_4}{\lambda_4} + \frac{1}{\alpha_o} = 1,7 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$.

We will check whether the 1st level of the condition specified in Building Code 2.01.04-18 is fulfilled: $R_{tot} = 1,7 > R_{tot}^R = 1,5 \text{ m}^2 \cdot ^\circ\text{C}/\text{Vt}$ condition is fulfilled.

IN CONCLUSION

From the results of the above-mentioned theoretical thermal-physical calculations, it can be concluded that the external wall structure of the 9-floor reinforced concrete panel residential buildings in operation in Zargarlik Square, Jizzah city, by covering it with a 40 mm thick penoplex plate from the outside, increasing its overall heat transfer resistance While fully meeting the requirement of level 1 of heat protection specified in Building Code 2.01.04-18.

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*Абдуазиз уулу Абдурауф, PhD по техническим наукам
доцент
кафедра «Энергетика»
Наманганский инженерно-технологический институт*

РОЛЬ ВОЗОБНОВЛЯЕМЫХ ИСТОЧНИКОВ ЭНЕРГИИ В РАЗВИТИИ ЭНЕРГЕТИКИ

Аннотация. Приведены сведения по работам, осуществляемым в Республике Узбекистан для развития и преобразования энергетической инфраструктуры. Рассмотрены возможности использования возобновляемых источников энергии и гидротехнических сооружений, для обеспечения энергией насосных станций водохозяйственной отрасли страны.

Ключевые слова: фотоэлектрической и гидроэлектрической станции, ветроэлектрической, микрогрид.

*Abduaziz uulu Abdurauf, PhD in technical sciences
associate professor
Department of Energy
Namangan Institute of Engineering and Technology*

ROLE OF RENEWABLE ENERGY SOURCES IN ENERGY DEVELOPMENT

Annotation. Information is provided on the work carried out in the Republic of Uzbekistan for the development and transformation of energy infrastructure. The possibilities of using renewable energy sources and hydraulic structures to provide energy to pumping stations of the country's water industry are considered.

Keywords: photovoltaic and hydroelectric power plant, wind power station, microgrid.

Введение. В настоящее время в электроэнергетической отрасли Республики Узбекистан проводятся масштабные изменения по модернизацию старых тепловых электрических станций (ТЭС) и строительству новых гидро, солнечных и ветряных электростанций, основной целью которых является устойчивое энергообеспечение экономики страны и повышение жизненных условий населения на основе максимально эффективного использования энергетических ресурсов. В «Концепции обеспечения Республики Узбекистан электрической энергией на 2020-2030 годы» поставлена цель к 2030 году довести выработку

электроэнергии до 120,8 млрд. кВт·ч, что в 1,76 раз больше, чем выработка электроэнергии в 2020 году [1]. При этом ежегодный рост потребления электрической энергии по республике будет составлять 6-7 процентов, а суммарная электрическая нагрузка в часы максимума потребления к 2030 году достигнет более 20,9 ГВт против 10,4 ГВт в зимний период 2019 года, в результате чего к 2030 году требуется увеличение генерирующих мощностей почти в 2 раза (рис.1).

В данной Концепции приведены целевые параметры ежегодно вводимых мощностей объектов ВИЭ в 2021-2030 годах, предусматривающие строительство ветряных (общей мощностью 3 ГВт), солнечных (общей мощностью 5 ГВт) и гидроэлектростанций (мощностью 3,8 ГВт), что будет составлять 56 % от общей мощности электростанций республики [1,2].

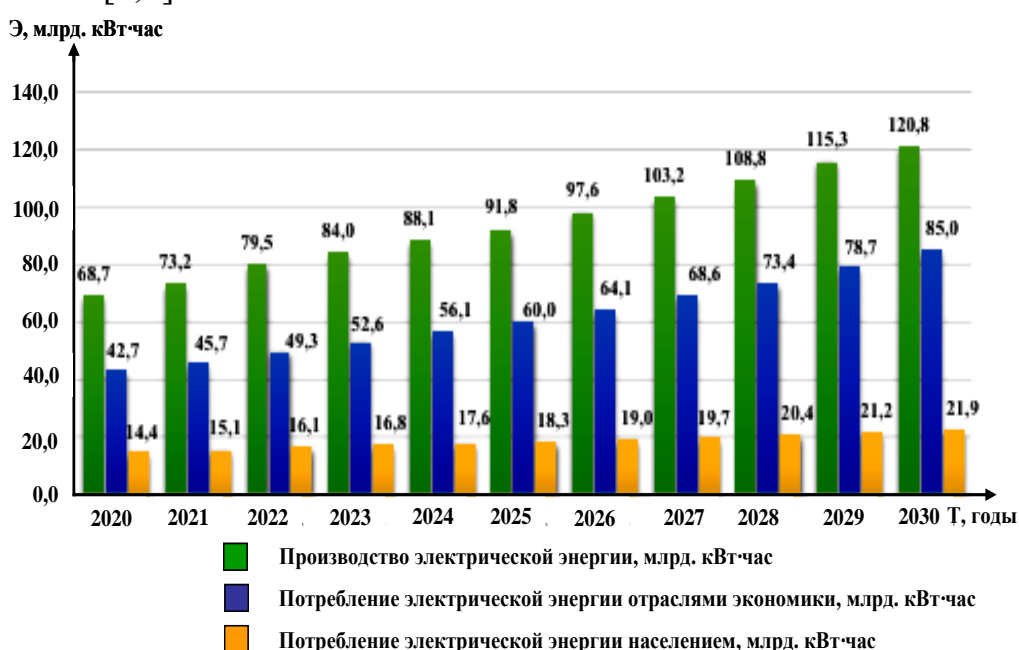


Рис.1. Прогноз динамики производства и потребления электроэнергии в Республике Узбекистан

Достижение данных рубежей в энергетике будет трудно и малоэффективно без масштабного внедрения цифровых технологий, которые обеспечивают достаточной для требований рынка надежности, экономичности, экологичности производства и снабжения электроэнергией.

Методы и материалы. Работу насосных и электростанций в данной энергосистеме можно характеризовать графиком режима работы в течение года, приведенным на рис. 2.

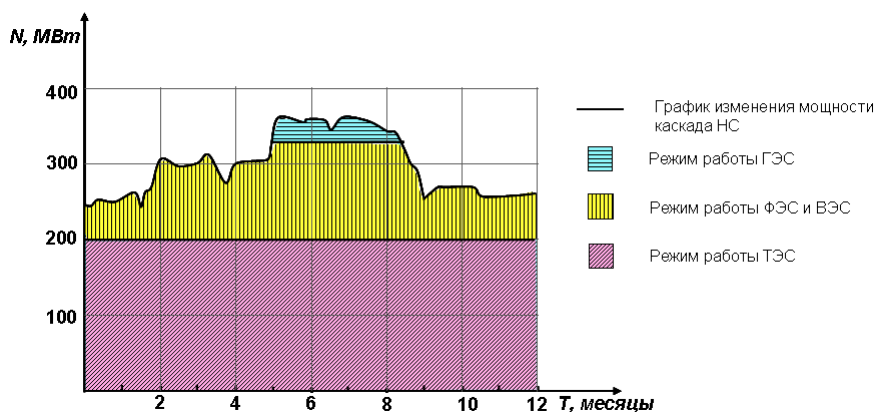


Рис.2. График режима работы энергосистемы.

Количество потребляемой каскадом НС энергии определяется следующей зависимостью [3, 4].

$$\mathcal{E}_{НС} = \mathcal{E}_{ТЭС} + \mathcal{E}_{ГЭС} + \mathcal{E}_{ФЭС} + \mathcal{E}_{ВЭС} - \Delta\mathcal{E} \quad (1)$$

где $\Delta\mathcal{E}$ – потери энергии

Количество $\mathcal{E}_{ТЭС}$ определяется расчетами режимных характеристик оборудования ТЭС с учетом минимизации расхода топлива, при этом представляется уместным использовать следующую целевую функцию

$$B_j = \mathcal{E}_{ТЭСj} \cdot b_j + b_{n,j} \cdot n_j \rightarrow \min, \quad (2)$$

где B_j – расход топлива в ТЭС в j -ном варианте потребления энергии каскадом НС; b_j – удельный расход топлива при стационарных режимах работы ТЭС; $b_{n,j}$ – удельный расход топлива при переключениях агрегатов ТЭС; n_j – число режимных переключений в ТЭС (число изменений мощности ТЭС).

Количество вырабатываемой ГЭС энергии, в течение времени от t_1 до t_2 , когда срабатывается объем водохранилища ΔV_B , соответствующий объему между отметками верхнего бьефа ∇BB_{max} и ∇BB_{min} , определяется следующим уравнением

$$\mathcal{E} = \int_{t_1}^{t_2} N_{ГЭС}(t) dt, \quad (3)$$

При этом режим работы водовыпускного сооружения считаем установившемся, т.е. он подчиняется работе по графику $\nabla BB = f(V_B)$, V_B – объем водохранилища. Кроме этого принимаются следующие допущения: потери расхода воды отсутствуют, потери напора $\Delta H = const$, КПД турбины $\eta^{myp} = const$.

В этом случае мощность ГЭС в момент времени t можно определить по формуле

$$N_{ГЭС}(t) = 9,81 \cdot Q_{ГЭС}(t) \cdot H(t) \cdot \eta^{myp} = K_I \cdot Q_{ГЭС}(t) \cdot H(t), \quad (4)$$

где $K_I = 9,81 \cdot \eta^{myp}$, H – напор ГЭС.

Расход ГЭС зависит от времени подачи объема ΔV_B , и в связи с этим его можно определить так

$$Q_{ГЭС}(t) = dV_B/dt, \quad (5)$$

Подставляя (5) и (4) в (3) получим

$$\mathcal{E} = \int_{t_1}^{t_2} N_{\text{ГЭС}}(t) dt = K_1 \int_{t_1}^{t_2} dV_B H(t) \quad (6)$$

При этом напор ГЭС определяется по известной зависимости

$$H(t) = H^{\Gamma} - \Delta H = \nabla BB(t) - \nabla HB(t) - \Delta H, \quad (7)$$

Обычно, когда водохранилище работает полностью в интересах водопотребителей, значение $Q_{\text{ГЭС}}(t) = Q_{\text{ВЭС}}(t)$ является заранее известной величиной и определяется графиком подачи воды из водовыпускного сооружения. В этих условиях величину мощности ГЭС в момент времени t можно определить по (4).

Таким образом, величина выработанной энергии ГЭС и ее мощность в момент времени t определяется в зависимости от значений $Q(t)$ и $H(t)$ [5, 6].

Количество вырабатываемой ФЭС и ВЭС энергии и соответственно оптимальное сочетание использования их мощностей, определяются на основании технико-экономических расчетов сопоставлением возможных вариантов [7].

Результаты. По результатам расчетов, выполненных с рассмотрением нескольких вариантов использования мощностей электростанций для питания НС каскада получены следующие показатели:

1. Затраты на электроэнергию каскадом НС в случае потребления электроэнергии полностью от ТЭС [8] $C = 2201900 \cdot 0,12 = 264228,0$ тыс. \$.
2. Получаемый эффект от разницы затрат при использовании предложенной системы энергоснабжения каскада НС составляет 11624 тыс. \$.

Заключение.

1. Показана возможность снижения затрат по очистке выбросов Талимарджанской ТЭС, результаты расчетов показали, что при использовании объектов на базе ВИЭ экономические выгоды от сокращения эмиссии CO_2 составляет 16,8 млн. \$ в год.

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*Абдулладжанов Б.Р., д.м.н.
доцент
Якуббекова М.
ассистент*

Андижанский государственный медицинский институт

СИМУЛЯЦИОННЫЕ ТЕХНОЛОГИИ В ВЫСШЕМ МЕДИЦИНСКОМ ОБРАЗОВАНИИ

В данной статье авторы приводят актуальность симуляционного обучения в медицине, в частности по специальности терапия. На современном этапе основная нагрузка по симуляционному обучению должна быть возложена на преподавателей профильных кафедр, работающих в клинических учреждениях. Оптимально – параллельная работа преподавателя как в клинике, так и в симуляционном центре, что позволяет провести обучение на высоком уровне.

Ключевые слова: технология, обучение, медицина, симуляция, терапия, студенты, дезинфекция, пациент.

*Abdullajanov B.R., ScD.
associate professor
Yakubbekova M.
assistant
Andijan State Medical Institute*

SIMULATION TECHNOLOGIES IN HIGHER MEDICAL EDUCATION

In this article, the authors cite the relevance of simulation training in medicine, in particular in the specialty therapy. At the present stage, the main burden of simulation training should be assigned to teachers of specialized departments working in clinical institutions. Optimal is the parallel work of the teacher both in the clinic and in the simulation center, which allows for high-level training.

Keywords: technology, education, medicine, simulation, therapy, students, disinfection, patient.

Актуальность проблемы. В соответствии с Указом Президента Республики Узбекистан «Об утверждении концепции развития системы высшего образования Республики Узбекистан до 2030 года» за №УП-5847 от 8 октября 2019 года, в целях определения приоритетных направлений системного реформирования высшего образования в Республике Узбекистан, поднятия на качественно новый уровень процесса подготовки

самостоятельно мыслящих высококвалифицированных кадров с современными знаниями и высокими духовно-нравственными качествами, модернизации высшего образования, развития социальной сферы и отраслей экономики на основе передовых образовательных технологий, во всех формах и типах учреждений системы непрерывного образования Республики Узбекистан образовательный процесс может быть достигнут путем создания современных условий для преподавания при условии, что он научно и методически полностью обеспечен [1].

Сегодня в целях повышения эффективности образовательного процесса система симуляционного обучения вошла в систему медицинского высшего образования и широко используется в качестве современного средства обучения [5]. Образовательный процесс по специальностям состоит из двух неотъемлемых компонентов: понимания патофизиологических основ заболевания и подготовки врача путем развития практических навыков [3]. Но отсутствие условий и возможностей для развития практических навыков врачей вызывало трудности.

Материалы и методы. Цель: внутривенное введение больших доз лекарственных средств, парентеральное питание и лечение.

Показание: рецепт врача.

Противопоказание для использования: наличие повышенной чувствительности к препарату, местных повреждений кожи, воспаления, отека, гематомы.

Трудности: воздушная эмболия, гематома, аллергические реакции, сепсис, ВИЧ, вирусный гепатит, некроз.

Место инъекции: локтевая, лучевая вена, сосуды верхних и нижних конечностей, подключичная вена.

Внутривенное капельное введение проводится по специальному назначению. Для этой процедуры лечебные кабинеты и отделения следует предварительно очистить и проветрить с помощью бактерицидной установки. Подготовка к внутривенному капельному введению, оборудование: комплект сменной спецодежды: халат, шапочка (кепка), гигиенический чехол с обувью. Средства индивидуальной защиты: маска, перчатки, очки или защитная маска. Медицинские инструменты могут быть одноразового и многоразового применения (за каждую инъекцию): стерильная капельная система, стерильный лоток, стерильные лотки, нестерильные лотки, лоток для использованного материала, стерильные ватные шарики; Контейнеры для обеззараживания и утилизации медицинских отходов. Контейнеры для обработки рабочих поверхностей до и после работы имеют соответствующую маркировку:

- «чистые тканевые салфетки»;
- «для дезинфекции рабочих поверхностей»;
- «для переработки использованных салфеток».

Контейнеры для дезинфекции медицинских изделий могут быть повторно загружены с соответствующей информацией: 15

- «дезинфицировать лотки»;
- «дезинфицировать пинцеты».

О единовременной загрузке тары для обеззараживания и утилизации изделий медицинского назначения с соответствующими:

- на уровне «А»;
- «Г-класс»;
- «стадия Б»;
- «для дезинфекции систем одноразовой загрузки»;
- «разовые мероприятия по дезинфекции игл»;
- «дезинфицировать использованные ватные шарики»;
- «для дезинфекции использованных масок»;
- «Дезинфицировать использованные перчатки».

Подготовка к процедуре:

1. Пригласите и проинформируйте пациента, узнайте анамнез аллергии, получите согласие на процедуру. 2. Провести гигиену рук по алгоритму. 3. Наденьте маску, наденьте перчатки и обработайте их антисептиком. 4. Подготовьте стерильный лоток со стерильными ватными шариками и стерильными подушечками. Смочите ватные шарики спиртовым антисептиком. 5. Подготовьте лекарство: проверьте список назначений врача, проверьте срок годности лекарства, убедитесь, что целостность ампулы соответствует наименованию на упаковке ампулы, визуально оцените лекарственное средство на совместимость. Первым шариком обработайте внешнюю крышку бутылки препарата, открыть нестерильным пинцетом центральную часть металлической крышки флакона (при необходимости) и обработать резиновую пробку флакона вторым ватным тампоном. 7. Проверьте целостность упаковки и срок стерильности инфузионной системы. 8. Откройте упаковку с системой и получите ее. 9. Закройте зажим на системе, снимите колпачок с иглы флакона, вставьте полную иглу во флакон. 10. Переверните бутылку вверх дном и закрепите на штативе, откройте воздушный канал. 11. Нажмите и заполните цилиндр системы до середины. 12. Стерильным пинцетом снимите инъекционную иглу с колпачком, поместить на стерильный лоток. Откройте зажим и наполните капельницу жидкостью по всей длине с полным вытеснением воздуха (на лотке). 15. Закрепите систему на штативе.

Результаты и обсуждение. Наши результаты согласуются с литературными данными [2,4]. Ю.К. Смаилов показала, что использование симуляционного оборудования для обучения студентов на клинических кафедрах имеет ряд преимуществ перед традиционными методами обучения. Студенты группы «Симуляция» показали хорошие результаты в освоении измерений артериального давления, катетеризации периферических сосудов и других практических навыков.

Использовать экспертов только для симуляционного обучения неразумно. Оптимально – параллельная работа преподавателя как в клинике, так и в симуляционном центре. Это позволяет провести обучение на высоком уровне. На самом деле, если речь идет о мануальном обучении, то достаточно простого дипломированного специалиста.

Подводя итоги, симуляционное обучение имеет следующие преимущества:

- 1) у студентов нет страха перед пациентом;
- 2) у пациента нет осложнений во время процедуры;
- 3) наличие возможности координировать и контролировать действия студентов во время практики;
- 4) неограниченное количество упражнений и их повторение;

Использованные источники:

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*Абдуллаева Ш.Р., к.э.н.
доцент
заведующий кафедрой «Цифровая экономика и финансы»
«РЭУ им. Г.В. Плеханова»
Ташкентский филиал
Икрамова А.Т.
студент 4 курса
«РЭУ им. Г.В. Плеханова
Ташкентский филиал*

РАЗВИТИЕ ЗЕЛЕННОЙ ЭКОНОМИКИ КАК ФАКТОР ОБЕСПЕЧЕНИЯ ДОЛГОСРОЧНОГО УСТОЙЧИВОГО ЭКОНОМИЧЕСКОГО РОСТА

Аннотация. В статье рассматривается развитие зеленой экономики в Республики Узбекистан, анализируются международные данные по развитию энергосберегающих технологий и снижение выбросов парникового газа, представлены результаты изучения современных тенденций развития «зеленого» финансирования для реализации проектов по внедрению ресурсосберегающих технологий, созданию новых мощностей за счет возобновляемых источников энергии, развитию социально ориентированного инвестирования.

Ключевые слова: зеленая экономика, зеленое финансирование, возобновляемые источники энергии, ресурсосберегающие технологии, изменение климата.

*Abdullaeva Sh.R., Ph.D.
associate professor
Head of the Department of Digital Economics and Finance
"REU im. G.V. Plekhanov"
Tashkent branch
Ikramova A.T.
4th year student
"REU im. G.V. Plekhanov
Tashkent branch*

DEVELOPMENT OF GREEN ECONOMY AS A FACTOR OF ENSURING LONG-TERM SUSTAINABLE ECONOMIC GROWTH

Abstract. The article discusses the development of a green economy in the Republic of Uzbekistan, analyzes international data on the development of energy-saving technologies and reducing greenhouse gas emissions, presents the results of a study of current trends in the development of «green» financing for

the implementation of projects for the introduction of resource-saving technologies, the creation of new capacities using renewable energy sources, development of socially oriented investing.

Keywords: green economy, green finance, renewable energy sources, resource-saving technologies, climate change.

Введение. Обеспечение устойчивого экономического роста в Республике Узбекистан сопряжено с решением проблем и последствий влияния экологических угроз и изменения климата. Среди экологических угроз следует отметить глобальную проблему высыхания Арала, растущий дефицит водных ресурсов, повышение средней температуры в связи с изменением климата, как следствие тающие ледники, засоленность почвы и риск опустынивания земель. В этой связи в нашей стране приоритетным направлением является решение экологических проблем и принятый курс на развитие зеленой экономики.

В 2018 году нашей страной было ратифицировано Парижское соглашение по изменению климата и принято обязательство по снижению «к 2030 году удельного выброса парниковых газов на единицу валового внутреннего продукта на 10 % от уровня 2010 года» [1], которые позволят обеспечить устойчивость национальной экономики к последствиям изменения климата. В стране успешно реализуются проекты по введению новых производственных мощностей по выработке энергии из возобновляемых источников. Внедрение новых инструментов зеленого финансирования, расширение сотрудничества с международными финансовыми институтами и частными инвесторами в сфере реализации зеленых проектов обосновывает необходимость глубокого изучения формата, международного опыта и специфики их развития в национальной экономике.

Обзор литературы. По мнению ученых в экономической литературе нет единого общепринятого подхода к понятию «зеленая экономика». Вахабов А. В., Хажибакиев Ш. Х., рассматривая приоритеты и необходимость перехода к зеленой экономике, отмечают, что: «Если в некоторых источниках «зеленая экономика» описывается как новые отрасли экономики, способствующие улучшению охраны окружающей среды, в других научных исследованиях отмечается, что «зеленая экономика» изучает новые технологии, экосистемы, которые оказывают содействие и приносят пользу природе. Третья группа исследователей считает, что «зеленая экономика» означает переход на новый этап развития, направленный на создание экологически чистых продуктов» [5]. По мнению Рахманова Ш.И., одним из основных направлений развития зеленой экономики в Республике Узбекистан является необходимость «создания законодательной базы в области «зеленой» экономики [7].

Самиева Г.Т., Аликулов Х.Т. отмечают, что: «Зеленая экономика» —

это экономика, которая ведет к улучшению благосостояния людей и социальной справедливости, а также к значительному снижению экологических рисков и экологического дефицита. Формирование «зеленой» экономики поможет решить такие экологические проблемы, как неразумное использование водных ресурсов, загрязнение воздуха, вырубка лесов, деградация земель и изменение климата [6].

В соответствии с документами Программы ООН по окружающей среде (UNEP) зеленая экономика – это «экономика, в которой происходит замещение преимущественного использования внешних ресурсов на внутренние, а экологически чистые и эффективные технологии и устойчивое сельское хозяйство, служат основными движущими факторами экономического роста, создания рабочих мест и сокращения масштабов нищеты» [11]. В основу развития зеленой экономики были положены три основополагающих принципа, как важного фактора обеспечения устойчивого роста: природные ресурсы на земле являются ограниченными, в природе все взаимосвязано и невозможно удовлетворять растущий спрос на потребление природных ресурсов в условиях их ограниченности.

В.И. Вернадский утверждал, что человечество в ходе своего развития превращается в новую мощную «геологическую силу», своей мыслью и трудом преобразующую облик планеты. Соответственно, оно в целях своего сохранения должно будет взять на себя ответственность за развитие биосферы, превращающейся в ноосферу, а это потребует от него определенной социальной организации и новой, экологической и одновременно гуманистической этики» [8]. Таким образом в настоящее время существует несколько подходов к пониманию сути содержания «зеленая» экономика. Одни считают, что это развитие новых отраслей экономики, которые способствуют сохранению окружающей среды и природных ресурсов. Другой подход предполагает внедрение новых технологий, которые призваны помогать и приносить пользу природе. Третий подход рассматривает зеленую экономику как переход на новый этап развития, целью которого является создание экологически чистых продуктов. Все эти подходы близки и отражают главное целевое направление экономического развития на основе повышения эффективности и рационального использования природных ресурсов, внедрения ресурсосберегающих технологий, развития возобновляемых источников энергии и принятие мер по охране окружающей среды.

Методология исследования. В ходе исследования применялись методы теоретико-прикладного научного познания, в числе которых: методы сравнительного анализа, методы обобщения, горизонтальный и вертикальный анализ, методы синтеза, индукции и дедукции. При подготовке исследования использовались статистические данные Международных финансовых институтов и организаций, статистические данные Агентства статистики при Президенте Республики Узбекистан.

Анализ и обсуждение результатов. По данным мировой статистики по итогам 2022 года наблюдалось новое увеличение выбросов CO₂ (+2,5%) связанные с энергетикой до рекордного уровня, превышающего уровень 2019 года, однако увеличение было медленнее, чем в 2021 году, но значительно выше, чем за период 2010-2019 годы (+1%/год). Выбросы достигли рекордного уровня – более 33,8 ГтCO₂, несмотря на глобальное снижение экономики во многих странах. Выбросы CO₂ незначительно увеличились в двух крупнейших странах-эмитентах, а именно в Китае (+1%, поскольку рост потребления энергии в промышленном секторе замедлился, а доля ветровой и солнечной энергии в китайской энергетической структуре продолжает увеличиваться) и США (+1,2%), поскольку снижение выбросов CO₂, связанных с углем, было более чем компенсировано ростом выбросов, связанных с газом) (см. рис.1) [10]. Благодаря динамичному экономическому росту, выбросы CO₂ росли очень быстрыми темпами в зависящих от угля Индии (+8,8%) и Индонезии (+28%), в зависимой от нефти Саудовской Аравии (+10%) и Мексике (+10%). С другой стороны, выбросы CO₂ снизились в Европе (-2%, в том числе -1,8% в ЕС, -2,7% в Турции и -2,6% в Великобритании), в Бразилии (-6,2%, при этом рост выработки гидроэлектроэнергии сократило потребление газ), в Южной Африке (-4,7%, поскольку технические проблемы препятствовали производству электроэнергии на угле) и в Южной Корее (-2,9%, из-за более высокого уровня производства атомной энергии). Они оставались стабильными в Японии и России (рост выбросов, связанных с углем, компенсировался снижением выбросов, связанных с газом).

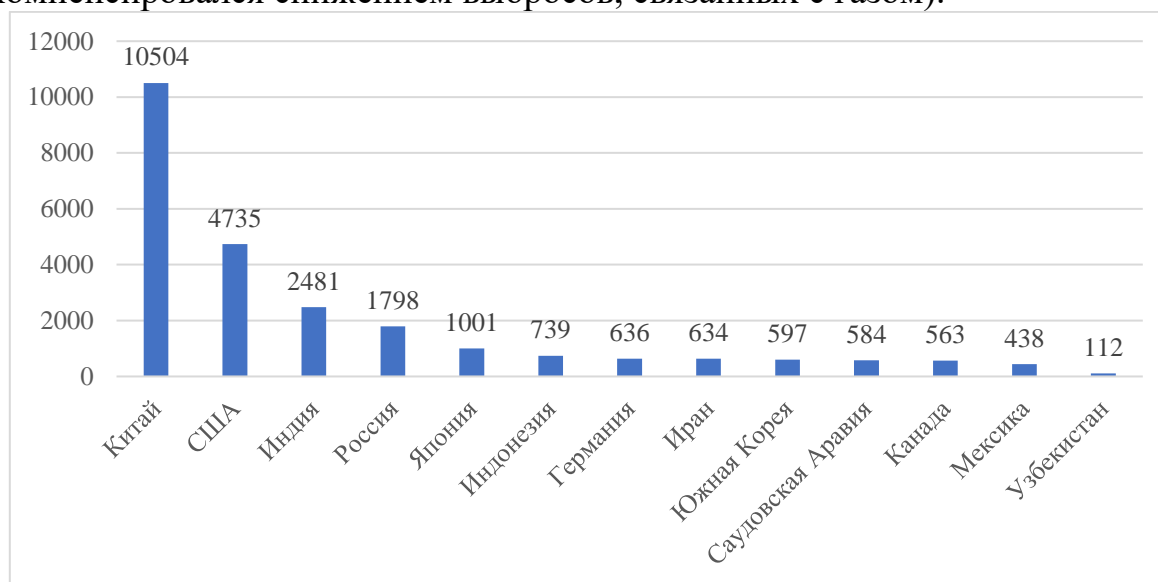


Рис.1. Наибольшие объемы выбросов CO₂ по странам и в Республике Узбекистан по итогам 2022 года (млн. т) [10]

В то же время следует отметить, что согласно данным отчета Международного агентства энергетики в 2023 году прирост мощностей возобновляемых источников энергии составил почти 50% или 550 ГВт,

только в Китае за один год было введено в эксплуатацию солнечных фотоэлектрических систем объемом равным совокупному объему всех стран мира в 2022 году. В отчете Программы ООН по окружающей среде (UNEP) в 2023 году наметился прогресс с момента подписания Парижского соглашения в 2015 году. Если на момент подписания ожидалось, что в 2030 году рост выбросов составит 16%, то с учетом принимаемых мер во всем мире, данный прогноз уменьшился до ожидаемого 3% роста, однако при реализации всех проектов и соглашений объем выбросов парникового газа должен уменьшиться на 28% [11].

В Республике Узбекистан потребность в электроэнергии в Узбекистане составляет 69 миллиардов кВт/час. Почти 90% этой энергии вырабатывается за счет сжигания газа и угля, оставшиеся 10% производятся за счет возобновляемых источников энергии. Для выработки электроэнергии расходуется 16,5 миллиарда кубометров природного газа, и 2,3 миллиона тонн угля. Однако по итогам 2022 года выбросы CO₂ сократились на 6% по сравнению с предыдущим годом, в 2023 году за счет прямых иностранных инвестиций компании «Masdar» в Джизакской, Самаркандской и Сурхандарьинской областях были построены первые очереди 3 солнечных электростанций общей мощностью 2400 мегаватт, строится современная ветряная станция, и запущены ее первые мощности по производству 100 мегаватт. Совместно с компанией «Gezhouba» строятся солнечные станции в Бухаре и Кашкадарье, которые начнут генерировать 400 мегаватт энергии. Следует отметить, что все проекты реализуются за счет прямых иностранных инвестиций на основе государственно-частного партнерства [3].

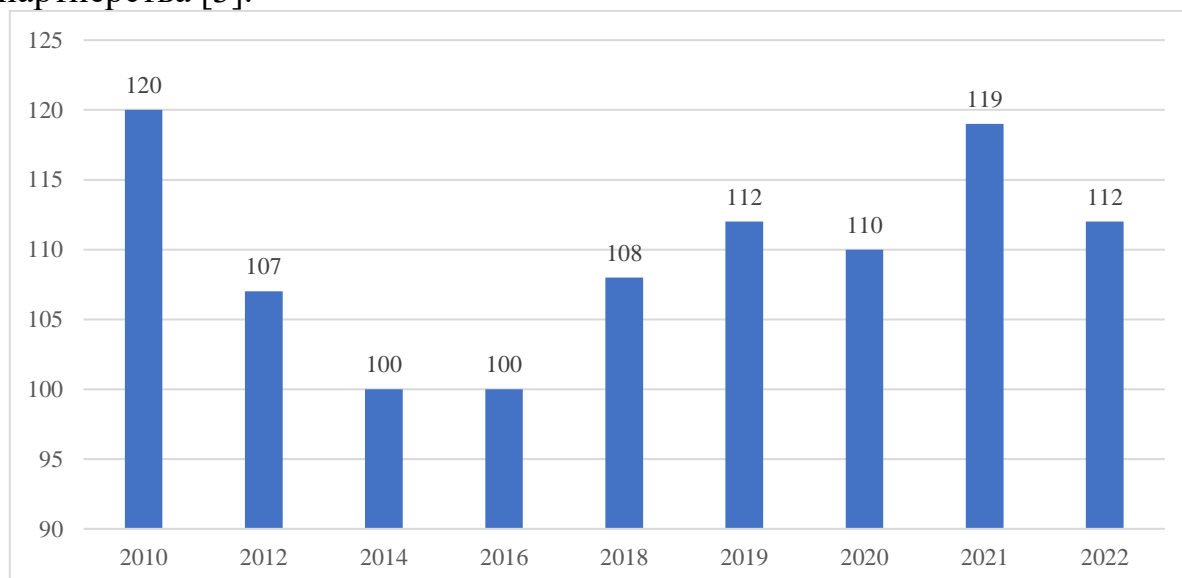


Рис.2. Динамика изменения выбросов CO₂ в Республике Узбекистан за период 2010-2022 годы (млн. т) [10]

Ожидается, что «за счет новых проектов общей стоимостью 2 млрд. долларов США будет производиться 6 млрд. кВт электроэнергии в год,

сэкономлено 2 млрд. кубометров природного газа, 2 миллиона домов будут обеспечены непрерывной и гарантированной электроэнергией» [3]. В соответствии со стратегией развития Нового Узбекистана до 2030 года планируется двукратное увеличение объемов промышленного производства в таких отраслях как металлургия, нефтехимия и машиностроение, что предполагает увеличение спроса на энергетические ресурсы на более, чем 40 млрд. киловатт-часов, который планируется покрыть прежде всего за счет возобновляемых источников энергии. В этих целях с международными компаниями подписано 25 соглашений о закупке электроэнергии и инвестиционных соглашений общей мощностью 11 954 МВт, которые предусматривают до конца 2026 года введение в эксплуатацию 25 электростанций общей мощностью 11 954 МВт (9 тепловых, 9 солнечных и 7 ветряных электростанций), что составляет 60% текущей мощности энергосистемы Узбекистана. В целях стимулирования сферы в Узбекистане создается система «Солнечный дом» по предоставлению льготных кредитов и субсидий для установки солнечных панелей, гарантированной закупке произведенной электроэнергии. Только в 2023 году солнечные панели были установлено 50 тыс. домохозяйствами и предпринимателями. Разработана методика сертификации продукции «Зеленая энергия», произведенной из «зеленой» энергии. «Внедрение зеленых технологий дал импульс к развитию новых видов производств, смежных отраслей для обеспечения сервиса и обслуживанию зеленой энергетики, 4 предприятия начали производство солнечных панелей, 2 предприятия – металлоконструкций. Около 50 проектов в сфере «зеленой» энергии создают рынок кабеля дополнительно на 500 миллионов долларов» [3]. Президентом Республики Узбекистан

Ш.М. Мирзиевым выдвинута инициатива проведения Самаркандского международного климатического форума в 2024 году, который станет новой глобальной платформой для обмена мнениями и объединения усилий в достижении целей «зелёного» развития в Центральной Азии: «Рассчитываем, что этот форум станет практическим шагом в создании «Самаркандского диалога во имя будущего» для поиска ответов на глобальные угрозы устойчивого развития» [4].

Новые технологии коснулись и развития финансового сектора Узбекистана. Впервые в 2023 году на Лондонской фондовой бирже были размещены зеленые суверенные еврооблигации Республики Узбекистан на сумму 4,25 триллиона сумов и еврооблигации на сумму 660 миллионов долларов. Полученные средства будут использованы государством на финансирование проектов по внедрению водосберегающих технологий, развитие железнодорожного транспорта и метрополитена, организацию санитарно-очистных работ и обеспечение чистоты в населенных пунктах, создание экологических лесных насаждений против ветровой эрозии и песчаного затопления водохозяйственных объектов.

В страновые стратегии сотрудничества с крупнейшими глобальными и региональными финансовыми институтами, как Группа Всемирного Банка, Азиатский банк развития, Азиатский банк инфраструктурных инвестиций и Европейский банк реконструкции и развития включены приоритеты реализации инвестиционных проектов зеленой экономики, а также развития на рынке инструментов зеленого финансирования.

Развитие зеленой экономики и зеленого финансирования представляет собой долгосрочный процесс, который требует значительных финансовых, материальных и трудовых ресурсов. Крупные промышленные предприятия республики нуждаются в модернизации оборудования, внедрении ресурсосберегающих технологий, развитии корпоративных принципов управления, а также внедрении новых требования социально ответственного инвестирования ESG-принципов. Банковский сектор Узбекистана за счет собственных ресурсов не сможет удовлетворить растущий спрос на масштабные инвестиционные программы промышленных предприятий, в этой связи в вопросах реализации зеленых проектов большую роль играет привлечение зарубежных кредитов и прямых инвестиций. Большинство банков в линейке своих продуктов стали предлагать зеленые кредиты, в основном направляемые на приобретение и установку устройств возобновляемых источников энергии, внедрение энергосберегающих технологий, финансирование мероприятий по повышению энергоэффективности производственных процессов.

Таблица 1.

Продукты «зеленого финансирования» коммерческих банков в Республике Узбекистан [12]

Наименование коммерческого банка	Банковские продукты зеленого финансирования	Условия предоставления		
		Максим. срок кредита (годы)	Льготный период (месяцы)	Процентная ставка (%)
АО Уздацбанк	National Green	5	6	По договору
АО Асакабанк	Кредитный продукт «Green line»	3	12	19% в суммах 14% в иностранной валюте
Микрокредитбанк	Green energy	5	6	21
Халк банк	Потребительский кредит "Green"	5	6	20
АО Узпромстройбанк	Потребительские «зелёные» кредиты для физических лиц	5	6	20
	SME Green Loan	5	6-12	21
	Corporate green loan	5	6-12	21
АИКБ Ипак Йули	Проект GEFF совместно с ЕБРР	Условия разрабатываются при технической поддержке экспертов		

АКБ Хамкорбанк	Потребительский кредит на покупку и установку солнечных панелей	7	Не указано	19
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Выборочный анализ зеленых продуктов коммерческих банков показал, что основным лидером в развитии инструментов зеленого финансирования выступает АО Узпромстройбанк по многообразию предлагаемых услуг, как для физических лиц, так и для частных предпринимателей и крупных корпоративных клиентов. В 2020 и 2023 годах АО Узпромстройбанк был отмечен наградой ЕБРР «Сделка года – «зеленая торговля» (Deal of the Year - Green Trade) за содействие во внедрении энергоэффективных технологий в Узбекистане. С 2020 года банк одним из первых запустил платформу для зеленого финансирования и создал необходимую внутреннюю ESG-экосистему, включая маркетинг, брендинг, разработку новых зеленых продуктов, развитие каналов продаж и обучение персонала. В банке предоставлялись разнообразные виды зеленого финансирования, как зеленые потребительские кредиты, зеленая ипотека, зеленое кредитование для малого и среднего бизнеса, и также финансирование для корпоративных клиентов. Многие банки внедрили новые продукты зеленого финансирования, отличающиеся в основном только целями кредитования, без учета изменения бизнес-процессов, особенностей подходов, условий кредитования. В силу специфики деятельности Микрокредитбанк в условиях кредитования предлагает инструмент частичной компенсации процентной ставки за счет Фонда поддержки предпринимательства. В большинстве случаев условия кредитования сохраняются общими для всех видов кредитов, включая зеленое финансирование. Между АКБ «Ипак Йули» и ЕБРР было подписано кредитное соглашение на сумму 5 млн. Евро в рамках развития GEF (Механизм финансирования зеленой экономики). В рамках данной кредитной линии инициаторам проектов предусматривается предоставление бесплатных консультаций от международных экспертов в области энергоэффективности. Механизм GEF поддерживает переходный процесс к зеленой экономике, предоставляя финансирование для внедрения энергосберегающих технологий, технологии, которые генерируют энергию из возобновляемых источников, технологии по охране водных ресурсов. Одним из главных преимуществ кредитной линии ЕБРР является предоставление грантовых средств инициаторам успешно реализованных проектов в размере от 10 до 20% от суммы кредита приемлемого проекта.

Также в последние годы в Узбекистане принимаются активные меры по развитию рынка ценных бумаг, ежегодно увеличивается объем сделок, процесс инвестиционных операций становится более прозрачным, внедряются новые инструменты публичных размещений акций

крупнейшими производственными предприятиями и финансовыми институтами. Однако для масштабного развития зеленого финансирования необходимо разработать институциональную структуру, предстоит еще создать национальную площадку для выпуска и обращения «зеленых» инструментов финансирования. В этих целях предстоит разработать методологию оценки финансовых инструментов зеленого финансирования, разработать национальные «зеленые» стандарты, таксономию, сертификацию и другие основополагающие положения, которыми в дальнейшем будет руководствоваться финансовый рынок. По мнению экспертов «с развитием институциональной структуры на рынке также начнут появляться углеродная биржа, ESG-фонды и другие организации, заинтересованные во внедрении «зеленой» повестки. Рейтинговые агентства уже начали активно расширять свои услуги и предлагают ESG-рейтинги. Появление новых организаций позволит ускорить развитие рынка и даст стимул частным компаниям соответствовать лучшим ESG-практикам» [9]. В перспективе развитие внутреннего финансового рынка зеленого финансирования будет способствовать привлечению глобальных ресурсов и выпуску «зеленых» инструментов – акций, облигаций, кредитных линий, а также созданию ESG-фондов. За счет «зеленых» финансовых инструментов, предприятия, которые являются фундаментом нашей экономики, смогут получить доступ к заемным средствам на оптимальных условиях. Все эти усилия в совокупности и долгосрочной перспективе приведут к переходу на более зрелую и устойчивую модель развития Узбекистана.

Выводы. Развитие «зеленой» экономики и «зеленого» финансирования в современных условиях экономических преобразований, совершенствования корпоративного управления, повышения роли частных инвестиций и значимости социально ответственного инвестирования являются важными факторами обеспечения устойчивого экономического роста национальной экономики. В стране последовательно реализуется целенаправленная государственная политика на развитие «зеленой» экономики в условиях растущего дефицита основных природных ресурсов при одновременном растущем спросе на них в целях обеспечения промышленного роста и роста населения. Для повышения эффективности результатов развития необходимо создавать условия на финансовом рынке, совершенствовать деятельность коммерческих банков и рынка ценных бумаг в сфере широкого внедрения инструментов «зеленого» финансирования.

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Абдулхакова Р.М.

Хакимов Ш.К.

Тошбоев Ш.О.

Холматова Н.О.

*Андижанский государственный медицинский институт
Узбекистан, Андижан*

СОСТОЯНИЕ АКТИВНОСТИ ФЕРМЕНТА АМИЛАЗЫ В ГРУДНОМ МОЛОКЕ ЗДОРОВЫХ КОРМЯЩИХ МАТЕРЕЙ

Аннотация. Под нашим наблюдением находилось 30 здоровых кормящих женщин, без экстрагенитальных заболеваний. Контрольную группу составили 15 кормящих матерей, страдающих с различной степени анемии.

Определение амилазы проводилось методом Смита-Роя в модификации А.М.Уголева и соавт. (1989), который отличается точностью и широко применяется в клинической и экспериментальной энзимологии.

Содержание амилазы в составе ГМ составляет в среднем $138,9 \pm 1,75$ ед/мл, с размахом колебаний от 48 до 230 ед/мл. Напряжение (выделение) этого фермента в общей группе составило $63,9 \pm 1,57$ ед/мл/мин или $920907 \pm 7640,7$ ед/сутки.

Содержание и выделение амилазы в ГМ у здоровых кормящих матерей зависят от возраста, паритета родов и периодов лактации.

Ключевые слова: грудное молоко, амилаза, содержание, выделение.

Abdulkhakova R.M.

Khakimov Sh.K.

Toshboyev Sh.O.

Kholmatova N.O.

*Andijan state medical institute
Uzbekistan, Andijan*

STATE OF AMYLASE ENZYME ACTIVITY IN BREAST MILK OF HEALTHY NURSING MOTHERS

Annotation. We observed 30 healthy lactating women, without extragenital diseases. The control group consisted of 15 nursing mothers suffering from varying degrees of anemia.

Amylase was determined by the Smith-Roy method modified by A.M. Ugolev et al. (1989), which is accurate and widely used in clinical and experimental enzymology.

The amylase content in GM is on average 138.9 ± 1.75 units/ml, with a range of fluctuations from 48 to 230 units/ml. The voltage (release) of this enzyme in the general group was 63.9 ± 1.57 units/ml/min or 920907 ± 7640.7 units/day.

The content and release of amylase in the BM of healthy nursing mothers depend on age, parity of births and periods of lactation.

Key words: breast milk, amylase, content, excretion.

Естественное вскармливание ребенка грудным материнским молоком – чрезвычайно важный период его жизни. Только оно может обеспечить растущий организм необходимыми пластическими, энергетическими, биологически активными и иммунозащитными веществами в условиях еще недостаточно сформированного пищеварительного аппарата [3, 5, 8, 10, 11].

Молочное питание – промежуточный период между предшествующим антенатальным гемо- и амниотрофным питанием плода и последующим дефинитивным питанием ребенка. Раннее лишение младенца материнского молока – это стресс, трагедия, которая не может в полной мере компенсироваться искусственным вскармливанием. Последствие такого неадекватного вскармливания пролонгированы могут быть пожизненными не только трофическими, но и социальными проблемами [1,2,4, 5,].

Определение амилазы проводилось методом Смита-Роя в модификации А.М.Уголева и соавт. (1989), который отличается точностью и широко применяется в клинической и экспериментальной энзимологии.

Результаты наших исследований показывают, что гидролитическая активность и содержание зимогенов протеаз в грудном молоке невелики. Тем не менее, амилолитическая активность молока в 3-4 раза выше, чем сыворотки крови, содержание пепсиногена в молоке - в 2,0-2,5 раза ниже, чем в плазме крови. Вместе с тем ферментативные активности молока – реальный участник гидролаза нутриентов [6] по типу индуцированного аутолитического пищеварения [7]. Все эти научные предпосылки поставили перед нами **цель и задачи исследования:** изучить содержания и выделения гидролитического фермента амилазы в грудном молоке (ГМ) здоровых кормящих матерей.

Материал и методы исследования: под нашим наблюдением находилось 30 здоровых кормящих женщин. Контрольную группу составили 15 женщин аналогичного возраста, страдающих различной степени тяжести анемии.

Определение амилазы проводилось методом Смита-Роя в модификации А.М.Уголева и соавт. (1989), который отличается точностью и широко применяется в клинической и экспериментальной энзимологии.

Полученные нами данные показывают, что содержание амилазы в составе ГМ составляет в среднем $138,9 \pm 1,75$ ед/мл, с размахом колебаний от

48 до 230 ед/мл. Напряжение (выделение) этого фермента в общей группе составило $63,9 \pm 1,57$ ед/мл/мин или $920907 \pm 7640,7$ ед/сутки.

Таблица 1.

Содержание (ед/мл/мин) амилазы в грудном молоке здоровых кормящих матерей ($M \pm m$)

п/н	Контингент обследуемых	Амилаза	
		Ед/мл	Ед/мл/мин
1.	Возраст матерей:		
	≤20 лет	$122,8 \pm 3,44^{**}$	$52,8 \pm 2,25^{***}$
	21-29 лет	$141,2 \pm 3,97$	$67,6 \pm 2,26$
	30 лет и старше	$107,2 \pm 3,83^{***}$	$42,8 \pm 2,10^{***}$
2.	Перворожавшие	$130,1 \pm 3,42$	$57,2 \pm 3,62$
	Повторнорожавшие	$138,8 \pm 1,34$	$66,4 \pm 1,48^{***}$
3.	Паритет родов:		
	1-2 родов	$134,3 \pm 3,65$	$61,6 \pm 1,19$
	3 и более родов	$118,1 \pm 3,29^{***}$	$53,8 \pm 1,02^{***}$
4.	Период лактации:		
	До 6 мес.	$135,3 \pm 4,35$	$76,9 \pm 2,39$
	Более 6 мес.	$126,3 \pm 2,67$	$46,2 \pm 1,69^{**}$

Примечание: Статистические данные достоверны $*(P < 0,05)$, $** (P < 0,01)$, $*** (P < 0,001)$, внутри группы обследованных.

Из данных таблицы 1 видно, что содержание и выделение в составе ГМ у повторно-рожавших женщин несколько выше ($P < 0,05$, $P < 0,01$). Однако такая тенденция сохраняется лишь у женщин после повторных (вторых) родов, т.к. концентрация и выделение этого фермента при последующих родах (3 и более) существенно уменьшилась ($P < 0,01$, $P < 0,001$). Содержание и выделение амилазы в составе ГМ также зависят от возраста кормящих матерей, т.е. эти показатели ниже у женщин в возрасте ≤20 лет ($P < 0,01$, $P < 0,001$) и в 30 лет и старше ($P < 0,001$, $P < 0,0001$) по сравнению с женщинами в возрасте 21-29 лет. Выделение этого фермента за единицу времени снижалось также у женщин в период лактации более шести месяцев при отсутствии различий ($P > 0,05$) в его содержании (ед/мл).

Определенный научный интерес представляет динамика выделения амилазы в составе ГМ у кормящих матерей в зависимости от периода лактации. Из данных рисунка 1 (А) видно, что амилаза в составе ГМ выделяется в большем количестве у первородящих женщин в период лактации до VII–VIII месяцев (Г) ($P < 0,05-0,01$) и к IX месяцу лактации выделение амилазы круто снижается до 38 ед/мл/сут, а к концу лактации (IX–XII месяцы) ($P < 0,01$).

У повторно-рожавших женщин первоначальное низкое значение выделения амилазы в составе ГМ долго сохраняется в средних пределах 42,0-60,0 ед/мл/мин. Складывается впечатление, что первоначальный

низкий уровень амилазы у повторнорожавших компенсируется длительным сохранением достаточного уровня данного фермента особенно в конце лактации.

Нами показано (Б), что у женщин в возрасте 21-29 лет выделение амилазы в составе ГМ существенно больше IV-VIII ($P < 0,01-0,001$), чем у женщин в возрасте ≤ 20 и ≥ 30 лет, в последующих периодах лактации эти различия становятся менее существенными ($P < 0,05$). Мы анализировали также выделение амилазы в составе ГМ в зависимости от паритета родов и от периода лактации. Как видно из данных рисунка 1 (В), выделение амилазы в составе ГМ женщин с паритетом 1-2 родов и в период лактации до 6 месяцев больше ($P < 0,05-0,01$), чем у женщин с паритетом родов более 3 и лактации более шести месяцев.

Вывод: Таким образом, содержание (ед/мл) и выделение (ед/мл/мин) амилазы в составе ГМ у здоровых кормящих матерей зависят от возраста, паритета родов и периодов лактации, что следует обращать внимание при введении прикорма и отнятии от груди.

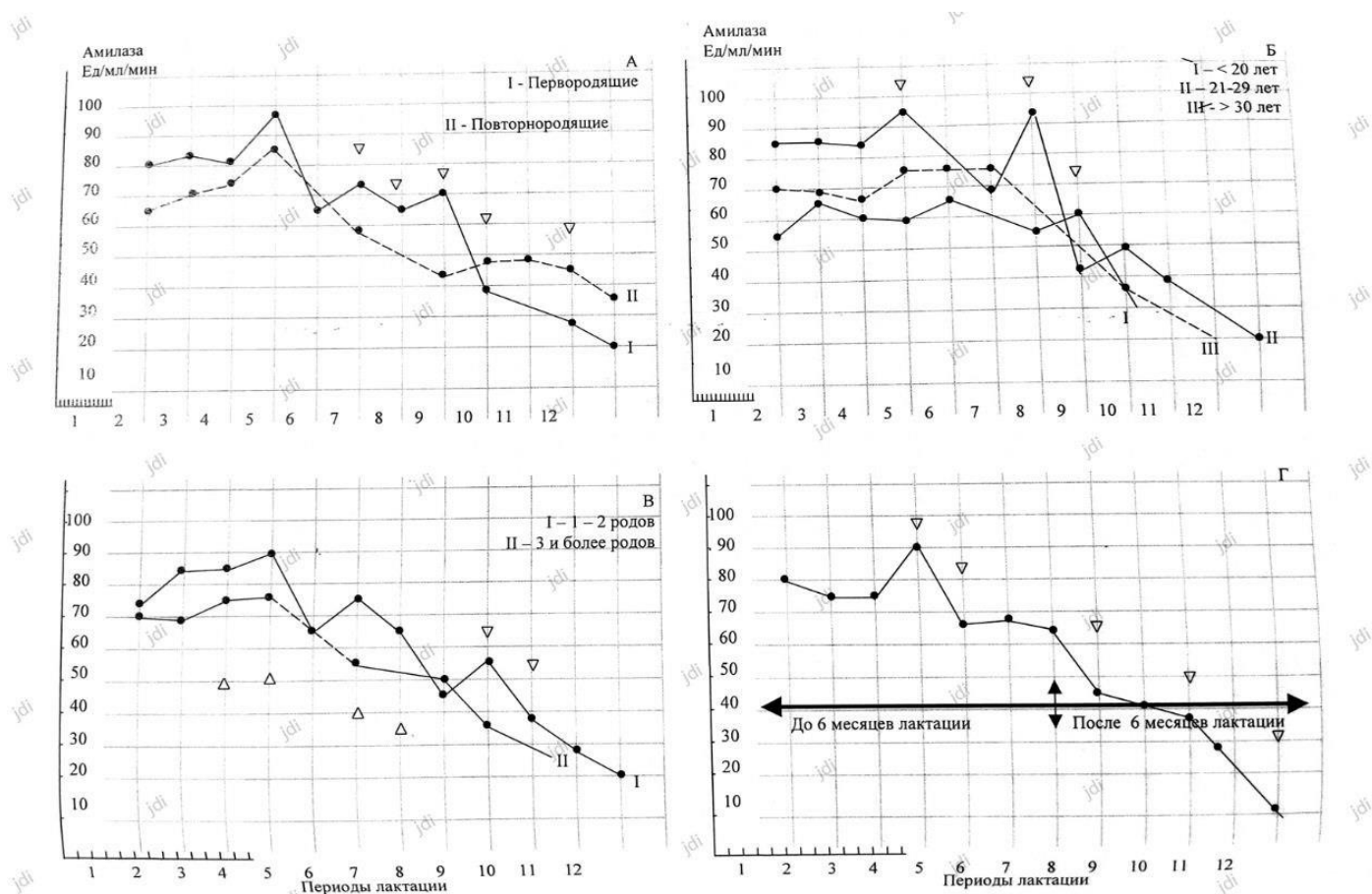


Рис.1. Содержание и выделение фермента амилазы в грудном молоке у здоровых женщин.

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*Абдурахманов А.А.
доцент
кафедры метрологии и стандартизации в.б.
ДжизПИ
Узбекистан*

ПОВЫШЕНИЕ ЭНЕРГОЭФФЕКТИВНОСТИ ПРЕДПРИЯТИЙ ПУТЕМ ВНЕДРЕНИЯ СИСТЕМЫ ЭНЕРГОМЕНЕДЖМЕНТА ISO 50001

Аннотация. Главная цель энергоменеджмента предприятия – эффективное расходование энергоресурсов и надежная работа энергосистемы организации. Международная организация по стандартизации – ISO в 2008 г. Проводила разработку нового международного стандарта, ставшего в области энергоменеджмента после утверждения 15 июня 2011 г.

Ключевые слова: энергоменеджмента предприятия, ISO 50001, конкуренции, структурой, внедрения, стандарт, сертификация.

*Abdurakhmanov A.A.
associate professor
Department of Metrology and Standardization
JizPI
Uzbekistan*

INCREASING THE ENERGY EFFICIENCY OF ENTERPRISES BY IMPLEMENTING AN ISO 50001 ENERGY MANAGEMENT SYSTEM

Annotation: the main goal of enterprise energy management is the efficient use of energy resources and reliable operation of the organization's energy system. The International Organization for Standardization - ISO in 2008. Conducted the development of a new international standard, which became in the field of energy management after approval on June 15, 2011.

Keywords: enterprise energy management, ISO 50001, competition, structure, implementation, standard, certification.

Энергоменеджмент – это передовое направление в организации и ведении бизнеса в условиях жесткой конкуренции. Главная цель энергоменеджмента предприятия – эффективное расходование энергоресурсов и надежная работа энергосистемы организации.

Международная организация по стандартизации – ISO в 2008 г. Проводила разработку нового международного стандарта, ставшего в

области энергоменеджмента после утверждения 15 июня 2011 г [1] самым инновационным стандартом. Он получил название «Системы Энергоменеджмента – Требования» и международное обозначение ISO 50001.

Система энергоменеджмента включает в себя следующие моменты: энергоснабжение; измерение, документирование и ведение необходимой отчетности об использовании энергии; выбор и закупка оборудования для производства энергии, процессов и систем. При разработке системы энергоменеджмента необходимо пройти через четыре этапа:

1. Выполнение предварительного аудита в системе управления.
2. Разработка системы энергоменеджмента и внедрение её в соответствии со стандартом ISO 50001.

3. Выполнение внутренних аудитов компании. Анализ эффективности системы энергетического менеджмента. Предсертификационный аудит [1].

4. Сертификационный аудит. (Производится согласно контракту с сертификационным органом). Внедрение системы энергетического менеджмента на предприятии обеспечивает следующие преимущества:

- расширяет и структурирует понимание значимости процессов использования энергии;
- обеспечивает системный структурированный подход к процессу интегрирования эффективного потребления энергии в корпоративную культуру, а также в практику каждодневного управления в промышленности[2].
- формирует планы для постоянного улучшения энергетических показателей;

– является организационной основой и структурой для постоянной работы по улучшению энергетических показателей независимо от смены персонала. На рис. 1 [1] показан тренд изменения энергоёмкости ВВП за 2001-2019 годы, из которого видно, что энергоёмкость снизилась с 0,738 тыс. к.н.э. / доллар до 0,152 тыс. к.н.э. / доллар или в 4,85 раза

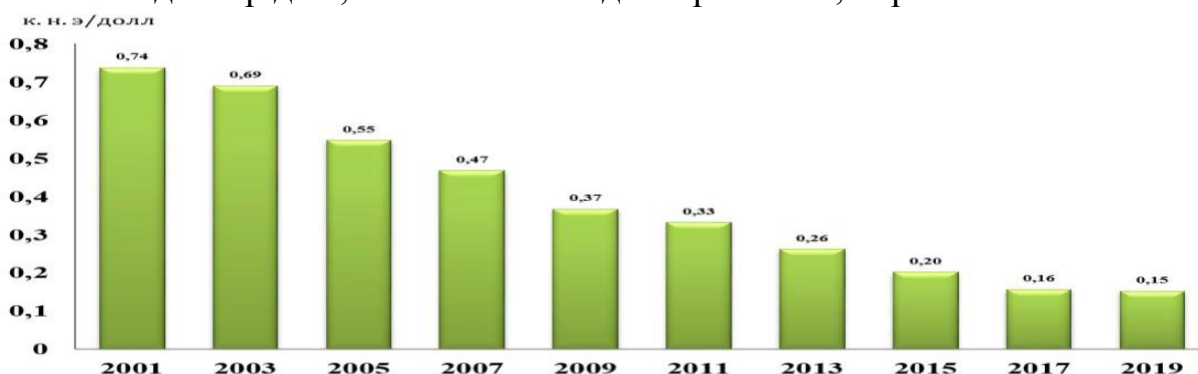


Рис.1. Динамика изменения энергоёмкости ВВП Узбекистана за 2001-2019

ГГ

Как известно, согласно Приложению 5 к протоколу Республиканской комиссии по энергоэффективности и развитию возобновляемых источников энергии № 59 от 9 ноября 2020 года утверждена целевая программа [3]. «Программа целевых показателей снижения энергоёмкости экономики на 1,5 раза к 2030 году по отраслям экономики и по видам деятельности», согласно которой министерствам, ведомствам и организациям поставлена задача уменьшения показателя энергоёмкости продукции к 2030 году до 0,0976. к.н.э/долл (в настоящее время, этот показатель составляет 0,1405 к.н.э/долл США) (рис. 2) [4].

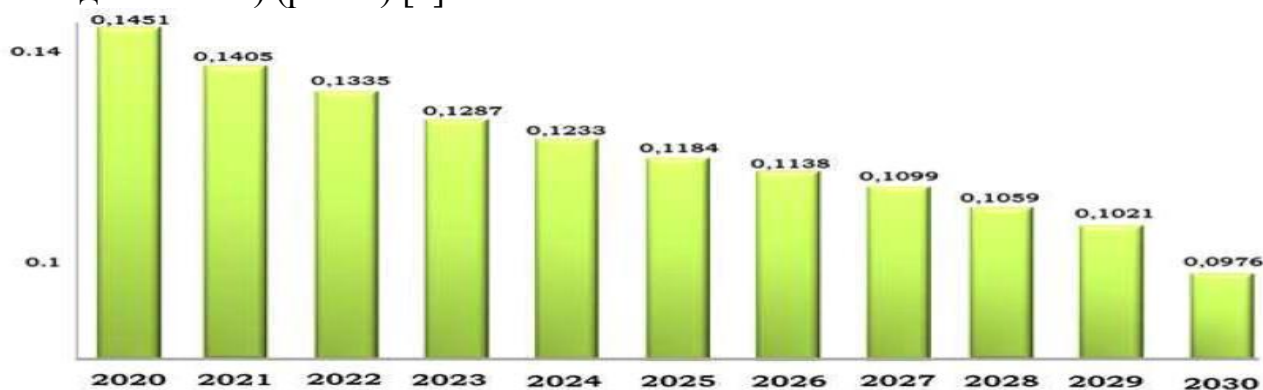


Рис.2. Динамика изменения энергоёмкости ВВП Узбекистана за 2020-2030 гг

В результате внедрения системы энергетического менеджмента по стандарту ISO 50001 обеспечивается:

- повышение инвестиционной привлекательности предприятия;
- снижение расходов до 15 % на топливно-энергетические ресурсы;
- оперативное управление энергопотреблением и затратами.

Предприятие, внедрившее и сертифицировавшее систему энергетического менеджмента, приобретает возможность [5].

- улучшить производственный цикл;
- представить доказательства функционирования системы энергетического менеджмента в соответствии с требованиями стандарта ISO 50001;
- повысить свою энергоэффективность;
- своевременно проводить эффективные мероприятия по сбережению энергии;
- реализовать планы, связанные с улучшением результативности энергосбережения методом проведения анализа текущего потребления энергии и ожидаемого;
- получать отдачу от мероприятий по энергосбережению в виде финансовой прибыли. Преимущества, которые дает сертификация[6].
- высокий уровень компетенции и авторитет в области энергетики;
- возможность прохождения энергетического аудита совместно с сертификацией по стандарту;

- опыт внедрения систем менеджмента в энергетических компаниях;
- расширение знаний и опыта в технических вопросах при реализации системы энергетического менеджмента.

Стандарт ISO 50001 обеспечивает эффективное управление затратами на топливно-энергетические ресурсы и используется в качестве инструмента для повышения эффективности и конкурентоспособности бизнеса. Рассмотрим схему (рис. 3), отображающую поведение рядового потребителя при желании снизить издержки на закупаемые энергоресурсы.



Рис. 3. Сокращение издержек на закупаемые энергоресурсы.

Дополнительным преимуществом стандарта ISO 50001 является его интегрируемость с другими стандартами:

- ISO 31000:2009 Риск-менеджмент;
- OHSAS 18001 Менеджмент охраны труда;
- ISO 9001 Системы менеджмента качества;
- ISO/IEC 27001 Информационная безопасность;
- ISO 26000:2010 Социальная ответственность;
- ISO 14001 Экологический менеджмент;
- ISO 28000 Безопасность цепи поставок и другое [5].

Новый международный стандарт формирует основу промышленных и коммерческих компаний для непрерывного улучшения их энергетической емкости – повышения конкурентоспособности, сохранения денег, сокращения загрязнений окружающей среды. Необходимо понимать, что стандарт ISO 50001 формулирует лишь требования: что должно быть сделано в организации, а как все это будет сделано – должно быть изложено в «Энергоруководстве» данного предприятия. Оно должно описывать все элементы деятельности организации, благодаря которым она обеспечивает выполнение требований стандарта ISO 50001 и деятельность персонала, вовлеченного в эту работу. Для внедрения системы энергетического менеджмента требуется наличие следующих процедур в организации [5].

- «энергопланирование»;
- обеспечение нужного уровня компетентности персонала;

– управление документацией (в том числе технической), которая обеспечивает деятельность в области энергоменеджмента;

– работа с потенциальными и фактическими несоответствиями, а, кроме того, и по принятию корректирующих и предупреждающих действий, исходя из важности по достижению энергетических целей и возможных последствий в случае, если они не будут приняты.

Информационная технология – это совокупность методов, производственных процессов и программно-технических средств, объединенных в технологическую цепочку, обеспечивающую сбор, обработку, хранение, передачу и отображение информации, позволяющих на системной основе организовать оптимальное взаимодействие между преподавателем и студентом с целью достижения результата обучения [6].

Процессы информатизации в современном обществе характеризуются совершенствованием и глобальным распространением информационно-коммуникационные технологии (ИКТ). Особенностью этого процесса является накопление, хранение, использование, передача информации, которая воспроизводится с помощью современных средств вычислительной техники [7].

Принимая во внимание технической информации, полученные через интернет, а также с самыми передовыми направлениями высокоразвитого современного производства: стандартизацией и унификацией в производстве, организацией труда на научной основе, с технологией подготовки деталей и сборки машин-механизмов, средств измерений, с рациональным использованием различных материалов предоставляет возможность подробно ознакомиться и используя перечисленные позиции в качестве показателей оценки, сформируем обобщенный критерий как продуктивность учебной деятельности [8,9,10].

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*Абдурахманов А.А.
доцент
Джизакский политехнический институт
Эшанкулова М.Н.
ассистент
Джизакский политехнический институт*

МЕЖДУНАРОДНЫЕ СТАНДАРТЫ КАЧЕСТВА И СЕРТИФИКАЦИЯ

Аннотация: в статье рассмотрены виды международных стандартов качества и ведение сертификации продукции, что обуславливает выпуск качественной продукции, где ведется непрерывный контроль соответствующими органами процесс выпуска продукции.

Ключевые слова: тестирование, сертификация, эксперт-аудитор, Международная организация по стандартизации (ИСО), международно-экономический, конкурсный, стандартный.

*Abdurakhmanov A.A.
associate professor
Jizzakh Polytechnic Institute
Eshankulova M.N.
assistant
Jizzakh Polytechnic Institute*

INTERNATIONAL QUALITY STANDARDS AND CERTIFICATION

Annotation: the article considers the types of international quality standards and the conduct of product certification, which determines the release of high-quality products, where the process of product release is continuously monitored by the relevant authorities.

Keywords: testing, certification, expert auditor, International Organization for Standardization (ISO), international economic, competitive, standard.

В современных условиях возрастает необходимость улучшения качества всей выпускаемой продукции, повышения ее конкурентоспособности, регулярного ее испытания для развития торговли, международных экономических связей, научно-технического сотрудничества с зарубежными странами. Тестирование часто проводится лицом или организацией, называемой третьей стороной. Испытующая организация (лицо) действует полностью независимо, защищая интересы всех субъектов экономической деятельности, в первую очередь поставщика

(первая сторона) и покупателя (вторая сторона) [1,2]. Понятие сертификации в широком смысле продукта или процесса соответствие техническому стандарту, методу работы, правилу третьей стороны любая проведенная проверка. Поэтому сертификационная проверка Учитывая это, следует понимать условный контроль, проводимый органами технического контроля для обеспечения безопасности при эксплуатации сосудов под давлением, взрывозащищенных устройств, кораблей, поплавков, самолетов, ядерных реакторов и горного оборудования [3,4,5]. Субъектом, активно участвующим в деятельности, связанной с сертификацией, является эксперт-аудитор. Обычно он может заниматься сертификацией систем качества, производственных процессов и продукции, а также аккредитацией испытательных лабораторий. В качестве эксперта-аудитора учреждений и предприятий в сфере сертификации сертифицированному лицу, имеющему право оценивать и контролировать деятельность говорят. В качестве эксперта-аудитора в порядке, установленном «Уздавстандартом». аттестованные опытно-производственные предприятия, научные, образовательные и проектные учреждения, а также частное лицо, обладающее достаточными глубокими знаниями и опытом работы с установленными нормативными документами и экспериментально-испытательными средствами [1].

Эксперт-аудитор выполняет следующие задачи:

- сертификация продукции, процессов, услуг, систем качества и производства;
 - контроль описания сертифицированной продукции, процессов и услуг,
- а также сертифицированных систем качества и стабильности производства;
- контроль деятельности органов по аккредитации, испытательных лабораторий по сертификации;
 - дать рекомендации по сертификации.

Эксперты-аудиторы имеют определенные права и обязанности в отношении возложенных на них ответственных обязанностей. [4]. В настоящее время широко соблюдаются международные стандарты ISO серии 9000. Стандарты данной серии являются основными стандартами контроля и оценки качества, предназначенными для внедрения систем качества в глобальном масштабе – международных моделей и служат для координации деятельности в следующих областях:

- ISO 9000 – «Стандарты общего менеджмента качества и обеспечения качества. Рекомендации по выбору и применению»;
- ISO 9001 – «Системы качества. Модель, обеспечивающая качество при проектировании, производстве, сборке и использовании»;
- ISO 9002 – «Системы качества. Модель обеспечения качества при производстве и сборке»;

- ISO 9003 – «Системы качества. Модель обеспечения качества при комплексном контроле и тестировании»;
- ISO 9004 – «Элементы всеобщей системы менеджмента качества. Руководящие указания»;
- ISO 10011 – «Руководство по аудиту системы качества»;
- ISO 10012 - «Требования, обеспечивающие качество средств измерений».

В нашей республике существует специальный стандарт, обеспечивающий единство терминов и определений в области сертификации. Этот стандарт – УзРСТ 5.5-93. Называется терминами и определениями. Настоящий стандарт определяет определения терминов и основных понятий, используемых в области сертификации в области науки и техники. Определения этих же основных терминов даны в Законе Республики Узбекистан «О сертификации продукции и услуг» и ряде национальных стандартов. Термины, приведенные в стандарте, должны использоваться в официальных документах так, как они определены в стандарте. В таких документах вместо стандартизированного термина запрещается использовать его синоним. Однако форма определения определений, значение понятий при необходимости допускается изменение без нарушения лимита [4].

Процессы информатизации в современном обществе характеризуются совершенствованием и глобальным распространением информационно-коммуникационные технологии (ИКТ). Особенностью этого процесса является накопление, хранение, использование, передача информации, которая воспроизводится с помощью современных средств вычислительной техники [6].

Специалисты по метрологии и стандартизации отраслей народного хозяйства должны регулярно повышать свое знание по техническому регулированию. Известно большое число работ, посвященных выбору целевой функции и критериев оптимизации при решении различных технических задач [7,8,9].

Для примера эффективность реализации производимой сельскохозяйственной продукции АПК во многом определяется выбором оптимальной структуры их распределения на основе товарно-денежных отношений. В этой связи представляется необходимым провести анализ сложившейся структуры реализации данной продукции [10,11,12].

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*Адихамжонов Ш.Б.
Андижанский государственный медицинский институт
Узбекистан, г.Андижан*

СРАВНИТЕЛЬНОЕ ИЗУЧЕНИЕ ГЕМОДИНАМИКИ ПРИ ЭПИДУРАЛЬНОЙ И СПИНАЛЬНОЙ АНЕСТЕЗИИ ВО ВРЕМЯ ТРАНСУРЕТРАЛЬНЫХ ВМЕШАТЕЛЬСТВ У БОЛЬНЫХ ПОЖИЛОГО И СТАРЧЕСКОГО ВОЗРАСТА

В настоящее время эпидуральная анестезия (ЭА) и спинальная анестезия (СА) широко применяются как при открытых, так и эндоскопических хирургических вмешательствах, в том числе и при проведении трансуретральных (ТУ) вмешательств [1, 8, 20]. Известно, что значительная часть ТУ операций осуществляется у лиц пожилого и старческого возраста. В то же время, применение ЭА и СА у геронтологических больных имеет ряд особенностей, обусловленных, в первую очередь, влиянием факторов анестезии на состояние кровообращения [9, 10, 17, 18]. Учитывая вышеизложенное, целью настоящей работы явилось сравнительное изучение влияния ЭА и СА на показатели гемодинамики при проведении ТУ вмешательств у больных пожилого и старческого возраста.

*Adihamzhonov Sh.B.
Andijan State Medical Institute
Uzbekistan, Andijan*

COMPARATIVE STUDY OF HEMODYNAMICS DURING EPIDURAL AND SPINAL ANESTHESIA DURING TRANSURETHRAL INTERVENTIONS IN ELDERLY AND SENILE PATIENTS

The outcomes of the research showed that in both EA and SA groups were reductions the BP_{syst.}, BP_{dias.} and BP_{mid.}, but hemodynamic disorders in SA becomes early and more reduction of HR showed in EA group. Changes in hemodynamic connected with the physiological reorganization of the cardiovascular system occurring in reply to development of desimpatisation in the area of anesthesia and have a mono- directed character, and commonly independent from the type of used anesthesia method. The author discuss about relationship between changes of different parameters of hemodynamic in groups of EA and SA.

МАТЕРИАЛЫ И МЕТОДЫ. Изучены изменения параметров гемодинамики на этапах анестезии и операции у 49 пациентов в возрасте от 67 до 86 лет. Среди обследованных больных было 44 мужчин (89,8%) и 5

женщин (10,2%). Больным проводились различные ТУ вмешательства, характеристика которых приведена в таблице 1. При проведении ТУ вмешательств использовалась техника трансуретральной резекции (ТУР), трансуретральной вапоризации (ТУВ) и трансуретральной литотрипсии. ТУ вмешательства осуществлялись с помощью аппаратов фирмы "Siemens".

Как указано в таблице 1, обследованные нами больные, в зависимости от использованного при вмешательствах метода анестезии, были выделены в 2 группы. У больных 1-й группы (27 человек) использовалась ЭА. Пункция эпидурального пространства производилась с помощью техники "потери сопротивления" в области L2-L5 с помощью иглы Tuohy размером 18G. После этого в эпидуральное пространство вводили катетер 20G и продвигали его в краниальном направлении на 3-4 см. В качестве местных анестетиков (МА) использовали 2% раствор лидокаина (20-28 мл) с добавлением адреналина (1:200000).

У больных 2-й группы (22 человек) в качестве метода обезболивания при ТУ вмешательствах применялась СА. Спинальная пункция производилась с помощью спинальных игл размером 25G, 26G, 27G в межпозвоночных промежутках L3-L4 и L4-L5. В качестве МА использовали изобарические растворы 1,5% новокаина (4,0-8,0 мл), 2% лидокаина (2,5-3,5 мл) или 0,5% бупивакаина (3 мл).

Контроль за качеством обезболивания проводили на основании оценки глубины сенсорного блока (с помощью 3-х бального теста "pin prick"), латентного периода блокады, определения заблокированного верхнего сегментарного дерматома (сегментарный уровень блока), глубины моторного блока (по шкале P.Bromage) и продолжительности анестезии. Оцениваемые нами параметры гемодинамики регистрировались на 4-х этапах исследования: 1-й этап - до анестезии, 2-й этап - перед началом операции, 3-й этап - на середине вмешательства, 4-й этап - после окончания операции. При этом изучали динамику систолического артериального давления (АДсист.), и диастолического АД (АДдиаст.), пульсового АД (АДпульс.), среднего АД (АДсред.), частоты сердечных сокращений (ЧСС), а также индекса "ДхЧ" (произведение АДсист. и ЧСС). Проводился также мониторинг насыщения крови кислородом (SaO₂). Полученные в ходе исследования данные обработаны статистически с применением методов вариационной статистики и оценкой достоверности сравниваемых значений по критерию Стьюдента.

Таблица 1. Характеристика трансуретральных вмешательств и распределение больных в группы

Трансуретральные вмешательства	1-я группа (ЭА)	2-я группа (СА)	Всего
1. Диагностические трансуретральные процедуры при раке простаты и опухолях мочевого пузыря	—	3	3
2. Механическая литотрипсия камней мочевого пузыря	3	—	3
3. ТУР доброкачественной гиперплазии простаты	12	9	21
4. ТУР опухолей мочевого пузыря	3	4	7
5. ТУВ опухолей мочевого пузыря	1	3	4
6. ТУВ простаты и опухолей мочевого пузыря	1	—	1
7. ТУВ опухолей мочевого пузыря и ТУР простаты	2	—	2
8. ТУР простаты и литотрипсия камней мочевого пузыря	5	—	5
9. ТУР контрактуры шейки мочевого пузыря	—	3	3
Всего	27	22	49

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЕ. Полученные в ходе исследования результаты приведены в таблице 2. Как видно из этой таблицы изменения показателей гемодинамики в группах больных с ЭА и СА в целом имеют однонаправленный характер, выражающийся статистически достоверным снижением АДсист., АДдиаст. и АДсред. Однако, выраженность изменений некоторых показателей, а также их динамика на отдельных этапах исследования существенно различается.

Учитывая рекомендации о том, что с целью контроля состояния гемодинамики во время анестезии наиболее рациональным среди параметров АД считают учет изменений АДсред. [8, 11], мы, в первую очередь остановимся на сравнительной динамике этого показателя. Таким образом, на фоне снижения средних значений АДсред. у больных обеих групп на всех этапах исследования, наиболее выраженная гипотензия отмечалась на 2-м и 3-м этапах, то есть, после наступления анестезии и приблизительно на середине вмешательства. Однако, если при ЭА максимальное снижение АДсред. отмечалось на 3-м этапе, при СА это приходилось на 2-й этап исследования. При этом, если у больных обеих

групп исходные значения показателей гемодинамики принять за 100%, то максимальное снижение АД_{сред.} (на 22,5%) наблюдалось в группе больных с ЭА на 3-м этапе, в то время как максимальное снижение АД_{сред.} (на 26,3%) у больных с СА отмечено на 2-м этапе исследования.

Анализируя причины указанных расхождений в выраженности гипотензии можно сделать предположение о том, что сравнительно раннее развитие гипотензии при СА связано с характерным для данного блока коротким латентным периодом и быстрым воздействием введенного непосредственно в ликвор анестетика на нервные элементы периферических отделов спинного мозга и спинномозговых корешков [2, 9, 16].

Таким образом, при субарахноидальном блоке анестезия (в том числе и симпатическая блокада) наступают значительно раньше, что и ведет к быстрым гемодинамическим расстройствам, в особенности у пациентов с недостаточной предшествующей волемиической нагрузкой. Степень выраженности и глубина гемодинамических расстройств при сегментарных блокадах определяются, главным образом, адаптационными возможностями организма. Ввиду этого у лиц пожилого и старческого возраста важность ожидаемых расстройств системы кровообращения при СА приобретает первостепенное значение [14, 17, 18].

Сравнительно более позднее наступление гемодинамических расстройств при ЭА объясняется необходимостью большего времени для достижения введенного в эпидуральное пространство раствора МА до необходимых для блока спинальных нервных структур. Однако, с другой стороны, при этом проявляется системное действие МА, который постепенно подвергаясь абсорбции в сосуды эпидурального пространства, в свою очередь способствует усилению гипотензии [5, 6, 11].

Динамика ЧСС в группах больных с ЭА и СА также отличалась. Хотя в целом у больных обеих групп отмечалась однонаправленная тенденция к брадикардии, при СА достоверное уменьшение ЧСС отмечалось только на 2-м этапе исследования. Так, при ЭА выраженное снижение ЧСС отмечалось в течение всего периода анестезии: на 20,4% - на 2-м этапе, 18,5% - на 3-м этапе и на 11,2% - на 3-м этапе исследования, в сравнении с исходными значениями. При СА снижение ЧСС на вышеуказанных этапах исследования составило, соответственно: 9,8%, 6% и 3,2%, причем, последнее значение оказалось статистически недостоверным в сравнении с исходными параметрами. Известно, что в отличие от СА, более выраженная и продолжительная тенденция к брадикардии при ЭА объясняется отрицательным инотропным влиянием плазменных концентраций МА, так как при ЭА используются большие дозы МА, часть которого постепенно абсорбируется в сосуды эпидурального пространства [5, 10].

Таблица 2. Изменения некоторых показателей системной гемодинамики при эпидуральной и спинальной анестезии (M± m)

Показатели (ед.измер.)	До анестезии (1-й этап)		Перед началом операции (2-й этап)		На середине вмешательства (3-й этап)		После окончания операции (4-й этап)	
	ЭА	СА	ЭА	СА	ЭА	СА	ЭА	СА
АД _{сист.} (мм рт.ст.)	138,1±7,3 –	140,3±7,5 –	114,8±6,4 P<0,001	103,3±5,9 P<0,001	105,5±6,3 P<0,001	110,2±7,6 P<0,001	110,6±6,3 P<0,001	117,5±9,1 P<0,01
АД _{диаст.} (мм рт.ст.)	87,9±5,6 –	89,5±5,5 –	74,8±5,0 P<0,01	64,4±4,3 P<0,001	65,7±4,7 P<0,001	69,0±4,9 P<0,001	71,2±4,9 P<0,001	76,1±5,0 P<0,01
АД _{пульс.} (мм рт.ст.)	49,8±3,7 –	50,7±3,7 –	41,1±3,2 P<0,05	39,0±3,0 P<0,001	40,0±3,1 P<0,01	40,9±3,2 P<0,01	39,6±3,3 P<0,01	41,3±3,6 P<0,05
АД _{сред.} (мм рт.ст.)	102,5±6,9 –	106,0±7,0 –	88,1±6,6 P<0,01	78,1±6,5 P<0,001	79,4±5,9 P<0,001	82,6±6,3 P<0,001	84,2±6,3 P<0,001	89,7±6,4 P<0,01
ЧСС (уд/мин)	90,2±5,2 –	89,9±5,0 –	71,8±4,1 P<0,001	81,1±4,4 P<0,01	73,5±4,3 P<0,001	84,5±4,7 P>0,05	79,4±4,3 P<0,01	87,0±4,9 P>0,5
Индекс "Д×Ч"	12455±521 –	12615±493 –	8246±317 P<0,001	8375±330 P<0,001	7760±302 P<0,001	9310±359 P<0,001	8782±388 P<0,001	10219±410 P<0,001

Примечание: показатели достоверности указаны в сравнении с 1-м этапом исследования в соответствующих группах больных.

Сравнение полученных нами результатов с данными других исследований показывает, что степень выраженности гемодинамических расстройств во время трансуретральных вмешательств у пациентов пожилого и старческого возраста также может варьировать в широких пределах. Так, Б.М.Стрелец и соавторы [15] отмечают, что после ЭА 2% раствором лидокаина на уровне L1-2 в дозе 1-1,5 мл на 1 спинальный сегмент после развития анестезии отмечено снижение СВ на 7-18%, ОЦК - на 5-15%, парциального давления кислорода на 8-15%. По данным других авторов глубокая гипотония была отмечена только у 9 пациентов из 190 прооперированных под ЭА, что составляло 4,7% [3] или же величина систолического АД у больных данной категории снижалась не более чем на 10-15% от исходных значений [6, 10].

Кузьмич А.А. и соавторы [9], проанализировав течение СА при трансуретральных вмешательствах у геронтологических больных, пришли к заключению, что АД_{сред.} в ходе анестезии снижалось на 10-20% от исходного уровня. Более выраженная артериальная гипотензия наблюдалась только у 4 больных (3,8%). Другие авторы выявили снижение АД, в сравнении с исходными данными, в среднем, на 13,8%, а ЧСС - на 12,8% [7] или же развитие значимой гипотензии при СА 2% раствором лидокаина, потребовавшим срочной инфузии кристаллоидов и коллоидов в сочетании с вазопрессорами, только у 1 больного из 45 обследованных [13]. Леонов А.В и соавторы [12] также указывают на явное преимущество СА у больных пожилого и старческого возраста во время трансуретральных вмешательств по сравнению с тотальной внутривенной анестезией.

На наш взгляд, разноречивость литературных данных, а также наших результатов, может зависеть также от методики сбора данных при проведении сегментарных блокад. Известно, что на практике с целью коррекции гипотонии при ЭА и СА используют дробное введение малых доз вазопрессоров. Ввиду этого гемодинамические параметры очень сильно зависят от соотношения времени введения вазопрессоров и времени

регистрации параметров гемодинамики. Отмеченные у наших больных более выраженные изменения гемодинамических параметров мы объясняем тем, что регистрация параметров производилась нами на высоте гипотензии или брадикардии, а затем проводилась их фармакологическая коррекция. На наш взгляд, такая методика регистрации данных обеспечивает более объективные результаты исследования, мало подверженные воздействию корригирующих доз периодически используемых вазопрессоров и холинолитиков.

В заключении следует остановиться на клинической значимости выявленных нами изменений гемодинамики во время анестезии при ТУ операциях. Естественно, что операция и анестезия являются экстремальным состоянием для организма больных пожилого и старческого возраста. Известно, что безопасность анестезиологического обеспечения при сегментарных блокадах определяется минимальностью угнетения жизненно-важных органов и систем, главным образом сердечно-сосудистой системы [2, 12, 14, 19]. Однако, смысловое значение терминов "угнетение кровообращения" или "угнетение миокарда" при проведении общей анестезии и регионарной анестезии нельзя считать однозначным. В настоящее время не требуется дополнительных доказательств того, что подавляющее большинство препаратов для общей анестезии обладают прямым депрессивным влиянием на миокард [4, 19]. При этом нередко условия работы сердечной мышцы дополнительно затрудняются в результате увеличения постнагрузки на миокард, связанной с подъемом АД, а значит и общего периферического сосудистого сопротивления (ОПСС) (в момент интубации трахеи, на высоте хирургической травмы, во время экстубации и т.д.). Естественно, это влечет за собой неблагоприятные последствия у больных геронтологического профиля, обладающих ограниченными компенсаторными возможностями сердечно-сосудистой системы.

С другой стороны, "угнетение кровообращения" при проведении сегментарных блокад не следует понимать дословно. Сразу же отметим, что в нашем исследовании речь идет о люмбальных блоках, при которых исключено прямое симпатиколитическое влияние на нервные структуры миокарда. Таким образом, при люмбальной СА (естественно, если проведена безошибочная техника) полностью исключено отрицательное ино- и хронотропное влияние МА на миокард. Поэтому, отмечающееся при этом снижение АД (а значит и ОПСС) обусловлено исключительно симпатиколлизисом в зоне развившейся блокады. Сопутствующее этому снижению постнагрузки имеет положительное влияние на миокард, облегчая его работу. В данных условиях с целью предупреждения неблагоприятных гемодинамических воздействий СА наиболее важным является: 1) обеспечение достаточного венозного возврата с целью исключения снижения ЦВД; 2) предупреждение значительного снижения АД, в осо-

бенности АДдиаст., так как кровенаполнение коронарных артерий происходит именно в период диастолы.

Если вышеуказанные условия соблюдаются, то для работы сердечно-сосудистой системы у геронтологических больных в период СА создаются принципиально более выгодные условия, в сравнении с различными вариантами общей анестезии. Подтверждением этому является обнаруженное нами снижение показателя "ДхЧ" (на 32,6%, 21,2% и 9% на 2-м, 3-м и 4-м этапах исследования, в сравнении с исходными значениями). Наблюдения показывают, что показатель "ДхЧ" изменяется в соответствии с прямой корреляционной зависимостью от потребностей миокарда в О₂. Даже допуская определенный субъективизм при оценке этого показателя (так как он не основан на методах прямой оценки потребности миокарда в кислороде), по меньшей мере следует согласиться с тем, что снижение постнагрузки на миокард способствует уменьшению потребности в О₂. В этих условиях даже уменьшение коронарного кровотока, вызванного снижением системного АД, не сопровождается гипоксией миокарда [2, 8, 11].

В сравнении с СА, при ЭА отмечалось несколько более выраженное снижение индекса "ДхЧ" (на 33,8%, 37,7% и 19,5% на 2-м, 3-м и 4-м этапах исследования, в сравнении с исходными значениями). Расчеты показывают, что причиной более выраженного снижения индекса "ДхЧ" при ЭА является наблюдавшаяся при этом более выраженная брадикардия. Логично предположить, что фармакологическое влияние абсорбированного из эпидурального пространства МА, являющимися, как известно еще и антиаритмическим препаратом, способствует уменьшению ЧСС. Следует отметить, что развитие выраженной брадикардии при сегментарных блокадах может привести к нежелательным коллаптоидным изменениям кровообращения. Ввиду этого проведение ЭА у больных геронтологического профиля требует еще более тщательного мониторинга ЧСС и своевременного применения холинолитических (атропин) или (α-адренергических, обычно, эфедрин) препаратов. Помимо этого, при ЭА определенную пользу в плане снижения плазменных концентраций таких препаратов, как лидокаин, приносит использование вместе с МА адреналина, который уменьшает всасывание МА в сосуды эпидурального пространства [8, 15, 18].

Таким образом, проведенное нами исследование показывает, что при тщательном соблюдении техники и обоснованном подборе вида и дозы используемого МА, как СА, так и ЭА, в сравнении с общей анестезией, создают принципиально более выгодные условия для функционирования сердечно-сосудистой системы во время проведения ТУ вмешательств у больных пожилого и старческого возраста.

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*Азимова Ф.Х.
Жиззах политехника институти
“Хорижий тиллар” кафедраси ўқитувчиси
Максимова Н.Л.*

И. Н. Улянова номидаги Чуваш давлат университети доценти

НЕФТЬ-ГАЗ САНОАТИДА СТРАТЕГИК КОМПЕТЕНЦИЯ ТУШУНЧАСИ ВА МАЗМУН-МОҲИЯТИ

Аннотация. Мазкур мақолада нефть-газ саноатида стратегик компетенция тушунчаси ўзига хос хусусиятлари ёритилган. Шунингдек, коммуникатив компетенция таркибига лингвистик, социолингвистик, ижтимоий, ижтимоий-маданий, дискурс, таянч, касбий компетенциялар билан бирга стратегик компетенцияни тўғрида маълумот берилган.

Калит сўзлар: компетенция, стратегик компетенция, лингвистик, социолингвистик, ижтимоий, ижтимоий-маданий, дискурс, таянч, касбий.

*Azimova F.Kh.
teacher*

*"Foreign Languages" department
Jizzakh Polytechnic Institute*

*Maksimova N.L.
associate professor*

Chuvash State University named after Ulyanov

THE CONCEPT AND CONTENT OF STRATEGIC COMPETENCE IN THE OIL AND GAS INDUSTRY

Annotation. This article covers the peculiarities of the concept of strategic competence in the oil and gas industry. Also, the content of communicative competence is given information on the correctness of strategic competence along with linguistic, sociolinguistic, social, socio-cultural, discursive, base, professional competencies.

Keywords: competence, strategic competence, linguistic, sociolinguistic, social, socio-cultural, discourse, base, professional.

Йиллар давомида “стратегик компетенция” тушунчаси вақти-вақти билан тадқиқотчиларнинг эътиборини тортади. Коммуникатив компетенция таркибига лингвистик, социолингвистик, ижтимоий, ижтимоий-маданий, дискурс, таянч, касбий компетенциялар билан бирга стратегик компетенцияни ўз ичига олади. Коммуникатив компетенциянинг таркибий қисмлари сифатида стратегик компетенция умумэътироф этилган бўлса ҳам “стратегик компетенция” тушунчасида ҳали ҳам ноаниқлик мавжуд. Бироқ,

яқин вақтгача ўқитувчилар ва тилшунослар маданиятлараро мулоқот жараёнининг ташқи кўринишларига кўпроқ қизиқиш билдиришган. Бундай мулоқотга имкон берадиган шахс компетенциясига етарлича эътибор берилмади ва бу эса, биринчи навбатда, стратегик компетенцияга таъсир кўрсатди. Асосий концепцияси бўлган “стратегик компетенция” компетенция ва стратегия каби иккита компонентлардан ташкил топади.

Стратегик компетенция – компенсатор кўникма ва қобилиятларни (талабаларнинг мулоқот жараёнида юзага келадиган қийинчиликларни енгиш қобилияти) ўрганиш кўникмаларини (олинган билимлардан мустақил фойдаланиш ва ўз билимлари ва бошқа одамларнинг билимларини тўғри баҳолаш қобилияти) ўз ичига олади.

Хорижий тилларни ўқитишда стратегик компетенция тушунчасига бир қатор таърифлардан фойдаланилиб келмоқда.

Хорижий тилларни ўқитишда стратегик компетенция тушунчасига таърифлар

№	Стратегик компетенция	Стратегик компетенциянинг мазмун-моҳияти
1.	Стратегик компетенция	коммуникация бўлмаганда вербал ва невербал воситалардан фойдаланиш қобилияти
2.	Стратегик компетенция	турли коммуникатив вазифаларни бажаришда самарали стратегияларни танлаш ва қўллаш қобилияти; умумий кўникмаларни эгаллашда: аниқ коммуникатив вазифаларни жорийланишда режа ишлаб чиқиш; режаларни бажариш; коммуникацияни такомиллаштиришда коммуникатив мулоқотни эгаллашни баҳолаш; билим ёки қобилиятлар етарли бўлмаган мулоқот вазиятларга тайёргарлиги ва кўникмалари; самарали умумий ўқув кўникмаларидан фойдаланиш; аниқлаштирувчи саволларни бериш
3.	Стратегик компетенция	компенсатор кўникма ва малакалари, ўқиш муҳимлигини назоратга олувчи кўникма ва малакалар, турли манбалардан мустақил билим эгаллаш йўллари, турли режимда ўқувчиларни ишлаш қобилиятини баҳолаш, ўқитишнинг техник воситаларидан фойдаланиш қобилияти
4.	Стратегик компетенция	бу оғзаки ёки оғзаки бўлмаган (таклид, имо-ишора) воситалар билан мулоқот қилишда тилни билишдаги камчиликларни қоплаш қобилияти
5.	Стратегик компетенция	бу мулоқот жараёнида тилни билмаслик, шунингдек, чет тилида нутқ ва ижтимоий мулоқот тажрибасини тўлдириш қобилияти

Юқорида қайд этилган таҳлилларга асосан коммуникатив компетенциянинг таркибий қисмларини ўрганиш шуни кўрсатдики, чет тилидаги коммуникатив компетенциянинг муҳим таркибий қисми сифатида стратегик компетенция кўриб чиқилган. Бироқ, ушбу компетенция чет тили муаммоларини ҳал қилишнинг мақбул усулларини излашда муҳим аҳамиятга эга бўлишига қарамай мулоқот фаолиятида ушбу концепциянинг

мазмуни ҳақида мунозаралар бир неча ўн йиллар давомида давом этмоқда. Натижада стратегик компетенциянинг турлари тадқиқотларда шакллана бошланди.

Тадқиқотчи Р.Оксфорд томонидан аниқланган ўқув стратегияларни ўрганишга ва ривожлантириш жухатларига тадқиқотимизда аҳамият қаратдик. Ўқув стратегияларига қуйидагилар киради:

ўрганилаётган чет тилида мулоқот қилиш учун зарур бўлган тилнинг таркибий элементларини (грамматик, лексик, фонетик) билиш ва уларни оғзаки ва ёзма мулоқот ҳолатларида қўллаш кўникма ва малакалари;

чет тилида мулоқот қилишда зарур бўлган нутқни ташкил этувчи формулалар тўпламини билиш ва эгаллаш;

кўп тилли суҳбатдошлар ўртасида алоқа ва ўзаро тушунишни ўрнатишга имкон берадиган оғзаки ниятни амалга ошириш қобилияти;

тил ва нутқ ҳодисаларининг миллий-маданий хусусиятларини билиш;

чет тилидаги алоқа жараёнида коммуникатив қийинчилик шароитида оғзаки компенсатор воситаларини билиш;

тил, прагматик ва ижтимоий-маданий табиатни тўлдириш учун ишлатиладиган ўрганилаётган чет тили маданияти вакилларининг коммуникатив хатти-ҳаракатларининг оғзаки бўлмаган элементлари ҳақидаги билимлар;

Нутқ фаолияти турлари учун ўқув стратегик компетенцияси қуйидаги кўникма ва қобилиятлар билан ифодаланиши мумкин ҳамда ўқув стратегик компетенциясини ривожлантириш машқлар тизимини тавсия этамиз. Ушбу стратегияларни ишлаб чиқиш учун машқлар тизими қуйидагиларга қаратилган:

- 1) ассоциатив прогнозлаш;
- 2) таркибий ва семантик прогнозлаш;
- 3) дедукция/индукция;
- 4) ассоциатив семантика;
- 5) интернационализм сўзларини аниқлаш;
- 6) морфологик реконструкция;
- 7) сўзларнинг мослиги;

Хулоса қилиб айтганда, инглиз тилини ўқитишда талабаларнинг стратегик компетенциясини ривожлантириш ўқув стратегияларининг турларини фарқлаш имконини беради, нефть-газ саноатига оид терминлар типологияси моддалар, нефть-газ геофизикаси, нефть-газ қайта ишлаш маҳсулотлари, нефть-газ қайта ишлаш моддалари ва маҳсулотларининг хусусиятлари, технологик жараёнлар ва операциялар, жиҳозлар ва ускуналар. нефть-газ саноатида ишлаб чиқариш, ташиш ва реализация қилиш иштирокчилари, нефть-газ қазиб олиш соҳасидаги ҳужжатлар каби мавзулар бўйича гуруҳлаштириш имконини беради. Бунда нефть-газ саноатига оид матнларни таржима қилишдаги қийинчиликларни аниқлашни талаб этади.

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*Акбаров А.А.
Ўзбекистон Республикаси Фавқулотда вазиятлар вазирлиги
Фуқаро муҳофазаси институи
II босқич магистратура талабаси*

РАДИОНУКЛИДЛАР БИЛАН ЗАРАРЛАНГАН ХУДУДНИ ЧЕГАРАЛАШ ВА БАРТАРАФ ЭТИШ УСУЛЛАР, УЛАРНИНГ АСОСЛАРИ

Аннотация. Ушбу мақолада, нурланиши юқори бўлган ҳудудлардаги муаммолар, радионуклидлар билан зарарланган ҳудудларни чегаралаб қўйиши, у ердаги муаммоларни ҳал этиш усуллари ва сабаблари тўғрисида сўз юрутилган.

Калит сўзлар: радионуклид, нурланган ҳудуд, радиоактив модда, радиация, чегаралаш, изотоп, радиоактив изотоп, сунъий нуклид, табиий нуклид.

*Akbarov A.A.
II stage graduate student
Ministry of Emergency Situations of the Republic of Uzbekistan
Institute of Civil Protection*

METHODS OF DELIMITING AND ELIMINATING AREA DAMAGED BY RADIONUCLIDES, THEIR BASIS

Abstract. This article talks about the problems in the areas with high radiation, demarcation of the areas affected by radionuclides, methods and reasons for solving the problems there.

Key words: radionuclide, irradiated area, radioactive substance, radiation, limitation, isotope, radioactive isotope, artificial nuclide, natural nuclide.

Кириш.

Барчамизга маълумки кучли нурланиш нафақат инсон, балки бутун тирик жонзотлар ва ўсимликлар учун ҳам нурланиш жуда зарарли ҳисобланади. Ана шу нурланиш бизга маълум бўлган ядровий портлашдан ҳосил бўлган кучли чакнаш сабабли юзага келган нурланиш орқали инсон организми мисли кўрилмаган даражада радиацияланади. Ёруғлик нурланишида келиб чиқган нурланувчи радионуклидлар ўта хавфли ҳисобланиб кучли куйишга олиб келади. Мана шундай ҳудудларда нурланувчи изотоплар инсон организмига, яъни ичак фаолиятига тушса ичак деворларидаги микроорганизмларни ҳимоя қилувчи қобикларга шикаст етказди, бунинг натижасида инсон ички организмларида турли

Ўсимталар пайдо бўла бошлайди. Радиацияланган ҳудудлардаги инсоннинг яшаш доимийлиги сустлашади. Ер усти ва ер ости ядровий портлашлар натижасида радиоактив моддалар ер юзасига ҳаво ва тупроқ билан аралашган ҳолда ҳаво оқими бўйлаб секин-асталик билан ерга тушади, бунинг натижаси кўзга кўринмайдиган радиоактив из пайдо бўлади, бу из қанчалик кўп бўлса инсонларнинг яшашлари ва ишлашлари учун шунча кўп хавф туғилади. Биз таъкидлаб ўтган ҳолат ядро заряди билан ишлайдиган тармоқларда, яъни атом электр станцияларида, гамма нурларидан фойдаланадиган лабораториялардаги авариялар натижасида ҳам келиб чиқиши мумкин.

Мисол тариқасида, 1986-йилдаги Чернобил АЕСдаги кучли портлаш натижаси тўртинчи энергоблокдан чиққан радиоактив моддалар 30 километрли масофагача етган эди ва ана ўша ҳудуддаги барча тирик организмлар, объектлар шу жумладан барча ресурсларни шикастлаган эди. АЕСларда юзага келувчи радионуклидлар, ушбу ҳудудда иссиқлик ажратиб чиқарувчи элементларни музлатиш жараёнида нейтронларни курсаб олинишида сувнинг сунъий радиоактивлиги туфайли радионуклид юзага келади.

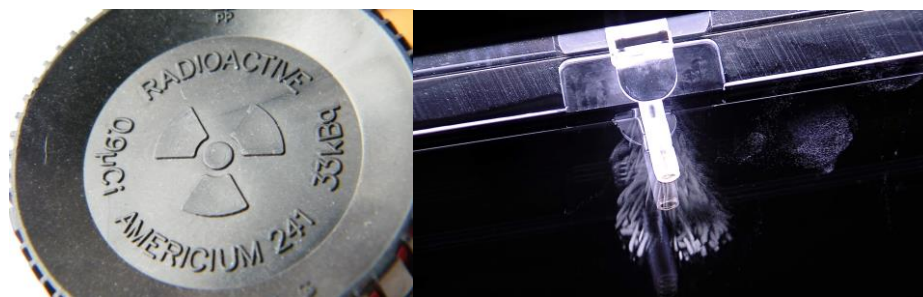
Душман билан жангларда қўлланилган атом бомбалари натижасида ҳам жуда йирик ҳудудлар шикастланади. Агар ушбу ҳудудларда зарарсизлантириш чоралари қўрилмаса бу майдонларда бемалол яшаш, ишлаш имкони бўлмайди. Радиациявий, кимёвий ва бактериологик ҳолатларни баҳолаш фуқаро муҳофазаси бошлиғининг штаб ва объект мутахассисларининг мажбурий бурчи ҳисобланади.

Радиациявий ҳолат бутун бир аҳолига таъсир этувчи радиоактив зарарланиш даражаси ва ўлчамини тушунамиз. Ҳудудларнинг радиоактив зарарланишининг баҳоланиши портлашнинг сонига, турларига, портлаш вақтига шамол тезлигига ва қувватига боғлиқ.

Усуллар.

Физик нуктаи назардан олиб қаралганда ядро томонидан альфа парчаланиш юз берганида ўзидан иккита нейтрон ва икки протондан иборат альфа заррачаларини ўзидан ажратади, альфа парчаланиш атом ўзидан алфани чиқариб юборганда содир бўлувчи жараён дидир. Парчаланадиган ядро асосий радионуклид ёки радиоизотоп деб аталади ва ушбу жараён камида битта нуклидни ҳосил қилади. Радио нуклидлар сонини ўз ичига олувчи радио изотоплар мавжуд бўлиб улар кимёвий элементлар жадвалида келтириб ўтилган, радиоактив изотоплар кимёвий элементнинг парчаланувчи изотоплари саналади. Кимёвий элементлар жадвалида маълум 107 элементда 1100 дан ортиқ изотопи мавжуд бўлиб, уларнинг 270 га яқини туғрун, 40 га яқини табиий радиоактивлик ва 800 тага яқини сунъий радиоактивлик хоссасига эга.

Қуйида сунъий тарзда яратилган нуклид(1-расм) келтирилган:



1-расм. Сунъий нуклид америсиум-241 альфа зарраларини чиқарадиган булут камерасига визуализация учун киритилган.

Зарарланган ҳудудларни баҳолаш қуйидаги босқичларда амалга оширилади:

- радиактив шикастланган жойларнинг қўламини қўламини аниқлаш;
- радиактив нурланган ҳудудларни харитага киритиш;
- бошланғич шикастланиш вақтини аниқлаш;
- радиациявий хавфсизликни таъминлаш дастурлаш;
- ионлаштирувчи нурланиш манбаларидан фойдаланишда фуқаролар олган нурланишни шахсий дозаларини назорат қилиш ва ҳисобга олишда ягона давлат тизимига амал қилиш;
- радиациявий зарар сабабли фуқаролар соғлигига зарар етказилиш жуда хавфли бўлганлиги учун тўланадиган товон турлари ва уларни белгилаб қўйиш;
- шундай вазиятдаги авария туфайли фуқароларнинг мол-мулкига етказилган зарарларни қоплаб бериш;
- ионлаштирув нурлаш манбааларидан фойдаланиш билан боғлиқ фаолият турларини белгилаш;
- ионлаштирувчи нурланиш манбааларини экспорт ва импорт қилинишини ҳукумат томонидан йўлга қўйиш ва уни тартиблаш;
- ҳудудлар бўйича тиббий-профилактик тадбирлар ўтказиш;
- радиациявий хавфсизликни таъминлаш чоралари тўғрисида фуқароларга бериш;
- фуқароларга нурланиш вазиятларида хавфсизлик чора-тадбирларини ўргатиш;
- бундай аварияли вазиятларда радиацияланган фуқароларга тиббий ёрдам кўрсатиш;
- радиацияланган ҳудудларда фуқароларнинг яшаш тарзига алоҳида тартибларни белгилаш;
- белгиланган ҳудудларда юқоридагидек вазиятларни олдини олиш учун хавфсизлик чораларини кўриш;
- радиактив авария юз берган тақдирда зудлик билан керакли чора-тадбирларни кўришни ташкил этиш ва амалга ошириш.

Тезлаштирилган чоралар кўрилгандан сўнг радиациявий офат оқибатларини бартараф этиш ишлари тезда бошланади. Айти пайтда радиациявий ҳолат мониторинги, радионуклидларни сув ва озиқ-овқат маҳсулотлари билан истеъмол қилишни чеклаш, зарарланган ҳудуддан аҳолини эвакуация қилиш, деактивация қилиш, тиббий кўриқдан ўтказиш, аҳолини ижтимоийлаштириш, тушунтириш ва санитария-тарғибот ишлари давом эттирилади. Бу босқич фақат маълум бир вақтда содир бўлади, дегани эмас. Чунки Чернобил АЕСдаги авария оқибатлари ҳалигача бартараф этилмаган.

Натижалар.

Бизга маълум бўлдики, ҳар хил массага эга бўлган радионуклидлар изотоплар деб аталиши, ушбу изотопларнинг парчаланиши нурланишга боғлиқдир.

Радионуклидларнинг табиий тарқалиши натижасида, атмосфера циркуляцияси, ёғингарчиликлар ва биологис занжирлар туфайли биосферада радионуклидларнинг тарқалиши рўй берди, бунинг оқибатида технологик ўзгарган радиацион фон пайдо бўлди, натижасида атроф-муҳитни ифлосланиши рўй берди ва бунда жиддий эътибор қаратишимиз лозим, чунки аҳолининг ҳар қандай кўшимча нурланишига стохастик эффектлар пайдо бўлиши хавфининг жиддийлашиши сифатида эътиборга олинади. Радионуклиднинг энг хавфлиларининг фарқи энг паст фаоллиликга эгалари ҳисобланади, яшаб келаётган ҳаётимизда нафас олаётган ҳавойимизда, истеъмол қиладиган маҳсулотларимизда барчасида чекланиб қўлланилган радионуклидлар мавжуд бўлиб, улар доим текширув остида бўлади. Радионуклидлар 4 гуруҳга бўлинади: А,Б,В,Г. Радионуклидларнинг қай турга мансублигини аниқлашда ва энг кам фаолликга эга бўлганлигини Сан Қ ва М 0029-94 бўйича аниқлаш мумкин.

Мунозара.

Ҳозирги вақтда ядро қуролларидан фойдаланиш ва уларни синаб кўриш тўхтатилган, аммо уран ва плутонийнинг парчаланиш маҳсулотлари бўлган узок яшовчи радионуклидлар биосферада яна 100 йилларча қолиш эҳтимоллиги мавжуд. Ҳудудларда нурланишга эга бўлган объектларни текшириш, улардан радионуклид даражасини аниқлаш ҳар бир объект, маҳсулот, ресурс учун алоҳида ҳисобланади.

Радионуклид билан зарарланган ҳудудларда эҳтиёт чораларини кўриш жуда муҳим жараёнлардан бири эканлиги аён, ушбу ҳудудларни чегаралаш, хариталар орқали амалга оширилади, чегараланган ҳудудларни қаттиқ кўриқлаш лозим бўлади, бундай ҳудудлар ҳарбий қисмлар томонидан қаттиқ кўриқлов остига олинади, ҳудуд ичига кириш талаб этилган, кирувчи ҳодимлар махсус кийимларда киришлари лозим бўлади,

Ўзингизни радиациядан ҳимоя қилиш оддий иш эмас. Гамма нурлари ва рентген нурлари каби ионлаштирувчи нурланиш учун ҳеч қандай костюм уларнинг кириб келишига тўлиқ тўсқинлик қила олмайди. Шунга қарамай,

шахсий ҳимоя воситаларини кийиш соғлиқ учун хавф ва жароҳатларни камайтиришда катта ёрдам беради. Махсус оқ комбинезон, газ ниқоби ва қўлқоплар радиацияланишдан ҳимоялайди. Хавфли моддалар каби шахсий ҳимоя воситаларидан соғлиқни сақлаш, кимё заводлари ёки заҳарли чиқиндиларни тозалаш ва ҳар қандай заҳарли ёки хавфли моддалар билан ишлайдиган бошқа соҳалар ишчилари фойдаланадилар.

Радиация манбалари билан ишлайдиган одамлар учун кийимлар радиоактив моддаларнинг кириб келишини минималлаштириш учун мўлжалланган. Шахсий ҳимоя воситалари тўплами одатда каска ва юз қалқони, пўлат бурунли этиклар, комбинезонлар, радиацияга чидамли қалпоқли костюм, нафас олиш аппарати ва шахсий монитордан иборат.

Костюмлар пахта ва поли аралашмасидан, оловга чидамли номех ёки пахтадан ёки полестер тўсикдан тайёрланиши мумкин. Қўрғошиндан ҳимоя қилиш, шунингдек, радиация ишчилари фойдали деб биладиган радиациявий ҳимоя шаклидир. Шунини таъкидлаш керакки, радиациявий ҳимоя ҳақида гап кетганда, стандарт протоколда айтилишича, гамма каби ионлаштирувчи нурланишни тўсиб қўядиган нарса 6,6 фут бетон, 1,3 фут қўрғошин ёки 13,8 фут сувдир. Шахсий ҳимоя воситалари кичик радиоактив чанг ёки заррачалар билан ташқи ифлосланишнинг олдини олади, аммо улар одамни гамма нурлари каби ионлаштирувчи нурланишдан ҳимоя қила олмайди. Улар радиоактив зарраларнинг тери билан алоқасини камайтириш учун яратилган. Умуман олганда, тана қамрови қанчалик кўп бўлса, шунча яхши ва материалшунослик соҳасидаги ўзгаришлар билан келажақда янада илғор ҳимоя костюмлари ишлаб чиқарилиши мумкин.

Хулоса.

Хулоса қилиб шунини таъкидлаш мумкинки, юқорида келтириб ўтилган барча маълумотлар фуқаролар учун жуда муҳим ва улар билиши лозим бўлган ахборотлардир. Радионуклид табиий жараёнда мавжуд бўлганлигида ҳам, сунъий равишда қўлланилганда ҳам инсон учун хавфга айланиши мумкин.

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*Алимова М.
старший преподаватель
кафедры «Инновационная экономика»
Каршинский инженерно-экономический институт*

КЛАССИФИКАЦИЯ ФАКТОРОВ, ВЛИЯЮЩИХ НА УРОВЕНЬ ЖИЗНИ СЕЛЬСКИХ ЖИТЕЛЕЙ

Аннотация. В статье освещены теоретические аспекты повышения уровня жизни сельского населения, факторы, влияющие на них, представлены механизмы, приоритетные направления и основные результаты реформ, реализуемых сегодня в целях повышения уровня жизни сельского населения. Кроме того, в данной статье отражены пути повышения эффективности мер, реализуемых в аграрном секторе.

Ключевые слова: сельское население, уровень жизни сельского населения, качество жизни, доходы населения, направления производства, влияющие факторы, благосостояние населения.

*Alimova M.
senior lecturer
Department of Innovative Economics
Karshi Engineering and Economic Institute*

CLASSIFICATION OF FACTORS AFFECTING THE LIVING STANDARD OF RURAL RESIDENTS

Abstract. The article highlights the theoretical aspects of improving the living standards of the rural population, the factors influencing them, presents the mechanisms, priority areas and main results of the reforms being implemented today in order to improve the living standards of the rural population. In addition, this article reflects ways to improve the efficiency of measures implemented in the agricultural sector.

Key words: rural population, standard of living of the rural population, quality of life, income of the population, directions of production, influencing factors, well-being of the population.

Услуги социальной инфраструктуры, как важная составляющая обеспечения развития общества, не только способствуют повышению уровня жизни населения, воспроизводству человеческого капитала, но в то же время обеспечивают экономический рост и социально-экономическое развитие регионов. По данным Международной организации труда⁷³ «В

⁷³<https://www.ilo.org/moscow/dw4sd/themes/rural-economy/lang--ru/index.htm>

развивающихся странах 88 процентов населения проживает в сельской местности, а уровень бедности в 4 раза выше, чем в городах», в результате чего разрыв между условиями жизни городских и сельских жителей увеличивается, а «доступ» сельского населения социальных услуг еще больше сокращается». В этой ситуации важное значение в повышении уровня жизни сельских жителей приобретает социально-экономическое развитие регионов и, в первую очередь, удовлетворение спроса на услуги социальной инфраструктуры.

Ряд научных исследований, направленных на повышение уровня жизни сельских жителей на основе развития услуг социальной инфраструктуры в мировой практике, включая изучение потребностей и приоритетов сельских жителей, развитие образовательной инфраструктуры, улучшение социальной защиты и поддержки сельских жителей. Систематически проводится оценка программ и мероприятий, изучение возможностей развития сельского туризма, разработка и применение новых технологий и инноваций в развитии сельской социальной инфраструктуры. В современных условиях необходимо изучить конкретные научно-методические основы оказания услуг социальной инфраструктуры в повышении уровня жизни сельских жителей, определить их основные направления, разработать стратегии экономического развития, оценить эффективность сельской социальной инфраструктуры, развитие и влияние на уровень жизни населения, разработка комплексной интегральной оценки, создание моделей является одним из основных научных направлений.

Одним из важнейших приоритетов реализуемых в Узбекистане экономических реформ является повышение уровня жизни населения на основе социально-экономического развития регионов и развития сферы услуг социальной инфраструктуры. «...стоимость финансирования социальных программ выросла в 2 раза по сравнению с ВВП, а охват малообеспеченных семей, получающих пособия, увеличился в 5 раз»⁷⁴ При этом в качестве приоритетной задачи уделяется внимание «организации социальной защиты на районном уровне, оказанию социальных услуг и помощи населению, находящемуся в трудной жизненной ситуации, на основе индивидуального подхода». Обеспечение реализации этих задач требует развития услуг социальной инфраструктуры для повышения уровня жизни населения в нашей стране и ее регионах.

Теоретико-методологические основы изучения уровня жизни населения и развития социальных услуг разработаны зарубежными учеными.⁷⁵ Оно широко освещено в исследованиях Ю. Шумпетера, Я.

⁷⁴Указ Президента Республики Узбекистан от 1 июня 2023 года ПФ-82 «О комплексных мерах по оказанию качественных социальных услуг и помощи населению и созданию эффективной системы ее контроля»

⁷⁵Шумпетер И. Теория экономического развития (исследование предпринимательской прибыли, капитала, кредита, процента и цикла конъюнктуры).-М.: Прогресс, 1982. – 160 с; Богатай Д. и др. Умные серебряные деревни как часть социальной инфраструктуры для пожилых людей в сельской местности

Богатая, Т. Н. Арбузовой, Л. З. Фатхуллиной, С. Г. Важенина, А. Д. Еременко, А. Г. Синельникова, Ю. Т. Тощенко и других.

От учёных республики 76 Гулямов С.С., Абдурахмонов Г.Х., Кудратов Г.Х., Пардаев М.К., Пардаев Б.К., Ойибназаров Х.С., Мухитдинов Х.С., Амраева С.Н., Самиева Г.Т. и другие провели ряд исследований по теоретическим и практическим проблемам развития инфраструктурных услуг в социально-экономическом развитии сельской местности.

В настоящее время понятия «уровень жизни» и «качество жизни» служат научно-теоретической основой оценки эффективности услуг социальной инфраструктуры и уровня социально-экономического развития регионов. Ученые с достаточной теоретической глубиной изучили природу этих категорий, определили их включение в общую систему социально-экономических идей и понятий. Однако при решении различных исследовательских и практических задач выяснилось, что разные специалисты по-разному трактуют термины «уровень жизни», «качество жизни» и используют разные интерпретации.

Понятие уровня жизни очень сложное и многогранное и требует объяснения как в самом общем смысле, так и в отдельных трактовках, используемых в различных исследованиях. Уровень жизни существует и употребляется вместе с целым семейством синонимов и подобных им терминов: национальное благосостояние, уровень удовлетворения материальных и духовных потребностей населения и т. д.

Приведенные выше определения уровня жизни основаны на отдельных первичных компонентах. Однако наибольший интерес представляют определения, обладающие сложными интеграционными свойствами. То есть, когда зарубежные и отечественные ученые определяли «уровень жизни населения», они ориентировались на уровень предоставления социальных льгот населению.

Существует два подхода к определению качества жизни населения. Один из них заключается в определении объективных условий жизни, а другой – в определении качества жизни посредством субъективных оценок.

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Согласно этим подходам были сформированы две концептуальные модели качества жизни: «объективная» и «психологическая». В первой «объективной» модели качество жизни определяется как сумма и комплекс различных статистических показателей. «Психологическая» модель определяет качество жизни как отражение субъективных ощущений людей, которые формируются в зависимости от уровня интеллекта, знаний, жизненного опыта и т. д.

Рисунок 1

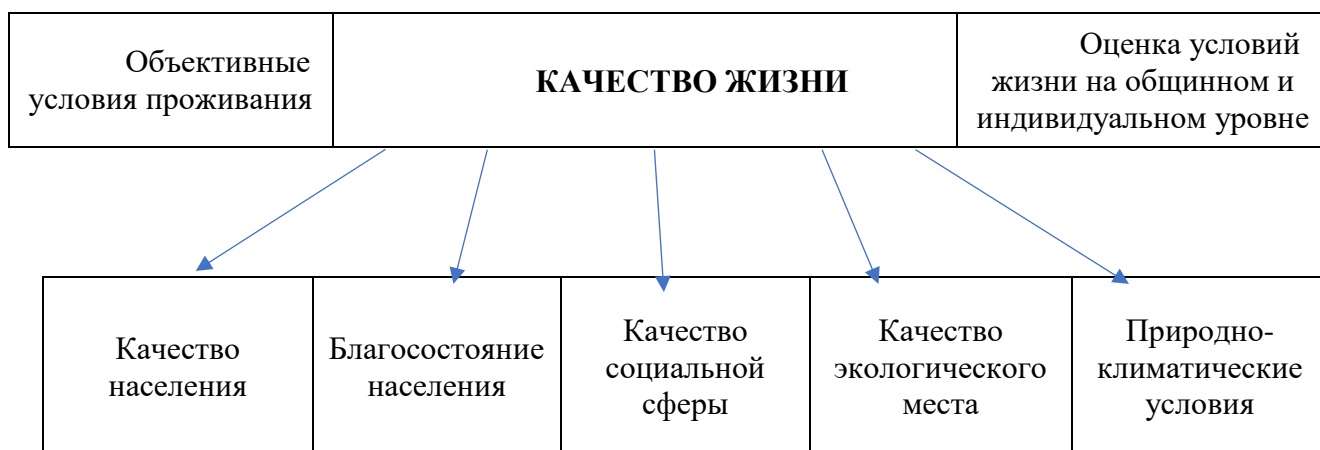


Рисунок 2

Доход на душу населения, стоимость жизни, потребление, население, уровень бедности
Обеспечение и охват населения работниками социальных сетей, объектов инфраструктуры и технических средств
Особенности состояния и деятельности социальных сетей
Демографические параметры
Природно-климатические условия жизни

Компоненты

Социальная инфраструктура – это сфера взаимодействия материальной среды и социальных субъектов, создающая условия для рациональной организации их жизни и деятельности. По своей внутренней организации инфраструктура социальной сферы представляет собой систему институтов, предприятий и органов управления, обеспечивающих эффективность всех институтов социальной сферы. В то же время разнообразные потребности отдельных людей, семей и общества в целом удовлетворяются широким и разнообразным спектром товаров и услуг.

В качестве характеристики социальной инфраструктуры выделяется: «создание условий для развития производства и жизни населения». При

этом социальная инфраструктура включает в себя все объекты, создающие общие условия для эффективного функционирования человека и гармоничного развития человека.

Таким образом, услуги социальной инфраструктуры и уровень жизни населения взаимосвязаны и влияют друг на друга. Услуги социальной инфраструктуры включают в себя такие элементы, как система здравоохранения, образования, транспортная и коммунальная инфраструктура, социальное обеспечение и другие социальные услуги, обеспечивающие благосостояние и уровень жизни населения:

1. Здравоохранение. Качество и доступность медицинских услуг, наличие больниц, поликлиник, аптек и медицинского оборудования влияют на здоровье и продолжительность жизни людей. Хорошая инфраструктура общественного здравоохранения помогает улучшить уровень жизни.

2. Образование. Высокий уровень охвата дошкольным образованием, школьным и высшим образованием, качество преподавания и доступность качественного образования для всех слоев населения положительно влияют на уровень образования, профессиональные возможности и доходы населения.

3. Транспортная и коммунальная инфраструктура. Развитая транспортная сеть, дороги, мосты, аэропорты и общественный транспорт обеспечивают мобильность людей и удобство доступа к местам работы, образования, здравоохранения и других услуг. Качество коммунальных услуг, таких как вода, электричество, газ и ландшафтный дизайн, также влияет на уровень и качество жизни.

4. Социальное обеспечение. Наличие социальных программ, пособий, пенсий и других форм социальной поддержки способствует повышению уровня жизни населения, особенно нуждающегося в социальной защите.

5. Культурно-развлекательные объекты. Наличие парков, спортивных площадок, театров, музеев, библиотек и других мест для отдыха и культурной деятельности способствует повышению качества жизни, создавая возможности для отдыха, развития и саморазвития.

В целом предоставление эффективных и качественных услуг социальной инфраструктуры способствует повышению уровня жизни населения, что, в свою очередь, способствует совершенствованию услуг социальной инфраструктуры за счет инвестиций сообщества в социальные услуги.

Использованные источники:

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*Атамуродов У.Н.
Тошкент давлат транспорт
университети таянч докторанти
Ўзбекистон, Тошкент*

МИНТАҚАДА ТУРЗИМ САЛОҲИЯТИ ВА УНДАН ФОЙДАЛАНИШ УНУМДОРЛИГИНИ ОШИРИШ

Аннотация. Мазкур мақода минтақада туризм салоҳияти ва ундан фойдаланиш тушунчасининг назарий ва иқтисодий асослари баён этилган. Минтақада туризм салоҳияти ривожланишида солиқ ва божхона имтиёзларининг афзалликлари шакллантирилган. Бундан ташқари ушбу мақолада туризм салоҳиятини давлат томонидан қўллаб-қувватлашнинг ўзига хос хусусиятлари таҳлил қилинган.

Калит сўзлар: Турзим салоҳияти, виза режими, ишлаб чиқариш, божхона ва солиқ режими, солиқ имтиёзлари, давлат томонидан қўллаб-қувватлаш.

*Atamurodov U.N.
doctoral student
Tashkent State University
Uzbekistan, Tashkent*

INCREASING LIVELIHOOD COMPETENCE AND PRODUCTIVITY OF ITS USE IN THE REGION

Abstract. This article describes the theoretical and economic basis of the concept of tourism potential and its use in the region. In the development of tourism potential in the region, advantages of tax and customs benefits have been formed. In addition, this article analyzes the specific features of state support for tourism potential.

Key words: Livelihood potential, visa regime, production, customs and tax regime, tax incentives, state support.

Ўзбекистон Республикаси бой маънавий-маданий меросга, турли-туман тарихий-археологик объектларга, қулай табиий-иқлим шароитига ва кўп тармоқли ижтимоий инфратузилмага эга бўлиб, бу эса туризмнинг турли шакллари илдам ривожлантириш учун барча зарур шарт-шароитларни яратади.

Қисқа вақт ичида республикада туристик соҳани ривожлантириш бўйича қатор чора-тадбирлар амалга оширилди. Жумладан, Ўзбекистоннинг туризм салоҳиятини комплекс равишда ривожлантиришга йўналтирилган 20 дан ортиқ норматив-ҳуқуқий ҳужжатлар қабул қилинди,

улар ўз навбатида туризм соҳасидаги янги давлат сиёсатига асос бўлди, туризм соҳасидаги субъектларга аҳамиятли тарзда солиқ ва божхона имтиёзлари ва афзалликларини берди.

Шу билан бир қаторда, соҳада бир қатор ҳал этилмаган масалалар мавжудлиги, шу жумладан хорижий фуқаролар учун виза ва паспорт режимини либераллаштириш ишлари секин олиб борилаётганлиги, улар учун электрон кириш визаларини расмийлаштириш имконияти мавжуд эмаслиги, бой ички ва зиёрат туризмлари салоҳиятидан суфт фойдаланилганлиги, инвестициялар, хусусан, хорижий инвестициялар секин жалб этилаётганлиги сабабли туризм инфратузилмасининг етарлича ривожланмаганлиги, шунингдек, ахборот-коммуникация технологиялари етарлича татбиқ этилмаётганлиги соҳанинг ривожланишига тўсқинлик қилмоқда.

Қайд этиб ўтилган масалаларни ҳал қилиш мақсадида Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикаси туризм салоҳиятини ривожлантириш учун қулай шароитлар яратиш бўйича қўшимча ташкилий чора-тадбирлар тўғрисида”ги Фармони қабул қилинди.

Мазкур Фармонда Исроил давлати, Индонезия Республикаси, Корея Республикаси, Малайзия, Сингапур Республикаси, Туркия Республикаси ва Япония фуқаролари, шунингдек, Ўзбекистон Республикасига мунтазам авиақатновларни амалга оширувчи хорижий авиакомпаниялар ҳаво кемалари экипажининг аъзолари учун Ўзбекистон Республикаси ҳудудига кирган кундан эътиборан 30 кунлик муддатга визасиз режим белгиланиши кўзда тутилган.

Шунингдек, Европа иттифоқи, Шарқий Осиёнинг бир қатор давлатлари ва Яқин Шарқ мамлакатларининг, ҳамда Ҳиндистон Республикаси, Канада, Янги Зеландия, Америка Қўшма Штатлари каби 39 та мамлакат фуқаролари учун Ўзбекистон Республикаси Ташқи ишлар вазирлигига туристик ваучерни ёхуд Ўзбекистон Республикасига таклиф қилаётган юридик ёки жисмоний шахснинг мурожаатномасини тақдим этишга оид талаб бекор қилинишини ҳамда ҳужжатларни қабул қилиш куни ҳисобга олинмаган ҳолда икки иш куни мобайнида визани расмийлаштиришни кўзда тутадиган туризм визаларини расмийлаштиришнинг 2018 йил 10 февралдан эътиборан соддалаштирилган тартиби киритилди.

Мамлакатнинг туристик, маданий, табиий ва спорт салоҳиятини тарғиб қилиш бўйича ишларни янада фаоллаштириш мақсадида Ўзбекистон Республикаси Туризмни ривожлантириш давлат қўмитаси ҳузуридаги «Миллий туризм маҳсулотини тарғиб қилиш маркази» ДУК Ўзбекистон Республикаси Туризмни ривожлантириш давлат қўмитаси ҳузуридаги «Миллий PR-маркази» ДУК сифатида қайта ташкил этилди ҳамда унга республиканинг туризм салоҳиятини тарғиб қилишни ташкил этиш бўйича вазифалар юклатилди.

Шу билан бирга, 2018 йилнинг 1 июлидан эътиборан бир қатор хорижий мамлакатлар фуқаролари учун электрон кириш визаларини бериш тизими жорий этилади.

Фармон қабул қилиниши билан республикада «Ўзбекистон бўйлаб саёҳат қил!» номи остида мамлакат бўйлаб таништирув саёҳатлари ва турларини ташкиллаштиришнинг кенг миқёсли дастури ишга туширилмоқда, унинг доирасида бир миллионга яқин фуқароларимиз, шу жумладан ўқув муассасаларининг ўқувчилари ва талабалари, ногирон болалар ва кам таъминланган оилалар фарзандлари, ишчилар, нафақахўрлар, маҳалла фаоллари, аёллар ва аҳолининг бошқа қатламлари ҳам мамлакат бўйлаб саёҳат қилиш имконига эга бўладилар.

Туризм соҳасидаги тадбиркорлик субъектларини қўллаб-қувватлаш мақсадида меҳмонхоналар, улар бўйидаги йўл, муҳандислик ва коммуникация инфратузилмаларини қуриш бўйича инвестиция лойиҳаларини биргаликда молиялаштириш учун туризм соҳаси тадбиркорлик субъектларига кредит маблағларини ажратиш мақсадида Ўзбекистон Тикланиш ва тараққиёт жамғармасининг кредит линияларини очиш назарда тутилган.

Асосий фаолияти тематик хиёбонлар хизматларини ташкиллаштиришдан иборат бўлган юридик шахслар тематик истироҳат боғларини фойдаланишга топшириш санасидан бошлаб 3 йил муддатга юридик шахслардан олинадиган фойда солиғи, ер солиғи ва мол-мулк солиғини ҳамда ягона солиқ тўловини тўлашдан озод этилади.

Шунингдек, тематик хиёбонлар, меҳмонхоналар ва бошқа жойлаштириш воситаларини қуриш, реконструкция қилиш ва жиҳозлаш учун тематик хиёбонлар, меҳмонхоналар ва бошқа жойлаштириш воситалари томонидан 2022 йил 1 январгача олиб кирилаётган жиҳозлар, техника, хом ашё, бутловчи буюмлар ва захира қисмлари ва қурилиш материаллари ва Ўзбекистон Республикасида ишлаб чиқарилмайдиган бошқа материаллар божхона тўловларидан озод этилади.

Бундан ташқари, туризм соҳасида фаолият юритадиган тадбиркорлик субъектлари республика ҳудудига олиб кирилаётган туристик тоифадаги транспорт воситалари ҳамда канат йўли, тоғ-чанғи кўтаргичлар, фуникулёрлар ва бошқа шунга ўхшаш объект ва иншоотларни қуриш, реконструкция қилиш ва жиҳозлаш учун жиҳозлар, механизмлар ва захира қисмлари, шунингдек, ҳаво шарлари, аэростатлар, квадроцикллар ва моторли қайиқлар учун 2022 йил 1 январгача божхона тўловларидан озод этилади.

Фармон билан Қорақалпоғистон Республикасида рўйхатга олинган лицензияга эга бўлган туризм операторларига истисно тариқасида экстремал турларни ташкил қилиш учун олиб кирилаётган двигатели ҳажми 2,4 л. дан кам бўлмаган юқори ўтиш қобилиятига эга бўлган транспорт воситаларига автотранспорт воситаларини рўйхатга олиш бўйича алоҳида

давлат рақами сериясини татбиқ этган ҳолда ва улардан фақатгина Қорақалпоғистон Республикаси ҳудудида фойдаланиш шарти билан 5 йил муддатга бўлиб-бўлиб тўлаш орқали амалдаги ставканинг 25 фоизи миқдорида бож тўловларини тўлашга рухсат этилади.

Ахборот-коммуникация технологияларини туризм соҳасига жадал татбиқ этиш мақсадида Фармон билан қуйидагилар назарда тутилган:

2018 йилнинг 1 январидан эътиборан туризм маҳсулотларини сотиш ва туризм хизматларини онлайн бронлаш бўйича хизмат кўрсатувчи хўжалик юритувчи субъектларга электрон тўловлар, бронлаш, эквайринг ва бошқа электрон хизматларни татбиқ қилиш, шунингдек, туризм хизматларининг замонавий турларини таклиф қилувчи ихтисослаштирилган интернет-сайтлар ва порталларни йўлга қўйишни рағбатлантиришга йўналтирилган солиқ имтиёзларини тақдим қилиш;

жамоат жойларида Интернет тармоғига симсиз бепул уланиш ҳудудлари (Wi-Fi) билан жиҳозлаган операторлар, провайдерлар ва бошқа хўжалик юритувчи субъектларга фойдаланувчиларнинг шахсини мажбурий тартибда аниқлаш билан биргаликда тегишли сифатдаги уланишни таъминлаш бўйича мажбурият қўйилди;

ўз ҳудудида Интернет тармоғига симсиз бепул уланиш ҳудудларини (Wi-Fi) ўрнатган хўжалик юритувчи субъектларга тегишли сифатдаги симсиз уланиш ҳудудини кенгайтириш учун асбоб-ускуналарни харид қилиш ва интернет-трафикни сотиб олишга йўналтирилган солиқ имтиёзларини жорий қилиш;

Интернет тармоғига симсиз бепул уланиш ҳудудларини (Wi-Fi) барпо этган операторлар, провайдерлар ва бошқа хўжалик юритувчи субъектларга бундай ҳудудлар ташкил этилган жойда беғараз асосда 18 кв.м.дан ортиқ бўлмаган майдондаги реклама баннери ёки ромларини ўрнатиш ҳуқуқини тақдим этиш.

Туну-кун намоёиш этиладиган «Dunyo Bo‘ylab» телеканали Ўзбекистон Республикаси Туризмни ривожлантириш давлат қўмитасининг ички туризм, дам олишнинг фаол турлари ва спорт туризмни ривожлантириш, маданий мерос объектлари ва табиий бойликлар, шу жумладан қўриқланадиган табиат ҳудудларини сақлаш ва улардан фойдаланиш бўйича ўтказиладиган тадбирларни ёритиш масалалари бўйича ахборот ҳамкори сифатида белгиланди.

Фармонда белгиланган тадбирларнинг амалга оширилиши ички ва зиёрат туризмларини жадал ривожлантириш ва уларнинг бой салоҳиятидан ҳар томонлама фойдаланиш учун янада қулай шароитлар яратади.

Фойдаланилган адабиётлар рўйхати:

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*Ахмадходжаева М.М.
доцент
кафедра медицинской профилактики
Андижанский государственный медицинский институт
Узбекистан, Андижан*

ЗАБОЛЕВАЕМОСТЬ ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА

Аннотация. Сегодня в нашей стране принимается ряд мер по профилактике и ликвидации заболеваний, связанных со здоровым питанием. В Стратегии действий по пяти приоритетным направлениям развития Республики Узбекистан на 2017-2021 годы «... Реализация комплексных мер по улучшению и укреплению здоровья населения, снижению заболеваемости, профилактике заболеваний, связанных с питанием, и увеличению продолжительности жизни...»

Ключевые слова: детей, здоровье, питание, заболевание, дошкольный.

*Akhmadkhodjaeva M.M.
associate professor
Department of Medical Prevention
Andijan State Medical Institute
Uzbekistan, Andijan*

INCIDENCE OF PRESCHOOL CHILDREN

Resume: Today, a number of measures are being taken in our country to prevent and eliminate diseases related to healthy eating. In the Action Strategy for the five priority areas of development of the Republic of Uzbekistan for 2017-2021, "... the implementation of comprehensive measures to improve and strengthen the health of the population, reduce morbidity, prevent nutrition-related diseases and increase life expectancy..."

Key words: children, health, nutrition, disease, preschool.

Актуальность. Сегодня в мировой практике одной из актуальных медико-социальных проблем является формирование системы дошкольного образования на основе наиболее оптимальных гигиенических требований, обучение и воспитание детей в соответствии с их возрастом, здоровое питание с целью профилактики региональных заболеваний. Здоровье, физическое развитие, сознание и мышление детей дошкольного возраста в мире, профилактика нарушений здорового питания, гигиенические условия в учреждении и правильная организация процесса начального образования зависят от знаний и навыков персонала.

Во всем мире проводится ряд исследований, чтобы предоставить оптимальные варианты оценки состояния питания и статуса питательных микроэлементов у детей дошкольного возраста. В связи с этим необходимо обосновать влияние эндогенных и экзогенных факторов, влияющих на здоровье детей дошкольного возраста, и усовершенствовать оздоровительные мероприятия, направленные на предупреждение распространения инфекционных и соматических заболеваний.

Данные о заболеваемости представляет интерес не только как показатель здоровья населения, но и как «совокупный измеритель» объема и характера оказываемой медицинской помощи и ее результатов в динамике. Данные о заболеваемости представляет интерес не только как показатель здоровья населения, но и как «совокупный измеритель» объема и характера оказываемой медицинской помощи и ее результатов в динамике.

Целью является совершенствование гигиенической оценки рациона и содержания микроэлементов детей в дошкольном образовании.

Материалы и методы обследования. Исследование проводилось на основании научно-исследовательского плана кафедры гигиены детей, подростков и питания Ташкентской медицинской академии. Научно-исследовательские работы проводились в городе Андижан № 3, 32, 62, Андижанском районе № 31, 41, 42, Ферганской области № 17 и 63, Ферганском районе № 4, 14 и Наманганской области № 13, 18. № 21, 42, в МТТ № 6, 9, 18, 51 Наманганского района. Эти объекты исследования приняты в качестве объектов исследования Ташкентской медицинской академии.

При анализе возрастной структуры количество детей дошкольного возраста составило 640 ребенка, из них: дети до 3 года – 39 (6,1%), от 3 до 4 лет – 336 (52,5%), от 5 до 7 лет – 265 (41,4%) (Таблица 1).

Таблица 1

Возрастная структура детей дошкольного возраста

Возраст	Пол	Абс. числа	%
от 3 до 4 лет	мальчики	487	54,4
	девочки	409	45,6
от 4 до 5 лет	мальчики	421	53,1
	девочки	372	46,9
от 5 до 6 лет	мальчики	381	51,5
	девочки	359	48,5
от 6 до 7 лет	мальчики	661	55,8
	девочки	524	44,2

Общий уровень распространенности заболеваний у детей в нашем исследовании составил 834,2‰ за 2020-2023 гг.. При этом общая инфекционная заболеваемость составила 457,8‰ за счет лидирующей

позиции в структуре острых респираторных вирусных инфекций (Таблица 2).

Таблица 2

Общий уровень распространенности заболеваний у детей

Заболеваемость	Абс.	‰
Общая		610,1
Соматическая		152,3
Инфекционная		457,8

Таблица 3

Уровень заболеваемости детей (на 1000 детей соответствующего возраста)

№	Возрастная группа (лет)	Частота заболеваемости в ‰
1	3-4 года	684,5
2	4-5 лет	755,9
3	5-6 лет	846,2
4	6-7 лет	1035,9
5	Всего	834,2

В структуре заболеваемости детей до 3 лет был выявлен широкий нозологический спектр. Наиболее распространенной была бронхолегочная патология в виде частых эпизодов острых респираторных заболеваний (ОРЗ), обнаруженная (42,8%). У (3,8%) детей на фоне ОРЗ отмечались рецидивы обструктивного бронхита. Случаев острой пневмонии как осложнение ОРЗ не отмечалось. Кроме того, в исследуемой группе детей болезни лор-органов составили высокий удельный вес во всех возрастных группах детей; в основном, за счет хронического тонзиллита и аденоидита, были выявлены отиты (5,7%). На втором месте по частоте встречаемости – железодефицитной анемии, выявленной у (16,4%). Заболевания органов пищеварения принадлежало третье место, ее признаки имелись у (9,7%). На четвертом месте находились болезни нервной системы, диагностированные в 8,5% случаев.

Среди болезней опорно-двигательного аппарата выявлены нарушения осанки, плоскостопие, неблагоприятно воздействующие на кости скелета, мышцы, приводящие к смещению внутренних органов, и как следствие заболеванию всего организма.

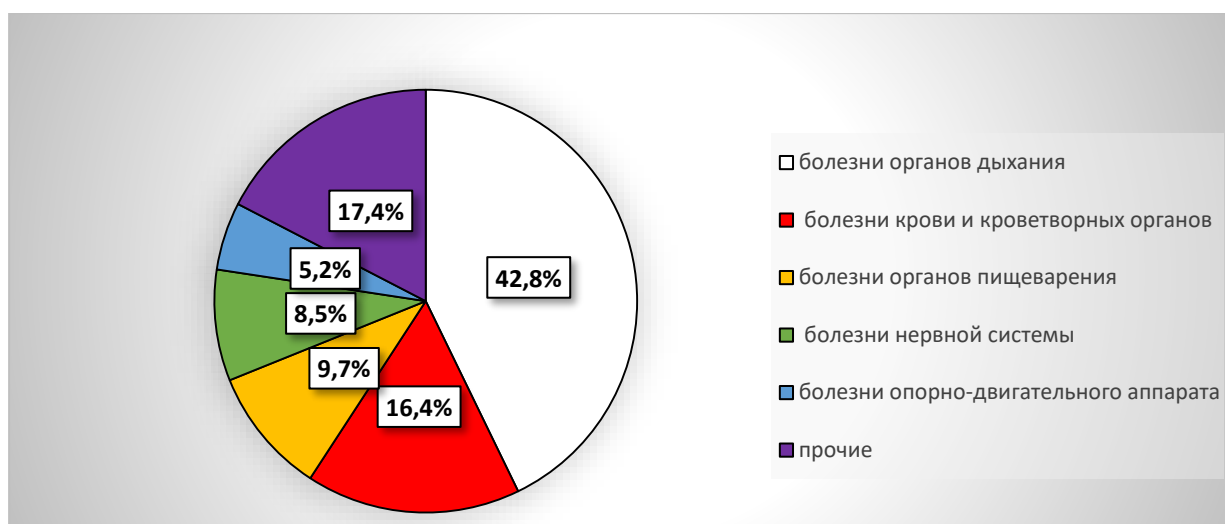


Рис 1 Структура заболеваемости детей по основным классам болезней (в % к итогу)

Перечисленные классы болезней составляют - 82,6% всех случаев общей заболеваемости патронажных медицинских сестёр (рис. 3.5, табл.3.4).

Таблица 4

Структура и уровень заболеваемости детей дошкольного возраста по основным классам болезней (в % и ‰)

Классы болезней	Удельный вес (%)	Частота (‰)
Некоторые инфекционные и паразитарные болезни	1,5	12,7
Болезни кожи и подкожной клетчатки	1,2	9,8
Болезни крови, кроветворных органов и отдельные нарушения, вовлекающие иммунный механизм	16,4	131,9
Болезни костно-мышечной системы и соединительной ткани	5,2	42,7
Новообразования	0,8	6,1
Болезни мочеполовой системы	1,1	8,2
Болезни глаза и его придаточного аппарата	3,4	25,8
Болезни уха и сосцевидного отростка	3,5	26,6
Болезни органов дыхания	42,8	349,0
Болезни нервной системы	8,5	82,6
Болезни системы кровообращения	1,1	8,5
Болезни эндокринной системы, расстройства питания и нарушения обмена веществ	2,4	20,6
Болезни органов пищеварения	9,7	90,6
Травмы, отравления и некоторые другие последствия воздействия внешних причин	1,1	8,5
Прочие классы болезней	1,3	11,1
Итого	100	834,2

Результаты исследования и их обсуждения

В структуре заболеваемости при поступлении детей в первый класс доминирующее место заняли болезни центральной нервной системы (17,54%). Исследования последних лет свидетельствуют о росте пограничных нервно-психических расстройств в детском возрасте. В нашем исследовании среди детской пограничной патологии выявлены гиперкинетические расстройства, специфические задержки в моторном и речевом развитии.

Изучение структуры ведущих классов заболеваний показало, что болезни органов желудочно-кишечного тракта встречались в 8,77% случаев и сформировались преимущественно за счет запоров, хронического гастрита, заболевания желчевыводящих путей.

Среди болезней глаза и его придаточного аппарата преобладали отклонения с различными нарушениями остроты зрения: нарушение аккомодации и рефракции (7,017%). Начиная с двухлетнего возраста у (7,02%) стала формироваться хроническая лор-патология (хронические болезни миндалин и аденоидов), которая резко возросла к 5 годам, что отчасти было связано с возрастным формированием носоглотки.

Число заболеваний болезнями органов дыхания составило 42,8% случаев, что свидетельствует о повышении двигательной активности детей, сопротивляемости и укреплении адаптационных механизмов детского организма к воздействию различных факторов (рис. 1). Данные классы болезней практически исчерпывают всю обращаемость родителей в поликлинику по поводу заболеваний всех детей. Следовательно, усилия медицинских работников детских лечебно-профилактических учреждений должны быть направлены на профилактику названных выше классов патологии. По итогам диспансеризации и в зависимости от состояния здоровья, проанализировано распределение детей по группам здоровья.

Доля практически здоровых детей – I группа, составила 23%. Наибольший удельный вес приходился на II группу (70%), то есть почти каждый второй ребенок имел некоторые функциональные и морфофункциональные нарушения (в данном исследовании – нарушение осанки, зрения, речи, плоскостопие), а также дети часто и/или длительно болеющие острыми респираторными заболеваниями. При этом доля детей в III группе здоровья составила всего 7% – это дети, страдающие хроническими болезнями в активной стадии и стадии нестойкой клинической ремиссии с частыми обострениями, с сохраненными или компенсированными функциональными возможностями или неполной компенсацией функциональных возможностей.

Как показал анализ полученных данных, количество детей в возрасте 7 лет, поступающих в начальную школу, составило 16% от общего количества детей в возрасте 7 лет (117 человек).

Таким образом, анализ состояния здоровья детей дошкольного возраста показал, что наиболее значимым является увеличение распространенности хронических болезней органов дыхания, костно-мышечной, нервной систем, глаз, болезней органов пищеварения. Для снижения данной заболеваемости и предупреждения развития хронизации требуется совершенствование системы медицинского обслуживания в амбулаторно-поликлиническом звене. Необходима своевременная организация профилактической работы, в первую очередь, направленная на снижение уровня заболеваний, проведение углубленных осмотров, а в последующем оздоровления; консультативное обеспечение по вопросам охраны здоровья детей и подростков в семье, половому и физическому воспитанию, медицинской профессиональной ориентации.

Результаты исследований позволили выделить и обосновать значимость наиболее существенных факторов, определяющих состояние здоровья детей дошкольного возраста в современных условиях, которые тесно связаны с возрастом, анатомо-физиологическими особенностями детей, и их образом жизни. Использование новых организационных технологий по профилактике заболеваний, изучений механизма формирования знаний о ЗОЖ, повышение приверженности детей к принципам здорового образа жизни (ЗОЖ) позволит в перспективе снизить уровень заболеваемости, повысить качества их жизни.

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*Ахмедов Ш.У.
ассистент
Ташкентский химико-технологический институт
Шахрисабзский филиал*

ЗНАЧЕНИЕ ОХРАНЫ ТРУДА В СЕЛЬСКОМ ХОЗЯЙСТВЕ

Аннотация. В статье рассмотрены принципы, требования и нормы охраны труда рабочих и служащих, работающих в сельском хозяйстве нашей республики.

Ключевые слова: охрана труда, сельское хозяйство, техника и технология, опасные факторы, машины и механизмы.

*Akhmedov Sh.U.
assistant
Tashkent Chemical and Technological Institute
Shakhrisabzsky branch*

THE IMPORTANCE OF OCCUPATIONAL SAFETY IN AGRICULTURE

Abstract. The article covers the principles, requirements and standards of labor protection of workers and servants working in agriculture in our republic

Key words: labor protection, agriculture, equipment and technology, dangerous factors, machines and mechanisms.

Социально-экономическое развитие человеческого общества тесно связано с развитием производства во всех сферах. В свою очередь, одной из основ развития и роста производства является человек и продукт его труда. Поэтому обеспечение безопасности и здоровья жизни человека во время работы является одной из важнейших задач. В выполнении этих задач большое значение имеют, прежде всего, ее правовые и нормативные основы в области охраны труда. Помимо мер по улучшению условий труда работников, занятых на производстве, уменьшению воздействующих на них источников риска, обеспечению сохранения трудоспособности работников, в нашей республике создана правовая база по охране труда. Государственная политика в области охраны труда определяет приоритет жизни и здоровья работников всех предприятий, действующих в нашей стране, по отношению к результатам производства. Кроме того, наше правительство подписало ряд нормативно-правовых документов по охране труда в сфере сельского хозяйства. Например, 17 июля 2023 года вышел приказ Министра по борьбе с бедностью и занятости Республики Узбекистан «О внесении изменений и дополнений в Правила охраны труда

работников хлопкоочистительных предприятий», рег. Приказ Министра по вопросам борьбы с бедностью и занятости Республики Узбекистан от 14 июля 2023 года № МЮ 1983-3 «О внесении изменений в Правила охраны труда работников рыбохозяйственного производства», рег. Принят № МУ 2478-1. Приказ Министра по борьбе с бедностью и занятости населения Республики Узбекистан от 14 июля 2023 года «О внесении изменений в Правила охраны труда при уходе за свиньями», рег. Приказ Министра по борьбе с бедностью и занятости Республики Узбекистан от 16 июля 2023 года № МЮ 1970-1 «О внесении изменений в пункт 2 Правил охраны труда при уходе за коровами и племенными быками», рег. Приказ Министра занятости и трудовых отношений Республики Узбекистан № МЮ 1977-1 от 08.01.2020 «О внесении изменений в Правила охраны труда работников лесного хозяйства», рег. Приказ Министра труда и социальной защиты Республики Узбекистан от 24.01.2014 № МЮ 2471-1 «Об утверждении правил охраны труда работников, работающих с мясной и молочной продукцией, в том числе работающих с отравленным сырьем», рег.. Приказ Министра труда и социальной защиты Республики Узбекистан от 16.07.2013 № МЮ 2557 «Об утверждении правил охраны труда работников рыбохозяйственного производства», рег. Есть приказы и постановления типа № МУ 2478. Задачи изучения и решения проблем, связанных с обеспечением здоровых и безопасных условий труда человека, рассматриваются в существующих решениях. Социальная значимость охраны труда заключается в совершенствовании здравоохранения, характеризующем уровень развития общественного производства, сохранении трудовых ресурсов за счет увеличения средней продолжительности жизни, а также повышения профессиональной активности работников, что приводит к увеличению стажа работы и повышению профессионального уровня за счет повышения квалификации; Это отражается на опыте и профессиональных знаниях пенсионеров, возможностях использования трудовой деятельности.

При охране труда работников необходимо действовать на основе установленных норм, исходя из деятельности экономики. Этот процесс должен осуществляться на основе следующих принципов (рис. 1).



Рисунок 1. Модельный принцип охраны труда в сельском хозяйстве

Требования по охране труда в сельском хозяйстве играют важную роль в организации основного производства в сельском хозяйстве. В частности, требуется соблюдение правил безопасности в процессах выращивания, воспроизводства, ухода, сбора и переработки сельскохозяйственной продукции, птицы, животноводства, рыбного хозяйства. По результатам нашего исследования необходимо реализовать следующие мероприятия по охране труда на сельскохозяйственных предприятиях:

1. Реализация общей профилактической политики, включающей в себя рабочую среду хозяйства и технологии организации труда, условия труда и социальные отношения работников;

2. Необходимо обеспечить безопасность и здоровье работников фермы. В частности, в целях предотвращения профессиональных рисков, предоставления необходимой информации рабочим и служащим и их обучения, разработки мер по контролю за работниками;

3. Разработка мероприятий по прохождению медицинского контроля во избежание возникновения опасных ситуаций для здоровья работников сельского хозяйства.

4. При оснащении предприятия новой технологией создание консультативной группы, пропагандирующей требования безопасности при ее использовании.

Факторы, воздействующие на рабочих и служащих при выполнении сельскохозяйственных работ, подразделяются на опасные и безопасные, причем на них влияют следующие опасные производственные факторы:

- сельскохозяйственные машины и механизмы, движущиеся части производственного оборудования и их рабочие части;
- зоны повышенного загрязнения атмосферного воздуха пылью и (или) газом на рабочем месте;
- недостаточное освещение рабочего места;
- повышение уровня шума на рабочем месте;
- повысить уровень вибрации на рабочем месте;
- повышение или понижение температуры, повышение или понижение влажности и подвижности воздуха на рабочем месте;
- ионизирующего излучения;
- расположение рабочего места на значительной высоте относительно поверхности земли;
- химические вещества, попадающие в организм человека через органы дыхания, пищеварительный тракт, кожу и слизистые оболочки (при работе с пестицидами, минеральными удобрениями);
- микроорганизмы токсичные, раздражающие, канцерогенные, сенсибилизирующие вещества и аэрозоли;
- биологическое воздействие (от укусов насекомых и животных);
- микроорганизмы (бактерии, вирусы и т.п.);
- на него влияют такие факторы, как физические перегрузки или ручное перемещение тяжелых предметов при выполнении работ стоя.

В заключение можно подчеркнуть, что для снижения воздействия опасных факторов при организации сельскохозяйственных работ существуют следующие общие организационно-технические мероприятия, которые должен принять работодатель:

- утилизация вредных материалов, полуфабрикатов и отходов производства и надлежащее обеспечение прямых связей с технологическим оборудованием;
- дистанционное управление производственными процессами в сельском хозяйстве и повышение уровня механизации и автоматизации;
- работать в соответствии с требованиями охраны труда при проведении профессионального отбора и обучения работников и проверке их знаний и навыков по безопасным методам работы;
- организация работ, связанных с риском (по разрешению), выполняемых в специальном порядке, обеспечивающих контроль за безопасным выполнением этих работ;
- обеспечение работников эффективными инструментами
- учет факторов вредного и (или) опасного производственного проявления, контроль правильного использования индивидуальных и коллективных средств защиты, совместимых с природой;
- использование разумных режимов труда и отдыха в целях снижения воздействия физических и психофизиологических вредных и (или) опасных производственных факторов работников.

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*Бобонов Д.Т.
старший преподаватель
кафедры «Радиоэлектроника»
Джизакский политехнический институт*

ИЗМЕНЕНИЕ ФУНДАМЕНТАЛЬНЫХ ПАРАМЕТРОВ КРЕМНИЯ ДЛЯ СОЗДАНИЯ НАНОЭЛЕКТРОННЫХ УСТРОЙСТВ

Аннотация. Показано, что можно изменять фундаментальные параметры исходных образцов кремния, управляя концентрацией наноструктур кластеров атомов в объеме кремниевого материала, и на основе этого показано, что существуют возможности создания новых класс устройств нанoeлектроники. Эта практически новая квантовая структура позволяет получать нано размерные кластеры в кремниевом материале.

Ключевые слова: кремний, сверхкомпенсация, диффузия, нано кластер, внедрение, сера, диффузия.

*Bobonov D.T.
senior lecturer
Department of Radio Electronics
Jizzakh Polytechnic Institute*

CHANGING THE FUNDAMENTAL PARAMETERS OF SILICON FOR THE CREATION OF NANOELECTRONIC DEVICES

Abstract. It is shown that by controlling the structure of complexes - clusters of impurity atoms and their concentration in highly compensated silicon - one can change the fundamental parameters of the starting material, which allows them to be used in the development of fundamentally new classes of nanoelectronic devices. In practice, this is a new approach to the creation of quantum-dimensional structures in silicon.

Key words: кремний, диффузия, нанокластер, сернистый, диффузия, компенсация.

Проводится ряд научных исследований по получению новых нанокластерных высококомпенсированных материалов. В результате проводимых в мире научных исследований по разработке электронных устройств на основе новых материалов получены научные результаты, направленные на управление электрофизическими параметрами полупроводниковых материалов. Это [1] технология введения различных входных атомов в кристаллическую решетку методом

высокотемпературной диффузии, [2] переход кремния с входными атомами в ферромагнитное состояние при низких температурах, [3] научные работы авторов по определяющим свойства компенсированных структур на основе кремния, можно привести. В мире исследования компенсированного кремния и кластеров на его основе ведутся по следующим приоритетным направлениям, включая разработку диодов с улучшенными параметрами на основе кремния с вводом атомов редкоземельных элементов, разработку процессов получения наноразмерных структур. в компенсированном кремнии, определение электрофизических свойств сверхкомпенсированных полупроводников и разработка на их основе многофункциональных магнитных, температурных, давления и фотосенсоров, идентификация и обоснование квантовых и наномасштабных эффектов, происходящих в трехмерных нанокластерах [4,5].

Сегодня в мире определены технологические условия возникновения неравновесных процессов в сверхкомпенсированном кремнии и физические свойства структур, созданных на основе нового материала. сосредоточено на выявлении событий и эффектов. На основе их функциональных возможностей большое значение придается созданию нового класса электронных устройств и датчиков [6]. В связи с этим одной из важных задач является проведение целевых научных исследований, включающих следующие научные исследования: определение необходимых электрофизических параметров исходного полупроводникового материала и состава переходной группы железа и изовалентных атомов свинца, выбор методов легирования, связанных с к природе атомов свинца, новым физическим явлениям в кремниевых материалах, эффектам и созданию нового класса электронных устройств и датчиков на основе их функциональных возможностей [7]. На основе знаний технологических методов формирования кластеров в кремнии изучены и проанализированы закономерности взаимодействия входных атомов и концентрации структур и комплексов в кристаллической решетке. Выявлено, что управлять образованием объемных нанокластеров можно, зная благоприятные термодинамические условия взаимодействия межмолекулярных атомов. На основании полученных результатов установлено, что электрофизические параметры сверхкомпенсированного кремния зависят от электрофизических параметров исходных материалов, типа вводимых атомов, электроактивности в кремнии, расположения вводимых атомов в кристаллической решетке кремния и условий. температурной обработки на технологических этапах [8,9].

В суперкомпенсированном кремнии уровень компенсации k рассчитывается следующим образом:

$$k = \frac{N_{dM}^+}{2N_{dGr}^-} = 0,9999k = \frac{N_{dM}^+}{2N_{dGr}^-} = 0,9999(1)$$

В данном случае: для выяснения природы k были получены 3 различных исходных кремниевых материала Р-типа. Число атомов бора и зарядоносных дырок в них составляет соответственно: 1) $p_1=2 \cdot 10^{14} \text{ см}^{-3}$ ($\rho=100 \text{ Ом}\cdot\text{см}$); 2) $p_2=2 \cdot 10^{15} \text{ см}^{-3}$ ($\rho=10 \text{ Ом}\cdot\text{см}$); 3) $p_3=2 \cdot 10^{16} \text{ см}^{-3}$ ($\rho=1 \text{ Ом}\cdot\text{см}$) был равен В эти материалы были введены донорные атомы, образующие глубокие энергетические уровни (например, атомы серы). Точность их количества $N_{ar}^{++} = 0,9995 N_a^- = 0,9995 \cdot p$ был равен Исходя из этого, первая группа образцов кремния была определена по количеству донорных атомов, образующих глубокий энергетический уровень: $2N_{ar}^{++} = 0,9995 \cdot p_1 = 0,9995 \cdot 2 \cdot 10^{14} = 1,999 \cdot 10^{14} \text{ см}^{-3}$ это произошло. Для кремниевого материала второй группы: $2N_{ar}^{++} = 0,9995 \cdot p_2 = 0,9995 \cdot 2 \cdot 10^{15} = 1,999 \cdot 10^{15} \text{ см}^{-3}$ это произошло. Для кремниевого материала третьей группы: $2N_{ar}^{++} = 0,9995 \cdot p_3 = 0,9995 \cdot 2 \cdot 10^{16} = 1,999 \cdot 10^{16} \text{ см}^{-3}$ оказалось равным. Уровень компенсации этих материалов соответственно составляет:

$$k_1 = \frac{1,999 \cdot 10^{14}}{2 \cdot 10^{14}} = 0,9995 \quad k_2 = \frac{1,999 \cdot 10^{15}}{2 \cdot 10^{15}} = 0,9995 \quad k_3 = \frac{1,999 \cdot 10^{16}}{2 \cdot 10^{16}} = 0,9995$$

организовал Результаты расчетов показывают, что значения k во всех материалах $k_1 \approx k_2 \approx k_3$ очень близки друг к другу, и условие самокомпенсации в материалах выполняется [10].

То есть, $k \approx 1$ равный, или, $(1-k) \ll 1$ ($(1-0,9995) = 0,0005 \ll 1$) можно получить сверхкомпенсированный кремний. Для определения параметров этих материалов были проведены некоторые расчеты. Для материалов I группы с $p_1=2 \cdot 10^{14} \text{ см}^{-3}$ в концентрацию некомпенсированных дырок при числе электронов в зоне проводимости $2N_{ar}^{++} = 1,999 \cdot 10^{14} \text{ см}^{-3}$ при донорных атомах, образующих глубокий энергетический уровень, включаются: $\Delta p_1 = p_1 - 2N_{ar}^{++} = 0,001 \cdot 10^{14} = 10^{11} \text{ см}^{-3}$. будет равно. (2)

Количество некомпенсированных полостей для материалов II группы: $\Delta p_2 = p_2 - 2N_{ar}^{++} = 2 \cdot 10^{15} - 1,999 \cdot 10^{15} = 1 \cdot 10^{12} \text{ см}^{-3}$ будет равно. (3)

Для материалов III группы: $\Delta p_3 = p_3 - 2N_{ar}^{++} = 2 \cdot 10^{16} - 1,999 \cdot 10^{16} = 1 \cdot 10^{13} \text{ см}^{-3}$ (4) будет равно.

Расчеты показали, что после введения входных атомов удельное сопротивление материалов составило $\rho_1 \approx 10^5 \text{ Ом}\cdot\text{см}$, $\rho_2 \approx 2 \cdot 10^4 \text{ Ом}\cdot\text{см}$, $\rho_3 \approx 2 \cdot 10^3 \text{ Ом}\cdot\text{см}$. Видно, что в материалах двух последних групп ρ_2 и ρ_3 наблюдалась отчетливая проводимость р-типа.

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Бозорова И.Ж., PhD
старший преподаватель
кафедра «Алгоритмы и технологии программирования»
Каршинский государственный университет

МЕСТО И РОЛЬ ИНФОРМАЦИОННО-КОММУНИКАЦИОННЫХ ТЕХНОЛОГИЙ В ЭКОНОМИЧЕСКИХ ПРОЦЕССАХ

Аннотация: Цифровизация – это всесторонний механизм, который затрагивает все области причем происходит это в масштабах всего нынешнего мира. Необходимо отметить, что развитие информационно-коммуникационных технологий позволило сохранять, обрабатывать, запоминать, передавать информацию, что в конечном итоге влияет на улучшение качества жизни. Статья посвящена исследованию воздействия механизмов цифровизации на нынешнего индивидуума, государства и общества.

Ключевые слова: цифровизация, информационно-коммуникационные технологии, искусственный интеллект, коммуникации.

Bozorova I.J., PhD
senior lecturer
Department of Algorithms and Programming Technologies
Karshi State University

THE PLACE AND ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN ECONOMIC PROCESSES

Abstract. Digitalization is a comprehensive mechanism that affects all areas and this happens on a global scale. It should be noted that the development of information and communication technologies has made it possible to save, process, remember, and transmit information, which ultimately affects the improvement of the quality of life. The article is devoted to the study of the impact of digitalization mechanisms on the current individual, state and society.

Key words: digitalization, information and communication technologies, artificial intelligence, communications.

Сегодня основным фактором развития любой страны является эффективное построение информационной экономики. Хотя в каждой стране информационная экономика формируется индивидуально, но имеет глобальный характер. В Узбекистане происходит бурный рост развития и внедрения информационных технологий во все сферах жизнедеятельности.

В современных условиях хозяйствования в деятельности организаций, одним из основных направлений совершенствования системы учета и контроля является внедрение информационных технологий.

Развитие цифровых технологий позволяет не только в значительной степени ускорить процессы сбора и анализа информации, но и автоматизировать ряд технологических процессов работы с первичными бухгалтерскими данными, например посредством интеграции систем складского и бухгалтерского учета, а также - с программным обеспечением внешних удаленных электронных сервисов. В частности, уже сегодняшние технологические возможности позволяют обеспечить автоматизированное проведение закупок на электронных торговых площадках на основе анализа запасов на складах предприятия.

В Республике Узбекистан вопросам эффективного и рационального использования ресурсов, в части товарно-материальных запасов, со стороны руководства нашего государства уделяется особое внимание, в Указе Президента Республики Узбекистан, № УП-6079 «Об утверждении стратегии «Цифровой Узбекистан-2030» и мерах по ее эффективной реализации» от 05.10.2020 года. В новой Стратегии развития была определена цифровизация ряда важных сфер, таких как государственные услуги, социальные услуги, банковский и сельскохозяйственный секторы и другие основные сферы национальной экономики.

Различия в экономических показателях между промышленно развитыми странами во многом объясняются уровнем инвестиций и исследований в области информационных и коммуникационных технологий (ИКТ), а также конкурентоспособностью информационного общества и медиаиндустрии. ИКТ-услуги, навыки, средства массовой информации и контент становятся растущей частью цифровой экономики и общества.

Цифровая экономика характеризуется как система экономических, социальных и культурных отношений, основой которых является повсеместное применение цифровых технологий.

Цифровая экономика включает в себя:

1. Формирование бизнес-моделей и выстраивание бизнес-процессов на основе возможностей цифровых технологий (ИКТ и Интернет) и обмена большими данными (BIG DATA);

2. Совокупность отношений, складывающихся в процессах производства, распределения, обмена и потребления, основанных на онлайн-технологиях (ИКТ и Интернет) и направленных на качественное удовлетворение потребностей в жизненных благах.

Информационно-коммуникационные технологии в современном мире оказывают огромную роль на сознание человека. Общественные отношения организованы по принципу сетей, где каждый субъект находится во взаимосвязи с другими. Прежде основу сообщества составляла

привязанность человека к месту жительства и работе, сегодня наблюдается ослабление этой привязанности.

В настоящее время человек реализуют личные потребности, опираясь на эти новые возможности, сетевой индивидуализм (персонализируемое сообщество), становясь частью глобальных сетевых структур. Люди объединяются в группы и сообщества в виртуальных сетях и зачастую строят свою жизнь, ориентируясь на мнения и ценности конкретных людей или референтных групп в социальных сетях, с которыми никогда не было и не будет прямого контакта, встречи.

Как выявляют современные исследования, влияние медиакоммуникаций распространяется на культурные и социальные изменения, отражающие трансформацию в структуре ценностей, образцах поведения, традициях, ритуалах. Кроме этого медийные персоналии через средства коммуникаций социализируют и поддерживают социальный контроль, а также способствуют интеграции общественных групп в зависимости от интересов.

Под влиянием медиакоммуникаций происходит процесс обучения, установление социального контроля. Однако, нельзя не отметить, что цифровые технологии несут в себе и замещение или вытеснение реальных занятий, иногда вплоть до отказа от профессиональной деятельности.

В настоящее время большие надежды связывают с тем, что внедрение новых ИКТ позволяет совершенствовать технологические процессы и повышать качество продукции, оптимизировать организацию в различных областях деятельности, наконец, способствуют улучшению здоровья и качества жизни людей. Расширяются возможности применения в экономике, управлении, производстве искусственного интеллекта (ИИ; англ. Artificial Intelligence, AI) - науки и технологии создания интеллектуальных машин.

Искусственный интеллект (ИИ) — ядро нового поколения цифровых технологий и основа цифровой трансформации практически всех секторов экономики. Решения на основе ИИ дают возможность автоматизировать рутинные задачи, развивать новые форматы работы, внедрять инновационные бизнес-модели, осваивать новые рыночные ниши.

В целом системы искусственного интеллекта работают, поглощая большие объемы помеченных обучающих данных, анализируя данные на наличие корреляций и закономерностей и используя эти закономерности для прогнозирования будущих состояний.

Программирование искусственного интеллекта фокусируется на когнитивных навыках, которые включают в себя следующее:

Обучение. Этот аспект программирования ИИ фокусируется на сборе данных и создании правил, позволяющих превратить их в полезную информацию. Правила, называемые алгоритмами, предоставляют

вычислительным устройствам пошаговые инструкции по выполнению конкретной задачи.

Рассуждение. Этот аспект программирования ИИ фокусируется на выборе правильного алгоритма для достижения желаемого результата.

Самокоррекция. Этот аспект программирования ИИ предназначен для постоянной настройки алгоритмов и обеспечения максимально точных результатов.

Креативность. Этот аспект ИИ использует нейронные сети, системы, основанные на правилах, статистические методы и другие методы ИИ для создания новых изображений, нового текста, новой музыки и новых идей.

Искусственный интеллект (ИИ) - наука и технология создания интеллектуальных машин, особенно интеллектуальных компьютерных программ. На данный момент множество роботов способны принимать некоторые организационные решения, исходя из внедренных в них вычислительных алгоритмов. Примером может являться наш собственный смартфон, который наверняка содержит искусственный интеллект в виде «Сири», «Алиса».

За прошедшие годы искусственный интеллект пережил множество циклов ажиотажа, но даже скептикам выпуск ChatGPT от OpenAI кажется поворотным моментом. В последний раз, когда генеративный ИИ выглядел так масштабно, прорывы были связаны с компьютерным зрением, но теперь скачок вперед произошел в области обработки естественного языка. И это не только язык: генеративные модели также могут изучать грамматику программного кода, молекул, естественных изображений и множества других типов данных.

Области применения этой технологии растут с каждым днем, и мы только начинаем изучать ее возможности. Но по мере того, как шумиха вокруг использования ИИ в бизнесе набирает обороты, разговоры об этике становятся критически важными.

Искусственный интеллект может повысить эффективность мировой экономики, но распределение полученных выгод, скорее всего, будет неравномерным. Внедрение ИИ способствует еще большему отставанию развивающихся стран от развитых, тем самым усиливая и без того высокий цифровой разрыв между государствами. На уровне компаний использование ИИ может привести к увеличению разрыва в производительности между лидерами по внедрению этих технологий и теми, кто промедлил во внедрении либо вообще не использовал технологии в своей деятельности.

Наконец, ИИ может сдвинуть спрос на мировом рынке труда с профессий, требующих выполнения рутинных задач, к социально и познавательно ориентированным специальностям, а также к связанным с деятельностью, которую трудно автоматизировать. Однако это приведет к повышению безработицы в первое время внедрения.

Иными словами, в случае неэффективного развития и внедрения технологий ИИ, может продолжиться усугубление неравенства между национальными экономиками, отдельными компаниями и работниками на рынке труда, а это станет катализатором возможных социальных конфликтов. Во избежание этого, правительства стран совместно с бизнесом обязаны обеспечить поддержку и безболезненный переход работников на новые востребованные рабочие места, а самим людям будет необходимо освоить новые навыки в соответствии с потребностями динамично меняющегося рынка труда.

Из всего этого можно сделать вывод что искусственный интеллект - это динамично развивающаяся система, которая имеет ряд недочетов, но в тоже время эти же недочеты можно исправить или же улучшить тем самым передвигая ИИ на следующий уровень развития. И в скором времени он станет такой же незаменимой частью нашей жизни как интернет или прочие технологии. Но и недостатками такой системы будет неравенство на рынке развитых стран перед не развитыми, и незащищенность этой системы перед киберпреступностью.

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Бозорова Н.Ж.
студент 1 курса магистратуры
факультет МОП
Каршинский государственный университет

ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ИСПОЛЬЗОВАНИЯ ТЕХНОЛОГИИ ПРОДУКТИВНОГО ЧТЕНИЯ НА УРОКАХ РУССКОГО ЯЗЫКА КАК ИНОСТРАННОГО

Аннотация. В статье рассмотрены методические рекомендации по изучению русского языка (правила организации занятия, характеристика чтения как вида речевой деятельности, принципы работы с текстом) посвященные ситуациям повседневного общения, и адаптированные учебные тексты, по тематике и содержанию связанные с произведениями русской литературы.

Ключевые слова: чтение, русская литература, урок, усвоение, тематика.

Bozorova N.Zh.
1st year master's degree
Faculty of Education and Science
Karshi State University

THEORETICAL BASIS OF USING PRODUCTIVE READING TECHNOLOGY IN RUSSIAN AS A FOREIGN LANGUAGE LESSONS

Annotation. The article discusses methodological recommendations for studying the Russian language (rules for organizing classes, characteristics of reading as a type of speech activity, principles of working with text) dedicated to situations of everyday communication, and adapted educational texts related in theme and content to works of Russian literature.

Key words: reading, Russian literature, lesson, learning, topic.

В условиях поликультурного образования существует потребность у студентов-иностранцев изучить русский язык. Уроки чтения в нашей методике сопровождаются знанием произведений народного творчества.

Универсальные учебные действия определяются в педагогическом словаре, как умение учиться, т.е. способность субъекта к саморазвитию и самосовершенствованию путем сознательного и активного присвоения нового социального опыта в иной среде. Любой человек, который приезжает в незнакомую страну, старается понять разговор на чужом ему языке, и постепенно у него появляется интерес и мотивы изучения языка другого народа.

Планируя занятие с иностранными учащимися, преподаватель должен учитывать следующие ведущие принципы:

1. Коммуникативное обучение (единица обучения – речевой акт). Вырабатывается речевое поведение в различных социальных ситуациях, поведение определяется социальным контекстом.

2. Формирование коммуникативной компетенции, т.е. умения решать коммуникативные задачи речевыми средствами. В процессе обучения используются аутентичные материалы, вводятся страноведческие понятия. Коммуникация ведется на изучаемом языке.

3. Личностно-деятельностный подход. В процессе обучения устанавливается межличностное общение: учащиеся решают общие задачи, работают в парах, группах и т.п., преподаватель создает условия коммуникации и облегчает ее.

4. Использование речевой ситуации в процессе обучения. В процессе обучения различают два вида ситуаций: естественные ситуации имеют естественные стимулы к речи (опоздание на урок, пропуск занятий, решение внеучебных вопросов и т.п.); учебные ситуации обеспечивают планомерную работу по развитию навыков речи на основе различного лексико-грамматического материала. Компоненты речевой ситуации: условия ситуации: описание обстановки и информация об участниках – речевой стимул (причина, побуждающая к речи) – речевая реакция.

Помимо основных принципов организации занятия по русскому языку как иностранному, современная методика преподавания РКИ предлагает модель уроков. Модель урока определяется задачей, которую ставит преподаватель перед учащимися. Тем не менее существует традиционная структура урока.

1. Начало урока. Как правило, начало урока представляет собой личностное общение, ответы на вопросы (Как дела? Что вы делали вчера? и т.п.), преподаватель стимулирует речевую деятельность учащихся. Оргмомент.

2. Аудирование (рассказ преподавателя на основе личных впечатлений или прочитанного, заранее подготовленного текста).

3. Основная часть урока. Введение нового материала с помощью текста– работа с новыми лексическими и грамматическими единицами – выполнение упражнений разных видов для формирования языковой, речевой и коммуникативной компетенций – обучение чтению и письму – подведение итогов урока.

Данная модель может быть представлена в виде более подробной схемы:

1. Организация начала урока (введение в языковую среду).

2. Проверка домашнего задания.

3. Подготовка к активной учебно-познавательной деятельности на основном этапе урока.

4. Введение нового учебного материала и алгоритма формирования новых речевых умений и навыков.

5. Первичная проверка понимания учащимися нового учебного материала.

6. Закрепление новых языковых и речевых умений и навыков.

7. Обобщение и систематизация учебного материала.

8. Контроль и проверка языковых и речевых умений и навыков.

9. Подведение итогов урока.

10. Домашнее задание.

В специальных целях структура урока может меняться. В данном учебном пособии предложенные уроки направлены на развитие навыков чтения, аудирования и говорения, в связи с чем предлагается следующая модель урока: словарь, речевые модели, диалог, вопросы на понимание текста, задание и тесты.

Каждый компонент урока предполагает использование различных видов упражнений, развивающих разные виды речевой деятельности (РД) и формирующих разные компетенции.

Сейчас большую долю информации учащиеся получают в «готовом» виде из таких источников, как телевидение и интернет. Учащиеся становятся пассивным наблюдателем того, что происходит на экране. Фильм заменяет литературное произведение, социальные сети и их возможности передавать эмоции и информацию заменяют живое общение. Снижается уровень читательской активности, беднеет словарный запас и, в целом, страдает культура речевого общения. Подготовить человека, способного ориентироваться в этом обществе, отличающегося такими чертами, как гибкость, подвижность мышления, способность к диалогу, толерантность и коммуникабельность - первостепенная задача образовательного учреждения.

В этом плане велика роль уроков чтения. Художественное слово воздействует не только на сознание, но и на чувства и поступки учащегося. Каждый учитель понимает, что сформировать традиционные знания, умения, навыки для этого недостаточно, нужно осваивать новые технологии, изменять содержание уроков.

Основная работа по формированию читательской грамотности начинается в начальной школе и проходит на уроках литературного чтения. Каждый из учителей начальных классов, опираясь на свой опыт и методику работы других педагогов, занимается поиском эффективных и рациональных способов обучения чтению. Например, эта система может включать:

- систему упражнений для отработки навыков чтения: «шифрограмма», чтение слов по кругу, чтение с разной интонацией и силой голоса, чтение текста с пропущенными словами и т.д.;

- работу с текстом художественного произведения: целостность первичного восприятия текста, постановка проблемного вопроса, глубокий анализ для постижения идеи произведения, внимание к позиции автора и художественным средствам языка;

- творческие задания: сочинение загадок, сказок, рассказов, стихов по аналогии, составление кроссвордов; создание личных книжек-малышек и сборников произведений класса;

- использование средств ИКТ (для рассказа о писателе, выборочного чтения, словарной работы, литературной викторины и т. д.).

Среди многообразия путей и средств для формирования читательской компетентности наиболее значимые для младших школьников - увлеченное преподавание, новизна учебного материала, использование инновационных форм и методов обучения, создание ситуации успеха на уроке. Эти средства находят свою реализацию при внедрении в процесс обучения нетрадиционных методических приемов работы с текстом.

Технологии обучения будут способствовать развитию коммуникативных особенностей личности обучаемого, обогащению знаний по предмету и раскрытию их творческих способностей, т.е. созданию творческой среды в процессе обучения.

Несмотря на то, что интерес студентов-иностранцев к русскому и якутскому языкам постоянно растет, применение произведений фольклора при усвоении чужого языка в образовательной среде в наши дни изучено крайне слабо. В связи с этим в статье разрабатываются методы обучения при усвоении языков в поликультурной образовательной среде с помощью средств этнопедагогики и вовлечения в образовательный процесс театральной педагогики, музыки и других форм; исследуются возможности интеграции различных видов искусства на уроках чтения в группах, где обучаются иностранцы, для которых русский и якутский языки являются неродным. Проведенное исследование показало, что применение произведений народной педагогики на уроках чтения в поликультурной образовательной среде не только активизирует познавательные интересы иностранцев и способствует обнаружению личностных смыслов учебного материала, но и помогает преодолению проблем, связанных с межкультурной коммуникацией.

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Болтаев К.С., к.б.н.

преподаватель

Одилова Г.М.

преподаватель

*кафедра микробиологии, вирусологии и иммунологии
Самаркандский медицинский университет*

ВЗАИМОДЕЙСТВИИ R-ЭПИСОМНЫХ ФАКТОРОВ С ХРОМОСОМНЫМИ ГЕНАМИ АНТИБИОТИКОУСТОЙЧИВОСТИ У КИШЕЧНЫХ ПАЛОЧЕК И ШИГЕЛЛ ЗОННЕ

Устойчивость к антибиотикам является растущей проблемой, некоторые из которых могут быть результатом чрезмерного использования антибиотиков, а другие могут быть результатом чрезмерного использования антибиотиков. Целью настоящей работы явилось изучение взаимодействия хромосомных генов, контролирующих антибиотикорезистентность у штаммов кишечных палочек, с эписомными детерминантами. Факторы резистентности передавали методом конъюгации. Частоту рекомбинаций вычисляли отношением количества выросших рекомбинантных клонов к числу жизнеспособных донорских клеток в одном мл.

Ключевые слова: E. coli, антибиотик, резистентность, шигелла.

Boltaev K.S., Ph.D.

teacher

Odilova G.M.

teacher

*Department of Microbiology, Virology and Immunology
Samarkand Medical University*

INTERACTION OF R-EPISOMAL FACTORS WITH CHROMOSOMAL ANTIBIOTIC RESISTANCE GENES IN E. COLI AND SHIGELLA SONNE

Antibiotic resistance is a growing problem, some of which may be the result of antibiotic overuse and others may be the result of antibiotic overuse. The purpose of this work was to study the interaction of chromosomal genes that control antibiotic resistance in Escherichia coli strains with episomal determinants. Resistance factors were transmitted by conjugation. The frequency of recombinations was calculated by the ratio of the number of grown recombinant clones to the number of viable donor cells in one ml.

Key words: E. coli, antibiotic, resistance, Shigella.

Введение. Устойчивость к антибиотикам является растущей проблемой, некоторые из которых могут быть результатом чрезмерного использования антибиотиков [1], а другие могут быть результатом чрезмерного использования антибиотиков [2]. *E. coli* может передавать гены, необходимые для устойчивости к антибиотикам, другим типам бактерий. Они часто содержат плазмиды устойчивости, и эти плазмиды могут мутировать при стрессе [4,5]. На самом деле в биопленки очень распространены кишечной палочке [3], где разные виды бактерий живут в непосредственной близости друг от друга [6,7]. Сочетание этих типов может принимать и переносить плазмиды других бактерий из-за этого *E. coli* и другие патогенные бактерии являются важными факторами развития устойчивости к антибиотикам [8,9].

Целью настоящей работы явилось изучение взаимодействия хромосомных генов, контролирующих антибиотикорезистентность у штаммов кишечных палочек, с эпизомными детерминантами.

Материалы и методы исследования. Факторы резистентности передавали методом конъюгации. Частоту рекомбинаций вычисляли отношением количества выросших рекомбинантных клонов к числу жизнеспособных донорских клеток в одном мл. В качестве Доноров использовали штамм *Sh. flexneri* 2 в, 222, имеющий факторы резистентности, контролирующие устойчивость к 100 Ед/мл стрептомицина, 500 мкг/мл ципринола, 250 Ед/мл хлортетрациклина, и штамм *E. coli* К-12, эпизомной устойчивостью к 625 Ед/мл 500 мкг/мл ципринола, 250 Ед/мл хлортетрациклина, 3200 ципрофлоксацин, и 1000 Ед/мл цефозалина. В качестве реципиенов субкультуры *E. coli* W-677 Ф-1, *E. coli* W-677Ф-2, *Sh. sonnei* 12-3, обладающие различными уровнями антибиотикоустойчивости, контролируемой хромосомными генами, и исходный штамм *E. coli* W-677Ф, чувствительный к использованным лекарственным веществам, который употреблялся в наших опытах в качестве контрольного.

Частота передачи факторов резистентности от *Sh. flexneri* 2в, 222 и от *E. coli* К-12 к вариантам *E. coli* W-677Ф колебалась в пределах $0,9 \cdot 10^{-5}$ - $0,7 \cdot 10^4$. Вариант *Sh. sonnei* 12-3 приобретал R-фактор с более низкой частотой: от $0,9 \cdot 10^{-6}$ до $1,5 \cdot 10^{-5}$. Частота передачи не зависела от наличия и уровней хромосомной устойчивости к стрептомицину у реципиентных штаммов кишечных палочек.

Результаты и их обсуждение. В результате конъюгации реципиентные штаммы приобретали резистентность ко всем трем лекарственным веществам, к которым был донор *Sh. flexneri* 2в, 222: стрептомицину, ципринолу и хлортетрациклину. Уровни фенотипического проявления устойчивости к ципринолу и хлортетрациклину у эшерихий и *Sh. sonnei* 12-3 такими же, что и у *Sh. flexneri* 2в, 222. Резистентность к стрептомицину проявлялась у реципиентных штаммов неодинаково.

Чувствительный -к антибиотикам штамм *E. coli* W-677Ф проявлял такую же резистентность, что и донор *Sh. flexneri* 2 в, 222. Штамм *E. coli* W- 677Ф-1, устойчивый к 156 Ед/мл стрептомицина, в результате получения R-фактора от *Sh. flexneri* 2в, 222 повысил свою стрептомицин резистентность до 5000 Ед/мл. Штамм *E. coli* W-677Ф-2, устойчивый к 5000 и Ед/мл, не изменил указанную резистентность к стрептомицину после приобретения R-эписомы. Штамм *Sh. sonnei* 12-3, устойчивый к 78 Ед/мл стрептомицина, в результате получения фактора резистентности также повысил свою резистентность к антибиотику до 1250 Ед/мл.

В последующих опытах были проведены скрещивания указанных вариантов эшерихий с *E. coli* K-12, имеющей эписомную устойчивость к стрептомицину, ципринолу, хлортетрациклину, ципрофлоксацину, цефозолину.

Рекомбинантные клоны приобретали устойчивость к стрептомицину, ципринолу, хлортетрациклину, ципрофлоксацину и цефозолину. Уровни фенотипического проявления антибиотикоустойчивости у реципиентных штаммов, получивших R-фактор, несколько отличались от таковых у донора *E. coli* K-12. Рекомбинантные клоны проявляли резистентность к ципринолу, хлортетрациклину и ципрофлоксацину в той же степени, что и *E. coli* K-12. Устойчивость к стрептомицину у штамма *E. coli* W-677Ф была несколько ниже, чем у донора *E. coli* K-12. В то же время штамм *E. coli* W-677Ф-1, устойчивый к 156Ед/мл стрептомицина, повышал резистентность к этому антибиотику до 5000 Ед/мл. Как и в предыдущих опытах, высокорезистентный к стрептомицину вариант *E. coli* W-677Ф-2 с приобретением R-эписомы не изменил устойчивости к стрептомицину. Устойчивость к цефазолину у вариантов *E. coli* W-677Ф и *E. coli* W-677Ф-1 была более низкой, у донора *E. coli* K-12, в то же время как высоко резистентный к вариант *E. coli* W-677Ф-2 в результате получения R-проявлял устойчивость к цефазолину в 4 раза большую, чем вышеуказанные варианты.

Таким образом, варианты *E. coli* W-677Ф-1 и *Sh. sonnei*, обладающие низкими уровнями хромосомной резистентности к стрептомицину, в результате получения R-факторов, контролирующей устойчивость к антибиотикам, в том числе и к низким концентрациям стрептомицина, становятся резистентными к высоким концентрациям последнего. Вариант *E. coli* W-677Ф-2, уже имеющий высокую стрептомицин резистентность, после получения этих же эписом не изменяет устойчивости к стрептомицину. Эти результаты можно объяснить, допустив, что хромосомные и эписомные гены, ответственные за устойчивость к низким концентрациям стрептомицина, контролируют разные процессы, обуславливающие фенотипическое проявление стрептомицинорезистентности. Одновременное присутствие в клетке эписомного и хромосомного генов, ответственных за устойчивость к стрептомицину, приводит

к тому, что эти процессы взаимно дополняют друг друга и обеспечивают высокую резистентность к антибиотикам. Вариант *E. coli* W-677Ф-2, по видимому, обладает несколькими механизмами, ответственными за фенотипическое проявление высокой устойчивости к стрептомицину и поэтому не изменяет своей резистентности с приобретением R-фактора. Возможно, один из этих механизмов способствует повышению устойчивости к цефозолину.

Выводы. Варианты *E. coli* W-677Ф-1 и *Sh. sonnei* 12-3, имеющие низкие уровни хромосомной устойчивости к стрептомицину, значительно повышают резистентность к последнему после получения R-фактора, контролирующего антибиотикоустойчивость, в том числе и к низким концентрациям стрептомицина.

Вариант *E. coli* W-677Ф-2, имеющий высокий уровень хромосомной устойчивости к стрептомицину, приобретая эпизодическую резистентность к стрептомицину, ципрофлоксацину, цефозолину, ципринолу и хлортетрациклину, не изменяет исходной устойчивости к стрептомицину, но проявляет резистентность к цефозолину большую, чем у донора *E. coli* K-12.

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ИЛМ-ФАННИ РИВОЖЛАНТИРИШ ЗАРУРИЯТИ ВА ЖОРИЙ ХОЛАТ ТАҲЛИЛИ

Аннотация. Мазкур мақолада мамлакатимизда илм фан соҳасида жорий ҳолат, унга таъсир этувчи омиллар, илм-фан секторининг тузилиши ва молиялаштириш жараёни, мавжуд муаммолар ҳамда илм фанни келажакда ривожланиш йўналишлари ўрганилган ва керакли статистик кўрсаткичлар орқали таҳлил этилган.

Калит сўзлар: илм, фан, илмий марказ, инновация, технологик ривожланиш, илмий муассаса, саноат инқилоби, интеллектуал, технологик салоҳият, индекс.

Buribayev E.N., PhD

doctoral student

associate professor

Gulistan State University

Republic of Uzbekistan, Gulistan

THE NEED FOR SCIENCE DEVELOPMENT AND ANALYSIS OF ITS CURRENT SITUATION

Annotation. This article analyzes with the help of the necessary statistical indicators the current situation in the scientific field in our country, the factors influencing it, the structure of the scientific sector and the process of its financing, the existing problems in the field of science are studied and the necessary directions for the development of science in the future are developed.

Keywords: knowledge, science, scientific center, innovation, technological development, scientific institution, industrial revolution, intellectual, technological potential, index.

Кириш

Мамлакат тараққиётининг замини, ҳеч шубҳасиз, илм-фан ва инновациялардир[1]. Жаҳон иқтисодиётининг глобаллашуви ва унинг янги технологик ривожланишга ўтиш жараёни дунё товар ва молия бозорларида, рақамли технологияларни жорий этиш соҳасида ва аҳолининг ижтимоий-иқтисодий, ўсиб бораётган муаммоларини ҳал қилиш усул-ларида тобора рақобатнинг тобора кучайишига олиб келмоқда. Ушбу масалаларнинг асосий ечими илм-фан ва инновациялар соҳасида етакчи мамлакатлар

қаторидан ўрин олиш, тўртинчи саноат инқилоби даврида халқаро рақобатбардошликка эришиш, тўпланган институционал муам-моларнинг янги ечимларини излаб топиш, шунингдек глобаллашув туфайли юзага келаётган баҳсли масалаларни ҳал қилишдан иборат бўлиши лозим.

Ушбу рақобат шароитида иқтисодиётда устувор йўналишлар ривожини таъминловчи илмий тадқиқотлар ҳамда инновацион ишланмаларни амалга оширувчи экотизимни шакллантириш энг асосий вазифа ҳисобланади.

Шу сабабдан, ривожланаётган мамлакатлар рақобатбардошликни ошириш ва мустаҳкамлаш бўйича юқори технологияли ишлаб чиқаришни ва глобал маркетингни фаол ўзлаштириш, устувор йўналишларда ўз илмий мактабларини ташкил этиш, тажрибали ва малакали мутахассисларни жалб этиш, инновацион салоҳиятга эга истиқболли стартапларни қўллаб-қувватлаш, узоқ муддатли барқарор ривожланишнинг молиявий ва институционал асосларини яратиш учун давлат имтиёзларидан мақсадли фойдаланиш каби чораларни кўрмоқда.

Тадқиқот мавзуси бўйича адабиётлар шарҳи (тахлили)

Мамлакатда илм-фанни ривожлантириш ва унинг салоҳиятидан фойдаланиш даражасини оширишнинг назарий-услубий жиҳатлари хориж олимлари томонидан муайян даражада ўрганилган [2]. Жумладан, инновацион салоҳият ўзгаришига таъсир қилувчи омиллар Ж.Шумпеттер, З.Гриличез, М.Фельдштейн, З.Жеймс, Ж.Хайнс, З.Гленн, халқаро савдо ва ташқи инвестицияларнинг инновацион салоҳиятга таъсири К.Хугас ва М.Парамешваран, кичик бизнес субъектларининг инновацион фаолиятини рағбатлантириш механизмлари П.Друккер, С.Фриман, миллий инновацион тизимни шакллантириш муаммолари Б.Ландвалл, Р.Нелсон ва бошқа олимларнинг тадқиқотларида ўрганилган.

Инновацион салоҳиятдан фойдаланиш самарадорлигини оширишнинг илмий-амалий жиҳатларини ўрганиш билан боғлиқ тадқиқот ишлари МДХ мамлакатларидаги қатор олимларнинг изланишларида маълум даражада тадқиқ этилган [3]. Жумладан, инновацион салоҳият таркибини таҳлил қилиш ва баҳолаш Н.Кондратьев, В.Васильцов, А.Большов, А.Белоусов, В.Марцинкевич, И.Соболева, илмий-техник ва тажриба-конструкторлик ишларини ривожлантиришнинг устувор йўналишлари Б.Мочалов, Л.Лопатников, Ж.Петровская, Л.Давидова, С.Маркина, инновацион салоҳият даражасини баҳолаш А.Татаркин, Е.Макарова, Л.Иноземцева, В.Мельянецев, Р.Фатхутдиновларнинг илмий изланишларида ўрганилган.

Ўзбекистонлик олимлар томонидан мамлакат инновацион салоҳиятини ривожлантириш ва ундан фойдаланиш даражасини оширишнинг умумий жиҳатлари муайян даражада ўрганилган ва ушбу йўналишдаги тадқиқотлар давом этмоқда [4]. Жумладан, мамлакат инновацион салоҳиятини алоҳида тармоқ, соҳа ва ҳудудлар кесимида

баҳолаш ҳамда интеллектуал салоҳиятни ошириш муаммолари С.С.Ғуломов, Ш.Н.Зайнутдинов, А.В.Вахабов, Н.М.Расулов иқтисодий ўсишнинг сифат кўрсаткичлари ва инновацион салоҳият ўртасидаги мутаносиблик Р.Нурумбетов, Ф.Б.Шакирова, инновацияларни бошқариш механизмларини такомиллаштириш Н.Қ.Йўлдошев, Ш.А.Мирсаидова, Б.И.Камилжанов, миллий иқтисодиёт инновацион салоҳиятидан самарали фойдаланишнинг умумназарий жиҳатлари Б.Ю.Ходиев, Т.Т.Жўраев, Х.П.Абулқосимов, Н.М.Махмудов, У.А.Мадрахимовларнинг тадқиқот ишларида баён этилган.

Тадқиқот методологияси

Тадқиқотнинг назарий ва услубий асосларини маҳаллий ва ҳорижий олимларнинг “Илм-фанни ривожлантириш”, билимлар иқтисодиёти ва инновацион фаолиятни ташкил этишга бағишланган илмий изланишлари натижалари, ушбу соҳада қабул қилинган Президент қарорлари ва ҳукумат дастурлари асос бўлди. Илмий мақолада кўтарилган муаммони атрофлича таҳлил қилиш, таҳлил натижаларини тизимлаштириш асосида илмий асосланган хулоса ва тавсиялар ишлаб чиқишда илмий абстракция, диалектик тадқиқот, индукция ва дедукция, мақсадли ривожлантириш, монографик кузатув, тизимли ва қиёсий таҳлил, график тасвирлаш, эксперт баҳолаш ва иқтисодий статистик каби усуллардан кенг фойдаланилди.

Таҳлил ва натижалар муҳокамаси

Мамлакатимизнинг илм-фан сектори 100 дан ортиқ академик ва тармоқ илмий муассасаларидан иборат бўлиб, ҳозирги кунда 65 та илмий-тадқиқот институти, 31 та илмий марказ (шундан 14 та ихтисослаштирилган илмий-амалий марказ) ва 8 та бошқа турдаги илмий ташкилот фаолият кўрсатмоқда. Бундан ташқари, олий таълим муассасалари ва уларнинг филиалларида ҳам илмий-тадқиқот ишлари амалга оширилмоқда.

Ўзбекистонни 2030 йилга қадар глобал инновацион индекс рейтингида дунёнинг 50 та етакчи давлатлари қаторига киритиш бўйича улкан мақсадга эришишда инсон капиталини ривожлантиришга қаратилган стратегик режа эълон қилинди. Мазкур мақсад илм-фан соҳасини замонавий иқтисодиёт талабларига мослаштиришдан иборат бўлиб, ўз навбатида, илм-фандаги тегишли ҳуқуқий база билан тартибга солинадиган туб таркибий, ташкилий, молиявий ҳамда кадрлар ва инфратузилмага оид ислоҳот-ўзгаришларни амалга оширишга қаратилган [5]. Сўнгги йилларда илм-фан соҳасини устувор ривожлантириш ва давлат томонидан қўллаб-қувватлашга қаратилган 20 дан зиёд норматив-ҳуқуқий ҳужжат қабул қилиниб, улар узлуксизлик, очиқлик, шаффоқлик ва рақобат тамойилларига асосланган.

2023 йил 1 январдан Олий таълим, фан ва инновациялар вазирлиги ташкил этилгани алоҳида аҳамиятга эга бўлиб, янги идора олий таълим, олий таълимдан кейинги таълим, илмий ва инновацион фаолиятга оид жамият ва давлат ҳаётини ҳар томонлама ривожлантиришга, мамлакатнинг

интеллектуал ва технологик салоҳиятини оширишга қаратилган ягона давлат сиёсатини амалга оширмоқда.

Фанлар академиясининг барча илмий ташкилотларини Давлат бюджети ҳисобига сақлаш ва уларга илмий лойиҳаларни грант асосида молиялаштириш тизими йўлга қўйилди.

Олий таълим, фан ва инновациялар вазирлигининг 10 та илмий ташкилоти Фанлар академияси тизимига қайтарилиб, унинг мақоми ва нуфузини юксалтириш баробарида илм-фан соҳасининг жамиятдаги маъқеи оширилди, ёшларнинг соҳага бўлган фикри-муносабати ижобий томонга ўзгарди.

2017 — 2021 йилларда илмий ташкилотлар лабораторияларини мустаҳкамлаш ва янгилашга 32 миллион АҚШ доллари миқдоридagi маблағ ажратилиши режалаштирилди ҳамда тегишли чора-тадбирлар босқичма-босқич амалга оширилмоқда.

Шу билан бирга, яқин келажақда илм-фан соҳасида ҳал этилиши зарур бўлган куйидаги асосий муаммолар сақланиб қолмоқда:

биринчидан, иқтисодиётнинг реал сектори корхоналарининг илм-фанга эътибори юқори эмаслиги. Юртимиз олимларининг технологик ишланмалари ва илмий-тадқиқотлари натижаларини амалиётга татбиқ этишга тармоқлар томонидан қизиқишнинг пастлиги мамлакат иқтисодиётининг технологик ривожланишига тўсиқ бўлмоқда ва Давлат бюджети зиммасига оғир юк бўлиб тушмоқда. Бундан ташқари, аксарият илмий лойиҳалар илмий ташкилотларнинг ташаббуслари асосида шакллантирилади, яъни давлат учун устувор бўлган тадқиқотлар эмас, балки мазкур илмий ташкилотлар истаган ва амалга ошира оладиган аниқ якуний натижа (маҳсулот) олиш имконини бермайдиган функционал вазифалар доирасидаги тадқиқотлар молиялаштирилади;

иккинчидан, инновацион инфратузилманинг алоҳида элементлари (инновацион жамғармалар, технологияларни жорий этиш марказлари, муҳандислик лабораториялари, технопарклар ва бошқалар) ўртасида иқтисодий ҳамкорликнинг ривожланмаганлиги. Ички ҳамда жаҳон бозорларига билимлар ва янги технологияларни татбиқ этиш ишларини яхшилаш лозим [6];

учинчидан, кичик инновацион тадбиркорлик ва илмий ҳажмдор маҳсулотлар ишлаб чиқаришнинг ривожланмаганлиги. Илмий ташкилотлар томонидан инновацион корхоналарни ташкил этиш бўйича тажриба ва кўникмалар тўлиқ шаклланмаган;

тўртинчидан, илмий ташкилотларда илм-фанни ташкил қилиш, илмий ишлар харажатларини прогнозлаштириш ва натижаларнинг иқтисодий таҳлилини олиб бориш тизими тўлиқ йўлга қўйилмаганлиги. Илмий ташкилотларнинг раҳбарияти асосан илм-фан намояндаларидан иборат бўлиб, улар илмий тадқиқот натижаларини тижоратлаштириш, ташкилот

ресурс базаси ва инфратузилмасини янгилаб бориш, ишланмаларни рағбатлантириш каби соҳаларда етарли кўникмаларга эга эмас;

бешинчидан, илмий салоҳиятни ривожлантиришга хусусий секторни жалб этиш ишлари фаол эмаслиги. Илм-фанга хусусий сектор маблағларини жалб қилиш янги технологиялар ва илмий ҳажмдор маҳсулотларни яратиш ҳамда ишлаб чиқаришга жорий этиш, бозорларда рақобатбардошликка эришиш ва уни сақлаб қолишнинг асосий омили;

олтинчидан, илмий-тадқиқот ўтказадиган жамоалар, академиклар ва тадқиқотчилар ўртача ёшининг катталиги. Илмий ташкилотларда фаолият кўрсатаётган илмий даражали тадқиқотчиларнинг ўртача ёши 51 ёшни ташкил этаётганлиги ёшларни илм-фанга жалб этиш ишларини жадаллаштириш ҳамда илмий-тадқиқотлар суръатларини оширишни талаб этади;

еттинчидан, аҳоли сонига нисбатан олимлар сонининг камлиги. Ҳозирда бир миллион аҳоли сонига ўртача 950 нафар илмий ходим тўғри келмоқда. Ёшларни илм-фанга жалб этиш ишларининг сушт ташкил этилганлиги, фан ва таълим тизими ўртасида интеграция даражаси паст бўлганлиги, олимлар меҳнатининг моддий, ижтимоий ва маънавий жиҳатдан етарли даражада қўллаб-қувватланмаганлиги бунинг асосий сабабларидандир;

саккизинчидан, илмий-тадқиқот натижаларига маҳаллий ва хорижий патентлар олиш даражаси пастлиги. 2014 — 2018 йилларда Давлат бюджети маблағлари ҳисобидан молиялаштирилган амалий ва инновацион лойиҳалар натижаларига кўра илмий ташкилотлар ва олий таълим муассасалари томонидан жами 700 та ихтиро патентлаштирилган бўлиб, бунда хорижий патентларнинг улуши 1 фоизга тенг. Олинган патентларни хорижий давлатларда рўйхатдан ўтказиш ишларини тўғри ва самарали ташкиллаштириш зарур;

тўққизинчидан, интеллектуал фаолият натижаларини хўжалик айланмасига киритишнинг иқтисодий ва ҳуқуқий механизмлари ривожланмаганлиги. Олимлар томонидан интеллектуал мулк учун олинган патентлар бозори мавжуд эмас. Хўжалик юритувчи субъектларнинг интеллектуал фаолият натижаларини жорий этишга бўлган манфаатдорлиги юқори даражада эмас;

ўнинчидан, илм-фан ва илмий фаолиятга молиявий ресурсларнинг етарли даражада йўналтирилмаётганлиги. Ҳозирги кунда илм-фан ва илмий фаолиятга йўналтирилаётган маблағ мамлакат ялпи ички маҳсулотининг атиги 0,2 фоизини ташкил қилади ва ушбу кўрсаткич қатор ривожланган ва ривожланаётган давлатлар томонидан илм-фанга йўналтирилаётган маблағларга нисбатан камдир;

ўн биринчидан, илмий ташкилотлар ва олий таълим муассасалари ўртасидаги алоқаларнинг сустилиги, таълим, фан ва ишлаб чиқаришнинг мустаҳкам интеграцияси таъминланмаганлиги. Илмий ташкилотларнинг

илмий фаолиятини мамлакат ижтимоий-иқтисодий ривожлантириш истиқболларини ҳисобга олган ҳолда ташкил этиш пайти келди;

ўн иккинчидан, илмий-тадқиқот ишлари натижаларини тижоратлаштириш даражасининг юқори эмаслиги. Бу эса илмий ташкилотлар ва улар томонидан ташкил этилган инновацион корхоналарга инвестиция ва банк кредити маблағларининг жалб қилиш имкониятини бермайди;

ўн учинчидан, олий таълимдан кейинги таълим, квота тизими ва илмий даража беришда аттестация жараёнлари жаҳон тажрибаси билан уйғунлаштирилмаганлиги. Ушбу йўналишлардаги бюрократик тўсиқлар оқибатида юқори малакали илмий кадрлар тайёрлаш талаб даражада эмас;

ўн тўртинчидан, илмий ташкилотларнинг асосан пойтахт атрофида марказлашганлиги ва ҳудудларда замонавий илмий лабораторияларнинг мавжуд эмаслиги. Деярли 90 фоиз илмий-тадқиқот лабораториялари Тошкент шаҳрида шаклланганлиги ҳудудларда илмий-тадқиқот фаолиятини замон талаблари даражасида амалга оширишни чегаралаб қўймоқда;

ўн бешинчидан, илмий базани технологик жиҳатдан жиҳозлаш даражасининг юқори эмаслиги. Илм-фанни технологик жиҳатдан модернизация қилиш, илмий ташкилотлар ва олий таълим муассасаларини замонавий асбоб-ускуналар билан жиҳозлаш даражаси паст, илм-фаннинг технологик базаси ҳолатини таҳлил қилиш ва уни мунтазам янгилаб бориш тизими тўлиқ шаклланмаган;

ўн олтинчидан, илмий ташкилотлар ўртасида рақобатнинг ривожланмаганлиги, уларнинг миллий рейтинги ва йиллик баҳолаб бориш тизими тўлиқ жорий этилмаганлиги. Аксарият илмий ташкилотлар фан йўналишларида монополист сифатида фаолият юритади, илм-фан йўналишларида рақобатчи сифатида намоён бўла олмаяпти;

ўн еттинчидан, мустақил илмий экспертлар жамоасининг шаклланмаганлиги. Илмий лойиҳалар муҳокамаси жараёнида маҳаллий олимлар жамоасидан иборат илмий-техник кенгашлардаги «манфаатлар тўқнашуви» лойиҳаларга берилаётган хулосаларнинг ҳолислиги ва сифатига салбий таъсир қилмоқда;

ўн саккизинчидан, илм-фандаги ютуқларнинг етарли даражада тарғиб қилинмаслиги. Янги технологиялар ва маҳсулотларни сотиш мумкин бўлган бозорлар ҳақида, шунингдек хусусий инвесторлар ва кредит ташкилотлари учун юқори даромадга эга капитал киритиладиган объектлар тўғрисидаги маълумотлар кам тарғиб қилинади;

ўн тўққизинчидан, олимларнинг жаҳоннинг нуфузли маълумотлар базаларида индексациядан ўтган юқори импакт факторли жаҳон журналларида мақолалар чоп этиш даражасининг пастлиги. Ҳозирда WEB of Science, SCOPUS каби маълумотлар базасида индексация қилинадиган халқаро илмий журналларда чоп этилган мақолалар орасида

Ўзбекистоннинг ялпи улуши 0,1 фоизга яқин. Ўз ичига 5 мингдан ортиқ нашриётларнинг 22 минг номдаги илмий журналларини олган Scopus маълумотлар базаси асосида SJR (ScimagoJournal&CountryRank) ресурсининг таҳлилларига кўра, Ўзбекистон битта мақолага ҳаволалар кўрсаткичи бўйича жаҳоннинг 239 давлати ўртасида 220-ўринни эгаллаб (6,52), мамлакатимизнинг H-index кўрсаткичи 86 ни ташкил этмоқда [7].

Чунончи, мамлакатимизда илм-фанни ривожлантиришнинг устувор йўналишлари қуйидагилардан иборат [8]:

биринчиси, илм-фан соҳасида бошқарув тизимини такомиллаштириш;

иккинчиси, илм-фан ва илмий фаолиятни молиялаштириш тизимини такомиллаштириш ҳамда молиялаштириш манбаларини диверсификациялаш;

учинчиси, юқори малакали илмий ва муҳандис кадрлар тайёрлаш ҳамда уларни илмий фаолиятга йўналтириш;

тўртинчиси, илм-фанни ривожлантиришнинг замонавий инфратузилмасини яратиш;

бешинчиси, илм-фан тараққиётига кўмаклашадиган замонавий ахборот муҳитини шакллантириш.

Замонавий шароитларда фан жамиятнинг бевосита ишлаб чиқарувчи кучи сифатида қатнашмоқда. У моддий ишлаб чиқариш муҳитига фаолроқ кириб бормоқда ва унга доимий катта таъсир ўтказмоқда. Интенсив тараққиётга ўтиш шароитида ишлаб чиқаришга янги илмий ғояларни тезроқ ва системали тарзда жорий этиш зарур бўлади. Айнан шу сабабли ҳам фундаментал тадқиқотлар техника ва ишлаб чиқариш эҳтиёжларидан олдинда бориши, узиб кетиши лозим. Илм-фан муҳитининг сўнгги босқичи-саноат ишлаб чиқаришнинг янги маҳсулотларни ўзлаштириши ҳисобланади. Бу босқич янги, мукаммаллаштирилган маҳсулотни текширишни амалга ошириш, шунингдек ишлаб чиқаришни техник ва технологии жихатдан тайёрлаш каби илмий ва ишлаб чиқариш муносабатларини қамраб олади.

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*Галимянов А.Ф., к.ф. – м.н.
доцент*

Казанский (Приволжского) федеральный университет

Иньяминов Ю.А.

Ирисбоев Ф.Б.

ассистент

кафедра «Радиоэлектроника»

Джизакский политехнический институт

ТИПОВЫЕ АЛГОРИТМЫ ПОИСКА ТОЧКИ МАКСИМАЛЬНОЙ МОЩНОСТИ

Аннотация. Одним из основных способов повышения энергетической эффективности фотоэлектрических энергетических установок является реализация режима отбора максимума мощности в максимальной точке вольт-амперной характеристики солнечной батареи. В методе возрастающей проводимости преобразователь измеряет увеличение тока и напряжение СБ, чтобы предсказать эффект от изменения напряжения.

Ключевые слова: солнечной батареи, постоянного напряжения, фотоэлектрической панель, фотомодуль, hill-climbing.

Galimyanov A.F., Ph.D

associate professor

Kazan (Volga Region) Federal University

Inyaminov Yu.A.

Irisboev F.B.

assistant

Department of Radioelectronics

Jizzakh Polytechnic Institute

TYPICAL ALGORITHMS FOR SEARCHING THE POINT OF MAXIMUM POWER

Abstract. This article conveys one of the main ways to increase the energy efficiency of photovoltaic power plants is the implementation of the maximum power selection mode at the maximum point of the current-voltage characteristic of the solar battery. In the incremental conductance method, the converter measures the increase in current and voltage of the SB to predict the effect of the voltage change.

Keywords: solar battery, constant voltage, photovoltaic panel, photomodule, hill-climbing.

Одним из основных способов повышения энергетической эффективности фотоэлектрических энергетических установок является реализация режима отбора максимума мощности в максимальной точке вольт-амперной характеристики солнечной батареи (рис.1) [1,2].

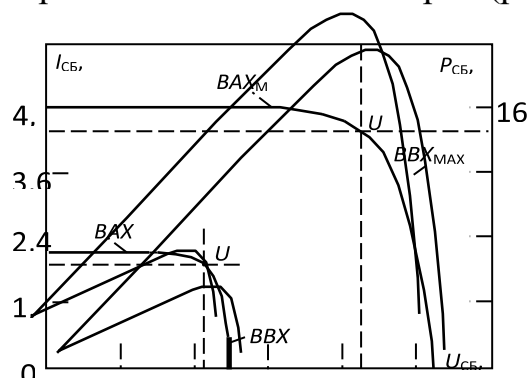


Рис. 1. ВАХ СБ на примере фотоэлектрической панели КСМ-160

Как правило используется один из трёх алгоритмов для оптимизации выходной мощности фотомодулей. В некоторых устройствах для отслеживания точки максимальной мощности реализовано несколько алгоритмов, и переключения между ними основываются на рабочих условиях. Основными методами являются: возмущение и наблюдение, метод возрастающей проводимости и метод постоянного напряжения [3,4].

При использовании метода возмущения и наблюдения устройство на небольшую величину изменяет входное сопротивление (путём варьирования скважности силового ключа или изменения задания на входное напряжение, ток или мощность), вследствие чего изменяется напряжение на СБ и измеряет её выходные параметры. Если мощность увеличивается – контроллер продолжает изменять напряжение в этом же направлении, пока мощность не перестанет увеличиваться [5]. Данный метод является наиболее распространённым, несмотря на то что он приводит к колебаниям мощности. Также этот метод упоминается как hill-climbing, потому что он зависит от кривой $P = f(U)$, которая возрастает до точки максимальной мощности и убывает после этой точки. Распространённость этого метода обусловлена простотой его реализации. Существует возможность повышения точности при использовании адаптивного алгоритма изменения шага [6,7].

В методе возрастающей проводимости преобразователь измеряет увеличение тока и напряжение СБ, чтобы предсказать эффект от изменения напряжения. Метод возрастающей проводимости требует больше вычислений в микроконтроллере, но он отслеживает изменение окружающей условий с большей скоростью, чем предыдущий метод. Однако, он так же приводит к колебаниям мощности. Метод возрастающей проводимости использует возрастающую проводимость dI/dU СБ для вычисления знака изменения мощности по отношению к напряжению dP/dU .

Этот метод вычисляет точку максимальной мощности, сравнивая возрастающую проводимость $\Delta I/\Delta U$ с проводимостью СБ (I/U). Когда выполняется условие $\Delta I/\Delta U = I/U$, выходное напряжение является напряжением максимальной мощности [8]. Уставка по напряжению поддерживается, пока не изменится уровень освещённости, после процесс повторяется.

При использовании метода постоянного напряжения, когда выходное напряжение СБ не изменяется, преобразователь не пытается отслеживать точку максимальной мощности. Работающее по этому методу устройство на мгновение отключает СБ от нагрузки и замеряет напряжение холостого хода. После этого продолжается работа с напряжением, управляемым постоянным коэффициентом ($U_{REF} = kU_{XX}$), который определяется эмпирически [9].

Возмущение и наблюдение и метод возрастающей проводимости являются примерами hill-climbing методов, которые могут найти локальный максимум мощности для рабочего состояния СБ и так обеспечить точку максимальной мощности. Метод возмущения и наблюдения может создавать колебания даже при постоянном уровне освещения. Метод возрастающей проводимости может определить точку максимальной мощности без колебаний мощности и в быстро меняющихся условиях, однако при быстро меняющихся погодных условиях он может работать хаотично. Так же он требует больших ресурсов микроконтроллера [10]. В методе постоянного напряжения ток должен установиться в ноль для измерения напряжения холостого хода. На время, пока ток остаётся нулевым, теряется энергия. Контроллеры точки максимальной мощности используются как в сетевых, так и автономных станциях. В сетевых инверторах вся вырабатываемая СБ мощность передаётся в сеть [11]. В автономной системе, когда аккумуляторы полностью заряжены и нет нагрузки для потребления выработки СБ, устройство отслеживания точки максимальной мощности переносит рабочую точку, уменьшая мощность, пока она не будет соответствовать потреблению.

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Ганиева М.Ш.

доцент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Мамадалиева Х.О.

студент магистратуры

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Маджидова Н.М.

ассистент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

СРАВНИТЕЛЬНЫЙ АНАЛИЗ ПОКАЗАТЕЛЕЙ ГЕМОСТАЗА ПРИ РАЗЛИЧНЫХ ВАРИАНТАХ ОСТРОГО ГЛОМЕРУЛОНЕФРИТА У ДЕТЕЙ НА ФОНЕ АНТИКОАГУЛЯНТНОЙ ТЕРАПИИ

Аннотация. Антикоагулянтная терапия, необходимая для лечения и предупреждения тромботических осложнений у детей, часто вызывает затруднения. До настоящего времени нет единого мнения по поводу терапии и профилактики тромботических осложнений при нефропатиях детей и взрослых. При этом установлено, что эпидемиология тромбозов и их локализация у детей и взрослых имеет существенные различия. Проблема антикоагулянтной терапии при нефротическом синдроме решена не до конца. Обсуждается возможность развития резистентности к терапии гепаринами вследствие потери с мочой антитромбина III у больных с нефротическим синдромом. В этом случае прямые пероральные антикоагулянты могут иметь преимущества у этой категории больных.

Ключевые слова. Антикоагулянтная терапия, тромбоз, антитромбин, нефропатия, коагуляция.

Ganieva M.SH.

professor

Department of hospital pediatrics

Andijan state medical institute

Republic of Uzbekistan, Andijan

Mamadaliyeva Kh.O.

master's student
Department of Hospital Pediatrics
Andijan State Medical Institute
Republic of Uzbekistan, Andijan
Madjidova N. M.
assistant
Department of hospital pediatrics
Andijan state medical institute
Republic of Uzbekistan, Andijan

COMPARATIVE ANALYSIS OF HEMOSTASIS INDICATORS IN DIFFERENT VARIANTS OF ACUTE GLOMERULONEPHRITIS IN CHILDREN DURING ANTICOAGULANT THERAPY

Annotation. Anticoagulant therapy necessary to treat and prevent thrombotic complications in children is often challenging. To date, there is no consensus on the treatment and prevention of thrombotic complications in nephropathy in children and adults. It has been established that the epidemiology of thrombosis and their localization in children and adults has significant differences. Until now, there is no consensus on the treatment and prevention of thrombotic complications in nephropathy in children and adults. The problem of anticoagulant therapy for nephrotic syndrome (NS) has not been fully resolved. The possibility of development of resistance to heparin therapy due to loss of antithrombin III in urine in patients with NS is discussed. In this case, direct oral anticoagulants may have advantages in this category of patients.

Keywords. Anticoagulant therapy, thrombosis, antithrombin, nephropathy, coagulation.

Актуальность. Одним из печальных последствий гломерулонефритов (ГН) у детей является развитие хронической почечной недостаточности, морфологическую основу которой составляет нефросклероз. Анализ механизмов развития гломерулосклероза некоторых авторов привёл к выводу о сходстве этого процесса с таковыми при атеросклерозе. Немаловажная роль среди факторов риска атеро- и нефросклероза отводится нарушениям свертываемости крови с тенденцией к гиперкоагуляции [1,2,4,6]. Исследователи подчеркивают, что гломерулосклероз вероятнее всего является результатом взаимодействия между мезангиальными и эпителиальными клетками клубочка и инфильтрирующими его тромбоцитами, нейтрофилами, лимфоцитами, моноцитами. Вследствие этого высвобождается много воспалительных медиаторов, цитокинов и факторов роста в виде тромбоцитарного и трансформирующего. Последнее ведёт к уменьшению продукции эндотелий релаксирующего оксида азота и последующей увеличению

выделения эндотелина-1 - мощного вазоконстриктора и промитогена, продуцируемого эндотелиальными клетками не только клубочка, но и канальцев [3,5,7, 8].

Активное изучение состояния гемокоагуляции при ГН началось с середины прошлого века, когда клинико-экспериментальные данные подтвердили наличие фибриновых тромбов в клубочках при различных вариантах заболевания [9,10,12]. За прошедшие годы опубликовано большое количество работ, раскрывающих механизмы внутрикапиллярной коагуляции при нефритах, что позволяет выделить основные составляющие этого процесса: нарушение функции эндотелия, активизация тромбоцитарного и коагуляционного звеньев гемостаза, изменения фибринолиза. Наряду с этим состояние различных звеньев системы гемостаза, в первую очередь сосудисто-тромбоцитарного, у больных с гломерулонефритами изучено недостаточно. А также мало сведений о воздействии и основных методов патогенетического лечения с использованием цитостатической терапии, антигипертензивных препаратов, дезагрегантов на эти процессы [11,13].

Цель исследования. Провести сравнительный анализ показателей гемостаза при различных вариантах острого гломерулонефрита у детей на фоне антикоагулянтной терапии.

Материал и методы исследования. Под наблюдением находилось 100 детей с острым гломерулонефритом (ОГН) в возрасте от 1 до 18 лет, получавших стационарное лечение в нефрологическом отделении Областного детского многопрофильного медицинского центра города Андижана. Диагноз был верифицирован на основании анализа жалоб, сбора анамнестических данных и комплекса клинико-лабораторных данных. Всем обследуемым детям с различными вариантами ОГН провели исследование показателей гемостаза – подсчёт количества тромбоцитов, определение времени свёртывания крови, АЧТВ, фибриногена, ПТИ и Д-димера. Контрольную группу составили 30 практически здоровых детей аналогичного возраста, не болевшие заболеванием почек, с нормальными клинико-лабораторными показателями по почечной патологии. Исследуемым больным было назначено стандартное лечение, включающее применение антикоагулянтов и антиагрегантов в возрастной дозе.

Результаты и их обсуждение. С учётом возможных отклонений в системе гемостаза и их первичности в патогенезе ОГН, его исследование является особенно информативным. Изучение базисных показателей свёртывания крови в различные стадии заболевания ОГН (дебют, активная стадия, стадия обратного развития симптомов, ремиссия) служит точкой отсчёта или моделью для оценки состояния гемостаза, возможно определяющего прогрессирование ГН (таблица 1).

Таблица 1

Показатели гемостаза в дебюте ОГН (M±m)

Показатели	Контрольная группа(n=30)	Больные ОГН с нефротическим синдромом (n=65)	Больные ОГН с нефритическим синдромом (n=35)
Тромбоциты	220±1,95	226±18,95	225±21,3
АЧТВ	38.9 ±1,5	43.2 ±2,3	41.2 ±2,6
Свёртываемость крови	2,5± 2,1	2,0± 1,7	2,2± 1,1
Фибриноген	3,0±0,3	6,3±0,4	5,2±0,5
Д-димер	0,5±0,1	1,4±0,4	1,0±0,25
ПТИ,%	100,5±1,7	110,1±5,6	104,1±5,6

Как видно из таблицы 2, начальные проявления ОГН вне зависимости от клинического варианта характеризовались усилением внутрисосудистой агрегации при нормальном количестве тромбоцитов крови, активизацией коагулирующей способности крови (при недостоверном приросте протромбинового индекса), а также значимым повышением количества растворимого фибриногена в плазме. Разгар болезни при всех вариантах течения сопровождался гиперагрегацией и выраженной активацией кровяных пластинок. В обследованных группах эти показатели характеризовались ускоренным начальным тромбинообразованием. Уровни АЧТВ свидетельствовали о фазности процесса коагуляции, что проявляется тем, что наряду с усилением свертывания у ряда больных отмечены гипокоагуляционные сдвиги во внутреннем и внешнем (протромбиновом) механизмах. В развёрнутой стадии ОГН наблюдались гиперфибриногемия, избыток продуктов деградации фибриногена/фибрина в крови, плазме и сыворотке, а на 2-3 месяце болезни наблюдался их выраженный дефицит, максимально выраженный у пациентов со значительной мочевой экскрецией белка (3,3±0,6 г/сут.) при ОГН с нефротическим синдромом (НС). Прогностически наиболее неблагоприятное течение с НС сопровождалось гипокоагуляцией потребления, достоверным снижением числа тромбоцитов крови и резкой активацией пластинок в циркуляции.

В задачи нашего исследования входило провести сравнительный анализ влияния дипиридамола на дальнейшее течение ОГН. Для этого мы отобрали из двух обследуемых нами групп больных по 10 детей, которым с интервалом 5 дней от начала лечения, включающего в себя обязательно антикоагулянтную терапию, провели мониторинг основных показателей гемостаза.

В таблице 2 приведены данные о гемостатических нарушениях при различных клинических вариантах ОГН через 5 дней после начала базисной патогенетической терапии, в частности включения в комплекс лечения больных гепарина в дозе 100 ЕД/кг. Частично свойствами антиагрегации

обладали и ингибиторы АПФ, которые входят в стандарт патогенетической терапии. Больные, находившиеся под нашим наблюдением, принимали такие препараты, как каптоприл или эналаприл. Потребность в данных препаратах была наиболее уместной среди больных с нефритическим синдромом ОГН, когда отмечалась артериальная гипертензия.

Таблица 2

Показатели гемостаза через 5 дней после начала антикоагулянтной терапии ОГН (M±m)

Показатели	Контрольная группа(n=30)	Больные ОГН с нефритическим синдромом (n=10)	Больные ОГН с нефритическим синдромом (n=10)
Тромбоциты	220±1,95	226±12,52	221±20,3
АЧТВ	38.9 ±1,5	40.2 ±2,8	39.2 ±2,5
Свёртываемость крови	2,5± 2,1	4,4± 1,2	4,7± 1,5
Фибриноген	3,0±0,3	4,5±0,5	4,3±0,6
Д-димер	0,5±0,1	1±0,5	0,5±0,2
ПТИ,%	100,5±1,7	104,1±4,1	101,1±4,2

Из данных таблицы 2 видно, что после начала антикоагулянтной терапии почти все показатели гемостаза стали приближаться к контрольным нормальным показателям. А среди больных с нефритическим синдромом показатели АЧТВ и Д-димера стали соответствовать нормальным значениям.

Судя по результатам наших наблюдений, прогностически наиболее неблагоприятное течение болезни отмечалось у больных с НС ОГН и сопровождалось гипокоагуляцией потребления, достоверным снижением числа тромбоцитов крови и резкой активацией пластинок в циркуляции.

Затяжное течение ОГН выражалось не только в сохранении клинико-лабораторных и морфологических симптомов (отеки, протеинурия, гематурия, мезангиальная пролиферация), но и в существенных нарушениях со стороны гемостаза (табл. 3).

Таблица 3

Показатели системы гемостаза при затяжном ОГН (M ± m)

Показатели	Контрольная группа(n=20)	Больные с затяжными формами ОГН (n=15)
Тромбоциты	220±1,95	273,6 ± 20,4
АЧТВ	38.9 ±1,5	32,8 ±1,7
Свёртываемость крови	2,5± 2,1	2,2± 1,2
Фибриноген	3,0±0,3	6,7 ±0,1
Д-димер	0,5±0,1	1±0,5
ПТИ,%	100,5±1,7	98.7 ± 2,8

Из данных таблицы 3 видно, что уровень тромбоцитов оставался повышенным в среднем в 1,5 раза, наблюдалась активация тромбоцитов с

усиленным выделением в плазму продуктов реакции «освобождения». Менее отчетливо, чем на предшествующих стадиях, определялась необратимая гиперагрегация, что не исключало формирования тромбоцитарных агрегатов в пристеночных капиллярных тромбах. Обращала на себя внимание также динамика в кинетике свёртывания крови: начальные этапы, инициируемые тромбоцитами, оставались ускоренными. Наиболее закономерно подобная фазность изменения гемокоагуляции объясняется углубляющимся дефицитом АТ III как за счет продолжающегося сброса его с мочой, так и в результате блокады антигепариновым фактором, что доказывает латентное течение почечного внутрисосудистого свертывания крови.

Полученные результаты подтверждают наличие устойчивых изменений функциональной способности тромбоцитов на всех этапах развития и прогрессирования ОГН, т.е. гиперагрегация и активация тромбоцитов стимулирует фоновую тромбоцинемию и это определяет возможно прогрессивное течение заболевания, при котором лабильные тромбоциты становятся непосредственными участниками воспаления.

Провоспалительные эффекты тромбоцитов реализуются двумя путями: в процессе дегрануляции пластинки секретируют серотонин, гистамин, простагландины, лизосомальные ферменты, что позволяет говорить о лейкоцитоподобном действии тромбоцитов. Другая группа секреторных белков (ПФ 4, р-тромбоглобулин, митогенный фактор) обладает хемотаксической активностью по отношению к гранулоцитам и фибробластам. Именно последние, мигрируя в очаг воспаления, способствуют регенерации, пролиферации и/или развитию склероза.

Коагуляционный потенциал у больных ОГН оказался более динамичным и имел разнонаправленные значения, что проявлялось в существенном увеличении времени свёртывания крови. Этому возможно способствовало назначение антикоагулянтов в связи с доказанным повышением уровня ФВ в плазме. В то же время дефицит АТ III из-за высокой экскреции его с мочой, накопление ПФ 4 в циркуляции определяли отложение фибрина в клубочках при затяжном остром постинфекционном гломерулонефрите (ОПИГН).

Подтверждением текущего микротромбообразования в клубочках почек являются уменьшение феномена необратимой гиперагрегации, высокие значения ПТИ, как маркеров внутрисосудистой активации свертывания крови. Особенностью данного процесса при ОГН, как и при других васкулитах, является отсутствие тромбоцитопении (за исключением форм с НС) и стойкая гиперфибриногенемия.

Следует подчеркнуть, что повышенные показатели коагуляционно-тромбоцитарных нарушений выявлены именно у больных нефротическим ОГН с затяжным течением. Случаи хронизации болезни в этой группе

больных составили около 100%. Последнее подтверждает прогностическую роль гемостазиологических изменений при ОГН.

Выводы:

1. Важной характеристикой патогенетических механизмов ОГН следует считать изменения в системе гемостаза.

2. Иммунокомплексное воспаление является пусковым моментом в активации функции тромбоцитов, которые в дальнейшем «запускают» органное внутрисосудистое свертывание крови.

3. Прогностически неблагоприятными в отношении хронизации процесса являются случаи НС ОГН по сравнению с нефритическим синдромом ОГН.

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Ганиева М.Ш.

доцент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Мамадалиева Х.О.

студент магистратуры

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Маджидова Н.М.

ассистент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Султанова С.А.

врач нефролог

заведующий отделением детской нефрологии с гемодиализом

Областной детский многопрофильный медицинский центр

Республика Узбекистан, г.Андижан

КЛИНИКО-ГЕМОСТАЗИОЛОГИЧЕСКИЕ СДВИГИ У БОЛЬНЫХ ДЕТЕЙ С РАЗЛИЧНЫМИ ФОРМАМИ ОСТРОГО ГЛОМЕРУЛОНЕФРИТА

Аннотация. В последние годы ведущее значение в развитии острого гломерулонефрита (ОГН) у детей придаётся сенсбилизации организма, начиная с внутриутробного периода. Увеличение в настоящее время числа осложнений у больных с различными вариантами ОГН в виде развития хронической почечной недостаточности и летальных исходов побуждает нефрологов к поиску путей, тормозящих прогрессирование диффузных болезней почек. В то же время прогноз ОГН становится все более неопределенным из-за изменчивой эпидемиологической ситуации и ряда причин, связанных с возрастом, полом, генетическими факторами, а также расстройствами гемокоагуляции. Хотя последние большей частью изучены при острых, относительно прогностически неблагоприятных формах ГН.

Ключевые слова. Острый гломерулонефрит, нефропатии, гломерулосклероз, гемостаз.

Ganieva M.Sh.
professor
Department of hospital pediatrics
Andijan state medical institute
Republic of Uzbekistan, Andijan
Mamadaliyeva Kh.O.
master's student
Department of Hospital Pediatrics
Andijan State Medical Institute
Republic of Uzbekistan, Andijan
Madjidova N.M.
assistant
Department of hospital pediatrics
Andijan state medical institute
Republic of Uzbekistan, Andijan
Sultanova S.A.
nephrologist
Head of the children's department
nephrology with hemodialysis
Regional children's multidisciplinary medical center
Republic of Uzbekistan, Andijan

CLINICAL AND HEMOSTASIOLOGICAL DEVELOPMENTS IN PATIENT CHILDREN WITH DIFFERENT FORMS OF ACUTE GLOMERULONEPHRITIS

Annotation. In recent years, leading importance in the development of acute glomerulonephritis (AGN) in children has been given to sensitization of the body, starting from the prenatal period. The current increase in the number of complications in patients with various variants of acute renal failure in the form of the development of chronic renal failure and deaths encourages nephrologists to search for ways to inhibit the progression of diffuse kidney diseases. At the same time, the prognosis of AGN is becoming increasingly uncertain due to the changing epidemiological situation and a number of reasons related to age, gender, genetic factors, and hemocoagulation disorders. Although the latter have been mostly studied in acute, relatively unfavorable forms of GN.

Key words. Acute glomerulonephritis, nephropathies, glomerulosclerosis, hemostasis.

Актуальность. Увеличение в настоящее время числа осложнений у больных с различными вариантами острого гломерулонефрита (ОГН) в виде развития хронической почечной недостаточности и летальных исходов побуждает нефрологов к поиску путей, тормозящих прогрессирование

диффузных болезней почек [1,4,5,6]. В то же время прогноз ОГН становится все более неопределенным из-за изменчивой эпидемиологической ситуации и ряда причин, связанных с возрастом, полом, генетическими факторами, а также расстройствами гемокоагуляции. Хотя последние большей частью изучены при острых, относительно прогностически неблагоприятных формах ГН [9,10,12]. Ряд авторов, изучая механизмы формирования гломерулосклероза, пришли к выводу, что они сходны с таковыми при развитии атеросклероза в виде тенденции к гиперкоагуляции [2,7,11]. Важно мнение о том, что гломерулосклероз развивается вследствие взаимодействия между клетками клубочка и инфильтрирующими его тромбоцитами, нейтрофилами, лимфоцитами, моноцитами. В результате происходит высвобождение широкого спектра медиаторов воспаления, цитокинов и факторов роста в виде тромбоцитарного и трансформирующего. [3,7,13].

Выявлена очевидная связь иммуногистологического типа хронического гломерулонефрита (ХГН) и темпов развития хронической почечной недостаточности [6,8,14]. Наряду с этим состояние и роль различных звеньев системы гемостаза в персистировании иммунокомплексного воспаления при различных клинических вариантах ОГН изучены недостаточно.

Цель исследования: изучить клинико-гемостазиологические сдвиги у больных детей с различными формами острого гломерулонефрита.

Материал и методы исследования. Под наблюдением находилось 100 детей с острым гломерулонефритом (ОГН) в возрасте от 1 до 18 лет, получавших стационарное лечение в нефрологическом отделении Областного детского многопрофильного медицинского центра города Андижан. Диагноз был верифицирован на основании анализа жалоб, сбора анамнестических данных и комплекса клинико-лабораторных данных. Всем обследуемым детям с различными вариантами ОГН провели исследование показателей гемостаза – подсчёт количества тромбоцитов, определение времени свёртывания крови, АЧТВ, фибриногена, ПТИ и Д-димера. Контрольную группу составили 30 практически здоровых детей аналогичного возраста, не болевших заболеванием почек с нормальными клинико-лабораторными показателями по почечной патологии.

Результаты и их обсуждение. В таблице № 1 приведены количественные показатели по распространённости вариантов ОГН, возрасту и полу.

Таблица 1

№	Формы заболевания	Возраст (годы)							
		1-3		4-7		8-14		15-18	
		М	Д	М	Д	М	Д	М	Д
1	ОГН с нефритическим синдромом (n= 35)	1	-	4	4	14	3	6	3
2	ОГН с нефротическим синдромом (n=65)	7	6	12	10	21	6	2	1
	Всего = 100 больных	8	6	16	14	35	9	8	4

Как видно из данных таблицы ОГН чаще встречается среди детей в возрасте от 8 до 14 лет. Во всех возрастных группах преобладают мальчики, что коррелирует с данными мировой нефрологической практики. Среди обследованных нами детей мы выделили нефротический вариант ОГН у 65% больных и нефритический вариант у 35%.

Следует отметить, что в последние годы ведущее значение в развитии ОГН у детей придаётся сенсibilизации организма, начиная с внутриутробного периода. Так, 45 % матерей во время беременности часто употребляли аллергенно значимые продукты, у 13 детей родители или родственники страдали такими аллергическими заболеваниями, как бронхиальная астма, атопический дерматит, 15 % детей в течении первых трех месяцев жизни были переведены на искусственное или смешанное вскармливание, 25 % детей часто болели респираторными вирусными инфекциями, у 45 % в раннем возрасте часто отмечалась диарея, у 29 % родители курили табак. Во время беременности 17 матерей (17%) страдали заболеванием почек в виде пиелонефрита, у 38 матерей (38%) отмечались токсикоз, угроза прерывания беременности, у 6 матерей отмечались выкидыши, 2 детей родились от родителей из родственного брака, 92 % матерей страдали различной степенью анемии. Полученные фактические материалы свидетельствуют о участии полигенов в этиологии и патогенезе болезни, и возможно о существовании гена НС (рисунок 1).

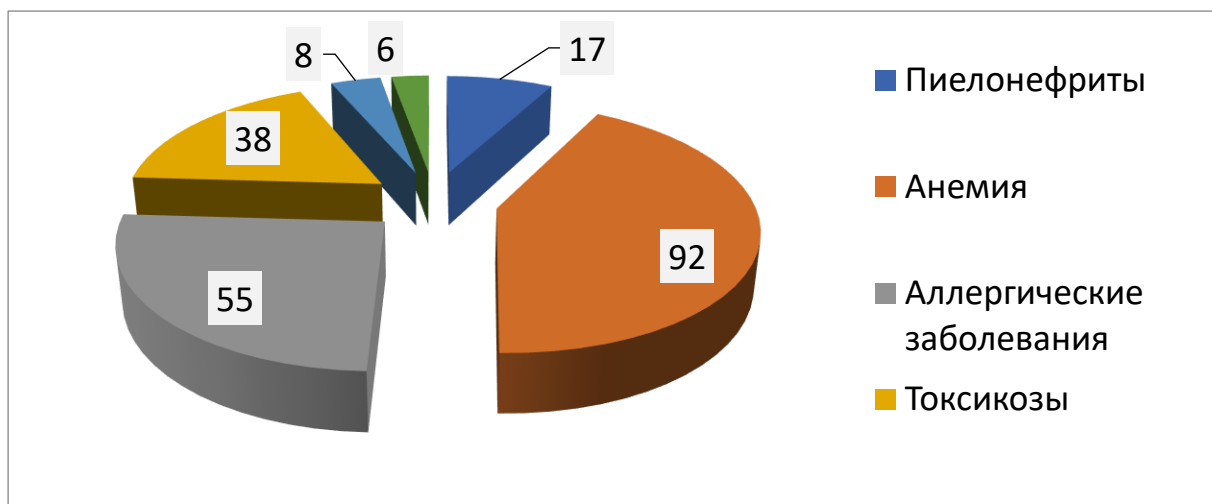


Рисунок 1. Данные об особенностях течения беременности матерей детей с ОГН

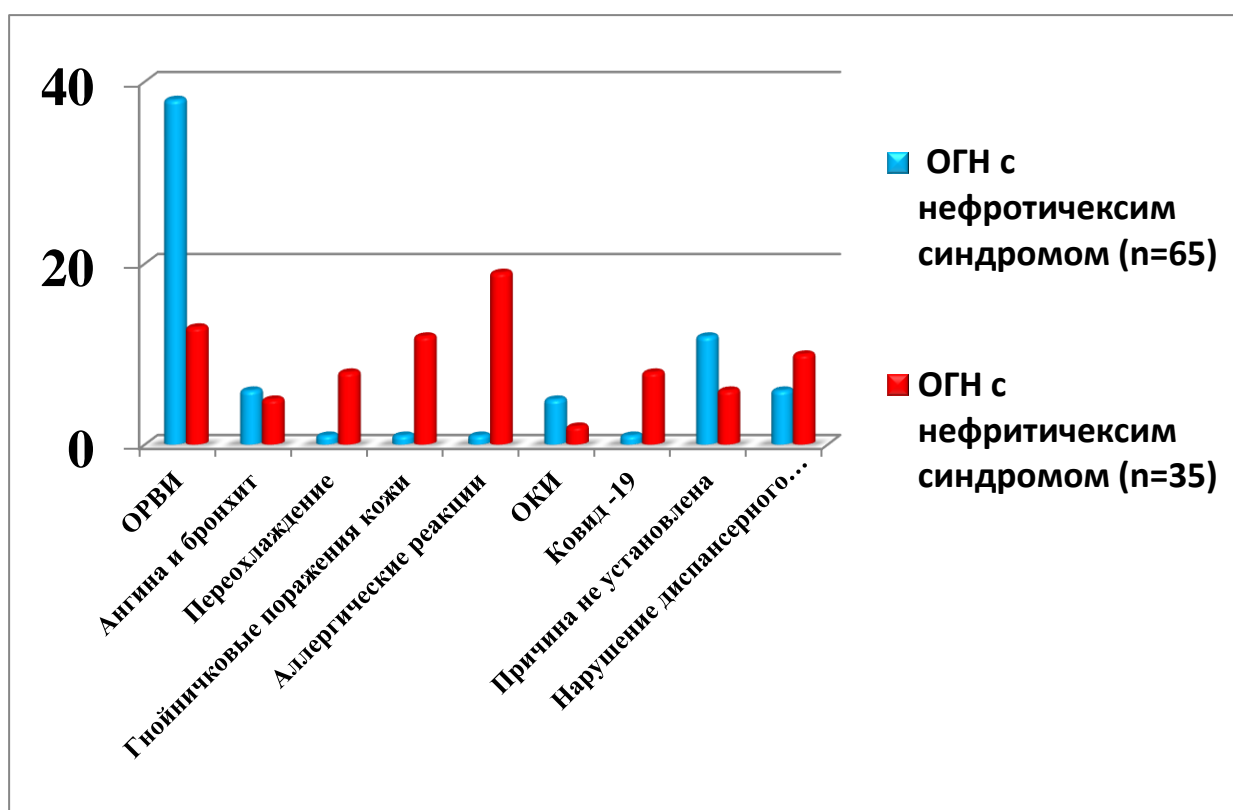


Рис. 2. Причины развития различных вариантов ОГН

Из материала, приведенного на рисунке 2, следует, что особенно частой причиной развития острого гломерулонефрита с НС и его рецидивов у наблюдаемых больных являлись ОРВИ (58 %), ангина и бронхит (9% случаев). Вместе с тем, у 12 больных с острым гломерулонефритом с НС в 18% случаев не удалось установить достоверную причину возникновения заболевания.

Результаты по больным с ОГН с нефритическим синдромом показали, что ведущую роль в развитии заболевания играли аллергические реакции (54%), ОРВИ (37%), гнойничковые поражения (34%) и Covid-19 (23%). Причиной гнойничковых поражений кожи и ангина у детей с ОГН в основном были стрептококки. У 17% больных причина болезни не была установлена достоверно. Полученные фактические материалы свидетельствуют об участии полигенов в этиологии и патогенезе болезни, и возможно о существовании гена НС. С учетом экологических изменений не маловажна роль средовых факторов в предрасположенности и проявлении гена НС.

Интересным представлялась информация о месте проживания детей, больных ОГН, также рождения их в определенное время года. Количество детей с нефритическим синдромом ОГН, проживающих в городе составило 16 человек, а на селе – 49, 8 детей с нефритическим синдромом ОГН проживали в городе, 27 на селе. Дети с нефритическим синдромом ОГН чаще рождались в августе (12%). 33% детей этой же группы родились осенью, 20% зимой, 17% весной и 30% летом (рис. 3). Среди детей с нефритическим синдромом ОГН преобладали дети, рожденные летом (14%), чем рожденные осенью (10%), весной (6%) и зимой (5%). Хотя по данным литературы отмечается наибольший процент заболеваемости и рецидивов болезни в осенне-зимний период.

Для исследования мы отобрали детей с ОГН с нефритическим и нефротическим синдромами. Ярким проявлением нефротического синдрома ОГН были отеки: у 45,1% больных выраженные, у 54,9% – умеренные. АД в подавляющем большинстве случаев соответствовала норме и только у 5 больных (9%), диастолическое АД не превышало 70 мм.рт.ст. В моче осадке у 80% больных отмечалась нормолейкоцитурия и гематурия, у 20% больных обнаруживалась микрогематурия. Патогномичным было выявление цилиндров гиалиновых и зернистых у 88% больных. У 6% больных обнаружены восковидные цилиндры. Протеинурия во всех случаях острого периода НС ОГН была выраженной (3 г/сут. и выше). В моче преобладали альбумины, в связи с чем альбумин-глобулиновый индекс всегда был больше единицы и нередко достигал до 2,8. Наряду с большим количеством белка в моче больных часто обнаруживались двоякопреломляющие свет липиды. Количество эритроцитов в моче осадке было невелико, в отдельных случаях наличие эритроцитурии устанавливалось только при помощи количественного исследования осадка мочи по методу Каковского-Аддиса. Как правило, у больных этой группы наблюдалась значительная цилиндрурия с обнаружением в моче большого количества гиалиновых, а иногда и восковидных цилиндров.

Со стороны биохимических показателей у больных с нефротическим синдромом острого гломерулонефрита отмечалось значительное

повышение уровня холестерина в крови (до 10,0 ммоль/л и выше) и общих липидов в крови (до 10,0 г/л и более), выраженная гипопротеинемия и диспротеинемия (значительное снижение содержания в сыворотке альбуминов на фоне повышения содержания α - и β -глобулинов), увеличение концентрированного остаточного азота, мочевины и креатинина в сыворотке, уменьшение клубочковой фильтрации и канальцевой реабсорбции воды.

Все наблюдаемые нами дети с нефритическим синдромом острого гломерулонефрита (35 детей), являющегося классическим или типичным вариантом заболевания, при поступлении в стационар предъявляли жалобы на общую слабость, недомогание, быструю утомляемость, одышку при небольшой физической нагрузке, плохой аппетит, появление умеренных отеков. Из них 4 детей (12%) жаловались на слабость, головную боль и головокружение, 30 детей (85%) – тошноту, изжогу и анорексию, 3-х (11%) - боли в животе, 5-ти (15%) - боли в поясничной области. У 35 больных (100%) выявлено уменьшение количества мочеиспусканий и объема выделяемой мочи, т.е. дизурические явления в виде олигурии, а у 4 (11%) - полное отсутствие мочеиспускания в течение 1-2 суток. У 2 (5,7 %) больных со слов родителей в анамнезе были указания на ночной энурез. У 11 больных (32%) отмечалось помутнение мочи.

При осмотре детей этой группы у большинства (71,4%) отмечалась бледность кожных покровов и слизистых оболочек, у всех больных - отеки на лице и веках по утрам, которые у 89% сочетались с отеками на ногах к вечеру. У 5 больных (14%) были жалобы на лихорадку. При постановке пробы Мак-Клюра-Олдрича волдыри рассасывались быстрее, чем в норме, что свидетельствует о повышенной гидрофильности тканей.

Со стороны периферической крови у 33,3% детей с нефритическим синдромом острого гломерулонефрита отмечалось уменьшение гематокрита и нормохромная анемия легкой степени. Вместе с тем обнаруживалось увеличение СОЭ до 30-40 мм/ч, лейкоцитоз, нейтрофилез, у отдельных больных - эозинофилия.

У всех детей с нефритическим синдромом острого гломерулонефрита отмечалось разной степени уменьшение диуреза. В моче обнаруживалась альбуминурия (до 1 % реже до 10- 20%). В осадке мочи выявлялись в большом количестве выщелоченные эритроциты, сравнительно небольшое количество свежих эритроцитов и лейкоцитов, гиалиновых и зернистых цилиндров (преимущественно гематурический вариант мочевого синдрома). Исследования показателей функционального состояния почек у детей с нефритическим синдромом острого гломерулонефрита позволило выявить гиперкалиемию, диспротеинемия в виде небольшого повышения содержания альфа-глобулинов и гамма-глобулинов, гипоальбуминемии, повышения уровня остаточного азота, мочевины и креатинина в крови, уменьшения клубочковой фильтрации и канальцевой реабсорбции воды.

Следует отметить, что при экскреторной урографии и эхоскопическом (ультразвуковом) исследовании почек детей с различными клиническими синдромами острого гломерулонефрита не обнаруживалось отклонений от нормы, но отмечалось усиление эхогенности коркового слоя почек.

При благоприятном течении острого гломерулонефрита, которое наблюдается у большинства детей, с конца 3-4-й недели от появления первых симптомов заболевания начинается период обратного развития процесса в почках. В первую очередь начинают постепенно уменьшаться, а затем исчезают артериальная гипертензия, отеки и пастозность.

Ликвидация мочевого синдрома и полное восстановление ренальных функций происходит через 3-6 мес, после чего наступает период клинико-лабораторной ремиссии. Исключение составляют поздно диагностируемые случаи острого гломерулонефрита, наложение интеркуррентной инфекции или наличие очага хронической инфекции и сенсбилизации в организме больных (хронический тонзиллит, гайморит, аденоидит, кариозные зубы и др.). В этих условиях острый гломерулонефрит может принимать затяжное волнообразное течение, длительностью до 1 года и более, заканчиваясь полным выздоровлением или переходом в хронический процесс.

По нашим наблюдениям, неблагоприятный прогноз в отношении получения полной клинико-лабораторной ремиссии во время стационарного этапа лечения чаще отмечается у детей с нефротическим синдромом острого гломерулонефрита, особенно его гормонорезистентные (10 детей) и гормонозависимые (3) формы.

Состояние системы гемостаза в динамике острого гломерулонефрита. С учётом возможных отклонений в системе гемостаза и их первичности в патогенезе ОГН, его исследование является особенно информативным. Изучение базисных показателей свертывания крови в различные стадии заболевания ОГН (дебют, активная стадия, стадия обратного развития симптомов, ремиссия) служит точкой отсчёта или моделью для оценки состояния гемостаза, возможно определяющего прогрессирование ГН (таблица 2).

Таблица 2

Показатели гемостаза в дебюте ОГН (M±m)

Показатели	Контрольная группа(n=)	Больные ОГН с нефротическим синдромом (n=65)	Больные ОГН с нефритическим синдромом (n=35)
Тромбоциты	220±1,95	226±18,95	225±21,3
АЧТВ	38.9 ±1,5	43.2 ±2,3	41.2 ±2,6
Свёртываемость крови	2,5± 2,1	2,0± 1,7	2,2± 1,1
Фибриноген	3,0±0,3	6,3±0,4	5,2±0,5
Д-димер	0,5±0,1	1,4±0,4	1,0±0,25
ПТИ,%	100,5±1,7	110,1±5,6	104,1±5,6

Как видно из таблицы 2, начальные проявления ОГН вне зависимости от клинического варианта характеризовались усилением внутрисосудистой агрегации при нормальном количестве тромбоцитов крови, активизацией коагулирующей способности крови (при недостоверном приросте протромбинового индекса), а также значимым повышением количества растворимого фибриногена в плазме. Разгар болезни при всех вариантах течения сопровождался гиперагрегацией и выраженной активацией кровяных пластинок. В обследованных группах эти показатели характеризовались ускоренным начальным тромбинообразованием. Уровни АЧТВ свидетельствовали о фазности процесса коагуляции, что проявляется тем, что наряду с усилением свертывания у ряда больных отмечены гипокоагуляционные сдвиги во внутреннем и внешнем (протромбиновом) механизмах. В развёрнутой стадии ОГН наблюдались гиперфибриногенемия, избыток продуктов деградации фибриногена/фибрина в крови, плазме и сыворотке, а на 2-3 месяце болезни наблюдался их выраженный дефицит, максимально выраженный у пациентов со значительной мочевой экскрецией белка ($3,3 \pm 0,6$ г/сут.) при ОГН с НС. Прогностически наиболее неблагоприятное течение с НС сопровождалось гипокоагуляцией потребления, достоверным снижением числа тромбоцитов крови и резкой активацией пластинок в циркуляции.

Выводы:

1. Этиологическими факторами ОГН у детей могут быть разнообразны, при этом причиной НС ОГН чаще являлась ОРВИ.
2. Показатели коагуляционно-тромбоцитарных нарушений выявлены именно у больных с нефротическим острым постинфекционным гломерулонефритом (ОПИГН).
3. Иммунокомплексное воспаление является пусковым моментом в активации функции тромбоцитов, которые поддерживают воспалительные реакции в клубочках, становясь непосредственными участниками этого процесса.

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Ганиева М.Ш.

доцент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Нурматова О.А.

студент магистратуры

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Хайдарова Л.Р.

старший преподаватель

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

Болтабоева М.М.

ассистент

кафедра «Госпитальная педиатрия»

Андижанский государственный медицинский институт

Республика Узбекистан, г.Андижан

ОСОБЕННОСТИ ТЕЧЕНИЯ НЕФРОТИЧЕСКОГО СИНДРОМА У ДЕТЕЙ РАЗЛИЧНОГО ВОЗРАСТА И ЕГО КЛИНИЧЕСКИЕ ПРОЯВЛЕНИЯ У ДЕТЕЙ АНДИЖАНСКОЙ ОБЛАСТИ

Аннотация. Нефротический синдром (НС) у детей продолжает оставаться актуальной клинической проблемой, несмотря на то, что диагностические критерии НС четко определены, подходы к лечению различных нефропатий с НС проверены многолетней клинической практикой и неоднократно опубликованы в различных руководствах, в том числе в Клинических Рекомендациях Союза Педиатров России. Вместе с тем актуальность проблемы НС определяется тем, что в его основе могут лежать самые различные нефропатии, требующие дифференцированного подхода к ведению таких больных. Кроме того, опасности НС неисчерпываются возможностью прогрессирования нефропатии до терминальной хронической почечной недостаточности (ХПН), но связаны с большой потерей белка. Вследствие этого прогноз НС практически на 100% определяется эффективностью или неэффективностью иммуносупрессивной терапии, и до начала применения глюкокортикоидов (ГКС) летальность при НС была чрезвычайно высока.

Ключевые слова. Гломерулонефрит, нефротический синдром, нефропатии, иммуносупрессивная терапия.

Ganieva M.Sh.

professor

Department of hospital pediatrics

Andijan state medical institute

Republic of Uzbekistan, Andijan

Nurmatova O.A.

Master's student

Department of Hospital Pediatrics

Andijan State Medical Institute

Republic of Uzbekistan, Andijan

Xaydarova L.R.

assistant

Department of hospital pediatrics

Andijan state medical institute

Republic of Uzbekistan, Andijan

Boltaboyeva M.M.

assistant

Department of hospital pediatrics

Andijan state medical institute

Republic of Uzbekistan, Andijan

FEATURES OF THE COURSE OF NEPHROTIC SYNDROME IN CHILDREN OF DIFFERENT AGES AND ITS CLINICAL MANIFESTATIONS IN CHILDREN OF THE ANDIJAN REGION

Annotation. Nephrotic syndrome (NS) in children continues to be a pressing clinical problem, despite the fact that the diagnostic criteria for NS are clearly controlled, approaches to various nephropathies with NS have been tested over many years of clinical practice and have been repeatedly published in various areas, including in the Clinical Guidelines of pediatric countries. Russia. At the same time, the relevance of the problem of NS was determined by the fact that on its basis all various nephropathies that require a differentiated approach to the treatment of such patients can be excluded. In addition, the dangers of NS are not limited to the possibility of progression of nephropathy to end-stage chronic renal failure (ESRD), but are associated with a large loss of protein. As a result, the prognosis of NS is almost 100% determined by the effectiveness or ineffectiveness of immunosuppressive therapy, and before the use of glucocorticoids (GCS), mortality in NS was extremely high.

Key words. Glomerulonephritis, nephrotic syndrome, nephropathies, immunosuppressive therapy.

Актуальность работы. Как известно, нефротический синдром сопровождается различными вариантами гломерулонефритов, а у некоторых больных может проявляться в виде самостоятельной нозологической формы. Согласно результатам эпидемиологических исследований, нефротический синдром (НС) отмечается не более чем у одного ребенка из 6000, однако именно этот пациент часто является серьезной терапевтической проблемой [4,6,11]. Проблема нефротического синдрома (НС) в детском возрасте остается актуальной в связи с особенностями развития его клинико-лабораторного и морфологического симптомокомплекса, характера течения, исхода при врожденных, наследственных, приобретенных заболеваниях. Клинико-лабораторный симптомокомплекс нефротического синдрома характеризуется протеинурией с диагностической значимостью у детей $1 \text{ г/м}^2/\text{сут}$ или $40 \text{ мг/м}^2/\text{ч}$, гипоальбуминемией $< 25 \text{ г/л}$, гиперлиппротеинемией IIa и в, реже IV типов, липидурией различной степени, отеками периферическими, полостными, нередкоходящими до анасарки [1,2,3,9].

Хотя за последние годы достигнуты существенные успехи в лечении нефротического синдрома ОГН, эффективность ее остается недостаточной, что требует совершенствования терапии НС [7, 8, 10]. С учетом иммунных и сосудистых механизмов поражения почек при ОГН, патогенетически в комплексном лечении используются препараты с иммуномодулирующим и антиоксидантными свойствами. Однако несмотря на длительный период использования глюкокортикоидов (ГК) и алкилирующих агентов, а также постоянный поиск цитостатиков «нового поколения», большинство детей с гормоночувствительным НС (ГЧНС) продолжают рецидивировать, у приблизительно половины из них отмечаются частые обострения, гормонозависимость, а также гормонорезистентность. В связи с этим актуальной остается проблема возрастных особенностей течения НС, угрожаемых по развитию осложнений, связанных как с основным заболеванием, так и с побочными эффектами используемых лекарственных препаратов, что требует оптимизации терапии и вторичной профилактики.

Дети с впервые развившимся НС госпитализируются, как правило, не в специализированные нефрологические центры, где возможно проведение морфобиоптического, иммунологического, генетического и других высокотехнологичных исследований, а в терапевтические отделения многопрофильных стационаров. Поэтому актуальной является задача своевременного выделения тех категорий больных, которые нуждаются в более углубленном обследовании и в специализированной высокотехнологичной помощи. В нашей республике вопросы идентификации морфологических вариантов НС особенно затруднительны в связи с отсутствием необходимых специалистов и технологий для изучения биопсийного материала. Выделение морфологических вариантов НС особенно необходимо для решения вопроса о выборе

иммуносупрессивной терапии при неэффективности стандартного курса ГКС в дебюте болезни. При рецидивирующем течении гормоночувствительного НС основную проблему представляют собой частые рецидивы, влекущие за собой необходимость длительной иммуносупрессивной терапии, когда прогноз определяется во многом именно побочными эффектами лечения [4.11].

Цель исследования: изучить возрастные особенности течения нефротического синдрома гломерулонефрита у детей Андиганской области.

Материал и методы исследования. Работа выполнена на базе нефрологического отделения Андиганского детского многопрофильного медицинского центра. Для получения полноценной информации о каждом пациенте проведено изучение архивных материалов вышеуказанного стационара за период 2022-2023 гг. с НС как проявление различных форм гломерулонефрита (ОГН, ХГН, семейный НС, врождённый НС).

Возраст обследуемых больных был от 0 до 18 лет. Все обследуемые больные были условно разделены на 4 возрастные группы с учётом половой принадлежности (Таблица 1)

Таблица 1

№	Формы заболевания	Возраст (годы)							
		0-3		4-7		8-14		15-18	
		М	Д	М	Д	М	Д	М	Д
1	НС при ОГН	3	2	9	12	24	13	7	4
2	НС при ХГН	-	-	-	-	13	4	2	2
3	Врождённый НС	2	-	2	-	-	-	-	-
4	Семейный НС	-	-	-	1	-	-	-	-

Диагноз заболевания у наблюдаемых детей устанавливался на основании тщательного изучения анамнеза, выявления причинных факторов, приведших к развитию заболевания, выделению особенностей клинических проявлений процесса у детей с НС в отдельно взятых возрастных группах, результатов клинико-лабораторных, биохимических и инструментальных методов исследования.

При изучении структуры заболевания использовалась классификационная терминология НС, которая подразумевает его деление на первичный, вторичный, врожденный и инфантильный. По характеру ответа на стероидную терапию – гормоночувствительный, гормонозависимый и гормонорезистентный НС. Период клинической манифестации характеризовался ренальными (олигурия, протеинурия, цилиндрурия) и экстраренальными признаками (выраженные распространённые отёки, редко артериальная гипертензия). Период обратного развития симптомов или частичная ремиссия – отсутствие отёков и олигурии при сохранении определенной степени протеинурия. Полная клинико-лабораторная

ремиссия — отсутствие клинических симптомов, свободная от белка моча и сывороточный альбумин > 35 г/л.

Обсуждение результатов исследования. Как следует из данных таблицы 1, ОГН с нефротическим синдромом развивался преимущественно среди детей в возрасте от 8 до 14 лет. Среди детей, кроме детей из группы 4-7 лет, преобладали мальчики, что в принципе согласуется с данными мировой литературы. В возрастной группе 4-7 лет НС чаще регистрировался у девочек. Также случай семейного НС был отмечен у одной девочки в возрасте 4-х лет.

Манифестация нефротического синдрома у большинства детей (71,4%) произошла после ОРВИ, у 2 (4,1%) – на фоне аллергической реакции, 1 (2,0%) после ветряной оспы, 1 (2,0%) – вакцинации против гриппа, у 8 детей (16,3%) – без предшествующей причины. В дебюте заболевания у всех (100%) детей диагностирована протеинурия, у 44 из 49 (89,8%) – отеки, у 5 (10,2%) – артериальная гипертензия, 17 (34,7%) – гематурия, 14 (28,6%) – лейкоцитурия. При этом манифестация НС без выраженного отеочного синдрома (неполный НС) произошла в 16,7% случаев у пациентов II группы, 10% случаев III и IV групп.

Локальные отеки (отеки век, лица) были диагностированы только у одного ребенка (2,0%) в возрасте 12 лет. В большинстве же случаев во всех возрастных группах отмечались распространенные выраженные отеки (век, лица, голеней, передней брюшной стенки). Полостные отеки с асцитом и гидротораксом имели место у 4 из 5 детей I группы, в 38,9% случаев у больных 1 - 3 лет, в 30% случаев 4 - 6 лет, 10% случаев 7 - 11 лет и не было ни одного случая у больных старше 11 лет.

Артериальная гипертензия в дебюте заболевания диагностирована у 1 (20%) ребенка первого года жизни, у 11,1% больных в возрасте 12 - 15 лет.

Протеинурия в целом у всех пациентов составила $2,83 \pm 1,31$ г/л. Выраженность протеинурии не имела достоверной разницы в зависимости от возрастной группы и составила в I гр. – $2,92 \pm 1,31$ г/л; II гр. – $2,89 \pm 1,25$ г/л; III гр. – $2,97 \pm 1,59$ г/л; IV гр. – $2,17 \pm 1,77$ г/л. Длительность протеинурии после назначения терапевтической дозы преднизолона (2 мг/кг/сутки) также значимо не отличалась в разных возрастных группах и составила у детей до 3-х лет $9,7 \pm 2,7$ дней; 4 - 7 лет – $8,5 \pm 3,1$ дней; 8 - 14 лет – $8,9 \pm 2,9$ дней; 15 – 18 лет – $8,8 \pm 0,89$ дней. У 4-х детей 1 и 2 возрастной группы констатирована гормонозависимость, у 3-х детей в возрасте 15-18 лет гормонорезистентность.

Эритроцитурия диагностирована у 15% больных 8 – 14 лет, несколько реже (10%) у детей 15 - 18 лет.

При анализе показателей клинического анализа крови оказалось, что у всех пациентов имело место снижение гемоглобина от $84,6 \pm 6,21$ до $68,2 \pm 8,05$ г/л. Лейкоцитоз имел место у 8 детей в возрасте 4-7 лет и 10 детей в возрасте 8-14 лет. Степень повышения СОЭ значимо не отличалась во всех

возрастных группах и составила у детей до 1 года $24,3 \pm 3,3$ мм/час; 1 - 3 лет $20,2 \pm 9,4$ мм/час; 4 - 7 лет - $13,5 \pm 10,9$ мм/час; 8 - 14 лет - $12,9 \pm 12,4$ мм/час; 15 - 18 лет - $9,6 \pm 8,5$ мм/час.

Анализируя показатели биохимического анализа крови установлено, что повышение мочевины при манифестации НС отмечалось у 3 из 5 детей первого года жизни ($27,4$; $10,8$; 35 ммоль/л), 1 (5,56 %) ребенка во II гр. до $9,0$ ммоль/л; 2 (20%) - IV гр. ($11,2$; 32 ммоль/л). В целом повышение уровня мочевины в крови диагностировано в 14,3% случаев, а рост содержания креатинина крови отмечался у 3 (6,1%) пациентов, в том числе у 2 до 1 года ($0,359$ мкмоль/л; $0,360$ мкмоль/л) и 1 в возрасте 13 лет ($0,120$ мкмоль/л).

Уменьшение показателей скорости клубочковой фильтрации по формуле Шварца в дебюте заболевания отмечалось в целом у трети (30,6%) больных. Причем у детей первого года жизни снижение СКФ ниже возрастной нормы диагностировано в 3 случаях ($7,2$; $9,3$; 27 мл/мин) из 5 (60%), у больных в возрасте до 3-х лет в 35,3% случаев ($74,7 \pm 13,73$; $55,4 - 86,4$ мл/мин); 4 - 7 лет - 33,3% случаев ($34,2$; 55 ; $87,4$ мл/мин); 8 - 14 лет - у 22,2% больных ($76,2$; $76,7$ мл/мин); 15 - 18 лет - в 20% случаев ($71,3$ мл/мин).

Высокое содержание холестерина выявлено у всех больных до 1 года ($9,88 \pm 2,11$ ммоль/л) и у большинства детей остальных возрастных групп: у детей до 3-х лет в 72,2% ($9,41 \pm 2,52$ ммоль/л), 4 - 7 лет - в 70% ($9,48 \pm 1,81$ ммоль/л), 8 - 14 лет в 80% ($9,19 \pm 2,38$ ммоль/л), старше 15 лет в 43,3% случаев ($8,14 \pm 1,2$ ммоль/л).

Во всех группах отмечалось снижение уровня общего белка и, в частности, альбумина в крови без значимой разницы. Необходимо отметить, что гипоальбуминемия тяжелой степени ($20 - 10$ г/л) была диагностирована у всех пациентов I группы, половины пациентов II группы, в то время как у больных III и IV групп несколько чаще отмечалась гипоальбуминемия средней ($25 - 20$ г/л) и легкой ($30 - 25$ г/л) тяжести.

При анализе показателей фибриногена в крови установлено, что высокий уровень его был диагностирован у всех (100%) больных до 1 года ($7110,0 \pm 1280,5$ мг/л), половины (50%) детей 4 - 7 лет ($4916,6 \pm 2031,1$ мг/л), в 44,4% случаев в возрасте 8 - 14 лет ($4749,6 \pm 1575,2$ мг/л) и 33,3% случаев - 15 - 18 лет ($3477,1 \pm 1005,6$ мг/л). При этом более высокое содержание фибриногена отмечалось в I группе, но достоверной разницы не выявлено.

Анализ результатов УЗИ показал, что увеличение объема почек было диагностировано у всех детей с врожденным НС, у большинства (60%) пациентов 4 - 7 летнего возраста, половины детей в возрасте до 3-х лет (55,6%) и 4-7 и 8- 14 лет (50%), около трети (33,3%) - 15 - 18 лет. Уплотнение паренхимы почек отмечалось у всех детей первого года жизни и примерно с одинаковой частотой в остальных возрастных группах: II гр. - 55,4%; III гр. - 52,3%; IV гр. - 54,2%.

Выводы:

1. Нефротический синдром чаще выявляется среди детей в возрасте 8 – 14 лет с преобладанием мальчиков.

2. «Чистый» или «полный» нефротический синдром наиболее часто отмечался у детей до 3-х лет и младшего школьного возраста (7 – 11 лет).

3. Мочевой синдром во всех возрастных группах характеризовался протеинурией, которая была более выраженной у пациентов 1 и 2 групп. У 15% пациентов 4-7 лет и 10% в возрасте 8-14 лет протеинурия сочеталась с незначительной эритроцитурией.

4. У 4-х детей 1 и 2 возрастной группы констатирована гормонозависимость, у 3-х детей в возрасте 15-18 лет гормонорезистентность, что требовало решения вопроса о выборе иммуносупрессивной терапии.

Использованные источники:

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*Джабборова Ю.А.
ассистент
кафедра «Экономика и менеджмент»
Джизакский политехнический институт
Республика Узбекистан
Сигов А.Н.
старший преподаватель
кафедра «Экономика и управление
на предприятиях машиностроения»
СПбГЭТУ «ЛЭТИ»*

СОВРЕМЕННЫЙ РЫНОК ИЗДАТЕЛЬСКОЙ ПРОДУКЦИИ В РЕСПУБЛИКЕ УЗБЕКИСТАН

Аннотация. В данной статье рассматриваются Рыночная инфраструктура которая представляет собой совокупность организационно-правовых форм и субъектов рынка (издатели, предприятия оптовой и розничной торговли, ярмарки и т.п.), обеспечивающих функционирование рынка.

Ключевые слова: издатели, предприятия оптовой, книжный рынок, производителей издавать книги, спрос и предложение, книжный рынок, библиография.

*Jabborova Yu.A.
assistant
Department of Economics and Management
Jizzakh Polytechnic Institute
The Republic of Uzbekistan
Sigov A.N.
senior lecturer
Department of Economics and Management at Mechanical Engineering
Enterprises
SPbSETU "LETI"*

MODERN MARKET FOR PUBLISHING PRODUCTS IN THE REPUBLIC OF UZBEKISTAN

Abstract: publishers, wholesale companies, book market, manufacturers to publish books, supply and demand, book market, bibliography.

Key words: the foreign economic activity, the state politics toward protectionism, the foreign economic strategies of the state, tariff and intariff of the restriction and barriers.

В последние годы стране проводится последовательная работа по обеспечению свободы слова и информации, формированию институционально-правовых основ развития информационной сферы и массовых коммуникаций.

Любая печатная продукция в Республике Узбекистан готовится в три этапа:

1) Допечатная подготовка, включая изготовление печатных форм - все эти операции, связаны с компьютерной обработкой изображения, изготовлением фотоформ (пленок) и, собственно, печатных форм (клише, пластин, трафаретов).

2) Печать тиража. Это основной этап изготовления печатной продукции. Основными способами печати на данный момент являются офсетная печать и оперативная полиграфия. Для изготовления упаковки и этикетки используется способ флексографии. Существуют также и другие способы печати, каждый из которых предназначен для решения определенного класса задач. Но здесь мы остановимся только на двух основных способах печати.

При печати больших тиражей более экономичным является офсетный способ печати. Офсетный способ печати, как никакой другой, обеспечивает высокое качество выпускаемой продукции.

3) Послепечатная обработка и отделка. Послепечатная обработка включает в себя: брошюровку, фальцовку, биговку, переплетные работы, высечку и др. Послепечатная обработка включает также специальные отделочные работы, направленные на улучшение внешнего вида готового продукта печати: лакирование, ламинирование, конгрев, тиснение фольгой, блинтовое (слепое) тиснение, высечка, биговка, склейка, термопечать и др. Отделочные работы придадут Вашей печатной продукции индивидуальность и неповторимость.

Использование методов дизайна при создании плакатных форм

Афиша – объявление о спектакле, концерте, лекции и т. п., вывешиваемое на видном месте.

Плакат – разнообразность графики, лаконичное, броское изображение на крупном листе с кратким пояснительным текстом.

Классификация плакатов и их характеристика.

По технике создания:

-печатные; -трафаретные;-самодельные.

По характеру содержания:

-сатирические;-декоративные;-монографические, -библиотечные и т.д.

По направлению использования:

-агитационные; -информационные; -рекламные; -просветительские; -учебно-методические.

Плакат-афиша – разновидность плаката-объявления. Афиша содержит информацию о концерте, спектакле, другом зрелищном мероприятии и принципиально не отличается от объявления. Создавая плакат-объявление или плакат-афишу, используют такие изобразительно-выразительные элементы, которые эмоционально окрашивают и наиболее образно раскрывают сообщение, создают эстетическую привлекательность. Это – символы, эмблемы, обобщенные образы, которые дают возможность в предельно емкой форме выразить основное содержание представляемого мероприятия. **Плакат-молния** представляет собой оперативное средство визуальной информации. Основной изобразительно-выразительный элемент молнии – текст. Шифр текста должен быть прост в восприятии. Содержание – лаконичное, фиксирующее факт, событие.

Репродукции с картин

В последнее время декораторы все чаще советуют нам не захламлять пространство своих домов лишней мебелью, а пространство, которое кажется пустым заполнить картинами на стенах. Но вешать обычные картинки из журналов, оформленные в рамы как-то не хочется. А настоящие шедевры стоят дорого и не доступны каждому. Выхода из подобной ситуации два. Первый – это приобретать картины молодых и малоизвестных художников, которые еще не успели прославиться и заломить цену, а второй – это покупка репродукций.

Сама технология изготовления требует не только больших умений, но и колоссальных затрат. Современная техника для фотографии, обработки и печати изображений очень дорогостоящая, но только с помощью нее нынешние умельцы могут доставить истинное удовольствие народу. Картины, которые получаются в результате невозможно отличить от оригинала на глаз. Для того чтобы сделать вывод об их подлинности необходим как минимум микроскоп. Каждый мазок рельефен и прорисован идеально, все краски лежат на холсте как «живые». А эффект «искусственного состаривания» делает шедевр достойным тех миллионов, которых стоит подлинная работа мастера.

Открытки

Слово «открытка» в русском языке произошло от словосочетания «открытое письмо», то есть этим словом обозначается вид корреспонденции, которая может отправляться по почте без конверта. В этом смысле открыткой может называться только почтовая карточка строго определенного размера, соответствующего международному почтовому стандарту – 105*148 мм. Однако сейчас открытками называют не только почтовые карточки, но и поздравительные открытки разнообразных конструкций и форматов, а также другие виды поздравлений, не имеющих никакого отношения ни к почте, ни к полиграфии: виртуальные электронные поздравления – flash-открытки или сувениры в виде открыток – например, подушки-открытки. В нашей статье речь пойдет о

поздравительных, рекламных, почтовых и «деловых» открытках, изготовленных с помощью полиграфических технологий и материалов.

Виды открыток

Первый вид открыток – обыкновенные почтовые карточки, предназначенные для отправки по почте без конверта. На одной стороне почтовой карточки напечатан герб страны и марка, на другой – место для текста. Размер такой почтовой открытки строго определен 9х14 см.

Второй вид открыток — иллюстрированные почтовые карточки. Это открытки на одной или на обеих сторонах которой имеется какое-либо изображение. В свою очередь иллюстрированные открытки можно разделить на художественные карточки и фотооткрытки. Художественные открытки обычно имеют иллюстрацию в виде репродукции с какого-либо произведения искусства. Или же они могут воспроизводить художественную работу, специально разработанную для открытки. Художественная открытка всегда авторская открытка. Она передает нам мысли и чувства художника, его настроение. Чем же характеризуются эти виды открыток?

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*Дилмуродова Г.Н.
студент 2 курса магистратуры
Каршинский инженерно-экономический институт*

НЕОБХОДИМОСТЬ ИННОВАЦИОННО-ИНВЕСТИЦИОННОЙ ДЕЯТЕЛЬНОСТИ НА ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЯХ

Аннотация. В статье рассматривается важность широкого использования инновационной и инвестиционной деятельности в развитии государственных промышленных предприятий. Также дана информация о характере государственных программ поддержки промышленных предприятий в этих сферах.

Ключевые слова: эффективность, механическое обеспечение, нормативно-правовые акты, экономическая эффективность, социальная эффективность, критерии, инновации, инвестиции, инфраструктура.

*Dilmurodova G.N.
2nd year master's student
Karshi Engineering and Economic Institute*

THE NEED FOR INNOVATION AND INVESTMENT ACTIVITIES IN INDUSTRIAL ENTERPRISES

Annotation. The article discusses the importance of the widespread use of innovation and investment activities in the development of state industrial enterprises. Information is also provided on the nature of government programs to support industrial enterprises in these areas.

Key words: efficiency, mechanical support, regulations, economic efficiency, social efficiency, criteria, innovation, investment, infrastructure.

Известно, что сегодня в нашей стране эффективными аспектами применения опыта развития, основанного на мировой практике, на промышленных производственных предприятиях Узбекистана являются содействие экономическому развитию в условиях развития и либерализации национальной экономики, защита частной собственности. собственности, реализация в экономике является наиболее актуальным вопросом.

Сегодня реформы, реализуемые в Узбекистане для обеспечения стабильного экономического роста, осуществляются на основе принципа «Если богат народ, то государство будет богатым и могущественным». Как известно, достижение всестороннего развития, постоянное повышение инвестиционной привлекательности с точки зрения привлечения инвестиций в отрасли экономики является важнейшей частью

экономической политики каждой страны. В нашей стране очень важно привлекать инвестиции в промышленные предприятия, создавать благоприятную инвестиционную среду, эффективно использовать внутренние и внешние финансовые ресурсы. Здесь следует сказать, что в Стратегии действий, определяющей новые направления нашего развития за последние пять лет, «активная инвестиционная политика, направленная на осуществление модернизации производства, технического и технологического обновления, производства, транспортно-коммуникационного Приоритетными считаются проекты «осуществление» и социальной инфраструктуры, а также «дальнейшее развитие международного экономического сотрудничества, расширение связей с ведущими международными и зарубежными финансовыми институтами, продолжение реализации продуманной внешней долговой политики». В нашей республике особое внимание уделяется привлечению иностранных инвестиций и созданию благоприятной инвестиционной среды в стране. На привлечение инвестиций в промышленные предприятия республики влияет ряд факторов. Если проанализировать на примере страны количество жителей и их расположение, то распределение производительных сил различается по регионам. Эти регионы отличаются друг от друга по своим условиям, собственности на природные ресурсы, наличию экономических центров и уровню развития.

Вышеупомянутые факторы помогают инвесторам вкладывать свой капитал в страны с высоким потенциалом получения прибыли. Соответственно, по мере развития мировой экономики международное движение капитала становится все более глобализированным, международный поток капитала чувствителен к любым изменениям, все больше развивается движение инвестиционного потока в страну, в которой создана благоприятная инвестиционная среда. В большинстве развитых стран мира, в том числе в США, Восточной Азии и Европейском Союзе, увеличение валового внутреннего продукта (ВВП) за счет инвестиций является одной из актуальных проблем, а в некоторых странах помимо этого опираться на внутренние инвестиционные возможности, напротив, одним из важных направлений считалось повышение показателя ВВП за счет привлечения инвестиций из зарубежных стран.

Принятие Указа Президента Республики Узбекистан от 6 июля 2022 года №ПФ-165 «Об утверждении Стратегии инновационного развития Республики Узбекистан на 2022-2026 годы» служит основой для дальнейшего развития данного направления. поле.

«В результате реализации Стратегии инновационного развития Республики Узбекистан на 2019-2021 годы в нашей стране достигнуты большие успехи инновационного и технологического развития в отраслях экономики и социальной сфере, в том числе в сельском хозяйстве, энергетике, строительстве, образовании, здравоохранении. было сделано с

точки зрения обеспечения и продвижения. В частности: наша республика поднялась на 36 мест по сравнению с 2015 годом в рейтинге Глобального инновационного индекса, который оценивается по 81 показателю;

объем ежегодных средств, выделяемых из Государственного бюджета на сферы инноваций и науки, увеличен в 3 раза по сравнению с 2018 годом и достиг 1,5 трлн сумов;

в 2018 году молодых ученых было 6,5 тысяч, а в 2022 году их число составило 10,8 тысяч, то есть увеличилось в полтора раза;

за последние 4 года количество специальных институтов финансирования инновационной деятельности (инновационные фонды, венчурные организации и др.) увеличилось до 28;

Начиная с 2018 года, ежегодная Международная неделя инновационных идей – «Innoweek.uz» становится площадкой инновационных технологий, объединяющей зарубежные инновационные и научные центры, инвестиционные фонды, технологические агентства, технопарки и бизнес-инкубаторы ради одной цели.”⁷⁷.

При этом уровень коммерциализации научных и инновационных разработок в реальном секторе экономики, сотрудничества науки, образования и промышленности остается относительно низким. Эта стратегия включает в себя инновационные и определив целевые направления государственной политики в области технологического развития, ее основными направлениями являются:

- поддержка стартап-инициатив путем формирования сети субъектов инновационной инфраструктуры;
 - увеличить долю инновационно активных организаций за счет совершенствования институциональных механизмов государственной поддержки инновационной деятельности;
 - обеспечить быстрый социально-экономический рост регионов за счет повышения инновационной активности малого бизнеса;
 - формирование сложной системы создания новых видов продукции и инновационных технологий и, как следствие, спроса на инновации.
- поощрение;
- дальнейшее развитие человеческого капитала в управлении инновационной деятельностью.

Также в рамках данной стратегии предполагается увеличить количество субъектов инновационной деятельности, то есть промышленно-производственных организаций, с 613 до 2250, увеличить количество субъектов инновационной инфраструктуры в 3 раза, а также увеличить количество новых рабочих мест, созданных в результате инновационного предпринимательства, в 4 раза. Кроме того, удвоение количества новых инновационных разработок, увеличение количества инновационных

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центров до 494, увеличение количества отечественных промышленных предприятий, занимающихся технологическими инновациями, до 600, увеличение количества новых технологий, создаваемых в регионах, до 384, увеличение количества ежегодных патентов до 184 и при увеличении предполагается, что будут выполняться и другие задачи.

В результате реализованных мер достигнуто увеличение доли продукции с высокой добавленной стоимостью в производстве промышленного сектора. В частности, за 2022 год производство автомобилей выросло на 39%, продуктов питания - на 34,2%, электрооборудования - на 5,4%, а производство одежды - на 5,5%. Не отличалось, например, производством промышленной продукции в В Республике Каракалпакстан за этот период рост составил 0,4%, в Андижанской области - на 22,6%, в Хорезмской области - на 15,1%. Кроме того, доля промышленного сектора в формировании валового регионального продукта также резко различается по регионам. При этом доля продукции низшего и ниже среднего уровня в технологическом уровне промышленной продукции составляет 74,8 процента, а в некоторых регионах 87,6 процента приходится на продукцию этого вида. Поэтому для обеспечения инновационного развития промышленного сектора нашей страны необходимо оценить потенциал развития промышленного сектора региона, выявить проблемы в развитии инновационных процессов и разработать научно обоснованные меры по их устранению. На основании исследования роли прямых иностранных инвестиций в повышении инвестиционной привлекательности республики можно привести следующее. Например: чтобы повысить инвестиционную привлекательность республики, государство должно в первую очередь создать благоприятную инвестиционную среду для иностранных инвесторов. При этом важную роль в привлечении иностранных инвесторов играет реализация действующего законодательства и рассмотрение мер по снижению различных инвестиционных рисков. Таким образом, при привлечении прямых иностранных инвестиций в промышленные предприятия Узбекистана необходимо применять их правильные направления и на основе международного опыта, а также использовать опыт зарубежных стран для повышения инвестиционной привлекательности. внедрять и адаптировать международный опыт в нашей стране при определении аспектов, которые следует учитывать при проведении инвестиционной политики. В основном, в результате этого будет обеспечено внедрение передовых технологий, создание новых рабочих мест, стабильное и равномерное развитие экономики республики. Также, если изучать опыт развитых стран, привлечение иностранных инвестиций является одним из решающих аспектов развития этих стран на высоком уровне. В результате этого создается почва для развития нашей Республики и ее прогресса на более высоких уровнях. Наша страна имеет все условия,

чтобы войти в число стран, направляющих крупные иностранные инвестиции, и располагает рядом возможностей для привлечения иностранных инвестиций. Узбекистан важен для мирового сообщества благодаря уровню социально-экономического развития, географическому положению на карте мира, структуре и запасам природных ресурсов, экономической политике, проводимой нашей страной, и другим. Если посмотреть на опыт развитых стран мира, то иностранные инвестиции являются важнейшим вопросом обеспечения стабильного и эффективного развития экономики государства. Соответственно, это показывает, что нам следует изучить вопрос привлечения иностранных инвестиций в экономику нашей республики как важного фактора экономического роста. Примером этого является то, что они заявили, что необходимо создать систему стимулирования иностранных инвесторов, которая побуждала бы их реинвестировать свой капитал, а не быстрее выводить его. Результаты наших вышеизложенных исследований показывают, что существование промышленных предприятий с иностранными инвестициями стимулирует конкуренцию и дает основу для изучения зарубежного опыта и взятия из него примеров с целью победы местных производителей в конкурентной среде. При этом оно оказывает прямое влияние не только на повышение уровня технологий, но и на рациональное использование ограниченных ресурсов. Мы видим, что доля прямых иностранных инвестиций и кредитов в составе иностранных инвестиций, привлеченных в нашу республику, значительно превышает долю иностранных инвестиций и кредитов под государственную гарантию.

В целях повышения эффективности инновационного менеджмента на промышленных предприятиях нашей страны целесообразно в целях стратегического развития предприятия разработать направления развития, связанные с инновационной деятельностью, разработать соответствующие меры по реализации инноваций. В этом случае использование предложенного выше метода при формировании дерева целей инновационного управления, помимо достижения высокой эффективности, создает основу для обеспечения устойчивости инновационного развития предприятия. Анализ показателей инновационной деятельности предприятий Узбекистана Данная ситуация прямо свидетельствует о том, что практика управления реализацией инновационных проектов на предприятиях несколько улучшилась. Однако уровень развития инновационного менеджмента предприятий не в полной мере соответствует международным требованиям. Производство продукции на промышленных предприятиях может меняться под влиянием показателей эффективности инновационного управления предприятием. То есть на промышленном предприятии правильно организован инновационный менеджмент, и чем больше процессы производства продукции технически и технологически соответствуют требованиям времени, тем быстрее увеличивается объем

производства. Целесообразно сосредоточить внимание на разработке государственных программ, направленных на стимулирование развития механизма инновационного управления промышленными предприятиями нашей страны. Необходимо перевести промышленные предприятия на путь инновационного развития по региональному принципу. Также появится возможность перевести процессы производства промышленной продукции, выпускаемой в регионах, на путь инновационного развития, регулярно улучшать их показатели индекса глобальной конкурентоспособности. Анализ практики инновационного развития промышленных предприятий и повышения их конкурентоспособности в развитых странах показывает, что принципу государственно-частного партнерства отдается приоритет в функционировании рыночного механизма в этих странах.

В заключение на основе исследования роли прямых иностранных инвестиций в повышении инвестиционной привлекательности республики можно констатировать следующее. Например: чтобы повысить инвестиционную привлекательность республики, государство должно в первую очередь создать благоприятную инвестиционную среду для иностранных инвесторов. При этом важную роль в привлечении иностранных инвесторов играет реализация действующего законодательства и рассмотрение мер по снижению различных инвестиционных рисков. Таким образом, при привлечении прямых иностранных инвестиций в промышленные предприятия Узбекистана необходимо применять их правильные направления и на основе международного опыта, а также использовать опыт зарубежных стран для повышения инвестиционной привлекательности. внедрять и адаптировать международный опыт в нашей стране при определении аспектов, которые следует учитывать при проведении инвестиционной политики.

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*Дмитриева О.А.
студент магистратуры
Научный руководитель: Аралбаева Г.Г., д.э.н.
профессор
ФГБОУ ВО "Оренбургский государственный университет"*

МЕЖДУНАРОДНЫЙ ОПЫТ ИСПОЛЬЗОВАНИЯ ИНТЕРНЕТ-ТЕХНОЛОГИЙ В ГОСУДАРСТВЕННОМ УПРАВЛЕНИИ

Аннотация: в статье рассматриваются современные тренды цифровизации государственного управления, использования интернет-технологий при оказании государственных услуг. Рассмотрены понятия, принципы и этапы формирования в государстве электронного правительства, взаимодействующего с населением и бизнесом в электронном формате с минимальным физическим взаимодействием. Проанализирован положительный опыт и достигнутые результаты стран-лидеров в области цифровизации государственного управления.

Ключевые слова: государственное управление, интернет-технологии, электронное-правительство, цифровизация государственных услуг, международный опыт.

*Dmitrieva O.A.
master's student
Federal State Budgetary Educational Institution "Orenburg State University"
Scientific adviser: Aralbaeva G.G., doctor of economics
professor
Federal State Budgetary Educational Institution "Orenburg State University"*

INTERNATIONAL EXPERIENCE IN USING INTERNET TECHNOLOGIES IN PUBLIC ADMINISTRATION

Annotation: the article discusses modern trends in the digitalization of public administration and the use of Internet technologies in the provision of public services. The concepts, principles and stages of the formation of an electronic government in the state, interacting with the population and business in an electronic format with minimal physical interaction, are considered. The positive experience and achieved results of leading countries in the field of digitalization of public administration are analyzed.

Keywords: public administration, Internet technologies, e-government, digitalization of public services, international experience.

Интенсивное развитие информационных технологий и телекоммуникационных систем позволило осуществить цифровизацию различных сфер общественной жизни, в том числе и автоматизировать механизмы государственного управления. В настоящее время большинство стран мира применяют передовые информационные технологии для повышения качества государственных услуг, предоставляя гражданам и бизнесу технологии электронного документооборота и инструменты удаленного взаимодействия с органами власти, что позволяет повысить скорость оказания государственных и муниципальных услуг, одновременно снижая их стоимость.

Основным мировым трендом цифровизации сферы государственного управления является внедрение в работу органов власти принципов «электронного правительства» (e-government) – правительства, которое взаимодействует с органами государственной власти, гражданами, организациями в электронном формате с минимальным физическим взаимодействием [1]. Необходимыми условиями работы электронного правительства являются создание единого информационного пространства для всех органов власти страны, внедрение технологий электронного обмена документами и данными по защищенным каналам связи, обеспечение свободного доступа к информации и получения необходимых услуг для государственных служащих, физических лиц и организаций.

Процесс формирования электронного правительства в стране состоит из пяти этапов:

1) начальный этап, который характеризуется созданием официальных сайтов органов власти, предоставляющих информацию заинтересованным лицам в одностороннем порядке;

2) динамичное предоставление информации и оказание услуг органами власти на отдельных веб-порталах с формами взаимодействия;

3) интерактивное присутствие государства в Интернете с двусторонним обменом информацией между пользователями и властными структурами на отдельных порталах;

4) присутствие государства в Интернете на уровне транзакций, предоставление заинтересованным лицам государственных услуг в режиме онлайн (оплата налогов, штрафов, запрос информации, формирование заявлений на предоставление услуг, квитанций на оплату и проч.);

5) создание единого информационного пространства и технологий взаимодействия для всех органов власти, объединение всех государственных интернет-ресурсов в единый портал государственных услуг [2].

Первыми странами, которые начали реализацию концепции электронного правительства, были США, Великобритания, Норвегия и Австралия. В дальнейшем концепцию электронного правительства стали реализовывать большинство стран мира, однако, хотя почти каждая страна

сейчас вовлечена в процесс цифровизации, не все страны достигли одинакового уровня цифровой трансформации в сфере государственного управления и обеспечения стабильной и повсеместной работы технологий электронного правительства.

Ежегодные исследования, проводимые Отделом государственных учреждений и цифрового правительства Департамента по экономическим и социальным вопросам ООН показывают, что на протяжении многих лет лидирующие строки в рейтинге лидеров по развитию технологий электронного правительства занимают Дания, Финляндия, Республика Корея, Новая Зеландия, Швеция, Эстония, Нидерланды, США, Великобритания, Сингапур, Япония [3]. Рассмотрим особенности применения интернет-технологий в государственном управлении на примере некоторых ведущих стран.

В Дании с 2011 г. реализуется стратегия электронного общества – «Цифровая дорога к будущему процветанию», а с 2016 г. – стратегия электронного правительства. Основными целями этих стратегий стало применение интернет-технологий для оказания гражданам и бизнесу необходимых услуг, исключение бумажной и бюрократической волокиты, повышение качества оказания не только государственных, но и социальных услуг населению. На реализацию стратегий было затрачено 426,6 млн. датских крон (примерно 57 млн. евро), из которых 76% было выделено на развитие и реализацию систем электронного документооборота, а 24% средств – на профессиональное обучение государственных служащих и заинтересованных лиц. При этом для граждан, которые слабо разбираются в инфокоммуникационных технологиях, были организованы сервисные и учебные центры, службы поддержки по телефону, а также предоставлена возможность доступа к индивидуальным сервисам для родственников, чтобы те могли оказывать помощь близким людям, живущим удаленно [4].

Одно из важных мест стратегии электронного правительства Дании занимает электронное здравоохранение (не только запись к врачу в режиме онлайн, но и консультирование, услуги телемедицины). Приоритетом стратегии является также формирование цифровых навыков у детей и школьников, достижение соответствия между полученными в образовательных учреждениях цифровыми компетенциями и требуемыми работодателями цифровыми навыками. Реализация стратегии привела к тому, что к 2018 году Дания поднялась с 9-го на первое место в общемировом рейтинге и занимает это место уже 5 лет. В 2022 г. индекс развития электронного правительства (e-Government Development Index, EGDI) в Дании составил 0,971, при максимальном значении – 1 [3].

В Республике Корея с 2014 г. реализуется стратегия «умного правительства» – «электронное правительство 4.0». Стратегия ориентирована на переход к максимальному использованию мобильных

устройств, которые в настоящий момент имеются у всех южнокорейских жителей.

В Южной Корее функционирует единая стандартизованная платформа электронного правительства (eGovFrame), платформа имеет открытую архитектуру, активно поддерживается и развивается, в том числе и силами небольших частных компаний. Независимые информационные системы органов власти страны объединены в общий центр государственного управления GIDC, имеющий 8 уровней защиты, технологии обработки больших объемов данных (Big Date). На рабочих компьютерах государственных служащих установлена система управления рабочими процессами (единая система документооборота) On-Nara, что в переводе с корейского означает «вся страна». Для взаимодействия с гражданами и бизнесом функционируют несколько онлайн-порталов с различной специализацией: оказание госуслуг, работа с обращениями и жалобами пользователей, поддержка бизнеса [5].

В настоящее время правительство Южной Кореи ориентировано на формирование мобильного электронного правительства, для чего активно развиваются технологии и сервисы мобильного доступа ко всем государственным и социальным услугам страны. Уже сейчас смартфоны и мобильные приложения масштабно используются для получения электронных услуг, оповещения, оплаты проезда, оказания социальных услуг населению. В рейтинге стран-лидеров по развитию электронного правительства Республика Корея многие годы занимает третье место, в 2022 году индекс EGDИ составил 0,952 [3].

В Швеции с 2015 г. правительство реализует программу информатизации государственного управления под лозунгом «Только цифра!». В настоящее время 98% населения Швеции имеют электронную идентификационную карту, а в диалоге «население – правительство» используются только цифровые каналы. К таким результатам привели масштабное развитие цифровой экономики страны, высокий уровень онлайн-потребления, поддержка и финансирование правительством сферы развития информационных коммуникаций. В Швеции работают специальные онлайн-порталы, с помощью которых можно не только получить государственные услуги в онлайн-формате, но и подать петицию, провести опросы для выявления общественного мнения, связаться с чиновниками, принять участие в планировании и распределении бюджетных средств, получить доступ к услугам здравоохранения, а также вызвать спасателей, оказать помощь человеку, нуждающемуся в спасении с помощью специального приложения и GPS-навигатора [6]. Внедрение технологий электронного правительства в Швеции помогло стимулировать трудоустройство, экономический рост, обеспечить достойное качество жизни граждан, повысить уровень медицинских услуг. Индекс EGDИ Швеции по итогам 2022 г. составляет 0,941 [3].

Соединенные штаты Америки одними из первых стран начали реализацию технологий электронного правительства, в связи с тем, что в стране была создана масштабная технологическая инфраструктура, разработано собственное программное обеспечение, страна является лидером в области инноваций во всех сферах ИТ. Несмотря на то, что по итогам 2022 г. США находится только на 10-ом месте в рейтинге стран по развитию электронного правительства с индексом 0,915 [3], тем не менее, лидерство в области цифровизации всех общественных процессов, бесспорно, остается за США.

В США развитием электронного правительства занимается специальное подразделение администрации президента США – Управление Электронного правительства (Office of E-Government and Information Technology), действуют законы об электронном правительстве, а оказание услуг органами государственной власти также возведено в ранг закона. Функционируют информационные супермагистралы на интернет-порталах, обеспечивающие бизнесу и гражданам получение государственных услуг и сведений о государственном управлении в онлайн-режиме. Все оказываемые услуги открыты и прозрачны, предоставляется полная информация обо всех оказанных услугах, правительство несет высокую ответственность перед гражданами, а население страны имеет возможность участвовать в общественной жизни, публикуя на сервисах свои жалобы, отзывы о деятельности органов власти. Кроме единых порталов госуслуг в стране функционируют информационные порталы Fed Forms (общеправительственная система федеральных форм); GILS (поиск информационных ресурсов по всем госструктурам); FedBizOpps (система федеральных государственных закупок) и другие [7]. Внедрение интернет-технологий в систему государственного управления США основано на следующих принципах: целью управления государством являются граждане, а не бюрократия; инновации; достижение конкретных результатов.

Американская модель электронного правительства с успехом применяется и в Великобритании, где стратегия цифровизации работы органов власти предполагает расширение сферы предоставляемых госуслуг, освобождение государственных служащих от выполнения рутинных работ, тесное взаимодействие с обществом, развитие системы оказания социальных услуг в формате удаленного доступа.

В Великобритании действует Центральный Правительственный Портал (ukonline), который объединяет сервисы оказания государственных услуг разными правительственными агентствами, консультационные и информационные сервисы, формы для обращения граждан по решению социальных проблем, технологии поиска с интуитивно понятной навигацией. В разделе «Пространство Гражданина» портала ukonline любой человек может получить правительственную информацию, получить

консультацию по интересующим вопросам, высказать свою точку зрения [8].

Россия в 2022 году заняла 42-е место в рейтинге стран по уровню развития электронного правительства (из 93 государств) с индексом EGDІ 0,816 [3], что свидетельствует о необходимости совершенствования деятельности в области цифровизации механизмов государственного управления. При этом в 2022 году Россия заняла 10 место в рейтинге Всемирного банка GovTech Maturity Index (из 198 стран) по уровню цифровизации государственных структур [9]. Следует отметить, что в России созданы необходимые условия для работы электронного правительства, имеется развитая система электронного документооборота, межсетевое взаимодействие органов власти. Однако, слабыми сторонами остается недоступность государственных услуг в онлайн-формате для некоторых категорий граждан, не имеющих доступа к интернету, недоверчивость населения к перспективам цифровизации органов власти. Кроме этого, в отличие от стран-лидеров в области развития электронного правительства, на российском портале государственных услуг и порталах органов власти у граждан отсутствует возможность оставлять свои отзывы, участвовать в социально значимых опросах и принимать активное участие в жизни страны. Решение этих проблем позволит России выйти на качественно новый уровень государственного управления.

Таким образом, международный опыт использования интернет-технологий в государственном управлении показывает, что многие страны идут по пути максимального охвата единым информационным пространством всех государственных учреждений и заинтересованных сторон, оказания большого количества государственных услуг в онлайн-формате с минимальным физическим взаимодействием, что говорит о достижении зрелого формата функционирования электронного правительства. Несмотря на то, что уровень развития электронного правительства и степень цифровизации государственных структур в России довольно высоки, тем не менее, необходимо перенимать опыт стран-лидеров для обеспечения более тесного взаимодействия с населением, для повышения активности граждан во взаимодействии с органами власти, для расширения перечня государственных услуг, оказываемых в электронном виде, в том числе и социальных услуг.

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*Дрозденский С., доктор технических наук
филиал ФГБОУ ВО «НИУ «МЭИ»
Каршибоев Ш.
Муртазин Э.
старший преподаватель
кафедра «Радиоэлектроника»
Джизакский политехнический институт*

МЕТОДЫ ОБРАБОТКИ ИЗОБРАЖЕНИЙ, В ПАССИВНЫХ ОПТИКО-ЭЛЕКТРОННЫХ СИСТЕМАХ

Аннотация. Данная статья рассматривает методы обработки изображений в пассивных опτικο-электронных системах. Пассивные системы работают без активного воздействия на объекты исследования, и обработка изображений играет ключевую роль в анализе и интерпретации полученных данных. Методы обработки включают в себя усреднение, фильтрацию, улучшение контрастности, сегментацию, извлечение признаков, морфологическую обработку, обнаружение и отслеживание объектов, реконструкцию и анализ текстур.

Ключевые слова: Обработка изображений, пассивные опτικο-электронные системы, усреднение изображений, фильтрация изображений, контрастность, сегментация, извлечение признаков, морфологическая обработка, обнаружение объектов, отслеживание объектов, реконструкция изображений, анализ текстур.

*Drozdensky S., doctor of technical sciences
Branch of the Federal State Budgetary Educational Institution of Higher
Education "National Research University "MPEI"
Karshiboev Sh.
Murtazin E.
senior lecturer
Department of Radio Electronics
Jizzakh Polytechnic Institute*

METHODS OF IMAGE PROCESSING IN PASSIVE OPTICAL- ELECTRONIC SYSTEMS

Annotation. This article examines image processing methods in passive optical-electronic systems. Passive systems operate without active influence on the objects of study, and image processing plays a key role in the analysis and interpretation of the data obtained. Processing methods include averaging,

filtering, contrast enhancement, segmentation, feature extraction, morphological processing, object detection and tracking, reconstruction and texture analysis.

Keywords: image processing, passive optoelectronic systems, image averaging, image filtering, contrast, segmentation, feature extraction, morphological processing, object detection, object tracking, image reconstruction, texture analysis.

Изображения играют в нашей жизни огромную роль. В начале развития науки и техники существовал только один способ регистрации изображений – их зарисовка. При перерисовке изображения явления неминуемо возникали неточности. Это сильно затрудняло продвижение научных исследований. В наше время все большую роль в научных исследованиях и повседневной жизни занимают изображения, регистрируемые на фотоаппарат, видеокамеру и т.д [1].

Изображения, сформированные различными оптико-электронными системами и зарегистрированные с помощью разнообразных приёмников искажаются действием помех различного характера. Искажения изображения вносятся всеми компонентами изображающего прибора, начиная с осветительной системы, даже если это просто лучи солнца. Искажения, которые вносит оптическая система, известны еще на этапе её проектирования и называются аберрации. Искажения, которые вносят электронные приёмники излучения, например ПЗС-матрицы, называются электронный шум. Помехи затрудняет визуальный анализ изображения и его автоматическую обработку [2].

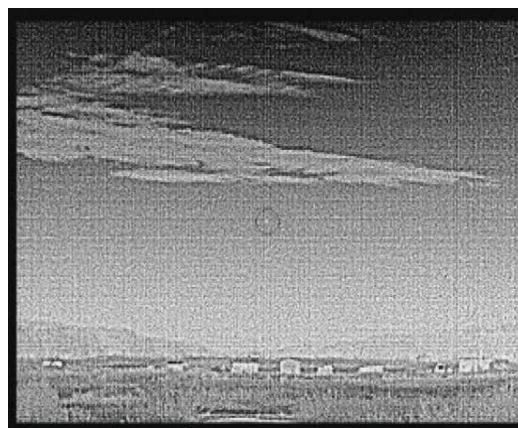
Ослабление действия помех достигается фильтрацией. При фильтрации яркость (сигнал) каждой точки исходного изображения, искаженного помехой, заменяется некоторым другим значением яркости, которое признается в наименьшей степени искаженным помехой. Для выполнения фильтрации необходимо выработать принципы таких преобразований, которые основываются на том, что интенсивность изображения изменяется по пространственным координатам медленнее, чем функция помех [3]. В других случаях, наоборот, признаком полезного сигнала являются резкие перепады яркости.

Цифровая обработка и распознавание изображений - одно из интенсивно развиваемых направлений исследования. Компьютерная обработка изображений предполагает обработку цифровых изображений с помощью компьютеров или специализированных устройств, построенных на цифровых сигнальных процессорах [4].

В результате обработки получается изображение улучшенного качества восприятия человеческим глазом (рисунок 1 а, б).



а



б

**Рисунок 1 – Результаты использования устройства, применяющего методы цифровой обработки в пассивной ОЭС обнаружения:
а – до цифровой обработки; б – после цифровой обработки**

В компьютере изображение хранится на жестком диске в виде отдельного файла графического формата. Самым распространенным графическим форматом представления изображения в компьютере является BMP [5]. В этом формате изображение хранится без потерь и искажений, которые являются результатом сжатия изображений (как например графический формат JPEG) в виде битовой матрицы. Минимальный неделимый элемент битовой матрицы – пиксель. Совокупность пикселей образует изображение [6].

Пиксель характеризуется определенным цветом и определенной яркостью. Воздействуя на эти характеристики каждого пикселя – элемента изображения, можно изменять качественные характеристики изображения в зависимости от поставленной задачи.

В методах фильтрации при оценке реального сигнала в некоторой точке кадра принимают во внимание некоторое множество (*окрестность*) соседних точек, воспользовавшись определенной похожестью сигнала в этих точках [7]. Понятие окрестности является достаточно условным. Окрестность может быть образована лишь ближайшими по кадру соседями, но могут быть окрестности, содержащие достаточно много и достаточно сильно удаленных точек кадра. В этом случае, степень влияния (вес) далеких и близких точек на решения, принимаемые фильтром в данной точке кадра, будет совершенно различной. Таким образом, идеология фильтрации основывается на рациональном использовании данных как из рабочей точки, так и из ее окрестности [8].

При решении задач фильтрации используют вероятностные модели изображения и помехи, и применяют статистические критерии оптимальности. Это связано со случайным характером помехи и стремлением получить минимальное в среднем отличие результата обработки от идеального сигнала. Многообразие методов и алгоритмов

фильтрации связано с большим разнообразием математических моделей сигналов и помех, а также различными критериями оптимальности [9,10].

Однако, несмотря на их множество можно объединить методы фильтрации изображений в несколько групп (рисунок 2).

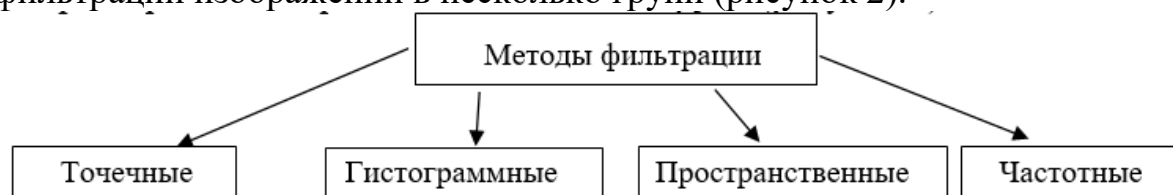


Рисунок 2 – Классификация методов фильтрации

Точечные методы. В этом виде обработки применяются алгоритмы, которые изменяют значения яркости элементов изображения исходя из исходных значений яркости этих элементов и их положения в битовой матрице изображения [11].

Гистограммные методы. В этой группе методов фильтрация осуществляется исходя из статистических характеристик изображения. Могут выполняться эквализация гистограммы или формирование заданной гистограммы.

Пространственная обработка изображений. В этом виде обработки применяются алгоритмы, которые изменяют значения яркости элементов изображения, основываясь не только на значении яркости изменяемого элемента, но и элементов вокруг него. При этом учитываются пространственные статистические характеристики изображения.

Частотные методы фильтрации. В данном случае обработка производится в частотной (спектральной) области. В некоторых случаях эти методы позволяют отфильтровать изображения намного проще, чем пространственные (например, если на изображении присутствуют шумы с частотой, значительно отличающейся от частот на изображении).

Следует отметить, что данные методы обработки сигналов могут применяться как по отдельности, так и, в совокупности – последовательно. Но надо учитывать, что конечный результат сильно зависит от порядка применения различных методов. Для определенности необходимо уточнить некоторые определения [12]. Пространственная разрешающая способность изображения — это число выборок, используемых для описания изображения. Чем выше пространственная разрешающая способность, тем большее количество единичных элементов в изображении (пикселей) приходится на единицу площади, тем выше качество изображения. Яркость изображения – это общее значение уровней, используемых для того, чтобы выразить значение интенсивности элементов в изображении. Яростное изображение связано с числом бит, используемых для хранения каждого элемента изображения [13]. Под фильтрацией изображений будем понимать любые методы обработки изображений, направленные на изменение

яркостных, пространственных, статистических, частотных характеристик изображения с целью выделить какие-либо особенности изучаемой картины.

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*Дусанова Ш.Б., кандидат географических наук, доцент
доцент*

*кафедра географии
Ургенчский государственный университет
Республика Узбекистан*

*Хожязова Д.Ш.
студент
направление «География»
Ургенчский государственный университет
Республика Узбекистан*

ПРОБЛЕМЫ РАЗВИТИЯ ЭКОТУРИЗМА В НИЖНЕЙ АМУДАРЬЕ

Аннотация. В данной статье представлена информация о значении уникальной и красивой природы Нижней Амударьи в развитии экотуризма, а также рекомендации по исследованию маршрутов для туристов и перспектив развития экотуризма в регионе.

Ключевые слова: степь, озеро, Бадайский тукай, Устюртская равнина, Кызылкум. Соляная пустыня Оролкум, верблюды, гора Султан Увайс, Бельтог, Каткаль, Тупроккаль, флора, фауна.

*Dusanova Sh.B., candidate of geographical sciences, associate professor
assistant professor*

*Department of Geography
Urgench State University
The Republic of Uzbekistan
Khozhiazova D.Sh.*

*student
direction "Geography"
Urgench State University
The Republic of Uzbekistan*

DEVELOPMENT ISSUES OF ECOTOURISM IN THE KUYI AMUDARYA REGION

Abstract. This article provides information on the importance of the unique and beautiful nature of the Lower Amu Darya in the development of ecotourism, as well as recommendations for researching routes for tourists and prospects for the development of ecotourism in the region.

Key words: steppe, lake, Badaytokai state reserve, Ustyurt plain, Kyzylkum, Orolqum salt desert, camel, Sultan Uvais mountain, flora, fauna, Beltog, Katkalha, Tuproqkalha.

Введение. Сегодня спрос на экологический туризм во всем мире велик, как никогда, и он становится самой быстрорастущей отраслью туризма как вида отдыха. Целью экотуризма является рациональное использование природы в туристическом направлении для обеспечения экологической безопасности и устойчивого развития нынешнего и будущих поколений.

Нижней Амударьи считается одним из регионов с высоким туристическим потенциалом, а ее разнообразные ландшафты, природные экосистемы, уникальная флора и фауна, промышленные города, исторические памятники, объекты культурного наследия, места паломничества позволяют развивать все виды отечественного туризма. Дальнейшее развитие потенциала экотуризма в регионе, создание благоприятных условий для жизни туристов посредством туризма, создание новых туристических дестинаций на природных территориях, дальнейшее увеличение потока туристов, обеспечение быстрого развития современной туристической инфраструктуры, а также широкого вовлечение населения в сферу предпринимательства по туристическим направлениям является актуальным сегодня, считается одним из вопросов.

Основная часть. Природа, уникальная флора и фауна, степи, озера и водохранилища, предгорья Амударьи, Бадайский токай, равнина Устырт, пустыня Кызылкум и новые соляные пустыни Оролкум, дельта Амударьи, гора Султан-Увайс, холмы Бельтог естественны - наличие региональных экосистем обеспечивает конкурентное преимущество Нижней Амударьи по сравнению с другими регионами. Экотуристические маршруты в регионе охватывают как засохшие, так и пострадавшие районы острова. В таких районах, по нашему мнению, экотуры можно осуществлять не только пешком или на верблюдах и лошадях, но и на самолете и вертолете. Он состоит из рощ на берегу реки Амударьи, которые представляют собой очень интересный и уникальный ландшафт для экотуров. На правом берегу Нижней Амударьи для охраны птиц и животных лесного ландшафта создан Бадайтокайский природный заповедник. Хорезмский заповедник создан для сохранения орнитофауны [2].

Помимо этого, в западной части Кызылкумов, на правом берегу р. Амударья. Хорезм – один из древнейших городов Узбекистана, расположен в Амударьинской области, его архитектурные памятники являются одним из исторических центров туризма. В такие места рекомендуется совмещать экотуры с историческими турами. В частности, на территории оазиса зарегистрировано 255 объектов культурного наследия, из них 18

археологических, 133 архитектурных, 66 скульптурных памятников и 32 святых места[3].

Необходимость развития экотуризма в регионе можно увидеть на примере международного биосферного заповедника Бадай-Токай. Этот заповедник был создан в октябре 1971 года как шестой заповедник в Узбекистане и первый в Каракалпакстане с целью сохранения лесного ландшафта и его фауны. Заповедник создан в Берунийском и Кегайлинском районах Республики Каракалпакстан с целью сохранения, охраны и разведения бухарского оленя, занесенного в международную «Красную книгу», который является эндемиком животного мира нашей страны, в рощах права берег Нижней Амударьи.

Район также располагает определенными рекреационными ресурсами. Например, в Хивинском районе желательнее создать туристический комплекс на берегу озер «Говукколь» и «Эшонравот», развивать рыболовство, организовать инфраструктуру палаток, проката плавательного снаряжения, бассейнов. Еще одно направление развития туризма связано с наличием целебных подземных вод в Хазараспском, Багатском, Ханкийском, Ургенчском и Гурленском районах. На их основе в будущем может быть создана эколого-медицинская служба [3].

В результате исследования перспектив развития экотуризма в Нижней Амударье можно дать следующие рекомендации:

- Необходимо создавать новые комплексные туристические маршруты, т.е. ресурсы экотуризма наряду с историко-архитектурными туристскими объектами, путем включения основных ресурсов экологического туризма региона в состав туристических маршрутов, предлагаемых турфирмами Нижнеамударьинского региона;

- Чтобы туристы, приезжающие в регион, лучше знали природу региона, необходимо создать каталог, включающий флору и фауну региона;

- Необходимо создать экотуристический комплекс на берегу озер «Эшон Рават» и «Говук» в Хивинском районе и создать рыболовные, загородные лагеря, услуги по прокату плавательного снаряжения, инфраструктуру рекреационных пляжей;

- Необходимо создать экотуристический комплекс в лесничестве, расположенном в поселке «Чолыш» Ургенчского района, и включить его в туристический маршрут.

Считаю необходимым разработать маршруты научного экологического туризма. Наряду с созданием гостевого дома в домах в селах восстанавливаются специальные сады по берегам рек сел и природных мест, удаленных от населения, и экспонируются экспонаты, представляющие культуру, быт, традиции коренного населения, а также выставки, отражающие мир животных и растений. Организации и туристы могут быть приглашены в другие места района[1].

Учитывая вышеизложенное, целесообразно развивать в регионе следующие направления туризма:

- **активный туризм:** это, как правило, организованный туризм, включающий в себя различные формы передвижения по одному и тому же маршруту, например, перемещение некоторой части пути пешком, на транспорте или на лошади и осле, самостоятельный (спортивный) туризм, охота и ловит рыбу;

- **экологический туризм:** привлечение туристов по отношению к конкретным элементам природы или направлениям, таким как ландшафты: памятники природы, особые виды растений и животных и их изучение.

- **культурный туризм:** организуется для изучения исторического, культурного наследия и географических мест.

Наша цель – сохранить его богатую природу, сохранить природные и археологические памятники, узнать об обычаях и национальных традициях населения путем организации и развития туристической сферы в регионе, привлечь иностранных туристов в эти места, познакомить с национальными сокровищами нашей страны. миру, то есть обслуживать туристов. Через организацию сервиса обеспечить занятость сельского населения, улучшить образ жизни, дальнейшее развитие инфраструктуры сел.

Заключение. Сегодня организовать экотуризм удобно и выгодно во всех отношениях. Для этого необходим не односторонний, а многосторонний подход к вопросу. Масштабные изменения в этом районе производиться не должны. Здесь нецелесообразно строить гостиницы, рестораны, объекты бытового обслуживания. Все должно быть естественным и нетронутым. Он интересен и туристам, которые смогут не только увидеть своими глазами, но и непосредственно поучаствовать в быте, обычаях, местной кухне и семейных традициях местного населения. Туристам это не только интересно и приятно, они поймут, что истоки древней близости и взаимоотношений природы и человека тесно связаны с природой и жизнью наших деревень, поймут важность их сохранения в первозданном виде. являются. Создавая и развивая многие виды туризма в Нижней Амударьи, он служит улучшению инфраструктуры десятков сел и улучшению образа жизни населения.

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Ефименко О.В.

*доцент кафедры «Госпитальная педиатрия»
Андижанский государственный медицинский институт
Республика Узбекистан, г.Андижан*

Хайдарова Л.Р.

*старший преподаватель
кафедра «Госпитальная педиатрия»
Андижанский государственный медицинский институт
Республика Узбекистан, г.Андижан*

Инакова С.У.

*студент магистратуры
кафедра «Госпитальной педиатрии»
Андижанский государственный медицинский институт
Республика Узбекистан, г.Андижан*

РОЛЬ ВИРУСНОЙ ИНФЕКЦИИ В РАЗВИТИИ НЕРЕВМАТИЧЕСКИХ КАРДИТОВ У ДЕТЕЙ

Аннотация. Диагностика вирусных поражений сердечной мышцы, основанная на убедительной доказательной базе, остается одной из ключевых проблем этой патологии. Острые кардиты могут быть проявлением любого инфекционного заболевания. Однако, наиболее частой причиной являются вирусы (70-95%), особенно у детей в первые годы жизни, причём в трети случаев кардиты развиваются на фоне суперинфекции.

Ключевые слова. Приобретенный кардит, острая вирусная инфекция, сердечная недостаточность, электрокардиография, внебольничная пневмония, часто болеющие дети.

*Efimenko O.V., candidate of medical sciences
associate professor*

*Department "Hospital Pediatrics"
Andijan State Medical Institute
Republic of Uzbekistan, Andijan*

Khaydarova L.R.

*senior lecturer
Department of "Hospital Pediatrics"
Andijan State Medical Institute
Republic of Uzbekistan, Andijan*

Inakova S.U.

master's student

THE ROLE OF VIRAL INFECTION IN THE DEVELOPMENT OF NON-RHEUMATIC CARDITIS IN CHILDREN

Annotation. The diagnosis of viral lesions of the heart muscle, based on a convincing evidence base, remains one of the key problems of this pathology. Acute carditis can be a manifestation of any infectious disease. However, viruses are the most common cause (70-95%), especially in children in the first years of life, and in a third of cases, carditis develop against the background of superinfection.

Keywords. Acquired carditis, acute viral infection, heart failure, electrocardiography, community-acquired pneumonia, children who are often ill.

Актуальность. Неревматические поражения сердца (приобретенные кардиты) являются частыми осложнениями ряда инфекционных заболеваний, прежде всего острых вирусных (1,8,10). Широкое распространение вирусных заболеваний, тропность вирусов к эндотелиоцитам и миокарду, возможность длительной персистенции возбудителей в организме объясняют стойкий интерес к вирусным повреждениям сердца (2,4,11).

Следует отметить, что в настоящее время мы не располагаем данными об истинном распространении вирусных кардитов, что, в первую очередь, обусловлено объективными трудностями их выявления (2,5). Диагностика вирусных поражений сердечной мышцы, основанная на убедительной доказательной базе, остается одной из ключевых проблем этой патологии (1,7,8).

Вирусные кардиты могут развиваться на разных стадиях инфекционного процесса. В острую фазу вирусных инфекций врачи проявляют настороженность в отношении возможного развития данного заболевания, между тем все клинические симптомы, как и изменения на ЭКГ, неспецифичны и могут быть расценены как проявления синдрома интоксикации, свойственного вирусным инфекциям (2,3,9).

Большой интерес в настоящее время вызывают проблемы развития кардитов у детей с внутриутробным и постнатальным инфицированием вирусами герпеса, ЦМВ и коронавирусной инфекцией. Доказано, что внутриутробное инфицирование может приводить к фатальным для плода заболеваниям миокарда, а также служить вероятной причиной и предрасполагающим фактором развития острого приобретенного кардита у детей в различные возрастные периоды, но и с наибольшей частотой в раннем возрасте (3,6,9).

На основании выше изложенного нами была поставлена **цель исследования:** установить роль острой вирусной инфекции в развитии приобретенных кардитов как проявление неревматических поражений сердца.

Материалы и методы. Наша работа выполнялась на базе кардиоревматологического отделения Андиганского Областного детского многопрофильного медицинского центра. Объем наших исследований включал 40 детей с острым приобретенным кардитом.

На первоначальном этапе нашей работы мы проводили беседу с родителями и детьми, с последующим целенаправленным клиническим осмотром и анализом лабораторно-инструментальных обследований. Во время беседы с матерью мы особое внимание уделяли на течение ante- и перинатального периодов: перенесенные вирусные инфекции в течении беременности, а также наличие осложнений во время беременности. Инструментальное обследование каждого ребенка включало: ЭКГ в 12 стандартных отведениях, ЭХОКГ с использованием доплерографии и обзорная рентгенография грудной клетки с расчетом кардиоторакального индекса.

Результаты исследования и обсуждения. Возрастной состав обследуемых нами детей имел довольно широкий диапазон и варьировал от 6 месяцев до 15 лет. Наибольший удельный вес приходился на возрастной период до 3-х лет (6 – 12 месяцев – 40% и 1-3 года – 35%). По гендерной принадлежности в 1,5 раза чаще встречались мальчики (57,5% против 42,5%).

Для получения результатов нами использовались данные перинатального анамнеза всех обследуемых нами детей с острым приобретенным кардитом (n=40), развившегося как осложнение после перенесенной острого вирусного заболевания.

При сборе анамнеза у матерей, дети которых находились на лечении с острым приобретенным кардитом нами установлено, что у всех женщин имело место неблагоприятное течение беременности, не только связанное с токсикозом и угрозой прерывания, но и с высокой частотой перенесенных острых вирусных заболеваний.

Факторы риска в период беременности

	авс	%
<i>Неблагоприятные факторы периода беременности:</i>		
- токсикоз		
- угроза прерывания	40	100%
- фетоплацентарная недостаточность	16	40%
- преэклампсия	6	15%
	3	7,5%
<i>Перенесенные заболевания во время беременности:</i>		
ОРВИ — однократно		
- двукратно	18	45%

из них Covid – 19	22	55%
TORCH- инфекция	5	12,5%
Анемия – средней тяжести	8	20%
- тяжелая	28	70%
	12	30%

Установлен очень высокий процент женщин, перенесших во время беременности острые вирусные заболевания, в том числе коронавирусную инфекцию. Данный фактор риска оказал влияние не только на сроки родоразрешения, но и на осложненное течение периода новорожденности у обследованных детей. Нами установлено, что у 35% женщин беременность закончилась преждевременными родами. Асфиксия новорожденного в родах зарегистрирована у 30% детей, у 2/3 которых вследствие обвития пуповины вокруг шеи.

Наличие фоновых заболеваний в периоде раннего возраста также рассматривалось нами как один из факторов риска неблагоприятно влияющего на состояние здоровья в последующие возрастные периоды (анемия -100%, рахит-100%, БЭНП-5% и др).

По литературным данным частые респираторные вирусные инфекции, особенно осложненные пневмонией, являются неоспоримым фактором риска в развитии острых приобретенных кардитов. Это нашло подтверждение и в наших исследованиях, так как все обследованные нами дети входили в группу ЧБД, в связи с неоднократно перенесенными острыми вирусными заболеваниями (два раза в год - 65%, 3 и более раз – 35%) и острыми пневмониями – 2 и более раз в год (47,5%).

При поступлении в стационар у 2/3 детей состояние оценивалось как тяжелое. У 11 детей (27,5%) диагноза острого кардита был установлен при поступлении в стационар с диагнозом острой внебольничной пневмонии, у остальных (72,5%) признаки поражения оболочек сердца диагностировались через 2-3 недели после перенесенного острого респираторного заболевания.

Жалобы детей при поступлении в стационар характеризовались широким диапазоном клинических проявлений. С наибольшей частотой встречались одышка (100%), прогрессирующая слабость (100%), стонущее дыхание (80%), кашель (60%), повышение температуры тела (45%) и нарушение сна (20%). Реже встречалась кардиалгия (5%) преимущественно у детей старшего возраста, а у детей раннего возраста – редкое мочеиспускание, сочетающееся с отеками (20%). Гепатомегалия, как проявление сердечной недостаточности встречалась у 70% детей.

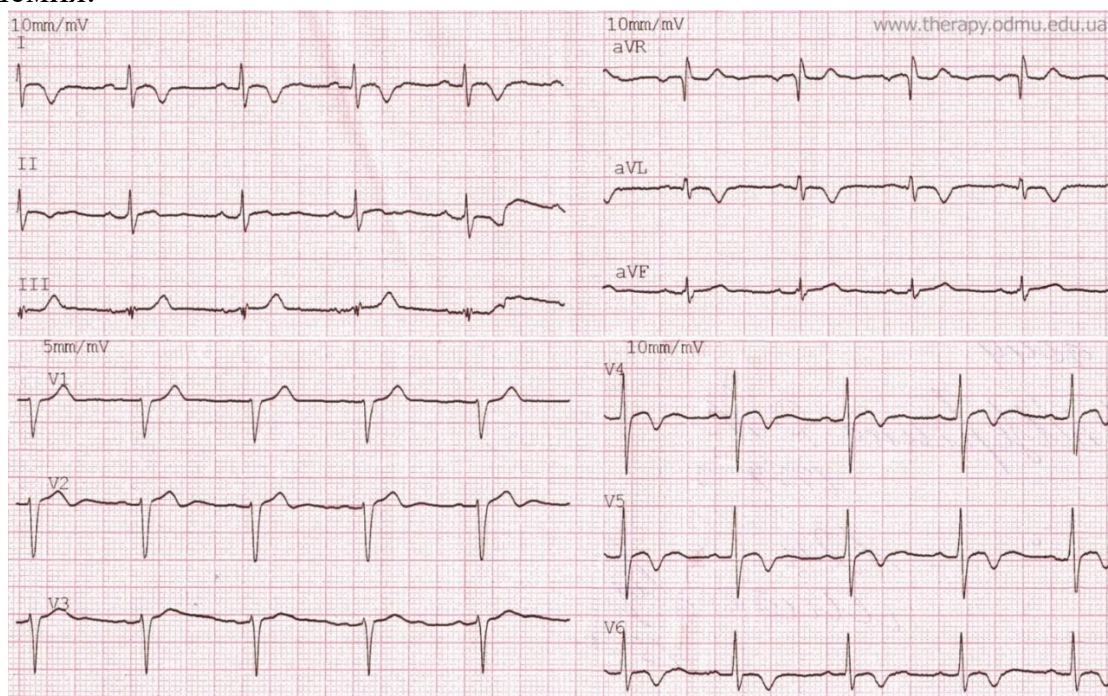
На основании субъективных и объективных данных более чем у 2/3 детей кардит протекал с картиной сердечной недостаточности, оцененной II Б степенью (70%).

Кроме клинических нами диагностированы и электрокардиографические признаки острого кардита. Неблагоприятным в

плане прогноза явились признаки субэндокардиальной ишемии, определенная нами по изменениям сегмента ST и зубца T, а именно у 6 детей (15%) - снижение сегмента ST ниже изолинии с уплощенным зубцом T в левых грудных отведениях (V5-V6), а у 3- – в тех же отведениях отрицательный заостренный зубец T.

ЭКГ больной – Холикназаровой Р., 5 лет, и/б – 3078/395

На ЭКГ – синусовая тахикардия (ЧСС 150), субэндокардиальная ишемия.



Эхокардиография позволила нам получить информацию о размерах полостей сердца, увеличении конечно-диастолического и конечно-систолического размеров левого желудочка, а также снижении фракции изгнания. Показатели конечно-систолического размера варьировали от 15 мм до 44 мм и конечно- диастолического размера – от 36 мм до 58 мм. Фракция изгнания у всех детей была ниже возрастных нормативов и располагалась в диапазоне 28 – 50%.

Подтверждающими критериями острого кардита явились данные Эхокардиографии по высоким показателям конечно-систолического и конечно-диастолического размеров и низким данным фракции изгнания (28-50%). Степень кардиомегалии оценивалась по данным КТИ на обзорной рентгенографии грудной клетки.

При рентгенологическом исследовании органов грудной клетки нами установлено расширение тени сердца за счет левого желудочка и застойные явления в виде усиления легочного рисунка. Минимальные значения кардиоторакального индекса соответствовали 64%, а максимальные – 70%.

Рентгенография органов грудной клетки больной Мамадалиевой И., 2 года, и/б 19031/1053.



На R-грамме – кардиомегалия, КТИ 68%, застойные явления в легких.

Выводы. Нами установлено, что у всех обследуемых нами детей развитие приобретенного кардита было связано с перенесенной вирусной инфекцией. Кроме того, большую роль сыграла высокая частота фоновых состояний, которые можно расценивать как предрасполагающие факторы к рецидивирующим вирусным заболеваниям.

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*Жаббаров К.Г.
доцент
Джизакский политехнический институт
Рахмонов Ф.А.*

АНАЛИЗ ЭФФЕКТИВНОСТИ ПРОИЗВОДСТВА И РЕАЛИЗАЦИИ СЕЛЬСКОХОЗЯЙСТВЕННОЙ ПРОДУКЦИИ АПК

Аннотация: в статье рассмотрен вопрос о повышении показателей производства и реализации сельскохозяйственной продукции агропромышленного комплекса, а также экономические показатели на примере Ташкентской области.

Ключевые слова: эффективность, специализация, структура, производство, этап, агропромышленный комплекс (АПК), категория, система. базис, продукция, стабильность, удельный вес, площадь, урожайность.

*Zhabbarov K.G.
associate professor
Jizzakh Polytechnic Institute
Rakhmonov F.A.*

ANALYSIS OF THE EFFICIENCY OF PRODUCTION AND SALES OF AGRICULTURAL PRODUCTS

Annotation: the he article considers the issue of increasing the indicators of production and sale of agricultural products of the agro-industrial complex, as well as economic indicators on the example of the Tashkent region.

Keywords: efficiency, specialization, structure, production, stage, agro-industrial complex (AIC), category, system. basis, production, stability, specific gravity, area, yield.

Анализ динамики показателей производства и реализации сельскохозяйственной продукции АПК является важным предоптимизационным этапом решения задачи прогнозирования развития сельского хозяйства. Он ориентирован на определение тенденции развития производства и распределения продукции. Выявление «узких мест» в товарно-денежных отношениях, оценки эффективности специализации сельскохозяйственного производства в регионе.

В силу многообразия природных и экономических условий административные районы и области специализируются на производстве того ассортимента сельскохозяйственной продукции АПК, который

осуществляется наиболее эффективно. При в этом прежде чем выбрать метод оптимизации специализации и размещения сельскохозяйственного производства следует тщательно исследовать и оценить воздействия объективных и субъективных экономических социальных и случайных факторов на конечные результаты производства [1]. При этом следует учитывать что сложившиеся структура и динамизм производства и реализации сельскохозяйственной продукции АПК во много определялись уровнем

и результатом интенсификации государственным заказом на продукцию а также потребностями региона.

Возникает необходимость достаточно полно выявить резервы повышения эффективности путем сравнения затрат и выручки от производства

и реализации сельскохозяйственной продукции.

Так, анализ динамики производства и реализации сельскохозяйственной продукции АПК свидетельствует о необходимости совершенствования их структуры с учетом принципов и концепции перехода на регулируемые рыночные отношения. Существенную роль для формирования перспективной структуры производства и реализации продукции будут играть новые отношения между республиками [2]. Уровень интенсификации не одинаков по отдельным регионам, даже в одинаковых сельскохозяйственных зонах. Причин для этого множество. Поэтому возникает необходимость проанализировать сложившуюся ситуацию в регионе и выявить резервы повышения эффективности производства и реализации продукции. По этому анализ сложившейся структуры и динамики производства и реализации продукции даст возможность определить эффективные направления развития товарно-денежных отношений.

Разумеется анализ сложившихся и перспективных структур производства и реализации сельскохозяйственной продукции АПК обуславливает разработку конкретной схемы и средства эффективного анализа. В качестве такого средства могут служить объективно обусловленные оценки производственных факторов и продукции которые находятся при решении оптимизационных экономических задач [3].

Специалисты различают два аспекта эффективности производства:

1. Техничко-экономической;
2. Социально-экономический.

Такое деление ни в коей мере не означает различие экономической и социальной эффективности.

В связи с этим можно проанализировать основные показатели социально-экономической эффективности сельскохозяйственного производства Ташкентской области.

Общественный сектор сельского хозяйства Ташкентской области на 1-ноября 2018 г. располагали в пользовании земельной площадью в 798.0 тыс. га, из них пашни-388.5 тыс.га, сенокосы 19.6 тыс. га, и пастбища-328.9 тыс.га. Эти земельной площади распределены по землепользователям следующим образом: из общей площади 798.0 тыс. га. Земли фермерский хозяйства составляли 285.9 тыс. га. Из них земли общественного пользования- 275.2 тыс. га. [3]. Приусадебные участки в пользовании колхозников -8.7 тыс. га, земли в личном пользовании рабочих и служащих -2.0 тыс.га, совхозов и других производственных и сельскохозяйственных предприятий-488.5 тыс. га и наконец земли в личном пользовании рабочих и служащих кроме участков на колхозных землях -20.2 тыс. га.

Данные таб.1. свидетельствуют о том, что за указанные годы фактических по всем культурам показатели их характеризующие заметно менялись. Так вся посевная площадь во всех категориях хозяйства на всех категориях земель в 2018 г. Составила 366903.0 га. Этот показатель в 2019 г. За счет введения в оборот новых земель достиг 377695.0 га. Произошло обмеление земель под строительства промышленных предприятий и жилищного строительства в результате чего она сократилась на 6216 га и ее площадь составила 371479 га.

Посевная площадь под зерновыми культурами постоянно увеличивалась главным образом за счет расширения посевных площадей под пшеницу, ячмень и рис. Посевная площадь под кукурузу на зерно в 2019 г. По сравнению с 2018 г. Сократилась на 1708 га а в 2018 г. Относительно 2019 г. уа 1012 га. Нестабильной тенденцией характеризуется динамика посевной площади хлопчатника за рассматриваемый период. Так, посевная площади этой культуры в 2019 г. увеличилась по сравнению с 2018 г. на 3613 га, а в 2018 г. она сократилась на 8680 га.[4] Последнее связано с организационно-экономическими мероприятиями, направленными на устранение монокультуры хлопчатника и внедрение научно обоснованной системы ведения земледелия. Определенная часть высвобождаемых земель из под хлопчатника отведена для расширения посевной площади овощных культур, бахчевых и многолетних трав.

Одним из важнейших показателей эффективности сельского хозяйства является урожайность. При этом урожайность зерновых культур (кроме риса) за рассматриваемых период в общем возрастает. Это происходит, благодаря интенсификации сельскохозяйственного производства и внедрения в последнее время прогрессивных форм организации и оплаты труда [5]. Так, урожайность озимой пшеницы за 2019-2018 гг. выросла на 4.8 центнера с гектара, т.е. в среднем ежегодный прирост урожайности составил 2.4 центнер.

Если урожайность по зерновые возрастает, то по техническим культурам и прежде всего по хлопчатнику, она практически не меняется (2018 г. – 29.4 ц/га, 2019 г. – 28.9 ц/га). Падает урожайность по картофелю, бахчевым культурам, фруктам, ягодам и винограду. Снижается урожайность однолетних трав.

Объем производства каждой культуры определяется размерами посевной площади и урожайности. При этом прирост объема производства продукции можно определить по следующей формуле (6) Δ :

$$\Delta_{sy} = S_1 Y_1 - S_0 Y_0 = \Delta_s Y_0 + \Delta_y S_0 + \Delta_s \Delta_y \quad (1.1)$$

где Y_0 и Y_1 – урожайность культуры, соответственно в базисном и отчетном годах; S_0 и S_1 – посевная площадь, соответственно в базисном и отчетном годах;

Отсюда объемы производства базисного (q_0) и отчетного (q_1) годов определяются по формуле: $q_0 = S_0 * Y_0$, $q_1 = S_1 * Y_1$ (1.2)

Разница их значений (Δ_{sy}) рассчитывается по следующей формуле:

$$\Delta_{sy} = S_1 Y_1 - S_0 Y_0 \quad (1.3)$$

где: Δ_{sy} – рост объема производства за счет прироста посевной площади при неизменной урожайности культур;

$\Delta_y S_0$ – рост объема производства за счет прироста урожайности при неизменной посевной площади культур;

$\Delta_s \Delta_y$ – рост объем производства, в следствии совместного влияния прироста урожайности и посевной площади культур.

Посевная площадь хлопчатника за базисный (2019 г.) и отчетный (2018 г.) годы соответственно составляет $S_0 = 149782$ га. $S_1 = 141102$ га. [7]. Урожайность хлопчатника за эти годы соответственно составила $Y_0 = 24,7$ ц/га и $Y_1 = 28,9$ ц/га. Тогда объемы производства хлопка-сырца за эти годы будут следующим:

$$q_1 = S_0 * Y_0 = 149782 \text{ га} \cdot 24,7 \text{ ц/га} = 369961,5 \text{ т.} \quad (1.4)$$

$$q_1 = S_1 * Y_1 = 141102 \text{ га} \cdot 28,9 \text{ ц/га} = 407784,8 \text{ т.} \quad (1.5)$$

а общий прирост производства хлопка - сыро за эти годы составит:

$$\Delta_{sy} = S_1 Y_1 - S_0 Y_0 = 407784,8 \text{ т} - 369961,5 \text{ т} = 37823,3 \text{ т} \quad (1.6)$$

При этом прирост объема производства хлопка – сырца за счет прироста посевной площади хлопчатника при неизменной урожайности определяется следующим образом: $\Delta_s Y_0 = -8680 \text{ га} \cdot 24,7 \text{ ц/га} = -21439,6 \text{ т} \quad (1.7)$

а прирост объема производства за счет прироста урожайности при неизменном размере его посевной площади рассчитывается [8]:

$$\Delta_y S_0 = 4,2 \text{ ц/га} \cdot 149782 \text{ га} = 62908,4 \text{ т} \quad (1.8)$$

Прирост объема производства хлопка – сырца вследствие совместного влияния повышения урожайности и прироста посевной площади определяется по следующей формуле: $\Delta_s \Delta_y = -8680 \text{ га} \cdot 4,2 \text{ ц/га} = -3645,5 \text{ т} \quad (1.9)$

Как видно из этих расчетов, сокращение посевной площади хлопчатника за отчетный год., по сравнению с базисным на $\Delta_s = 8680$ га не

могло не сказаться отрицательно не росте объема производства хлопка – сырца. Следует отметить, что при неизменной посевной площади за рассматриваемые годы прирост хлопка – сырца составил бы $\Delta_y S_0 = 62908.4$ т. Однако, как было подчеркнуто, сокращение посевной площади хлопчатника снизило прирост объема производства хлопка – сырца до 37823.3 т.[9]. Таким образом, прирост объема производства хлопка-сырца достигнут только вследствие влияния урожайности. Составные части изменения объема производства хлопка-сырца по Ташкентской области за 2019 и 2018 гг. показаны на рис-1.

Данные факторы производства указаны на графике (рис-1.), причем по оси абсцисс показана посевная площадь, а по оси ординат – урожайность хлопчатника. Составные части изменение объема производства хлопка – сырца за счет прироста посевной площади обозначено Δ_s при неизменной урожайности хлопчатники характеризуется как поверхность четырехугольника, т.е. $\Delta Q_s = \Delta_s \Delta_y$.

Аналогичным образом определяется увеличение объема хлопка – сырца за счет прироста урожайности хлопчатника, что показано приростом оси ординат на (Δ_y) и посевной площади (Δ_s) хлопчатника характеризуется следующим образом:

используя формулы (1.1)-(1.3) [10] покажем влияние прироста урожайности и посевные площади соответственной равны $S_0 = 25024$ га, $S_1 = 26641$ га, а урожайность овощей - $Y_0 = 216.8$ ц./га и $Y_1 = 227.2$ ц/га.

На основе этих данных рассчитываем разницу между базисными и отчетными посевными площадями, урожайностью и объемами производства овощей [11]: $\Delta_s = S_1 - S_0 = 26541 - 25024 = 1517$ га.,

$$\Delta_y = Y_1 - Y_0 = 227.2 - 216.8 = 10.4 \text{ ц/га} \quad (1.10)$$

$$q_0 = S_0 * Y_0 = 25024 \text{ га}, 216.8 \text{ ц/га} = 542520.3 \text{ т.} \quad (1.11)$$

$$q_1 = S_1 * Y_1 = 26641 \text{ га}, 227.2 \text{ ц./ га} = 603011.5 \text{ т.} \quad (1.12)$$

Разница между объемами производства овощей за эти годы составляет $\Delta_{sy} = S_1 Y_1 - S_0 Y_0 = 603011.5 \text{ т.} - 542520.3 \text{ т.} = 60491.2 \text{ т.} \quad (1.13)$

Прирост объема производства овощей вследствие прироста посевной площади при неизменном уровне урожайности будет таков:

$$\Delta_s Y_0 = 1517 \text{ га}, 216.8 \text{ ц/га} = 32888.6 \text{ т.} \quad (1.14)$$

Прирост объема производства овощей за счет прироста урожайности при неизменной размер его посевной площади определяется следующим образом:

$\Delta Q_s = \Delta_y S_0 = 62908.4 \text{ т.}$	$\Delta_s \Delta_y = - 3645.5 \text{ т.}$
$S_0 Y_0 = 369961,5 \text{ т.}$	$\Delta Q_s = \Delta_s Y_0 = 21439.6 \text{ т.}$

Рис -1.

$$\Delta_y S_0 = 25024 \text{ га}, 10.4 \text{ ц/га} = 25075.0 \text{ ц} \quad (1.15)$$

А прирост объема производства овощей вследствие совместного влияния прироста урожайности и посевной площади будет следующим [12]:

$$\Delta_s \Delta_y = 1517 \text{ га}, 10.4 \text{ ц/га} = 1577.6 \text{ ц. (1.16)}$$

Соотношение приростов производства овощей вследствие повышения урожайности, посевной площади и их совместного влияния характеризует их удельные веса, соответственно, 0.54, 0.43, 0.03. По Ташкентской области стабильный прирост посевной площади за рассматриваемые годы имеет место только по бахчевым культурам и многолетним травам. Посевная площадь бахчевых в 2019 г. составила 3157 га, что превышает значение этого показателя за 2018 г. [13]. На 332 га. В 2018 г. площадь бахчевых достигла 3689 га, т.е. за два года посевной площади под этой культурой выросли почти на 17 %. При этом урожайность бахчевых постоянно снижалась. Так, если урожайности этой культуры в 2018 г. составила 171.0 ц/га, то в 2018 г. она не превышала 150 ц/га. Нужно заметить, что падение урожайности очень равномерное, примерно 5-6 ц/га. Этот факт говорит уже о сложившейся тенденции. Снижение урожайности бахчевых культур компенсировалось увеличением посевной площади (2018 г. – 2.8 тыс. га, 2019 г. – 3.2 тыс. га, 2018 г. – 2.7 тыс. га), чем и обеспечивался стабильный прирост объема производства бахчевых. За рассматриваемый промежуток времени валовой сбор этих культур вырос с 48.5 тыс. тонн в 2018 г. до 56.6 тыс. т. При этом прирост объема производства был относительно равномерным, около 4 тыс. т в год.

Добиться быстрого повышения урожайности за короткий срок – задача нереальная. Для этого требуется время. Нет и свободных земель. Но решать продовольственную проблему нужно. Единственно возможный путь решения этой неотложной проблемы является изменение структуры распределения посевных площадей. Необходимо быстрое, но в то же время обдуманное и социально – экономическое оправданное сокращение земельных угодий под техническими культурами и одновременное увеличение посевных площадей под продовольственными культурами [14].

В этом направлении уже проделана определенная работа. Так, посевная площадь кенафа в 2018 г. была сокращена по сравнению с 2019 г. на 2034 га. Сокращается посевная площадь под хлопчатником. Однако этот процесс идет еще не достаточно быстро.

Объем производства животноводческой продукции определяется поголовьем скота и птиц и их продуктивностью. Поголовье скота и птиц во всех категориях хозяйств Ташкентской области на 1-января 2018-2019 гг. приведено в таблица-2. Как видно из таблицы, поголовье крупного рогатого скота за 2018-2019 гг. стабильно возрастало (2018 г. – 373.1 тыс. голов, 2018 г. – 387.1 тыс. голов) [15], но в 2019 г. поголовье скота, по сравнению с 2018 г. сократилось на 1.4 % и составило 381.8 тыс. голов.

Аналогичная картина, т.е. уменьшение поголовья в 2019 г. характерна и для других видов скота (свиней, овец всех пород и коз). Поголовье птиц в 2019 году по сравнению с 2018 г. несколько возросло, но оно все -таки не достигло уровня 2018 г.

За рассматриваемый период темпы роста объема производства животноводческой продукции опережали темпы прироста поголовья скота и птиц, что свидетельствует о росте продуктивности скота. Ретроспектива производства животноводческой продукции за 2015-2019 гг. во всех категориях хозяйств Ташкентской- области приведена в таблице. Как видно из этой таблица из этой таблицы, объем производства мяса в убойном весе в 2018 г. составила 68.3 тыс. тонн, что превышает значение этого показателя за 2015 г. – 2019 г., соответственно, на 7.3 тыс. т. 8.6 тыс. т. И 5.3 тыс. т. При одновременном уменьшении поголовья крупного рогатого скота, свиней, овец всех пород и коз. Прирост объема производства молока за этот период имеет стабильную тенденцию.

**Поголовье скота и птицы во всех категориях хозяйств
Ташкентской области на 1-января 2020 г.**

Таблица.

	2018 г. тыс. гол.	2019 г. тыс. гол.	2018 г. тыс. гол.	2019 г. тыс. гол.	В 2019 г. в % к		
					2018 г.	2018 г.	2018г.
Крупный рогатый скот	373.1	384.1	387.1	381.8	102.3	99.4	98.6
Свиньи в т.ч. коров	145.3	148.1	147.3	152.8	105.2	103.2	103.7
Свиньи	261.8	280.4	259.3	235.8	90.1	84.1	90.9
Овец всех пород и коз	569.2	588.8	544.7	541.4	95.1	91.9	99.4
в.т.ч. коз	63.3	63.4	58.5	57.7	81.1	91.0	98.6
Птицы	7237.2	7099.1	6607.7	6907	95.4	97.3	104.5

За 2015-2018 гг. наблюдался значительный прирост производства яиц во всех категориях хозяйств Ташкентской области. Так, индекс роста производства яиц в 2018, 2019 и 2018 гг. (2015 г. – 100) составил, соответственно 1.07, 1.15, 1.21 [16].

Объем производства шерсти до 2019 г. постоянно возрастал, но в 2018 г. наблюдалось значительное снижение (примерно на 100 тонн). Аналогичная картина наблюдалась по производству коконов тутового шелкопряда. Объем производства этого сырья в 2019 г. составил 2443,0 тонн, а в следующем году снизился на 83.0 тонн.

Эффективность реализации производимой сельскохозяйственной продукции АПК во многом определяется выбором оптимальной структуры их распределения на основе товарно-денежных отношений. В этой связи представляется необходимым провести анализ сложившейся структуры реализации данной продукции. В таблица-3 приводятся удельные веса реализации сельскохозяйственных продуктов от общего их объема по каналам распределения [17].

Как видно из данных этой таблицы удельные веса всех видов растениеводческой продукции отличаются между собой как по годам так и по каналам распределения. Например, удельный вес поставки картофеля в общесоюзный фонд от общего объема производства в 2019 г. составил 10.3 %, а в 2018 и 2019 гг. составили, соответственно 17.3 и 9.5 % от их общего объема производства. То есть в 2019 г. по сравнению с 2018 г. удельный вес поставки картофеля в общесоюзный фонд снизился на 7.8 %. В результате этого появилась возможность повысить удельный вес реализации картофеля в городах области в 2018 г. составил 12.8 %, то в 2019 г. по сравнению с 2018 г. он повысился на 6 % и достиг 18.8 %.

На основании анализа научно-технической литературы выявленных и классифицированных обобщенных приемов определения оптимальных соотношений параметров [18], а также для упрощения анализа, расчета и синтеза цепей различной физической природы удобно использовать единый математический аппарат, использующий принцип прямой аналогии, т.е. в качестве обобщенных величин, характеризующих процессы в целях любой физической природы [19].

Ретроспектива посевной площади, урожайности и валового сбора сельскохозяйственных культур (во всех категориях хозяйств – на всех категориях земель).

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Жаксыгельдин Е.А.

*Ақпараттық жүйелер мамандығының студент магистратуры,
Байтурсынов атындағы Қостанай өңірлік университеті,
Қазақстан, Қостанай*

Ғылыми кеңесші: Абатов Н.Т.

*Профессор, физика-математика ғылымдарының кандидаты,
Ақпараттық жүйелер және информатика кафедрасының доценті
А. Байтурсынов атындағы Қостанай өңірлік университеті
Қазақстан, Қостанай*

ҚЫЛМЫСҚА ҚАРСЫ КӨРСЕТУДЕ ЖАСАНДЫ ИНТЕЛЛЕКТТИ ҚОЛДАНУ

Мақалада жасанды интеллекттің (ЖИ) қоғамға және құқық қорғау органдарына әсері, сондай-ақ оны қылмыстық мақсатта пайдалану мүмкіндігі қарастырылады. Авторлар ЖИ технологиялары әлі толық зерттелмегенін және оларды құқықтық бағалаудың артықшылықтары мен кемшіліктерін ескере отырып, жан-жақты болуы керектігін атап көрсетеді. Мақалада сонымен қатар қосымша зерттеулерді қажет ететін мәселелер талқыланады, соның ішінде ЖИ-тің табиғи интеллектпен нақты өзара әрекеттесуін анықтау, құқық қорғау органдарында ЖИ алгоритмдерін қолданудың халықаралық тәжірибесін талдау және ЖИ технологияларын пайдаланумен байланысты іргелі адам құқықтарына қауіптерді болжау.

Түйінді сөздер: жасанды интеллект, құқық қорғау органдары, криминогендік фактор, құқықтық бағалау, AI технологиялары, табиғи интеллект, халықаралық тәжірибе, адам құқықтарына қауіп-қатер.

Zhaxygeldin Y.A.

*Master's student of the specialty information systems
Kostanay Regional University named after A. Baitursynov
Kazakhstan, Kostanay*

*Scientific consultant: Abatov N.T., candidate of physical and mathematical
sciences*

professor

associate professor

*Department of Information Systems and Informatics
Kostanay Regional University named after A. Baitursynov
Kazakhstan, Kostanay*

THE USE OF ARTIFICIAL INTELLIGENCE IN COUNTERING CRIME

The article discusses the impact of artificial intelligence (AI) on society and law enforcement agencies, as well as its potential use for criminal purposes. The authors emphasize that AI technologies have not yet been fully studied and their legal assessment should be comprehensive, taking into account both advantages and disadvantages. The article also discusses issues that require further research, including determining the specifics of AI interaction with natural intelligence, analyzing international experience in using AI algorithms in law enforcement agencies, and predicting risks to fundamental human rights associated with the use of AI technologies.

Keywords: artificial intelligence, law enforcement agencies, criminogenic factor, legal assessment, AI technologies, natural intelligence, international experience, risks to human rights.

Қазіргі уақытта әлем өте қарқынды өзгеруде. Көптеген реформалар, індеттің қоғамға әсері, соған байланысты дағдарыстық жағдайлар және қоғамның әртүрлі салаларындағы басқа да сын-қатерлер мен қауіптер адам мен азаматтың құқықтары мен бостандықтарын қамтамасыз етудің жаңа тиімді тетіктерін әзірлеу қажеттілігін тудырады.

Цифрландыру жағдайында ақпараттық технологиялардың үздіксіз дамуы жылдам өзгеріп отырады, бұл қоғамдық өмірдің әртүрлі салаларында, басқалармен қатар құқықтық, жасанды интеллект ақпараттық технологиялардың ұйымдастырылған жиынтығы ретінде пайдалануды ұсынады, оны пайдалану арқылы ғылыми зерттеу әдістерінің жүйесін және жұмыс барысында алынған немесе өз бетінше жасалған ақпаратты өңдеу алгоритмдерін қолдану арқылы күрделі күрделі тапсырмаларды орындау, сондай-ақ өздерінің білім қорларын, шешім қабылдау модельдерін, ақпаратпен жұмыс істеу алгоритмдерін құру және пайдалану және оларды шешу жолдарын анықтау берілген тапсырмаларға қол жеткізу.

Мақаланың мақсаты – қылмыспен күрес парадигмасындағы жасанды интеллект технологияларының рөлін анықтау және шешілмеген құқықтық мәселелер ауқымын анықтау.

Коронавирустық дағдарыс айқын көрсетіп берген қазіргі заманның басты мәселелерінің бірі – сандық технологиялар мен жасанды интеллекттің біздің өміріміздегі, ғылымдағы, әсіресе оның гуманитарлық құрамдас бөлігіндегі рөлі. Бұл теориялық білім және әлеуметтік тәжірибе ретінде криминология ғылымына да қатысты екені сөзсіз [1, 113 б.].

Қазірдің өзінде отандық құқық қорғау органдары осындай салаларда жасанды интеллект технологияларын белсенді түрде қолдануда.

Бетті тану. Біраз уақыттан бері бүкіл әлем бойынша құқық қорғау органдары бейнебақылау жүйелерімен және дерекқорда бар ақпаратпен салыстыра отырып, бет-әлпетті автоматты түрде тануға мүмкіндік беретін бағдарламалық жүйелерді пайдалануда. Бұл ретте жоғары тану дәлдігіне беттің биометриялық параметрлеріне негізделген индекстік

технологияларды қолдану арқылы қол жеткізіледі. Полиция да бұл жүйені пайдалана алады, көбінесе қылмыстарды анықтауда, алдын алуда және тергеуде, іздеуде жүрген адамдардың орналасқан жерін анықтауда басты рөл атқарады [3, 92 б.].

Дрондарды пайдалану. Роботтар сонымен қатар браконьерлерді анықтай алады, заңсыз кен өндіруді, заңсыз ағаш кесуді анықтай алады, орман өрттерін таба алады және орманда немесе тауларда жоғалғандарды іздеуге көмектеседі. Дрондар тас жолдардағы қозғалыс жағдайын бақылайды және ұрланған көліктерді іздейді.

Жол қауіпсіздігін қамтамасыз ету. Жолдардағы құқық бұзушылықтар туралы мәліметтерді есепке алу автоматты тіркеу кешендерін, атап айтқанда фото және бейне жазу функцияларымен жабдықталған арнайы техникалық құралдарды пайдалана отырып жүзеге асырылады, бұл әкімшілік құқық бұзушылық белгілерін қамтитын нақты оқиғаларды автоматты түрде анықтауға және дерекқорларға құжаттандыруға мүмкіндік береді. қозғалыс қауіпсіздігі.

Қылмыстық құқық бұзушылықтарды болжау. Жасанды интеллект технологияларының көмегімен қылмыстың уақытша, аумақтық және сапалық көрсеткіштері бойынша негізделген болжамдар жасауға болады.

Қазақстанда қолдану.

Цифрлық технологиялар бөлімінің басшысы «Сергек» жүйесі жасанды интеллект пен машиналық оқыту технологияларын пайдалана отырып, жолдардағы жағдайды талдап, жылдамдық шегін анықтаудың оптикалық әдісін қолданатынын атап өтті.

Сергек жүйесі қазақстандық әзірлеушілер «Көркем Телеком» ЖШС өнімі. Бағдарламалық қамтамасыз ету мен алгоритмдерді қазақстандық IT мамандары жазған. Деректері бар барлық серверлер Қазақстан аумағында орналасқан. Бағдарламалық жасақтаманы әзірлеуден басқа, компанияда Конструкторлық бюро бар, оның қызметкерлері Сергек жүйесінің аппараттық құралдарын жобалаумен айналысады.

Бөлім жобаны жүзеге асыру арқылы келесі оң көрсеткіштер күтілетінін атап өтті: Жол-көлік оқиғаларының санын 30 пайызға азайту; Жол-көлік оқиғаларынан қаза болғандардың санын 40 пайызға азайту; Жол-көлік оқиғасынан зардап шеккендердің санын 30 пайызға азайту; Қоғамдық орындардағы қылмысты 40 пайызға азайту; Көлік жүргізу мәдениетін арттыру; Қалалық көлікті басқару сапасын арттыру; Қылмыстың алдын алу және азаматтарға жедел көмек көрсету бойынша полиция қызметінің тиімділігін арттыру; Бұқаралық іс-шаралар кезінде жедел жағдайды бақылау; Жаңа жұмыс орындарын құру.

Қазіргі уақытта жасанды интеллект технологиялары толық түсінілмеген. Құқықтық бағалауды кемшілігімен де, артықшылығымен де жан-жақты қарастыру керек. Жасанды интеллекттің күшін бағаламау немесе елемеу мүмкін емес. Керісінше, бұл технологияларды жан-жақты

және жан-жақты зерттеп, олардың адамзат болашағындағы орны мен рөлін зерделеу, пайдалану шекаралары мен критерийлерін анықтау, жағымсыз салдарын болжау және оларды барынша азайту, оны пайдаланумен байланысты проблемалық аспектілерді құқықтық шеңберде анықтау қажет.

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*Жумаев Х.Х., доктор философии по географии (PhD)
и.о. доцента
факультет географии и агрономии
Каршинский государственный университет
Махмудов.М.
студент 4 курса
Каршинский государственный университет
Узбекистан*

ТУРИСТИЧЕСКИЙ ПОТЕНЦИАЛ ФРАНЦИИ И РАЗВИТИЕ МЕЖДУНАРОДНОГО ТУРИЗМА

Аннотация. В данной статье представлены географическое положение Франции, природные условия и природные ресурсы, вопросы развития туризма, статистика международных туристических потоков и значение туризма в экономике страны, города с историческими и культурными объектами, которые посещает наибольшее количество туристов. Также в статье представлена информация об известных туристических объектах и туристических регионах Франции, включенных в список объектов культурного наследия ЮНЕСКО.

Ключевые слова: географическое расположение, природно-рекреационные ресурсы, климат, чудеса природы, талассотерапии, религиозные сооружения, доисторическими рисунками, туристско-рекреационные районы, лечебно-оздоровительного туризма.

*Zhumaev Kh.Kh., doctor of philosophy in geography (PhD)
acting associate professor
Karshi State University
Makhmudov.M.
4th year student
Karshi State University
Uzbekistan*

TOURIST POTENTIAL OF FRANCE AND DEVELOPMENT OF INTERNATIONAL TOURISM

Abstract. This article presents the geographical location of France, natural conditions and natural resources, issues of tourism development, statistics of international tourist flows and the importance of tourism in the economy of the country, cities with historical and cultural sites visited by the largest number of tourists. The article also provides information about famous tourist sites and tourist regions of France included in the list of UNESCO cultural heritage sites.

Key words: Geographical location, natural and recreational resources, climate, natural wonders, thalassotherapy, religious constructions, historical drawings, tourist and recreational areas, medical and health tourism.

Франция расположена на западе Европы, и ее географическое положение очень удобно; она принадлежит и к Средиземному бассейну, и к Атлантическому; через нее пролегают наиболее удобные пути сообщения между Атлантическим побережьем Европы и Средиземным морем. Границы Франции общая их длина - 5290 км, из них морских 3120 км и сухопутных 2170 км. На Па-де-Кале и Ла-Манш приходится 1120 км, на Атлантический океан -1385 км, на Средиземное море - 615 км. Бельгийская граница - 460 км, Люксембургская - 14 км, Германская - 20 км, Швейцарская - 396 км, Итальянская - 410 км, Испанская - 570 км [6]. Согласно районированию ЮНВТО Франция относится к макрорегиону Европа, мезорегиону Западная Европа. По типологии мезорегионов страна относится к центру развития туризма.

Франция является одним из ведущих туристических направлений в мире. Франция уже несколько десятилетий является лидером по количеству международных туристических прибытий. Количество иностранных туристов в 2022 году во Францию составили 80 млн. чел., что более чем на 10 млн. больше прибытий в Испания (2-е место по прибытиям) и на 30 млн. больше прибытий в США (3-е место по прибытиям). Согласно результатам исследования UNWTO, за 2022 год было совершено 963 млн. международных туристических поездок (это на 34% меньше, чем в 2019 году). Самая посещаемая страна мира - Франция (80 млн. прибытий). Второе место заняла Испания (71,6 млн), третье - США (50,8 млн), четвёртое - Турция (50,4 млн), а пятое - Италия (49,8 млн) [7]. Иностранные туристы принесли стране 59,7 миллиардов долларов в 2022 году, что является рекордным показателем эффективности туристической индустрии. По доходам от туризма Франция занимает 4-е место после США (135,2 млрд.долл.), Испании (72,9 млрд.долл.) и Великобритания (68,2 млрд.долл.). Туризм занимает важное место во французской экономике. Так в 2022 г. доля туризма в ВВП Франции составила 8 %.

Природно-рекреационные ресурсы, климат. Для Франции нельзя выделить только один доминирующий тип климата, так как там наличествуют 4 климатические зоны. Умеренный морской климат на западе Франции на побережье, например, в Бресте, где зима проходит мягко (+7 °С), а лето довольно прохладное (+15 °С). Этот тип климата чувствуется по всей западной зоне страны. Континентальный климат господствует в центральной зоне во внутренних областях страны. Поэтому в этом регионе смена времен года чувствуется более отчетливо. Лето проходит жарче (+19 °С), а зима - холоднее (+2 °С).

Горный климат очень сильно ощущается на возвышенностях, так как с растущей высотой количество осадков тоже увеличивается. Во многих деревнях в высоких долинах снег идет по 2-3 месяца без остановки. В Альпах температура опускается до -2°C в январе, а летом составляет $+17^{\circ}\text{C}$. Южное побережье относится к средиземноморскому типу климата. Лето здесь очень теплое, а зима - мягкая. Количество осадков довольно небольшое, выпадают обычно осенью. Зимой температура опускается всего лишь до $+7^{\circ}\text{C}$, а летом поднимается до $+27^{\circ}\text{C}$. Например, Ницца очень привлекательна для туристов. В целом климат приятный, а погодные условия достаточно разнообразны. В столице обычно мягкая зима, средняя температура составляет $+4^{\circ}\text{C}$ [8].

В целом климатические условия Франции благоприятствуют развитию разнообразных видов туризма на территории страны. Особенно благоприятными условиями для развития туризма являются: продолжительный комфортный период; умеренный климат; региональные контрасты (стимулирует внутренний туризм; решает проблему сезонности отдельных туристических продуктов страны).

Рельеф Франции разнообразен 2/3 территории страны составляют равнины и низменности (Парижский бассейн, Аквитанский бассейн и др.). Главными горными массивами являются Альпы (на Юго-востоке), Пиренеи (на Юге), Вогеzy (на границе с Германией), центральный массив (Центр), Юра (на границе со Швейцарией). На севере страны находится Арденнская возвышенность. Во Франции находится самая высокая точка Западной Европы - гора Мон Блан (Альпы) [1; 2]. Наличие горных массивов стало предпосылкой для развития горного (горнолыжного, пешеходного, велотуризма) и экстремального (альпинизм, скалолазание по льду) видов туризма.

Водные ресурсы. Большинство рек Франции, начинаясь в Центральном массиве, текут в Атлантический океан или Средиземное море. Сена (775 км, от лат. «спокойствие») - равнинная река. Она образует широко разветвленную систему с крупными правыми притоками Марной и Уазой и левым притоком Ионной. Сена судоходна и обеспечивает движение грузов между Парижем и Руаном. Гаронна (650 км) берет свое начало в испанских Пиренеях, протекает через Тулузу и Бордо, при впадении в океан, образуя обширный эстуарий - Жиронду. Основные притоки Тарн, Ло и Дордонь. Используется в сельском хозяйстве для орошения.

Рона (812 км) прозвище реки - «разъяренный бык» - самая полноводная река Франции, начинается в Швейцарских Альпах из Ронского ледника, протекает через Женевское озеро. Около Лиона в нее впадает река Соны. Другие крупные притоки - Дюранс и Изер. Имеет важное гидроэнергетическое и транспортное значение. Обеспечивает водоснабжением города, находящиеся на Лазурном берегу. Судоходна ниже притока - реки Эн. Также играет большую роль в сельском хозяйстве

(используется для ирригации). Луара (1020 км) - самая длинная река Франции начинается в Центральном массиве. Река принимает много притоков, основные из которых Алье, Шер, Эндр и Вьенна. Река судоходна лишь в низовьях, где находятся Нант и Сен-Назер. В декабре и в январе Луара особенно полноводна (она увеличивается примерно в восемь раз) и только к лету вода спадает. В прежние времена по Луаре проходили важные торговые пути и ее называли рекой-королевой. Берега Луары сложены белым известняком, который использовали для строительства храмов и дворцов. Луара судоходна до города Руан. Имеет важное туристическое значение [9].

Франция – страна, богатая множеством туристических достопримечательностей и чудес природы. Тем более примечательно, что многие из самых прекрасных французских озёр широкой публике практически абсолютно неизвестны. Крупнейшие озера Франции Женевское, озеро Алло (Lac d'Allos), озеро Анси, озеро Бурже, озеро Этан-де-То [10]. Пляжи Средиземного моря и Атлантического океана являются главными предпосылками развития въездного и внутреннего купально-пляжного и лечебного-оздоровительного туризма. Побережье Северного моря, Па-де-Кале и Атлантического океана популярны у любителей водных видов спорта (парусный спорт, виндсерфинг).

Крупнейшие курорты Средиземного моря: Лазурный берег отлично подходит для купания детей. Кроме самых известных курортов, здесь есть еще Антиб и Жуан-ле-Пен, Ментон, Сен-Жан-Кап-Ферра и, конечно же, знаменитый Сен-Тропе. Отдых на пляжах Франции в этой части побережья предпочитают любители автостопа и палаточного туризма. Вокруг курортов Аржеле-Пляж, Сен-Сеприен-Пляж и Кап Д'Агд каждое лето неизменно разрастается обширный кемпинг. Пляжи соседнего Лангедок-Руссильона ничуть не хуже по качеству, зато гораздо дешевле и не так переполнены, как пляжи Ривьеры. О Среди популярных курортов Атлантического побережья можно назвать Биарриц, Ла-Боль, Довиль, Ла-Рошель, Сен-Мало и Динар. Все они вполне подходят для отдыха с детьми [11].

Центры талассотерапии: Самые эффективные и профессиональные центры талассотерапии во Франции находятся в Бретани, на Атлантическом побережье (Roscoff, Perros-Guirec, Saint-Malo и др.). Несколько очень известных талассоцентров находятся не на побережье. Например, Caudalie, Vichy, Evian, Avene и другие. На популярных курортах Лазурного берега (Канны, Монако) также есть отели со своими спа-центрами. Здесь спа-процедуры скорее являются приятным дополнением к отдыху на море [12].

Во Франции также имеются подземные термальные и минеральные источники, которые определяют развитие бальнеологического туризма. Крупнейшие бальнеологические курорты: Термальный курорт Амели-Ле-Бэн (Восточные Пиренеи), Барботан-Ле-Терм (Жер), Камбо-ле-Бэн (Атлантические Пиренеи), Молич-ле-Бэн (Восточные Пиренеи), Эжени-ле-

Бэн (Ланды), Греу-ле-Бэн (Альпы-Север Прованса), Жонзак (Шарант-Маритим), Бэн-ле-Бэн (Вож), Крансак-ле-Терм (Авейрон) и другие [13].



Рис.1. Тармальная курорты Франции.

Культурно-исторические ресурсы Франция обладает богатейшим культурно-историческим наследием (табл.1). По данным Официального туристического центра Франции (Maison de la France), в стране находятся 40 000 культурных памятников, в том числе 10 000 замков, аббатств и имений, 6000 музеев, 1000 фестивалей.

Таблица 1.

Культурно-исторические ресурсы Франции

Туристические ресурсы	Вид туризма
<i>Памятники архитектуры</i>	Экскурсионно познавательный, религиозный
Религиозные сооружения: Буржский собор (Bourges Cathedral), Страсбургский собор (Strasbourg Cathedral), Монолитная церковь Сен-Жан (Monolithic Church of Saint-Jean), Руанский собор (Rouen Cathedral), Базилика Сакре-Кер (Sacre-Coeur), Нотр-Дам-де-ла-Гард (Notre Dame de la Garde), Аббатство Мон-Сен-Мишель (Mont Saint Michel Abbey), Собор Реймса (Reims Cathedral), Нотр-Дам де Пари (Notre Dame de Paris), Шартрский собор (Chartres Cathedral) и другие.	

<p><i>Историческая застройка городов:</i> Париж, Лион, Лилль, Арль, Сан-Мало, Нанси, Ла Рошелль, Ницца и другие.; <i>крепости:</i> Каркассон, Седан и др.; замки, дворцы: замки долины Луары, Версаль, Фонтэнбло, Шантийи и др.; памятники архитектуры римского периода: амфитеатры в Арле, Ниме, Лионе, Оранже.</p>	
<i>Памятники археологии</i>	
<p><i>пещеры с доисторическими рисунками:</i> Ласко («Сикстинская капелла первобытной живописи»), Пещера Фон-де-Гом; ранние архитектурные сооружения: Карнак (Аллея менгиров), Крюкюно (Дольмен); места стоянок первобытного человека: Ансерун, Монкарэ, Монморэн.</p>	Экскурсионно познавательный
<i>Памятники истории</i>	
<p><i>Париж:</i> могила Наполеона (Les Invalides), площадь Согласия (место казней во время Великой французской революции, Консьержери (знаменитая тюрьма) и др. Версаль, Фонтенбло Папский дворец в Авиньоне Собор Нотр-Дам в Реймсе (короновались все короли) Фортификационные сооружения в провинции Па-де-кале Мемориальные комплексы, посвященные двум мировым войнам (в Нормандии, Па-де-Кале).</p>	Экскурсионно познавательный
<i>Музеи</i>	
<p>Лувр, Д'Орсэ (импрессионизм), Центр искусства и культуры Ж. Помпиду, музей Пикассо в г. Париж Музей изобразительных искусств в г. Лилль Национальный музей гобеленов в г. Бовэ (Пикарди) Музей Ренуара, музей Матисса (Ривьера) Дом Леонардо да Винчи (Долина реки Луара).</p>	Экскурсионно познавательный

Источник: [14].

Туристско-рекреационные районы Франции. Основными туристско-рекреационными районами Франции являются Париж и Иль-де-Франс, Нормандия, Северо-Восточная Франция, п-ов Бретань, Бургундия, Долина реки Луара, Центральная Франция, долина реки Рона и провинция Прованс, французская Ривьера, французские Альпы, Пиренеи, о.Корсика (рис.2) [15].



рис.2. Туристско-рекреационные районы Франции

Парижский район – крупнейший по площади и важнейший в туристском отношении. Он включает пять регионов: Иль-де-Франс, Шампань-Арденны, Бургундию, Центр и Земли на Луаре. Вся жизнь этого района тесно связана с Парижем - столицей и главным туристическим центром страны. Современные здания в нем прекрасно сочетаются с архитектурными ансамблями и памятниками прошлого, придавая городу неповторимый колорит. Архитектурный облик города складывался на протяжении многих веков, сочетая в себе черты разных стилей, но сохранил художественное единство. На острове Сите, в историческом ядре Парижа, высится собор Парижской богородицы, облик левого берега Сены определяют ансамбль Дома Инвалидов, в соборе которого покоится прах императора Наполеона, Марсово поле, Эйфелева башня, Пантеон. На правом берегу Сены расположены выдающиеся ансамбли Парижа XVI-XVII вв. - площади Вогезов и Вандомская, дворцы Лувр и Тюильри, творения XVIII-XIX вв. - площадь Согласия, Триумфальная арка, оперный театр «Гранд-Опера» и другие.

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*Зухурова Д.М.
ТВМ- кафедраси ассистенти
Исломов Ж.Б.
104-21 гуруҳ талабаси*

ЖАМОАТ ТРАНСПОРТИ ИСЛОҲОТЛАРГА МУҲТОЖ

Аннотация. Сир эмас, сўнгги йилларда жамоат транспорти камчиликлар қуришотида қолиб, аҳолига хизмат кўрсатишда кўнлаб муаммолар кўзга таишланаётган эди. Уларни бартараф этиши учун ер усти метросининг қурилиши жараёни амалга оширилиб, янги транспорт воситалари харид қилинди. Бугун эса мазкур жараёнлар янги босқичга кўтарилди.

Калит сўзлар: Транспорт, автомобил, автобус, йўналиши, шаҳар, муаммо, жамоат.

*Zukhurova D.M.
TVM- department assistant
Islamov J.B.
student
group 104-21*

PUBLIC TRANSPORT NEEDS REFORM

Abstract. It is no secret that in recent years, public transport has been surrounded by shortcomings, and many problems have been noticed in providing services to the population. To eliminate them, the construction process of the underground subway was implemented and new vehicles were purchased. Today, these processes have reached a new level.

Key words: Transport, car, bus, route, city, problem, community.

Сўнгги йилларда аҳолига автотранспорт хизмати кўрсатишни яхшилаш, жамоат транспорти йўналишлари тармоғини кенгайтириш ва ҳаракат таркибини замонавий, экологик тоза автобуслар билан янгилаш бўйича кенг кўламли ишлар амалга оширилди.

Хорижий экспертлар иштирокида янгича ёндашувлар асосида Тошкент шаҳар жамоат транспортининг янги йўналишлари тармоғи ишлаб чиқилди.

Шу билан бирга, катнов мунтазамлигига, ҳаракат хавфсизлиги ва сифат талабларига риоя этилмаслиги, йўлкира ҳақининг табақалашган тарифлари мавжуд эмаслиги, жамоат транспорти ҳаракати устуворлиги таъминланмаслиги жамоат транспорти жозибадорлигини пасайтирмоқда.

Аҳолининг юқори сифатли ва қулай йўловчи ташиш хизматларига бўлган эҳтиёжларини тўлиқ қондириш, соҳада бозор тамойилларини жорий этиш, хусусан молиялаштириш тизими ва тариф сиёсатини такомиллаштириш орқали хусусий сектор учун жозибали бизнес муҳитини яратиш мақсадида, шунингдек, 2022 — 2026 йилларга мўлжалланган. Янги Ўзбекистоннинг тараққиёт стратегиясига мувофиқ: Жамоат транспортининг сифатсиз хизматидан жуда қулай муаммоларга дуч келмоқдалар. Шу жиҳатдан қуйидаги соҳага замонавий тадқиқотлар ва шаҳар транспорт тизимидаги муаммоларни бартараф қилишга қаратилган бир неча ечимлар келтирилган. Муаммолар тизимли ҳал қилинадими? Қундалик ҳаётимизда жамоат транспортининг алоҳида аҳамияти ва ўрни мавжуд. Аммо автомобиллар сонининг йил сайин ошиб бориши, йўл ҳаракатини назорат қилишдаги камчиликлар сабаб транспорт воситаларининг тирбандлиги йил сайин ортиб бормоқда. Айниқса, ўқув йили бошланиши ва кўплаб талабалар пойтахтга келиши натижасида бу муаммо нақадар долзарб ва унга жиддий эътибор қаратиш кераклигига яна бир марта амин бўлдик. Маълумотларга кўра, биргина Тошкент шаҳридаги жамоат транспорти йўналиш тармоқлари ўтган асрнинг 80-йилларида тузилган бўлиб, шу вақтга қадар мукамал тарзда қайта кўриб чиқилмаган. Бу эса ўз навбатида шаҳар жамоат транспорти тизимида жиддий муаммолар йиғилиб қолишига сабаб бўлмоқда.

Баъзи ривожланган давлатларда йўлнинг ўнг чети автобус ҳайдовчилари учун ажратилган бўлиб, бу йўлда тўхташ, тўсиб қўйиш қонун билан тақиқланади. Фавқулодда вазиятдан ташқари бошқа машиналар автобус йўлига тўхтаб унга халақит беришса, катта миқдорда жаримага тортилади. Бир тасмали йўлларда эса автобусни қувиб ўтиш тақиқланган. Ўзбекистонда эса кўпчилик марказий йўллар ҳам автобус учун алоҳида йўлак қилиш даражасидаги талабга жавоб бермайди. Бир тасмали йўлларга бундай талабнинг жорий қилинишига эса кўпчилик ҳайдовчилар асло тоқат қила олмаса ҳам керак.

Охириги 10 йилда биргина пойтахт Тошкент шаҳрида автомобиллар сони 2 баравардан зиёдроққа ошган. Машина кўпайган сари тирбандликлар ортади. Шаҳарда ҳаракат қилиш секинлашади ва бир қанча жиддий муаммоларни юзага келтиради. Соҳани ислоҳ қилиш борасида давлат раҳбари томонидан ҳам бир нечта алоҳида топшириқлар берилганди. Хусусан, Юнусобод туманидаги метрополитен қурилиш ишлари билан танишиш жараёнида Шавкат Мирзиёев бекатларда йўловчилар тўпланишини ва ҳаракатини мониторинг қилиш, таҳлиллар асосида йўналишларни оптималлаштириш, йўловчиларни кўпайтириш ҳисобидан йўл ҳақини арзонлаштириш масалаларига тўхталиб ўтган.

Шуларни инобатга олиб, шаҳар жамоат транспортини аҳолига қулай, арзон, хавфсиз қилиб беришимиз керак», деганди давлат раҳбари.

Бундан ташқари, жамоат транспорти тизимида янги бошқарув услубини жорий этиш, метрополитен, автосаройлар ва йўналишли такси корхоналарини бир-бирига боғлаш, ахборот технологиялари асосида уларнинг ўзаро интеграциясини таъминлаш кераклигига алоҳида урғу берилган.

Аmmo бу борада шунча топшириқлар берилган бўлса-да, ижрони таъминлашда жиддий муаммолар борлигини кузатиш мумкин.

«Жамоат транспортининг эгаси шаҳарликлар, шаҳар депутатлари ва шаҳар ҳокимлиги бўлиши керак. Тошкентга “генплан” керак, Тошкент жамоат транспортига стратегия керак. Жамоат транспортини ривожлантириш учун эса велосипедни қайта кашф қилиш керак эмас. Юзлаб шаҳарлар аллақачон муваффақиятли амалиётга, тажрибага эга.

У маънода пойтахтда ва йирик шаҳарларда жамоат транспорти, жамоат макони, экология, мактаб ва умуман ижтимоий неъматлар сифати билан боғлиқ муаммолар ечим топишига мен унча ишонмайман. Хўш, бу муаммони ҳал қилиш учун нима қилиш керак. Метронинг вақтини қисқартириш, автобуслар сонини кўпайтириш билан бу нарсаларни ҳал қилиш имконсиз. Пойтахт ва марказий катта шаҳарларга вилоятлар ва ҳудудлардан ҳар куни ўн минглаб автомашиналар кириб келади. Катта шаҳарларга кираверишда бепул автотураргоҳлар ташкил этилиб, транзит тизимига ўтилса, шаҳардаги тирбандликлар бир қанча камаяди. Бунинг учун, аввало, шаҳарда жамоат транспортини тубдан ислоҳ қилиш, уларнинг қулайлигини ошириш ва уларда ҳаракатланиш машинада манзилга етиб боришдан тезроқ ва афзалроқ бўлиши керак.

Шу билан бир қаторда жамоат транспортининг сони кўпайтирилиши ва вақти қисқартирилиши натижасида улар зарар билан ишлай бошлаши эҳтимоли ошади. Шу сабаб ҳукумат доимий равишда уларни қўллаб-қувватлаши зарур.

Автобуслар шаҳар жамоат транспортининг асосий воситаси бўлиб, аҳолининг аксарияти улардан ҳар куни ишга, ўқишга ёки бошқа жойларга етиб бориш учун фойдаланади. Шу боис аҳоли ҳаракатчанлигини таъминлашда мунтазам ва ишончли автобус қатновини ташкил этиш муҳим вазифадир.

Шу билан биргаликда, Тошкент шаҳри аҳолиси ва пойтахтимиз меҳмонлари томонидан жамоат транспортдан кенг фойдаланилиши мазкур соҳани ривожлантиришга бўлган эҳтиёжни яна долзарб масала қилиб қўймоқда.

Бугунги кунда Тошкент шаҳрида 5 млн аҳоли бўлиб (доимий яшовчи 2,9 млн, кунлик шаҳарга келиб кетувчи 1,5 млн, вақтинчалик истиқомат қилувчи аҳоли 0,5 млн), бу рақам йилига ўртача 100 минггага ошмоқда. Тошкент шаҳрида рўйхатдан ўтган автотранспорт воситалари 760 мингга етган (йилига 76 минггага ортиб бормоқда), транспорт воситалари доимий

ҳаракатланадиган асосий йўл кўча тармоқлари узунлиги эса 470 км бўлиб, 380-400 минг автотранспорт ҳаракатланишига мўлжалланган.

Айни пайтда Тошкентда автобус ёки метрода ҳаракатланиш жуда қийин. Одам сони ҳаддан зиёд кўплиги сабаб, айниқса, қиз болалар, аёл кишилар ва ёш болали аёлларга жуда ноқулай. Жамоат транспорти тубдан ислоҳ қилиниб, уларнинг ҳаракатланиш тезлиги ва қулайликлари оширилмас экан, одамларда автомобилда ҳаракатланишга бўлган талаб йилдан йилга ошаверади. Бу эса “Ўзавтомоторс” каби монопол ташкилотларга миллионлаб доллар фойда олишлари учун замин яратади.

Пойтахт бекатларида автобусларнинг ҳаракатланиш схемаси ва графиклари каби маълумотлар қўйилган бўлса-да, вилоятларда бундай эмас. Асосий жамоат транспорти автобуслар ҳисобланган вилоятларда бу бир қанча тушунмовчиликлар ва ноқулайликларни юзага келтирмоқда.

Автоматлаштирилган тўлов тизими ва автоматлаштирилган диспетчерлик хизматининг босқичма-босқич йўлга қўйилиши 2024 йил 1 июнигача яқунланади. 2024 йил 1 июндан бошлаб эса мунтазам шаҳар автобус йўналишида чекланган тарифлар бўйича йўловчилар ташишни брутто-шартномаси асосида ташкил этиш ва молиялаштириш тизими босқичма-босқич ишга туширилади.

Хулоса қилиб айтганда Шаҳарда автобус йўналишларининг янги тармоғини жорий этиш, ҳар бир жамоатчиликда катта аҳамиятга эга. Бу билан биз жамоат танспортига ва бошқа соҳаларга ҳам катта натижалар олиб келамиз деган умиддаман.

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Ибодуллаев Ш., PhD
Национальный банк внешнеэкономической
деятельности Республики Узбекистан

ПУТИ ОБЕСПЕЧЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ КОММЕРЧЕСКИХ БАНКОВ УЗБЕКИСТАНА

Аннотация. Обеспечение конкурентоспособности коммерческих банков является одним из обязательных условий развития финансового рынка, которая показывает финансовые, организационно-управленческие и инновационные возможности коммерческого банка и всего банковского сектора. Поэтому, обеспечение конкурентоспособности коммерческих банков является одним из приоритетных направлений реформирования банковской системы Узбекистана на 2020-2025 годы.

В статье выявлены актуальные проблемы, связанных с обеспечением конкурентоспособности коммерческих банков Узбекистана и разработаны научные предложения, направленных на решение этих проблем.

Ключевые слова: коммерческий банк, конкурентоспособность, ликвидность, финансовая устойчивость, чистая прибыль, процентная ставка, актив, регулятивный капитал, кредит, депозит.

Ibodullaev Sh., PhD
National Bank for Foreign Economic Activities of the Republic of Uzbekistan

WAYS TO ENSURE THE COMPETITIVENESS OF COMMERCIAL BANKS OF UZBEKISTAN

Annotation. Ensuring the competitiveness of commercial banks is one of the prerequisites for the development of the financial market, which shows the financial, organizational, managerial and innovative capabilities of a commercial bank and the entire banking sector. Therefore, ensuring the competitiveness of commercial banks is one of the priority areas for reforming the banking system of Uzbekistan for 2020-2025.

The article identifies current problems related to ensuring the competitiveness of commercial banks in Uzbekistan and develops scientific proposals aimed at solving these problems.

Key words: commercial bank, competitiveness, liquidity, financial stability, net profit, interest rate, asset, regulatory capital, loan, deposit.

Введение

В Стратегии развития Нового Узбекистана на 2022-2026 годы отмечено, что «завершение процесса трансформации коммерческих банков с долей государства, увеличив до 60 процентов долю частного сектора в

банковских активах до конца 2026 года» являются стратегическими задачами обеспечения ускоренного развития национальной экономики и высоких темпов роста [1].

Также, в Стратегии реформирования банковской системы Республики Узбекистана на 2020-2025 годы определено, что «повышение эффективности банковской системы путем создания на финансовом рынке равных конкурентных условий, кредитования исключительно на рыночной основе, снижения зависимости банков от государственных ресурсов, модернизации банковского обслуживания, обеспечение финансовой стабильности банковской системы посредством улучшения качества кредитного портфеля и управления рисками, соблюдения умеренного роста объемов кредитования» являются основными направлениями реформирования банковского сектора Узбекистана [2].

Вышеприведенные аргументы обуславливают необходимость научного исследования проблем, связанных с обеспечением конкурентоспособности отечественных банков.

Обзор литературы по теме

Н. Казаренкова утверждает, что «конкурентоспособность банка – эта потенциальная и реальная возможность коммерческого банка по созданию конкурентоспособных продуктов и их выдвигание на рынок, формированию имиджа надёжного и современного банка, отвечающий всем требованиям клиентов» [3].

Как видно из приведенное определение, Н. Казаренкова оценивает конкурентоспособность коммерческого банка с точки зрения создания конкурентоспособных финансовых продуктов. Она отчасти права. Но, конкурентоспособность банка зависит не только от конкурентоспособных продуктов, но и от уровня капитализации, ликвидности и финансовой устойчивости банка.

По мнению С.Величко, конкурентоспособность коммерческого банка определяется следующими факторами:

- *надёжность банка;
- *удобное географическое расположение филиалов;
- *наличие комплекса услуг, отвечающий требованиям клиентов;
- *отсутствие искусственного расщепления продукта на отдельные услуги и операции;
- *продуманный набор дополнительных услуг, делающий потребление продукта максимально комфортным для клиента;
- *удобная последовательность выполнения операций в рамках предоставления услуги;
- *наличие квалифицированного и хорошо подготовленного персонала, умеющий эффективно взаимодействовать с клиентами и дать компетентные ответы на все вопросы;

*отлаженная технология совершения операций, исключая длительные очереди и задержки в обслуживании [4].

Дж.Синки утверждает, что конкурентоспособность коммерческого банка определяется тремя факторами: цена банковских услуг; удобность услуг для клиента; репутация банка [5].

А.Бергер, С. Чоул, О.Гуэдхами и Р.Роман, опираясь на результаты совместного научного исследования, пришли к выводу, что уверенность руководства коммерческого банка к гарантии, предоставляемую государством по спасению приведет к принятию чрезмерных рисков [6].

Данное заключение имеет практическое значение для коммерческих банков Узбекистана. Это объясняется тем, что в Узбекистане государственные банки активно поддерживаются государством, что привело к принятию государственными банками чрезмерных рисков. Например, по состоянию на 1 января 2023 года, доля проблемных кредитов в объеме предоставленных кредитов по всем банкам составила 3,6 %, а в Халк банке значение данного показателя составила 11,9% [7].

По заключению Н. Сеторелли и Л. Голдберга, коммерческие банки, имеющие сложные аффилированные компании, имеют возможность обеспечить экономию по масштабу и в результате этого повышается их ликвидность [8].

Р. Корреа и Л. Голдберг утверждает, что географическая диверсификация деятельности коммерческих банков демонстрирует преимущества диверсификации, однако, повышает уровень рыночного риска [9].

Данное утверждение для Узбекистана имеет практическую значимость. Поскольку, коммерческие банки Узбекистана не имеют филиалы в зарубежных странах. Поэтому, они пока не могут пользоваться преимуществами географической диверсификации.

Методология исследования

В настоящее время, одним из относительно новых и перспективных методологических основ обеспечения конкурентоспособности коммерческих банков является методика стресс-тестирования, разработанных банковскими надзорными органами [10].

Стресс-тестирование имеет важное значение в обеспечении ликвидности и финансовой устойчивости в условиях финансовых кризисов и макроэкономических изменений [11].

Стресс-тестирование состоит из следующих этапов:

1-этап – разработка строгого и убедительного экономического сценария;

2-этап – осуществление передачи макроэкономического сценария к микроэкономическим последствиям для баланса финансовых институтов;

3-этап – оценка действий финансовых институтов в условиях стресса;

4-этап – определение критериев стабильности финансовой инфраструктуры;

5-этап – выдача сведений по результатам [12].

Также важной методологической основой обеспечения конкурентоспособности коммерческих банков является новый стандарт банковского надзора Базельского комитета.

В стандарте Базель-III повышены требования к достаточности регулятивного капитала, введены новые пруденциальные нормы по коэффициенту нормы покрытия ликвидности и по коэффициенту чистого стабильного финансирования [13].

Анализ и результаты

Одним из основных аспектов конкурентоспособности коммерческих банков является конкурентоспособность созданных банковских продуктов. В свою очередь, определяющим фактором конкурентоспособности банковских продуктов является их цена.

Одним из основных видов банковских продуктов является кредиты и депозиты.

Ниже мы оценим уровень средних процентных ставок кредитов и депозитов отечественных коммерческих банков в национальной валюте.

Таблица 1

Средняя процентная ставка кредитов и срочных депозитов коммерческих банков Узбекистана в национальной валюте⁷⁸

Показатели	2019г.	2020 г.	2021г.	2022г.	2023г.
Процентная ставка кредитов	23,7	22,3	20,8	21,9	23,1
Процентная ставка депозитов	16,6	16,5	16,3	16,0	18,9

Как видно из приведенных данных таблицы 1, в 2019-2023 годах средняя процентная ставка кредитов и депозитов коммерческих банков Узбекистана в национальной валюте были на относительно высоком уровне. Это объясняется тем, что в течение данного анализируемого периода уровень инфляции и уровень ставки рефинансирования Центрального банка были высокими (рисунок 1).

⁷⁸ Таблица составлена автором на основе статистических данных Центрального банка Республики Узбекистан.

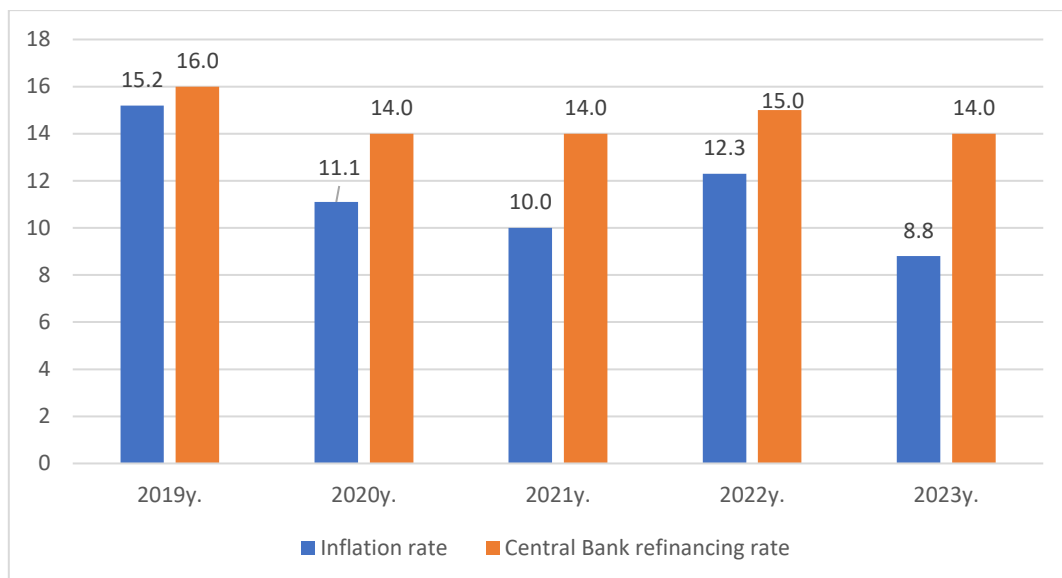


Рисунок 1. Годовой уровень инфляции и годовой уровень ставки рефинансирования Центрального банка в Узбекистане⁷⁹

Как видно из рисунка 1, в 2019-2023 годах в Узбекистане годовой уровень инфляции был относительно высоким, поэтому, Центральный банк страны вынужден был поддерживать ставку рефинансирования на относительно высоком уровне.

Одним из основных показателей, характеризующий конкурентоспособность коммерческого банка, является уровень регулятивного капитала по отношению к общей сумме пассива бухгалтерского баланса банка.

Таблица 2

Величина и уровень регулятивного капитала Национального банка внешнеэкономической деятельности Узбекистана⁸⁰

Показатели	2019 г.	2020г.	2021г.	2022г.	2023г.
Регулятивный капитал, млрд. сум	13 141	13 873	14 768	16 377	17 848
Уровень регулятивного капитала по отношению к пассива баланса	19,7	17,4	16,4	13,7	14,0

Как видно из таблицы 2, в 2019-2023 годах сумма регулятивного капитала Национального банка внешнеэкономической деятельности Узбекистана имела тенденцию роста. Однако, в 2019-2023 году доля регулятивного капитала по отношению к пассива баланса имела тенденцию

⁷⁹ Рисунок составлен автором на основе статистических данных Центрального банка Республики Узбекистан.

⁸⁰ Таблица составлена автором на основе данных годовых отчетов Национального банка внешнеэкономической деятельности.

снижению. Это свидетельствует о том, что уровень капитализации банка снижается.

Одним из основных аспектов конкурентоспособности коммерческих банков является их финансовая устойчивость. В свою очередь, одним из основных показателей, характеризующий финансовую устойчивость коммерческих банков является уровень чистой прибыли по отношению к активам, взвешенных с учётом риска.

Таблица 3

Величина и уровень чистой прибыли Промстройбанка Узбекистана⁸¹

Показатели	2019 г.	2020г.	2021г.	2022г.	2023г.
Чистая прибыль, млн. сум	704 526	798 245	998 221	588 937	911 648
Уровень чистой прибыли по отношению к активам, взвешенных с учётом риска	2,4	1,9	1,9	1,0	1,3

Как видно из приведенных данных таблицы 3, в 2019-2021 годах сумма чистой прибыли Узпромстройбанка имела тенденцию увеличения, однако, в 2022 году чистая прибыль существенно уменьшилась по сравнению с 2021 годом.

Как видно из приведенных данных таблицы 3, в 2019-2022 годах уровень чистой прибыли по отношению к активам, взвешенных с учётом риска, имела тенденцию снижения. Кроме того, значение данного показателя существенно снизилось в 2023 году по сравнению с 2019 годом. Все эти факты свидетельствует о том, что конкурентоспособность Узпромстройбанка в течение анализируемого периода снизился.

Одним из основных аспектов конкурентоспособности коммерческих банков является обеспечение качества кредитного портфеля, поскольку, кредиты занимают самый большой удельный вес в структуре активов коммерческих банков Узбекистана. По состоянию на 1 января 2024 года, доля кредитов в общем объеме активов коммерческих банков Узбекистана составила 70,2 % [14].

Одним из основных показателей, характеризующий качества кредитного портфеля, является уровень резервных отчислений по ссудам.

В Узбекистане, в соответствии с требованиям Центрального банка резервы создаются по всем видам классифицированных кредитов:

- *стандартные кредиты – 1 %;
- *субстандартные кредиты – 10 %;
- *неудовлетворительные кредиты – 25 %;
- *сомнительные кредиты – 50 %;
- *безнадёжные кредиты – 100 % [15]

В банковской практике Узбекистана резервы, предназначенных для покрытия убытков по кредитам, полностью списываются на расходы

⁸¹ Таблица составлена автором на основе данных годовых отчётов Узпромстройбанка.

коммерческих банков. Поэтому, налогооблагаемая база уменьшается на сумму резерва.

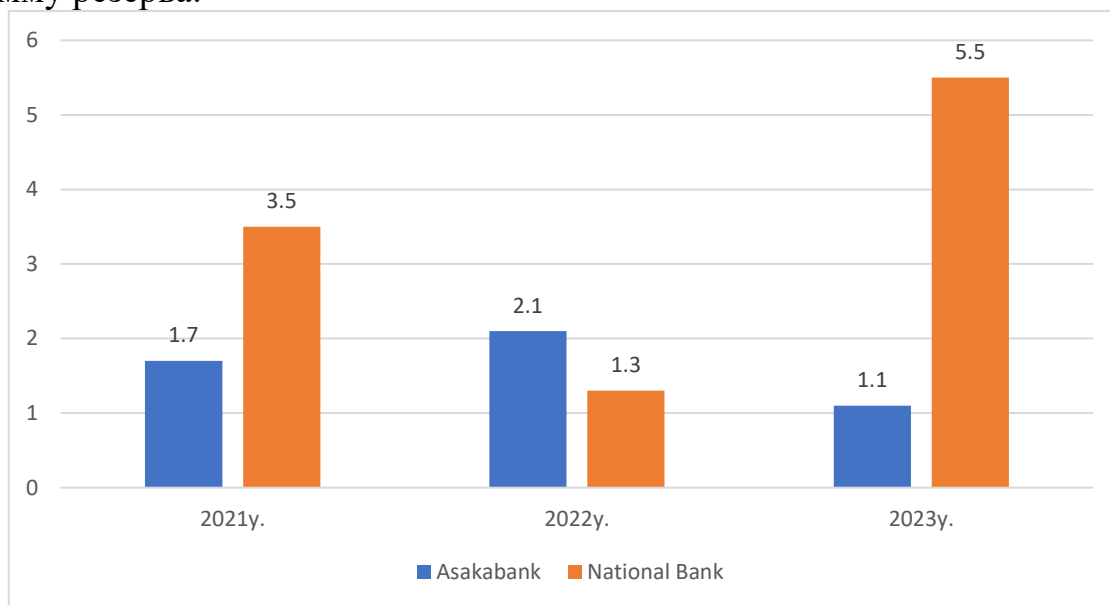


Рисунок 2. Уровень резервных отчислений, предназначенных для покрытия убытков по кредитам, по отношению к брутто активам, в Асакабанке и Национальном банке Узбекистана в процентах⁸²

Как видно из рисунка 2, в Асакабанке уровень резервных отчислений, предназначенных для покрытия убытков по кредитам, в 2023 году существенно снизился по сравнению с 2021 годом. Однако, в Национальном банке внешнеэкономической деятельности в течение данного анализируемого периода уровень резервных отчислений, предназначенных для покрытия убытков по кредитам, оставался высоким,

Выводы и заключения

В процессе научного исследования нами сформулированы следующие выводы по обеспечению конкурентоспособности коммерческих банков:

*обеспечение конкурентоспособности коммерческих банков является одним из основных направлений реформирования банковского сектора Узбекистана;

*одним из основных и важных аспектов конкурентоспособности коммерческих банков является создание конкурентоспособных финансовых продуктов и их выдвигание на рынок;

* в обеспечении конкурентоспособности коммерческого банка важными являются такие факторы, как, удобное географическое расположение филиалов, наличие комплекса услуг, отвечающий требованиям клиентов, продуманный набор дополнительных услуг, делающий потребление продукта максимально комфортным для клиента, наличие квалифицированного и хорошо подготовленного персонала,

⁸² Рисунок составлен автором на основе данных Асакабанка и Национального банка Узбекистана

умеющий эффективно взаимодействовать с клиентами и дать компетентные ответы на все вопросы;

* конкурентоспособность коммерческого банка напрямую зависит от уровня капитализации, ликвидности и финансовой устойчивости банка;

* в 2019-2023 годах средняя процентная ставка кредитов и депозитов коммерческих банков Узбекистана в национальной валюте были на относительно высоком уровне и она объясняется высокими уровнями инфляции ставке рефинансирования Центрального банка;

* в 2019-2023 годах сумма регулятивного капитала Национального банка внешнеэкономической деятельности Узбекистана имела тенденцию роста, однако, в 2019-2023 году доля регулятивного капитала по отношению к пассива баланса имела тенденцию снижению;

* в 2019-2022 годах уровень чистой прибыли Промстройбанка по отношению к активам, взвешенных с учётом риска, имела тенденцию снижения. Кроме того, значение данного показателя существенно снизилась в 2023 году по сравнению с 2019 годом;

в Асакабанке уровень резервных отчислений, предназначенных для покрытия убытков по кредитам, в 2023 году существенно снизился по сравнению с 2021 годом. Однако, в Национальном банке внешнеэкономической деятельности в течение данного анализируемого периода уровень резервных отчислений, предназначенных для покрытия убытков по кредитам, оставался высоким,

На наш взгляд, для обеспечения конкурентоспособности коммерческих банков Узбекистана, было бы целесообразно принятие следующих мер:

1. С целью повышения конкурентоспособности коммерческого банка путём повышения пассивов банка необходимо, во-первых, повысить удельный вес срочных депозитов в общем объеме депозитов за счёт сокращения чистого процентного спреда; во-вторых, снизить долю межбанковских кредитов в объеме пассивов банка путем увеличения объема эмиссионных операций банка с ценными бумагами; в-третьих, повысить удельный вес регулятивного капитала в объеме пассивов за счёт увеличения величины капитала первого уровня.

В настоящее время трансакционные депозиты занимает относительно большой удельный вес в общем объеме депозитов коммерческих банков. Например, в Асакабанке, по состоянию на 31 декабря 2023 года, доля трансакционных депозитов в общем объеме депозитов составила 42,2%. Также, у банков Узбекистана не развита эмиссионные операции с ценными бумагами. Так, по состоянию на 31 декабря 2023 года, удельный вес денежных средств, поступивших от продажи ценных бумаг банка в общем объеме пассивов коммерческих банков Узбекистана составил всего 2,4% [16].

2. Для повышения конкурентоспособности коммерческого банка на рынке ссудных капиталов, необходимо, во-первых, снизить уровень резервных отчислений по кредитам по отношению к брутто активам путём улучшения структуры классифицированных кредитов; во-вторых, обеспечить сбалансированность между суммами кредитов и процентных доходов по кредитам; в-третьих, повысить эффективность регулирования рынка ссудных капиталов путём увеличения объема кредитов рефинансирования и объема операций РЕПО Центрального банка.

Проведенные анализы показали, что в крупных коммерческих банках Узбекистана резервные отчисления по кредитам занимает большой удельный вес по отношению к брутто активам. Также, в банках не обеспечена сбалансированность между суммами кредитов и процентных доходов по кредитам, т.е. темп роста кредитов превышает темпа роста процентных доходов по кредитам.

5. С целью повышения уровня чистой прибыли по отношению к активам, взвешенных с учётом риска путём обеспечения сбалансированности между темпами роста чистого процентного дохода и активов, взвешенных с учётом риска, необходимо, во-первых обеспечить нормативный уровень чистого процентного спреда; во-вторых, обеспечить соответствие темпов роста беспроцентных доходов и беспроцентных расходов; в-третьих, уменьшить сумму убытков от валютных операций путём сокращения объема открытых валютных позиций; в-четвертых, снизить уровень рискованных активов в объеме брутто активов за счёт увеличения объема инвестиций на высоколиквидные ценные бумаги.

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*Иняминов Ю.А.
ассистент
кафедра радиоэлектроники
Джизакский политехнический институт
Худайбергенов Д.П.
Профессионально ремесленная школа г. Коразуак*

ОБЗОР КОНТРОЛЛЕРОВ ТОЧКИ МАКСИМАЛЬНОЙ МОЩНОСТИ

Аннотация: одним из основных способов повышения энергетической эффективности фотоэлектрических энергетических установок является реализация режима отбора максимума мощности в максимальной точке вольт-амперной характеристики солнечной батареи. В методе возрастающей проводимости преобразователь измеряет увеличение тока и напряжение СБ, чтобы предсказать эффект от изменения напряжения.

Ключевые слова: СБ-солнечной батареи, постоянного напряжения, фотоэлектрической панель, фотомодуль, hill-climbing, инвертор.

*Inyaminov Yu.A.
assistant
Department of Radio Electronics
Jizzakh Polytechnic Institute
Khudaibergenov D.P.
Vocational school in Corauzac*

OVERVIEW OF POWER POINT CONTROLLERS

Abstract. In this case, one of the main ways to increase the energy efficiency of photovoltaic power plants is to implement the maximum power selection mode at the maximum point of the current-voltage characteristic of the solar battery. In the incremental conductance method, the converter measures the increase in current and voltage of the SB to predict the effect of the voltage change.

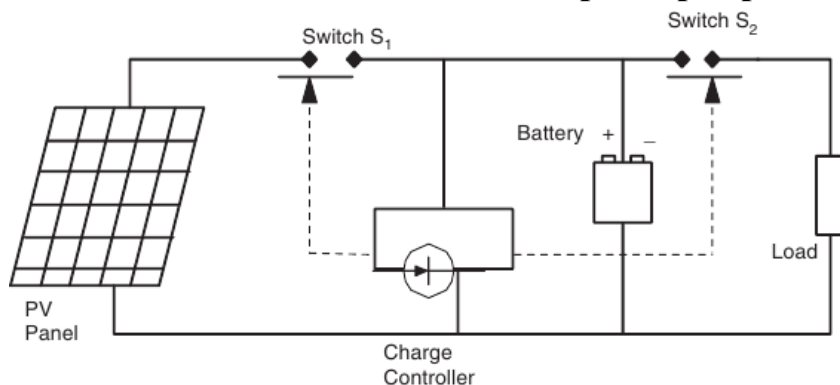
Key words: SB-solar battery, constant voltage, photovoltaic panel, photomodule, hill-climbing, inverter.

Контроллеры точки максимальной мощности используются как в сетевых, так и автономных станциях. В сетевых инверторах вся вырабатываемая СБ мощность передаётся в сеть [1,2]. В автономной системе, когда аккумуляторы полностью заряжены и нет нагрузки для потребления выработки СБ, устройство отслеживания точки максимальной мощности переносит рабочую точку, уменьшая мощность, пока она не будет

соответствовать потреблению. Так же может использоваться альтернативный подход, когда избыточная мощность СБ используется для питания резистивной нагрузки, благодаря чему фотоэлемент всегда работает на максимальной мощности [3,4].

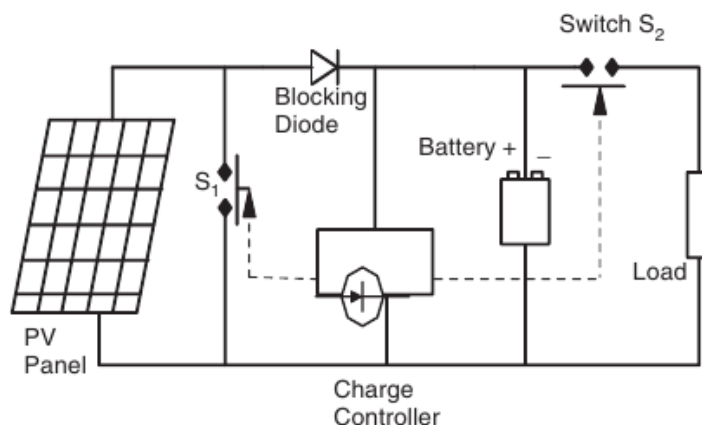
В качестве контроллера заряда (charge regulator unit) могут быть использованы последовательные (рис.1) и параллельные (рис.2) контроллеры заряда, а также контроллеры заряда на основе преобразователей постоянного напряжения, которые рассмотрены выше [5].

Рис. 1. Последовательный контроллер заряда



При использовании последовательного контроллера заряда ключ S1 отключает солнечную панель, когда напряжение аккумулятора достигает определенного уровня. Когда напряжение на аккумуляторе снижается, нагрузка отключается от батареи ключом S2 для избежания глубокого разряда [6]. Основная проблема, связанная с использованием этого типа контроллеров – потеря мощности на ключах. В качестве таких ключей могут быть использованы биполярные или MOSFET транзисторы, реле.

Рис. 2. Параллельный контроллер заряда



При использовании параллельного контроллера при полном заряде аккумулятора солнечная батарея замкнута накоротко ключом S1. По сравнению с последовательным контроллером, данный метод более эффективен, т.к. потери на ключе отсутствуют, пока накопитель энергии не будет разряжен [7,8]. Диод препятствует короткому замыканию

аккумулятора. Контроллеры заряда этого типа используются преимущественно для маломощных решений (ток до 20 А).

Использование контроллеров заряда на основе импульсных преобразователей постоянного напряжения позволяет управлять зарядным током аккумулятора и поддерживать напряжение на нём на требуемом уровне [9,10].

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*Исломов М.Х.
ассистент
кафедра «Радиоэлектроника»
Джизакский политехнический институт*

ИЗУЧЕНИЕ МАГНИТНОГО СОПРОТИВЛЕНИЯ КРЕМНИЕВОГО МАТЕРИАЛА ВВЕДЕНИЕМ СОЕДИНЕНИЙ МАРГАНЦА

Аннотация. В данной работе приведены результаты экспериментальных исследований по изучению магнитного сопротивления (МС) ионноимплантированного марганца Si(B, Mn). При анализе экспериментальных данных замечено обнаружен заметный гистерезис МС при комнатных температурах и увеличение ширины гистерезиса при сильных магнитных полях. Видимо причиной наблюдения гистерезиса такого поведения является наличие коэрцитивной силы при переориентации магнитных моментов нано кластеров марганца.

Ключевые слова: гистерезиса, марганца, температура, коэрцитивной, сопротивление, магнитных полях.

*Islomov M.Kh.
assistant
Department of Radioelectronics
Jizzakh Polytechnic Institute*

KINETICS OF MAGNETIC RESISTANCE OF SILICON WITH MAGNETIC NANOCCLUSERS

Annotation. This paper presents the results of experimental studies on the study of magnetic resistance (MR) of ion-implanted manganese Si (B, Mn). An analysis of the experimental data revealed a noticeable hysteresis of the MR at room temperatures and an increase in the width of the hysteresis at strong magnetic fields. Apparently, the reason for the observation of the hysteresis of this behavior is the presence of a coercive force upon reorientation of the magnetic moments of manganese nanoclusters.

Key words: hysteresis, manganese, temperature, coercive, resistance, magnetic fields.

Представлены результаты экспериментального исследования магнетосопротивления (МС) образцов монокристаллического сильно компенсированного Si<B,Mn> ионноимплантированного марганцем.

Эксперименты были проведены в магнитных полях (0-15 kOe) при комнатной температуре по стандартной методике [1]. Простейший и самый

распространенный вид МС связан с движением носителей заряда в магнитном поле (МС Лоренца) и сопротивление должно возрастать пропорционально квадрату напряженности магнитного поля. Это МС является положительным. Оно наблюдается во всех полупроводниках [2] и металлах [3]. МС в тонких неоднородных полупроводниковых пленках может отклоняться от квадратичного закона [3;4]. Отклонение может быть связано с тем, что структурный беспорядок и сильное легирование приводят к спин-зависимому рассеянию носителей заряда на анизотропных кластерах примеси которые вполне могут иметь магнитные моменты.

Результаты экспериментов по изучению магнетосопротивления образцов кремния, имплантированных ионами марганца приведены на рис. 1. Как видно из рисунка магнетосопротивление положительное, а также наблюдается кинетика магнетосопротивления (рис.2.) при комнатной температуре. Магнетосопротивление увеличивается более чем в полтора раза и достигает до 25% в течение 45 минут при слабых магнитных полях $H < 0,7$ кОе. Такое поведение магнетосопротивления наблюдается в Fe/SiO₂ металл-диэлектрик нанокompозитных материалах [2].

В наших экспериментах наблюдался заметный гистерезис магнетосопротивления при комнатных температурах (рис.3). Ширина гистерезиса увеличивался при удерживании образцов в сильных магнитных полях $H > 10$ кОе течении более чем 10 минут при комнатной температуре перед измерением МС.

Можно утверждать, что полученные результаты показывает наличия, магнитных кластеров с магнитными моментами приводящих к спин-зависимому рассеянию носителей заряда. При удерживании образцов в сильных магнитных полях $H > 10$ кОе в течении более чем 10 минут при комнатной температуре перед измерением, МС как будто происходит самоорганизация, то есть взаимное ориентация между магнитными моментами кластеров примесей и превращения на более крупные домены, которые приводят к увеличению спин-зависимого рассеяния носителей заряда [5,6]. Но это магнитное поле не достаточно сильное для влияния внутрикластерного магнитного взаимодействия, которая стало бы причиной возникновения кинетики и гистерезиса МС.

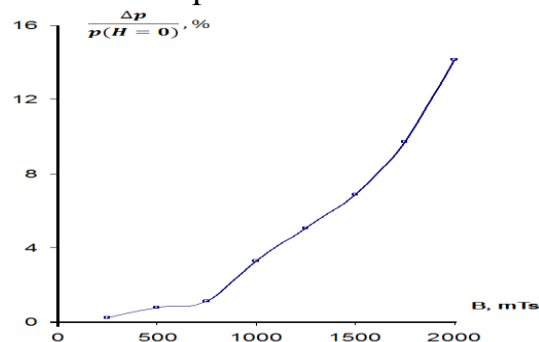


Рис.1. Полевая зависимость магнетосопротивления образцов Si<B, Mn>

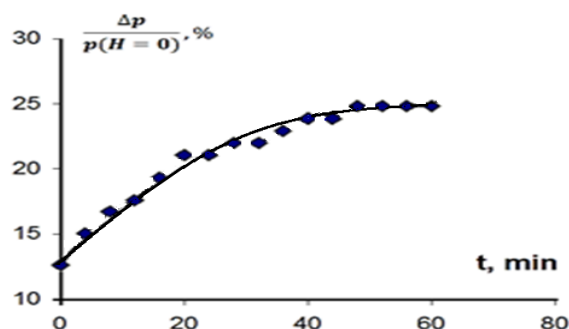


Рис.2. Кинетика магнетосопротивления образцов Si<B, Mn> при комнатной температуре

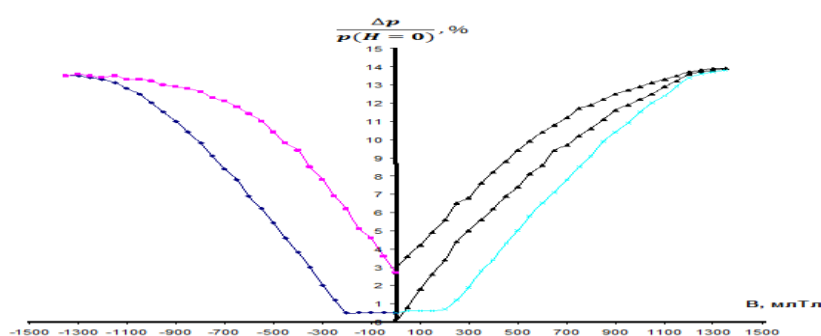


Рис.3. Гистерезис магнетосопротивления при комнатной температуре

Из полученных результатов можно сделать следующие выводы:

- в образцах Si<B, Mn> полученных методом ионно имплантации наблюдается ПМС на более чем 25 % при комнатной температуре;
- в образцах Si<B, Mn> при комнатной температуре и при слабых магнитных полях наблюдается кинетика ПМС;
- доминирующей причиной ПМС является спин-зависимая рассеяние носителей заряда от высокоспиновых магнитных нанокластеров марганца;
- наблюдение временной кинетики ПМС показывают конкуренцию между тепловой разупорядочением и упорядочением внешним магнитным полем ориентацию магнитных моментов высокоспиновых магнитных нанокластеров марганца;
- наблюдение гистерезиса в МС образцов показывают, наличие коэрцитивной силы в переориентации магнитных моментов нанокластеров марганца и тем самым дает предпосылки существования ферромагнитной фазы [7,8].

В настоящее время не имеется какая либо теоретическая модель объясняющая происхождения ферромагнитного состояния сильно компенсированных образцов p-Si<B, Mn> [9].

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Исмаилов О.А.
ассистент
кафедры анестезиологии реаниматологии
и скорой медицинской помощи
Андижанский государственный медицинский институт

СОВРЕМЕННЫЕ И ОТЕЧЕСТВЕННЫЕ МЕТОДЫ СИСТЕМНОЙ И РЕГИОНАРНОЙ ЛИМФОТРОПНОЙ ТЕРАПИИ В РЕАНИМАЦИОННЫХ СЛУЧАЯХ

Публикации статьи посвящена обзору данных литературы об использовании методов клинической лимфологии в реанимационных случаях. В ее первой части обозначены основные понятия и термины, касающиеся общих взаимоотношений лимфатической и лимфоидной систем организма человека с методами воздействия на них лекарственных средств и физических технологий для достижения эффекта лимфосанации (лимфостимуляция, лимфокоррекция, лимфопротекция, лимфосупрессия). Даны современные определения понятия «лимфатический регион», его основных звеньев, показаны особенности различных методов лимфотропной терапии. Во второй части приведены конкретные результаты применения лимфотропной терапии при различных формах острой и хронической воспалительной патологии, и травмы глотки, носа и околоносовых пазух, гортани, уха, а также с профилактической целью, для снижения частоты и тяжести постинтубационных ларингеальных осложнений у детей младшего возраста и у взрослых при пролонгированной интубации трахеи. Сделан вывод о превалировании исследований, направленных на разработку методик регионарной лимфотропной (непрямой) терапии. В настоящее время они рассматриваются как эффективные способы купирования разнообразных форм воспалительной патологии околоносовых, ротовой и верхних дыхательных путей. Способы системной (прямой лимфотропной) терапии в реанимации пока не имеют широкого применения, используются значительно реже и у небольшого количества больных. То и другое направления требуют дальнейших исследований и технических разработок, так как сегодня далеко не исчерпан потенциал реанимационные состояние, где бы они могли найти свое применение.

Ключевые слова: лимфология, лимфатическая система, лимфоидная система, лимфатический регион, лимфотропная терапия, лимфосанация, реанимация, критические состояние.

Ismailov O.A.
assistant
Department of Anesthesiology, Reanimatology
and Emergency Medical Care
Andijan State Medical Institute

MODERN AND DOMESTIC METHODS OF SYSTEMIC AND REGIONAL LYMPHOTROPIC THERAPY IN RESUSCITATIVE CASES

The publication of the article is devoted to a review of literature data on the use of clinical lymphology methods in intensive care cases. Its first part outlines the basic concepts and terms relating to the general relationship of the lymphatic and lymphoid systems of the human body with the methods of influencing them with drugs and physical technologies to achieve the effect of lymphosanitation (lymphostimulation, lymphocorrection, lymphoprotection, lymphosuppression). Modern definitions of the concept of “lymphatic region” and its main links are given, and the features of various methods of lymphotropic therapy are shown. The second part presents specific results of the use of lymphotropic therapy for various forms of acute and chronic inflammatory pathology and trauma of the pharynx, nose and paranasal sinuses, larynx, ear, as well as for preventive purposes, to reduce the frequency and severity of post-intubation laryngeal complications in young children and in adults with prolonged tracheal intubation. It is concluded that research aimed at developing methods of regional lymphotropic (indirect) therapy prevails. Currently, they are considered as effective ways to relieve various forms of inflammatory pathology of the paranasal, oral and upper respiratory tract. Methods of systemic (direct lymphotropic) therapy in intensive care are not yet widely used; they are used much less frequently and in a small number of patients. Both directions require further research and technical development, since today the potential for resuscitation is far from exhausted, where they could find their application.

Key words: lymphology, lymphatic system, lymphoid system, lymphatic region, lymphotropic therapy, lymphatic sanitation, resuscitation, critical condition.

Современная лимфология является интегральной медицинской наукой, в поле зрения которой одновременно находятся две взаимосвязанные системы организма человека – лимфатическая и лимфоидная, содержащие лимфу, лимфатические сосуды, организованные лимфоидные структуры и клетки.

Лимфатическая система, как подсистема сердечно-сосудистой системы, включает лимфатическое русло (лимфатические капилляры, сосуды, стволы, правый лимфатический и грудной протоки), в том числе,

пути лимфотока внутри лимфатических узлов, и саму лимфу с ее клеточным содержанием.

Лимфоидная система большей частью ассоциируется с иммунной системой, в состав которой входят такие органы, как красный костный мозг и тимус (первичные лимфоидные органы), селезенка, миндалины, лимфоидная паренхима лимфатических узлов, одиночные и групповые скопления лимфоидной ткани, а также отдельные лимфоидные клетки в тканях и органах (вторичные лимфоидные органы). Обе группы органов находятся в соподчинении. Морфофункциональным аргументом сопряженности лимфатической и лимфоидной систем являются лимфатические узлы, что позволило Ю.И.Бородину (1993) назвать лимфатический узел маркером средового прессинга и регулятором регионарной гемо- и лимфодинамики. Анатомическим пространством, где происходят основные транспортные и обменные процессы, регистрируются первые структурно-функциональные нарушения, с одной стороны, и осуществляются процессы естественной интракорпоральной лимфодетоксикации, с другой стороны, является лимфатический регион.

Лимфатический регион включает три основных звена: 1 – несосудистые пути микроциркуляции в интерстиции, где идет накопление и транспорт мобильной тканевой жидкости в направлении к корням лимфатической системы, лимфатическим капиллярам; 2 – оформленные сосудистые лимфатические структуры (лимфатические капилляры, сосуды), которые образуют и транспортируют лимфу; 3 – регионарные лимфатические узлы, а также одиночные или групповые скопления лимфоидной ткани, участвующие в транспорте лимфы и ее детоксикации. Все элементы лимфатического региона, функционируя синхронно и взаимосвязанно, образуют структурно-функциональную единицу, которая обеспечивает дренаж и детоксикацию клеток, перицеллюлярного пространства, ткани в целом. Нарушения интерстициального транспорта и лимфатического дренажа играют не только важную роль в патогенезе воспалительных процессов, но и учитываются при терапии этих нарушений. Указанные факты послужили основанием для разработки программы эндоэкологической реабилитации, системы восстановления эндоэкологического (околоклеточного, интерстициального) гомеостаза путем воздействия на интерстициальный гуморальный транспорт, лимфатический дренаж и детоксикацию лимфы. Эффективной реабилитации органа можно добиться только при морфофункциональной адекватности этих процессов.

Воздействия на лимфатическую и лимфоидную системы с помощью лекарственных средств, медицинских, механических и физических технологий позволили улучшить результаты лечения многих хирургических, кардиологических, травматологических, гинекологических, инфекционных и других заболеваний. В настоящее время они объединены в понятие

«клиническая лимфология», которое имеет отношение фактически ко всем лечебным специальностям и направлениям.

Существует две группы способов терапевтического воздействия лекарственных веществ на лимфатическую систему – прямые и непрямые. К прямым (эндолимфатическим) методам относится канюлирование магистральных или периферических лимфатических сосудов, лимфатических узлов, грудного протока, что предполагает создание высокой и длительно сохраняющейся концентрации лекарственного препарата в лимфатической системе при однократном введении официальной разовой дозы от 1 до 3 дней. Однако, с точки зрения Ю. М. Левина (1986), это не всегда возможно, так как в центральной лимфе и отдельных лимфатических узлах, которые являются транспортным продолжением использованного для пункции лимфатического сосуда, создается высокая концентрация лекарственных веществ, а в других, в том числе вовлеченных в патологический процесс, содержание лекарственных веществ может быть очень мало или вообще отсутствовать. Кроме того, катетеризация лимфатических сосудов – это трудоемкая и травматичная манипуляция, для выполнения которой требуются специальные инструменты, оборудованная операционная и необходимые хирургические навыки врача. С учетом эти обстоятельства рядом специалистов был предложен нехирургический способ введения лекарственных препаратов (подкожно или внутримышечно, забрюшинное введение, подслизистые инъекции) в зависимости от регионарности оттока лимфы. Доставка веществ осуществляется с помощью инъекции в область наибольшего представительства лимфатических капилляров при создании условий повышенного поступления их в лимфатическую систему. Данный метод получил название – не прямое эндолимфатическое введение или регионарная лимфотропная терапия. Он позволяет создавать высокую концентрацию препарата в лимфатическом регионе и непосредственно в патологическом очаге, но при этом значительно упрощает способ введения. Исключает ряд серьезных осложнений, связанных с хирургическими манипуляциями, делает регионарную лимфотропную терапию более доступной не только для хирургов, но и для других специалистов, в том числе, работающих в сфере амбулаторно- поликлинической службы.

По характеру результирующего эффекта все способы воздействия на лимфатический регион условно могут быть разделены на лимфостимуляцию, лимфокоррекцию, лимфопротекцию и лимфосупрессию.

Наиболее известным и чаще всего применяемым из них является способ лимфостимуляции, цель которого заключается в увеличении объема и скорости оттока лимфы от органов. Существенный лимфостимулирующий эффект для организма дает любая мышечная и водная нагрузка (как при внутреннем потреблении воды, так и при всевозможных водных процедурах). В медицинской практике в качестве

способов лимфостимуляции используются многочисленные физиотерапевтические и медикаментозные средства. Они изменяют осмотическое давление в тканях, повышающее проницаемость сосудистой стенки кровеносных и лимфатических микрососудов, способствуют дезагрегации мегамолекул в интерстиции с высвобождением из них свободной воды. Наибольшее распространение здесь получили различные коктейли, включающие глюкозу, лидокаин, дикаин, лидазу, дексаметазон и ряд других лекарственных средств. Из физических методов воздействия наилучшим лимфостимулирующим эффектом обладает низкоинтенсивный лазер и ультразвук.

Лимфостимуляция может включать две разновидности – динамическую и метаболическую. Целью динамической лимфостимуляции является увеличение объема и линейной скорости лимфооттока в сосудах органа или части тела. Лимфостимулятор увеличивает массу свободной (мобильной), не связанной с белковыми молекулами тканевой жидкости в интерстиции. При этом возрастает внутритканевое давление, растягивается волокнистый соединительнотканый каркас, увеличиваются в диаметре лимфатические капилляры, межэндотелиальные контакты становятся открытыми, падает внутрисосудистое давление, нарастает резорбция тканевой жидкости в капиллярах, возрастает масса вновь образующейся лимфы, усиливается лимфоток. Метаболическая лимфостимуляция направлена на улучшение клеточного состава и морфофункционального состояния клеток в лимфоидных органах и ткани. Применяя в лечебных и профилактических целях препараты, оказывающие влияние на клетки лимфоидных органов, можно говорить об их лимфокоррекции и лимфопротекции (разгрузке), что может рассматриваться в качестве вариантов метаболической лимфостимуляции.

Метод лимфосупрессии или лимфодепрессии применяется, большей частью, в онкологии для блокирования распространения раковых клеток по лимфатическим путям в условиях опухолевой экспансии.

В оториноларингологии ввиду специфики проявлений воспалительных процессов ЛОР-органов и реакции со стороны регионарных лимфатических узлов большей частью используются методы регионарной лимфотропной терапии. Их разработка начата около 20 лет назад, с конца 90-х годов 20-го столетия.

М. В. Мальцев (2000) предложил использовать регионарную лимфотропную антибиотикотерапию в составе комплексного консервативного лечения больных с декомпенсированной формой хронического тонзиллита. Сущность метода заключается во введении антибиотика в зону лимфатического региона небных миндалин – область двубрюшно-яремного узла, «сторожевого» для миндалин. Раствор антибиотика вводится подкожно на границе верхней и средней третьей грудино-ключично-сосцевидной мышцы по ее переднему краю, с обеих сторон.

Параллельно, в целях стимуляции регионарного лимфотока, на эту область проводится ультразвуковое воздействие. Курс лечения составляет 5–7 процедур. В последующем, учитывая мнение коллег о возможности воспалительных реакций и отека мягких тканей, автор отказался от инъекций и предложил более щадящую методику, которая включала только фонофорез антибактериального препарата на мазевой основе. Анализ результатов лечения не выявил существенных различий между чисто фонофоретическим и инъекционно-фонофоретическим методами.

А. В. Головнев (2000) для регионарной лимфотропной терапии хронического тонзиллита использовал препарат Т-активин, доказав в эксперименте на животных его более выраженное действие на фоне бальнеопроцедур радоновой воды.

Е. Г. Шахова, С. Е. Козловская (2005) с помощью фонофореза в течение 2 минут в зону регионарных лимфатических узлов небных миндалин вводили водный раствор поликатана разведением 1:20. Процедуру проводили в сочетании с ультразвуковым вакуумным промыванием миндалинковых лакун. Бактериологический анализ микробного обсеменения и морфологическое исследование миндалин позволили выявить эффективность метода у 60% больных по сравнению с традиционной терапией.

Для оценки эффективности регионарной лимфотропной терапии в процессе лечения больных с хроническим тонзиллитом Р. О. Станишевский (2013) провел исследование про- и антиоксидантной активности сыворотки крови больных при данном заболевании. До и в процессе лечения в сыворотке крови и отделяемом лакун методом иммуноферментного анализа определяли содержание провоспалительных (ИЛ-1В; ФНО-а) и противовоспалительных (ИЛ-4) цитокинов. Доказано, что лимфотропная терапия нормализует системную реакцию, содержание ИЛ-4 и ТФР-В1 на 7,1 и 16,8% соответственно.

В ринологии первые клинические исследования по применению лимфологических методов были проведены В. Ю. Андронниковым, М. Я. Козловым, Э. А. Цветковым (1995) у детей с риносинусогенными орбитальными осложнениями. Авторы использовали способ эндолимфатического (прямого) введения антибиотика через катетеризированный на стопе лимфатический сосуд. Методика признана эффективной и рекомендована к применению в составе алгоритма лечения тяжелых форм хронических риносинуситов и риногенных орбитальных осложнений. К.Касимов и соавт. (2018) экспериментально и клинически показали преимущество применения регионарной лимфотропной терапии в сравнении с традиционной терапией при лечении воспалительных заболеваний околоносовых пазух. Они провели сравнительный анализ лечения пациентов с воспалительными заболеваниями околоносовых пазух, применяя введение ампициллина в их полости и лимфотропно в зону

лимфатического региона. При лимфотропном лечении введение лекарственных веществ осуществлялось через подкожную клетчатку подчелюстной области, в проекции подчелюстных лимфатических узлов. Клиническое выздоровление среди больных острым гнойным верхнечелюстным синуситом составило 72,5% при традиционной терапии и 94,4% после лимфотропной терапии. В работе О. Е. Малышевой (2011) проведен сравнительный анализ традиционного лечения и лимфотропной антибактериальной терапии в сочетании с озоном у больных хроническим верхнечелюстным синуситом. Озонирование стерильного изотонического раствора хлорида натрия осуществляли с помощью озонатора «Медозонс БМ 01». Полученным раствором с концентрацией озона 4–6 мг/л промывали верхнечелюстную пазуху через катетер. Процедуру проводили один раз в день. В качестве антибактериального препарата для лимфотропной терапии использовали цефалоспорины I поколения. Эффективность данной методики была подтверждена микробиологическим исследованием отделяемого верхнечелюстных пазух. В группе, где применялась лимфотропная терапия, полной деконтаминации пазух удалось добиться в 71,9% случаев, у пациентов получавших традиционную терапию – только в 54,8%. Помимо эндолимфатического введения антибиотиков, Д. В. Кравченко (1997) при воспалительных заболеваниях носа и околоносовых пазух, сопровождающихся различного рода иммунодефицитными состояниями, предложил проводить регионарную иммуностимулирующую лимфотропную терапию. В поднижнечелюстную область на стороне поражения (зону лимфатического региона пазух) он вводил иммуномодулятор Т-активин, получив при этом более выраженный эффект по сравнению с традиционным лечением.

Первые исследования эффективности регионарной лимфотропной терапии в отиатрии проведены Х. Э. Шаиховой и соавт. (1999). Они изучали морфологию лимфатического региона среднего уха у кроликов породы шиншилла при экспериментальном остром среднем отите. В качестве лимфотропного препарата использовали раствор антибиотика и лазикса, которые с помощью инъекций вводили поднадкостнично в зону сосцевидного отростка больного уха. Отмечено уменьшение воспалительного процесса за счет стимуляции дренажной функции регионарных лимфатических узлов.

Д. В. Кравченко (2002) для коррекции иммунных нарушений у больных острым средним отитом применил лимфотропное введение иммуномодулятора «Тамерит» (100 мг) путем предварительной инфильтрации заушной области лидазой (12 ЕД) в 0,5% растворе новокаина. Доказано положительное влияние этой процедуры на течение гнойно-воспалительного процесса и состояние иммунной системы у данной категории больных.

С. Ю. Кротов (2013) более детально изучил морфологию лимфатического региона среднего уха, отметив при этом, что в его состав входит 3 группы лимфоузлов – заушные, передние околоушные и поднижнечелюстные. Каждая из этих групп несет определенные функции с точки зрения лимфодренажа, лимфокоррекции и лимфопротекции. Им же предложено важное усовершенствование методики лимфотропной терапии в виде введения смеси лекарственных препаратов в ткани с помощью воздействия низкочастотного ультразвука (ультрафонофорез) на каждую из регионарных лимфатических зон. Разработанный способ неинвазивен, не дает осложнений и побочных эффектов, не имеет возрастных ограничений, может быть успешно реализован в условиях ЛОР-стационаров и поликлиник. Доказано, что низкочастотный ультразвук не изменяет молекулярный состав лекарственных препаратов, вводимых лимфотропно, и способствует их проникновению в барабанную полость через неповрежденную барабанную перепонку. Эти особенности послужили основой в использовании данной технологии при лечении затянувшихся форм экссудативного среднего отита.

Сочетание регионарной лимфотропной терапии и ультразвуковых технологий также нашло применение у больных с хроническим гнойным средним отитом как самостоятельные методы консервативного лечения, так и в сочетании с хирургией при лечении болезней оперированного уха.

В. А. Насыров и соавт. (2014) имеют опыт применения лимфотропной терапии в лечении больных с отогенными внутричерепными осложнениями. Методика заключается во введении лекарственной смеси, состоящей из лидазы, гидрокортизона, 0,5% раствора новокаина, лазикса и антибактериального препарата в межкостистые промежутки шейного и верхнего грудного отделов позвоночника, что в сочетании с операцией позволяет улучшить ее результат, сократив при этом сроки послеоперационного лечения.

При заболеваниях гортани регионарная лимфотропная терапия как самостоятельный метод консервативного лечения в оториноларингологии используется пока редко. Однако к существенным позитивным результатам клинических разработок в этом направлении следует отнести применение регионарной лимфотропной терапии с профилактической целью. Метод использован для снижения частоты и тяжести постинтубационных ларингеальных осложнений у детей младшего возраста при пролонгированной интубации трахеи.

Начиная с первых суток интубации, ежедневно, в течение 5–6 дней, методом низкочастотного ультрафонофореза в область проекции гортани и ее регионарных лимфатических узлов по переднему краю верхней и средней третей грудино-ключично-сосцевидных мышц вводится водный раствор тиенама (имипенем/циластин натрия) и 32 ЕД лидазы на 0,25% новокаине. Применение разработанного способа защиты гортани позволило автору в 3

раза снизить частоту и на половину сократить длительность течения острых постинтубационных ларингитов, уменьшить вероятность хронических постинтубационных стенозов гортани.

Вывод. Из представленных сведений следует, что вопросы лечения больных путем воздействия на лимфатическую систему или через нее, на ткани и органы в реанимации разрабатываются постепенно на протяжении последних 30 лет. Превалируют исследования, направленные на разработку методик регионарной лимфотропной терапии. В настоящее время они рассматриваются как эффективные способы купирования разнообразных форм воспалительной патологии околоносовой, ротовой области и верхних дыхательных путей. Способы эндолимфатической (системной) терапии пока не имеют широкого применения, используются значительно реже и у небольшого количества больных. То и другое направления требуют дальнейших исследований и поиска новых технических разработок, так как сегодня далеко не исчерпан потенциал реанимационные случаи, где бы они могли найти свое применение.

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МЕТОДЫ ИССЛЕДОВАНИЯ МАГНИТОРЕЗИСТИВНОГО ЭФФЕКТА В КОМПЕНСИРОВАННОМ КРЕМНИИ

Аннотация: в работе рассмотрены на основании научно-технической литературы анализ метода исследования магниторезистивного эффекта в компенсированном кремнии, а также анализ результатов теоретического и экспериментального исследования зависимости степени нелинейности напряжения при измерении фотоэлектрических свойств композитных образцов.

Ключевые слова: магнитное поле, сопротивление, образец, напряжение, погрешность, электрическое поле, температура, термометр, образец, мощность.

Israilov F.M.

associate professor

Jizzakh Polytechnic Institute

METHODS FOR STUDYING THE MAGNETORESISTIVE EFFECT IN COMPENSATED SILICON

Annotation: on the basis of scientific and technical literature, the analysis of the method of studying the magnetoresistive effect in compensated silicon, as well as the analysis of the results of theoretical and an experimental study of the dependence of the degree of voltage nonlinearity when measuring the photovoltaic properties of composite samples.

Keywords: magnetic field, resistance, sample, voltage, error, electric field, temperature, thermometer, sample, power.

Собранное устройство для измерения магнитосопротивления в широком диапазоне магнитных и электрических полей показано на рис. 1. Устройство создает постоянное магнитное поле. Он состоит из электромагнита, держателя образца, системы нагрева и криостата.

Электромагнит с током до 20 А при напряжении 220 В через обмотку создает магнитное поле до 2 Тл. Для измерения магнитного сопротивления образцов использовался метод Холла. Известно, что сопротивление образца определяется следующим выражением.

$$\rho = \frac{U_V S}{I \cdot l} \quad (1)$$

Здесь U_V — напряжение между зондами, I — ток, протекающий через образец, S — поверхность образца, l — длина образца.

Если образец поместить в магнитное поле, изменится только величина тока, протекающего через образец.

$$\frac{U_V S}{\ell} = \text{const} \quad (2)$$

Из (2) следует, что:

$$r_V = \text{const } I_B \quad (3),$$

где I_B — удельное сопротивление образца в магнитном поле.

В отсутствие магнитного поля r_0 определяется тем же выражением:

$$r = \text{const } I \quad (4)$$

где r — удельное сопротивление образца без магнитного поля,

I — ток, протекающий через образец без магнитного поля.

Магнитное сопротивление образцов выражается следующим образом:

$$\frac{\Delta \rho}{\rho} = \frac{\rho_B - \rho}{\rho} \quad (5)$$

Если (2) и (3) заменить на (4), получится магнитное сопротивление образцов, выраженное через протекающий ток:

$$\frac{\rho_B - \rho}{\rho} = \frac{I - I_B}{I_B} \quad (6)$$

где: ρ_B удельное сопротивление образца в магнитном поле

ρ удельное сопротивление образца без магнитного поля;

I_B — ток, протекающий через образец в магнитном поле;

I — ток, протекающий через образец без магнитного поля.

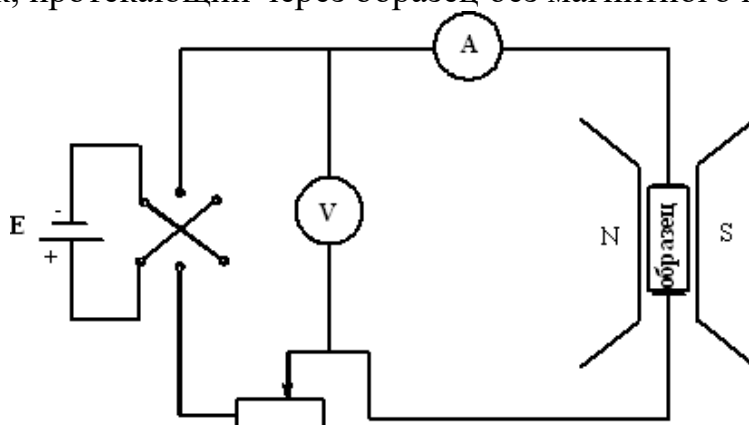


Рис.1. Вид устройства, используемого для измерения магнитосопротивления в широком диапазоне магнитных и электрических полей.

Измерение фотоэлектрических свойств композитных образцов.

Образцы композита исследовали на установке ИКС-21, оснащенной специальным криостатом, позволяющим исследовать спектральную зависимость фотопроводимости (ФП) в электрическом поле ($E = 0,1-50$) В/см в широком диапазоне температур (77-350)К., фоновое освещение ($J = 0,1-1000$ лк) осуществлялось при разной интенсивности с помощью лампочки (рис.2).

Интенсивность фона освещения контролировали с помощью калибровочных кривых. Температуру измеряли с помощью медно-константановой термопары, которую помещали под образец в криостате. Интенсивность монохроматического света, у $J = 10 - 5$ Вт/см², поддерживалась постоянной при изучении спектральной зависимости ФП и при необходимости изменялась с помощью калибровочных стержней, помещаемых между глобаром и окном ИКС-21. Практически все фотоэлектрические исследования проводились с двойным фильтром из полированных кремниевых пластин толщиной $d = 0,5$ мм, размещенным перед окном ИКС и перед окном криостата, для получения достоверной информации о спектральной зависимости ФП в диапазоне $h\nu = 0,2-1,0$ требовало применения двойного фильтра [1].

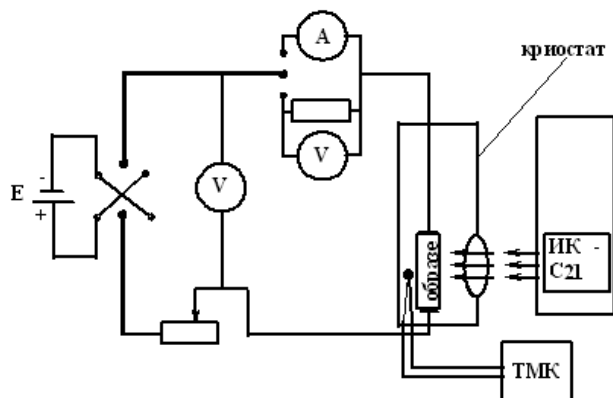


Рис.2. Устройство для измерения спектральной фотопроводимости.

Вольтамперные характеристики разработанных композиционных датчиков температуры.

При анализе классификации обобщенных приемов показывает, что наибольшее количество обобщенных приемов совершенствования конструкций разработана с целью уменьшения погрешности, обусловленной воздушным зазором, так как эта погрешность является наибольшей по величине и по существу определяет значение суммарной погрешности трансформаторных преобразователей механических напряжений. Процесс, происходящий в преобразователе, может быть представлен в виде совокупности элементарных преобразований одной физической

величины в другую, каждое из которых является в первом приближении линейной зависимостью [2,3].

Анализ классификации обобщенных приемов показывает, что наибольшее количество обобщенных приемов совершенствования конструкций разработана с целью уменьшения погрешности. Для уменьшения погрешности преобразования необходимо обеспечение максимума параметра $R_{\mu k}$ [4,5]

Из-за чувствительности к высоким температурам изготовленные композитные датчики температуры значительно облегчат работу, если их использовать в качестве аксессуаров. В этом случае сигнал может быть отправлен непосредственно регистратору устройств. Это повышает надежность и снижает стоимость датчика температуры. Аналогом разработанного композитного датчика температуры является ООО «ВЗ СЕНСОР» Института проблем управления РАН.

А также могут быть присоединены умные (функциональные) Z-термисторы (Z-термисторы), разработанные на основе полупроводниковых конструкций. Г-образная вольт-амперная характеристика способна решить задачу подбора определенных значений температуры без использования дополнительных электронных схем.

На рис.3 представлены ВАХ разработанного композитного датчика температуры. Следует отметить, что ВАХ композиционных датчиков температуры, выполненных на основе материалов Si<B,S>, Si<P,Ni>, но имеющих одинаковое удельное сопротивление, подобны друг другу. При малом токе и напряжении характеристика ВАХ линейна вне зависимости от номинального сопротивления датчика температуры и удельного сопротивления материала, из которого он изготовлен. В составном термодатчике появляется нелинейность из-за саморазогрева термодатчика по мере увеличения рассеиваемой мощности. Обычно при измерении температуры датчик температуры располагается в линейной части ВАХ, и нормировать режим работы составного датчика температуры проще электронным способом. Поэтому важно знать, при каких условиях реализуется режим работы. Нелинейность возникает из-за рассеивания тепла в составном датчике температуры, поэтому чем меньше ток и напряжение на датчике температуры (т. е. чем меньше потребляемая мощность), тем более линейным будет датчик температуры. На рис.3 ВАХ разработанного композитного датчика температуры представлены данные, полученные в безвоздушной, герметичной и безвоздушной герметичных средах. Без герметизации неравномерность начинается с 0,36 мВт потребляемой мощности, то есть распределение мощности на графике становится нелинейным (нелинейность в ВАХ при этой мощности составляет 2%).

Нелинейность датчика температуры в герметично закрытом состоянии начинается с 3,2 мВт. Если датчик температуры работает в более

теплопроводной среде, например, в жидкости, то эти силы возрастают. Наличие токовых потоков также приводит к увеличению рассеиваемой потребляемой мощности.

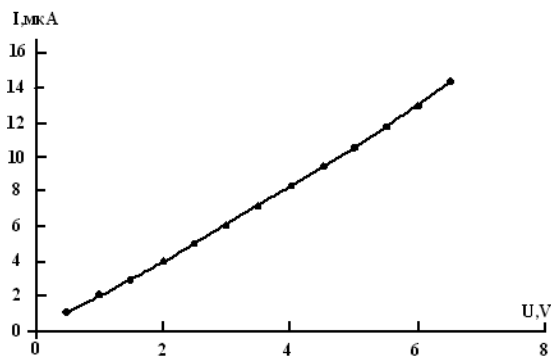


Рис.3. Вольтамперная характеристика составных датчиков температуры, разработанная при $r = 10^5 \text{ Ом}\cdot\text{см}$.

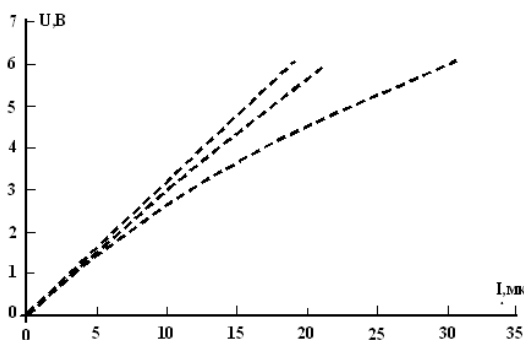


Рис.4. $n\text{-Si}\langle S \rangle s = 10^5 \text{ Ом}\cdot\text{см}^2$ на основе вольтамперметрической характеристики композитных датчиков температуры при комнатной температуре. 1 – линейный ВАХ; 2 – негерметичные датчики температуры для ВАХ; ВАХ для 3-х герметичных датчиков температуры.

Тепловая инерция разработанного композитного датчика температуры.

Тепловая инерция составного датчика температуры показывает, насколько быстро или медленно датчик температуры достигает теплового равновесия с окружающей средой. Инерционность (или быстродействие) составного датчика температуры зависит от многих факторов: теплопроводности среды, теплопроводности наполнителя, наличия токов в среде, разности температур между помещенным в среду датчиком температуры и температуры теплоемкости (масса) самой среды.

Тепловая инерция определялась быстрым перемещением композитного датчика температуры из одной среды в другую при отсутствии токов в среде. Так, датчик температуры размером $1 \times 1 \times 0,5 \text{ мм}$ при переносе из открытого помещения температурой $T = 25^\circ\text{C}$ в воду

температурой $T=75^{\circ}\text{C}$ без герметизации, датчик температуры достигает равновесия с окружающей средой за 9 с (время постоянная 4°C), из воды при $T=40^{\circ}\text{C}$ (время постоянная 12°C) и при $T=75^{\circ}\text{C}$ за 50 с (время постоянная 20°C) при реверсировании. Покрытие датчика температуры нитролаком не изменило эти значения. После закрытия эти времена увеличились в 2-3 раза. При наличии токов в окружающей среде скорость датчика температуры увеличивается.

Разработанный композитный датчик температуры легко монтируется на объекте в отверстии диаметром около 2 мм. Для снижения термостойкости зазор между датчиком и теплопроводом заполнен теплопроводной пастой КТП-8. При погружении датчика температуры в жидкий азот, нагретый до 250°C (-196°C), время отклика на изменение температуры не превышает 4 секунды.

Диапазон рабочих температур композитных датчиков температуры.

Технологически удобным соединением для изготовления композитного датчика температуры является марганец (Mn). При его использовании время диффузии, которое нужно для сплава, чтобы изготовить датчик температуры, невелико. Однако диапазон рабочих температур для образцов композитов $\text{Si}\langle\text{B},\text{Mn}\rangle$ ограничен, он находится в пределах от -200°C до $+100^{\circ}\text{C}$. Верхняя граница этого диапазона ограничена началом распада атомов марганца. Это составляет температуру свыше 100°C .

Легирующего соединения имеют более сложные условия для диффузии из-за низкого коэффициента диффузии атомов серы (S) в кремнии (Si) по сравнению с коэффициентом диффузии атомов марганца (Mn), но диапазон рабочих температур образцов композита $\text{Si}\langle\text{B},\text{S}\rangle$ в более широком диапазоне от -200°C до $+200^{\circ}\text{C}$.

Композиционные датчики температуры из никелевого сплава на основе кремния (Si) требует применения вакуумного оборудования, которое дорого и сложно в обслуживании и эксплуатации, что в конечном итоге приводит к удорожанию технологического процесса и удорожанию температуры. Однако, время диффузионного легирования никелем значительно меньше, чем серой. Диапазон рабочих температур образцов $\text{Si}\langle\text{P},\text{Ni}\rangle$ составляет от -200°C до $+250^{\circ}\text{C}$.

Диапазон рабочих температур разработанного композитного датчика температуры составляет от -60°C до $+110^{\circ}\text{C}$. Здесь нижний предел определяется температурными характеристиками кристалла кремния и пленки никеля. Напыление никеля производят при температуре около 100°C , при очень низких температурах из-за неравенства коэффициентов термического расширения с кремния снимается пленка никеля. Верхний температурный предел определяется температурой плавления шипа. Температура плавления предохранителя ПОСК 50/18 150°C (при

использовании предохранителя ПОС 61 верхний предел увеличивается до 180°C). Температурная чувствительность разработанных композиционных термореле остается постоянной во всем диапазоне рабочих температур.

На основе комплексного изучения состояния и электрофизических свойств монокристаллов кремния р- и n-типа, легированных фосфором и бором и дополнительно легированных атомами серы и никеля, определены оптимальные условия создания необходимых уровней в запрещенной области Si для увеличения, определены чувствительность и быстродействие композитных датчиков температуры на основе кремния. Как показано в главах 2 и 3, дополнительное легирование кремния атомами S и Ni приводит к увеличению времени жизни неосновных носителей на 50%, что приводит к увеличению быстродействия датчика температуры и увеличению его радиационной стойкости. Высокочувствительные композиционные датчики температуры изготавливаются с использованием разработанного нового метода сплавления атомов никеля и серы с монокристаллами кремния методом постепенной диффузии. Составные датчики имеют следующие размеры: 1,5x1,5x0,5 мм, контакты 0,1 мм выполнены из медных проводников диаметром 1,5 мм. Композитные датчики температуры привариваются

к никелевым контактам, подводимым к контактными поверхностям, методом предварительного вакуумного напыления.

Преобразователь – устройство, которое преобразует изменения входной величины в соответствующий выходной сигнал, удобный для дальнейшего использования, и служит воспринимающим органом ряда элементов [6]. Составные датчика температуры (сопротивление ρ , температурная чувствительность B , диапазон измеряемых температур, габариты) представлены в таблице 1. Скорость перемещения разработанных композитных датчиков температуры составила 10-15 секунд. Композитные датчики температуры по своим параметрам намного лучше существующих аналогов.

Составная температурная характеристика составных датчиков температуры на основе $n\text{-Si}\langle S \rangle$ $r=10^5$ Ом·см² показано на рис.5. После выбора оптимального состава и технологии нанесения смеси тепловая инерция датчиков температуры не превышала 4 секунд.

Таблица 1.

Параметры композитных датчиков температуры на основе материала Si<P,Ni>

Нет.	ρ , Ом·см	Б, К	T, К	Размеры, мм
1	$3 \cdot 10^2$	4600	77 ÷ 200	1x1x0,5
2	$3 \cdot 10^3$	6250	120 ÷ 250	1x1x0,5
3	$2 \cdot 10^4$	7000	150 ÷ 300	1x1x0,5
4	10^5	7200	200 ÷ 370	1x1x0,5
5	$6 \cdot 10^5$	7300	250 ÷ 400	1x1x0,5

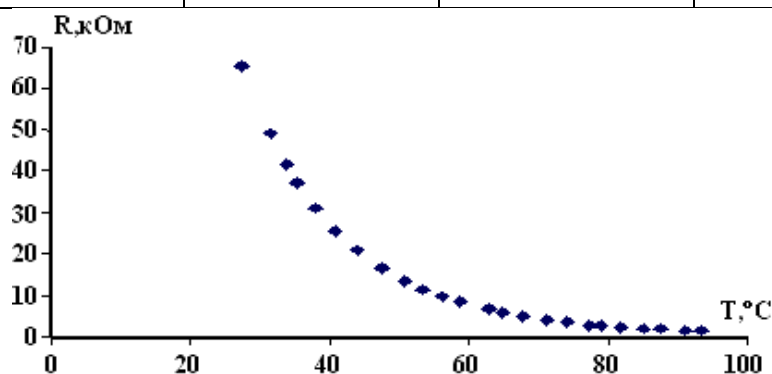


Рис.5. Температурные характеристики композитных датчиков температуры

Композитные датчики температуры на основе Si<P,Ni> составляет от -200°C до $+250^{\circ}\text{C}$. Диапазон рабочих температур композитных датчиков температуры, изготавливаемых для широкого применения на практике, находится в диапазоне -60°C до $+110^{\circ}\text{C}$. Композитные термодатчики остаются постоянными во всем диапазоне рабочих температур.

Разработаны композитные датчики температуры нанокластеров никеля на основе кремния со следующими эксплуатационными характеристиками:

- 1) максимальное значение коэффициента температурной чувствительности, $B=6600$ град $^{-1}$;
- 2) скорость 10 секунд;
- 3) диапазон измеряемых температур от -60°C до 120°C , где во всем диапазоне $U_{\text{пр}}=f(T)$ является линейным;
- 4) размеры 1x1x0,5 мм;

- 5) температурная чувствительность 3,0 мВ.К⁻¹;
- 6) ток от 1 мА до 100 мА;
- 7) погрешность ±0,5°C;
- 8) радиационная стойкость 10⁹ Р;
- 9) устойчив к механическим вибрациям до 350 Гц.

В табл.1. сравниваются характеристики датчиков температуры, полученных методами низкотемпературной диффузии атомов серы и никеля и имплантации ионов фосфора и бора в монокристалл кремния в разных направлениях. Как видно из таблицы, лучшими свойствами обладают датчики температуры с нанокластерами атомов никеля, внедренными в кремниевую основу. Кроме того, их характеристики устойчивы к воздействию γ - и нейтронного излучения, к вибрациям. Достоинствами разработанных датчиков являются их очень малые размеры, простота изготовления и достаточное быстродействие. Технология изготовления таких датчиков не требует дорогостоящего оборудования, в отличие от датчика на основе рin-диода, не требует для своего изготовления высоковакуумного устройства и установки для ионных пучков и ионного сплавления. Кроме того, методом имплантации ионов никеля не удастся добиться равномерного распределения примеси по глубине в объеме кремния, что не позволяет создавать чувствительные датчики температуры путем диффузии атомов никеля в кремний при низкой температуре..

Таблица 2.

Композитные датчики температуры, полученные низкотемпературной диффузией Si<B,S>, Si<B,Ni>, Si<P,Ni> и ионной имплантацией (пин-диод) сравнение производительности.

Тип термо-датчика	Сопротивление	Диапазон измерения температуры °С	Температурный Коэффициент	Температура чувствительности	Быстродействие сек
Si<B,S>		-200÷180	2,1 мВ К ⁻¹	4500	25
Si<B,Ni>	6 10 ⁵	-200÷250	2,2 мВ К ⁻¹	7000	10
Si<P, Ni>	10 ⁵	-200÷250	3,0 мВ К ⁻¹	7200	5-15
(пин-диод)		-250÷250	2,3 мВ К ⁻¹		20

Количественной характеристикой измеряемых величин является размер. Качественной характеристикой величин - ее размерность. Последняя обозначается символом dim от латинского слова «dimension», которое переводится как размер и как размерность в зависимости от контекста [7].

Следует отметить, что прямому использованию при измерениях имеются следующие факторы [8]:

- оценка измерений в испытательных и калибровочных лабораториях;
- применение специально сертифицированных программных средств для измерения;

- получения данных неопределенности измерений путем существующими программными средствами;
- документирование пошаговой процедуры.

Выводы

Исследованы температурные показатели композиционных образцов композиционного материала Si<B,S>Si<B,Mn>, Si<B,Mn,S>, Si<P,Ni>, компенсированного кремнием.

Температурный коэффициент сопротивления и температурный коэффициент композиционного материала в интервале температур от -60°C до +90°C для Si<B,S> Si<B,Mn>, Si<B,Mn,S>. Для образцов PNi> исследована температурная зависимость коэффициента чувствительности.

3. Кремниевая компенсация Si<B,S> Si<B,Mn>, Si<B,Mn,S>, Si<P,Ni>

Композитные датчики температуры изготовлены на основе композиционных материалов.

4. На основе полученных композитных датчиков температуры разработан электронный термометр с использованием аналого-цифрового преобразователя.

5. Эргономические показатели, характеризующие систему «человек - изделие - среда», устанавливают соответствие свойств изделия тем или иным свойствам человека [9].

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*Калибаев Ж.Ш.
заведующий кафедрой физической культуры и спорта
Ташкентский государственный аграрный университет*

РАЗВИТИЕ СКОРОСТНЫХ КАЧЕСТВ В МИНИ-ФУТБОЛЕ С ПРИМЕНЕНИЕМ РАЗЛИЧНЫХ МЕТОДОВ

Аннотация. Скорость – одно из важнейших физических качеств для успеха в мини-футболе. Способность ускоряться, быстро менять направление и поддерживать темп на коротких дистанциях может дать игрокам решающее преимущество. Поэтому тренеры и спортсмены должны использовать различные методы тренировок для систематического развития скорости. В этой статье мы рассмотрим несколько ключевых методов развития скорости и то, как их можно применить к тренировкам по мини-футболу.

Ключевые слова: мини-футбол, скоростные качества, развитие мастерства, методы тренировки, результативность.

*Kalibaev J.Sh.
Head of the Department of Physical Culture and Sports
Tashkent State Agrarian University*

DEVELOPMENT OF SPEED QUALITIES IN MINI-FOOTBALL USING VARIOUS METHODS

Abstract: Speed is one of the most important physical qualities for success in futsal. The ability to accelerate, change direction quickly and maintain pace over short distances can give players a decisive advantage. Therefore, coaches and athletes must use a variety of training methods to systematically develop speed. In this article, we'll look at a few key speed development techniques and how they can be applied to futsal training.

Keywords: mini-football, speed qualities, skill development, training methods, effectiveness.

Введение: Предыдущие исследования показали, что скорость игроков в мини-футбол тесно связана с улучшением результатов. Исследования показывают, что сочетание упражнений на ловкость, спринтерских тренировок и упражнений, основанных на навыках, способствует развитию скоростных качеств игроков. Однако существует необходимость в более полном понимании конкретных методов, которые дают наилучшие результаты.

Тренировки и тактика мини-футбола – важная и нормальная практика для всех футболистов, которые планируют играть на высоком уровне.

Почему этот тренировочный план важен, так это физические способности, техника и выносливость, позволяющие подходить к различным игровым ситуациям.

Несмотря на свою простоту, мини-футбол обладает рядом интересных особенностей, которые делают эту игру по-своему уникальной и привлекательной. Во-первых, каждый игрок гораздо чаще сталкивается с мячом, участвует в общих действиях игры.

Во-вторых, ворот в мини-футболе забивается гораздо больше. В-третьих, каждый игрок должен действовать с полной отдачей сил, успевая защитить свои ворота и атаковать соперников. Кроме того, при игре в зале практически все время мяч находится в игре, что происходит без вынужденных и утомительных установок.

После всей разминки и растяжки очень важна работа с мячом для совершенствования контроля мяча в различных игровых ситуациях. Эту практику следует выполнять в парах. В то время как два партнера стоят друг перед другом, чтобы отработать четкость передачи стоя, а затем движением. Расстояние между двумя игроками не должно превышать 2 метров. После тренировки на коротких пасах следует следовать на длинной дистанции.

Для этого игроки становятся лицом друг к другу в полярном конце зала и начинают быстро передавать мяч. Сначала по земле, а потом по воздуху.

«Примечание». Эту практику передачи необходимо выполнять обеими ногами, даже если вы одноногий игрок. Важно практиковаться в умении использовать как левую, так и правую ногу, поскольку это помогает идеально адаптироваться к любому высокому темпу игры и самостоятельным действиям.

Есть много тренировочных занятий по мини-футболу, над которыми необходимо работать, чтобы улучшить свои результаты. Они следующие:

- Навык стрельбы
- Умение вести мяч
- Скорость
- Гибкость и техника

В конце концов, эта тренировочная практика должна сопровождаться игрой команды с двумя боковыми игроками, которая играет по 15 минут и два перерыва. Между перерывами игры следует сделать 3–5 минут растяжки для расслабления мышц, а затем продолжить вторую половину. Это помогает применить на практике все навыки, полученные в ходе обучения с самого начала, раздела обучения.

Чтобы исследовать влияние различных методов тренировки на скоростные показатели, различные игроки в мини-футбол были вовлечены в структурированную тренировочную программу. Эти методы включали упражнения на ловкость, интервалы между спринтами, упражнения по контролю мяча и симуляции матчей. Показатели эффективности, такие как

время спринта, скорость смены направления и принятие решений на поле, оценивались до и после тренировочного периода.

Мини-футбол может способствовать развитию у учащихся различных навыков и качеств, в том числе скоростных. Мини-футбол – динамичный вид спорта, требующий быстроты мышления, ловкости и быстрых движений.

Вот несколько способов, с помощью которых мини-футбол может помочь развить у учащихся скоростные навыки:

Ловкость и быстрая реакция:

- Мини-футбол предполагает частую смену направления и быстрые движения. Игроки должны быть ловкими и обладать быстрой реакцией, чтобы ориентироваться на небольшой игровой площадке и реагировать на быстрый темп игры.

Ускорение и замедление:

- Короткие серии спринтов в футзале помогают улучшить ускорение. Кроме того, необходимость быстро останавливаться, менять направление и снова ускоряться повышает способность к быстрому торможению, что является важным навыком в скоростных видах спорта.

Скорость мышления:

- Футзал – игра, требующая быстрого принятия решений. Игроки должны анализировать ситуации, предугадывать действия противника и быстро принимать решения о передаче, ударе или ведении мяча. Быстрое мышление имеет решающее значение для успеха в скоростных видах спорта.

Высокоскоростной контроль мяча:

- Контроль мяча в ограниченном пространстве и быстрое движение – ключевой навык в футзале. Это не только улучшает навыки владения мячом игроком, но также увеличивает его способность принимать решения за доли секунды, сохраняя при этом контроль.

Координация и коммуникация команды:

- Скоростная игра требует эффективной коммуникации и координации действий между членами команды. Мини-футбол помогает учащимся развивать чувство командной работы и умение быстро и точно общаться с товарищами по команде на поле.

Фитнес и выносливость:

— Игра в мини-футбол отличная тренировка для сердечно-сосудистой системы, развивающая выносливость. Выносливость имеет решающее значение для поддержания высокой скорости на протяжении всего матча.

Время реакции:

- Быстрый темп игры в мини-футбол улучшает время реакции игроков. Быстрое реагирование на изменения в игре, такие как перехваты,

подборы или движения соперника, имеет важное значение для успеха в скоростных видах спорта.

Работа ног и технические навыки:

- В мини-футболе особое внимание уделяется тщательному контролю мяча и точной работе ног. Развитие технических навыков на высоких скоростях необходимо для маневрирования в ограниченном пространстве и уклонения от противников.

Для оптимизации развития скоростных качеств у занимающихся мини-футболом тренерам следует включать специальные упражнения, направленные на развитие ловкости, быстроты принятия решений и быстрых движений. Кроме того, хорошо продуманная программа обучения должна включать как физические, так и умственные аспекты, чтобы обеспечить всестороннее развитие навыков.

В ходе обсуждения рассматриваются конкретные элементы учебной программы, которые в наибольшей степени способствовали наблюдаемым улучшениям. В нем также обсуждаются потенциальные ограничения исследования и предлагаются области для дальнейших исследований. Результаты подтверждают идею о том, что сочетание ловкости, спринта и тренировок, основанных на навыках, имеет решающее значение для оптимизации скорости игроков в мини-футбол.

Вывод

Системный подход, сочетающий спринтерские тренировки, упражнения с отягощениями, работу на ловкость и RSA, наиболее эффективен для развития скоростных качеств, жизненно важных для успеха в мини-футболе. Тренеры должны внедрять передозированный план, который постепенно перегружает эти ключевые области с помощью различных методов тренировки. При целенаправленных тренировках 2-3 раза в неделю игроки могут значительно улучшить ускорение, смену направления и многократную скоростную выносливость, используя методы, обсуждаемые в этом эссе.

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Каримов А.А.
заведующий отделение нейрореанимации
анестезиолог-реаниматолог
РНЦЭМП АФ

ОПЫТ И РАБОТА ОРГАНИЗАЦИИ СИМУЛЯЦИОННОГО ОБУЧЕНИЯ ВРАЧЕЙ АНЕСТЕЗИОЛОГОВ-РЕАНИМАТОЛОГОВ В РНЦЭМП АФ

В статье рассмотрена актуальность симуляционного обучения в практической подготовке врачей анестезиологов-реаниматологов. Обоснованы теоретические и практические предпосылки включения симуляционного образования в траекторию образовательного процесса с целью снижения числа врачебных ошибок в одной из самых высокотехнологичных специальностей современной медицины. Представлен опыт этапного симуляционного обучения врачей анестезиологов-реаниматологов в симуляционном центре АГМИ.

Ключевые слова: симуляционное обучение, анестезиолог-реаниматолог, практический навык.

Karimov A.A.
head of the neuroreanimation department
anesthesiologist-resuscitator
RSCEMC AB

EXPERIENCE AND WORK OF THE ORGANIZATION OF SIMULATION TRAINING OF ANESTHESIOLOGISTS- RESCUINATOLOGISTS AT RNC EM AF

The article describes the topicality of simulation-based technologies as a part of the practical training of anesthesiologists and emergency physicians. It validates the theoretical and practical background for inclusion of simulation-based technologies into the training in order to decrease the number of medical errors in one of the most highly technical fields of modern medicine. The authors share the experience of staged simulation-based training of anesthesiologists and emergency physicians in the Simulation Center of ASMI.

Key words: simulation-based training, anesthesiologist and emergency physician, practical skills.

В настоящее время требования к профессиональной деятельности врачей неизмеримо возросли по сравнению с событиями 30-летней давности. Врач, не владеющий практическими навыками на достаточном уровне, не может быть допущен к профессиональной деятельности.

Современная практика непрерывного медицинского образования в определенной степени позволяет решить эту проблему. Тем не менее для создания системы высокой надежности

в деятельности врача важно не только постоянно повышать уровень теоретических знаний, но и научить его правильно и безопасно выполнять технически сложные действия строго в соответствии с протоколами лечения. Среди медицинских специальностей анестезиология-реаниматология является одной из самых наукоемких. В этом разделе клинической медицины происходит постоянное накопление объема используемой научной информации, неуклонное внедрение в практику работы современных высоко-технологичных диагностических и лечебных методик. Эти обстоятельства в свою очередь порождают опасность допущения врачом профессиональных ошибок, которые нередко становятся причиной летального исхода у пациента. В США при тщательном анализе летальности пришли к выводу, что врачебные ошибки составляют значительную часть причин смерти больных, достигая 50–100 тыс. случаев ежегодно. По данным разных авторов, в Европе получены аналогичные результаты. В частности, в Великобритании – 70 тыс., в Германии – 100 тыс. в Италии – около 90 тыс. пациентов. Допущенная врачебная ошибка трактуется как проявление «человеческого» фактора или «сбоя системы». При профессиональной подготовке врачей необходимо учитывать и психологические аспекты деятельности анестезиологов-реаниматологов. При всей настороженности и готовности к наилучшему варианту событий врач анестезиолог-реаниматолог постоянно рискует столкнуться с незапланированной ситуацией. «Часы скуки и мгновения ужаса» – формулировка, ярко характеризующая характер работы и в какой-то степени объясняющая причины профессиональных девиаций анестезиологов. В критических ситуациях врач работает не один, а в команде и внутри сложно организованной системы. На смену врачам, «научившимся на своих ошибках», приходят те, у кого все сложности еще впереди. Формируется новый фактор стресса – страх ошибок, страх быть втянутым в судебный процесс при неблагоприятном для пациента исходе. Значительно возрос общий уровень конфликтности в условиях, когда необходимо разделять ответственность внутри команды за здоровье и жизнь пациентов. Все это требует качественно новых подходов к подготовке врачей анестезиологов-реаниматологов к профессиональной деятельности. Одним из таких подходов в современных условиях является симуляционное обучение (СО), тем более что в силу специфических особенностей специальности освоение практических навыков оказания реанимационной помощи в клинике невозможно и осуществимо только на манекенах. Симуляционный тренинг – метод активного обучения, направленный на развитие знаний, умений, навыков и социальных установок. Он способствует увеличению интеллектуального потенциала обучающегося,

активации его способности к обучению, освоению конкретных видов производственной деятельности, формированию адекватных форм общения в процессе этой деятельности с коллегами по работе и средним медицинским персоналом. Важнейшие преимущества СО – освоение практических навыков без нанесения физического и психологического вреда пациенту, а также объективная оценка качества профессиональной подготовки каждым специалистом. Применяемая до недавнего времени классическая система обучения предусматривает освоение четко регламентированных учебных дисциплин и предметов. Это не обеспечивает необходимый уровень мотивации курсантов и их осознанной активности в реализации процесса обучения. При симуляционном варианте профессиональной подготовки происходит их активное когнитивное и эмоциональное вовлечение в учебный процесс. Это позволяет существенно повысить уровень приобретенных ими необходимых знаний теории вопроса, а также практических умений в условиях полноты и реалистичности моделируемой клинической ситуации. СО позволяет научить работать специалистов в соответствии с современными стандартами и протоколами оказания неотложной помощи, выработать навыки командного взаимодействия в коллективе врачей и средних медицинских работников, повысить качество выполнения сложных медицинских процедур и объективно оценить результат деятельности. Для этого необходимым является освоение солидной теоретической базы знаний патофизиологии, клиники и диагностики критических состояний, владение современными принципами их лечения, безупречное выполнение технологий оказания неотложной помощи и реанимации на симуляционных манекенах и умение работы в команде. В связи с выше изложенным определены 4 основные задачи СО:

1) обеспечение квалифицированного уровня освоения практических профессиональных навыков неотложной реанимационной помощи при критических состояниях на специальных тренажерах;

2) подготовка профессионально подготовленного врача, способного и готового применить свои знания и практические навыки в различных критических ситуациях;

3) контроль эффективности и качества проводимых реанимационных мероприятий;

4) изучение и внедрение в практику работы врача анестезиолога-реаниматолога современных методов повышения качества его врачебной деятельности, оценка их соответствия профессиональным стандартам и протоколам.

В качестве этапов обучения и процесса тестирования используем модифицированные предложения И. З. Ялонецкого и др.. Обучение проводится по трем этапам.

1. Теоретический дистанционный этап. Изучение теоретических основ практических навыков проводится дистанционно по размещенным на платформе Moodle учебным материалам.

2. Практический дистанционный этап. Визуальные автоматизмы практических навыков отрабатываются на платформе Moodle с помощью просмотра видеофильмов (сердечно-легочная реанимация, «трудный дыхательный путь», внутрикостный доступ, коникотомия, катетеризация центральных вен, эпидуральная и субарахноидальная анестезия и др.). Осваиваются фармакокинетические аспекты анестезии с помощью симулятора Gas Man. Этап завершается промежуточным тестированием на платформе Moodle.

3. Симуляционный коммуникативный этап. Отработка практических навыков проводится в симуляционном центре с использованием манекенов, тренажеров, инструментария и расходных материалов.

Обучающиеся, которые не освоили предыдущий этап практического обучения, не могут быть допущены к последующему этапу. Обучение практическим навыкам проводится в соответствии с рекомендациями Европейского совета по реанимации (ERC), которые используем при всех видах тренинга. ERC рекомендует осваивать практические навыки с использованием симуляторов и тренажеров в виде 4-ступенчатого метода:

1-я ступень – преподаватель для всех слушателей группы в режиме реального времени показывает на тренажере, как правильно выполняется тот или иной навык;

2-я ступень – преподаватель показывает и объясняет все элементы навыка и отвечает на вопросы;

3-я ступень – обучающийся говорит преподавателю, как выполнять навык, а тот исполняет на тренажере его инструкции, даже если обучающийся дает неверные указания. На этой ступени обучающийся должен увидеть возможные ошибки и сам исправить их;

4-я ступень – обучающийся самостоятельно выполняет навык и комментирует его выполнение. Это позволяет лучше запомнить совокупность составляющих элементов навыка.

Кроме того, в ряде случаев применяется методика «обучился сам – обучи коллегу». С помощью подготовленных на основании реальных клинических случаев сценариев создается клиническое окружение с высоким уровнем достоверности: реанимационная палата или операционная, современное техническое оснащение, соответствие уровня работы симулятора клинической задаче. В полном объеме моделируется выполнение всех манипуляций (вскрытие ампул, инфузионная терапия, внутрикостный доступ, алгоритм «трудный дыхательный путь», сердечно-легочная реанимация, коникотомия, катетеризация центральных вен, эпидуральная и субарахноидальная анестезия и др.). В критической ситуации внимание врача сконцентрировано на пациенте. Тем не менее

важно учитывать различные аспекты работы, в том числе правильное документирование кризисной ситуации. В условиях клинического моделирования учитывается административная структура медицинской организации. Моделируемая система обязанностей, профессиональных взаимоотношений идентична таковой в практическом здравоохранении. Это относится и к документации, регламентирующей работу специалистов и используемой врачами и медицинскими сестрами в процессе симуляционного обучения (наркозные карты, листы назначений, протоколы гемотрансфузий и др.). Занятия в симуляционном центре проводятся малыми группами. При обучении применяется соотношение инструктор – курсант (от 1: 2 до 1: 4). При использовании тщательно разработанных сценариев работа может проводиться командой без участия педагога-инструктора в рамках самостоятельного обучения в присутствии вспомогательного технического персонала (техников-программистов).

Достаточный штат инструкторов позволяет решить за короткий период времени многие задачи – от освоения новых навыков до объединения различных специалистов для разрешения кризисной ситуации, когда каждый выполняет свои действия, успешно скооперировав их с членами команды. Во время симуляционной работы обучающиеся должны самостоятельно видеть возникающие проблемы, предполагать сценарий развития ситуации, находить решения, со сменой клинической обстановки ставить перед собой новые цели. Функции координатора в этих условиях может выполнять член команды обучающихся. Инструктор соблюдает принцип «экстерриториальности» и ведет

дистанционное наблюдение из отдельного помещения. Сразу по завершении сценария проводится подробное обсуждение клинической ситуации, при этом анализ своих действий осуществляет каждый обучающийся. В условиях работы специалистов различных специальностей (акушеры, анестезиологи-реаниматологи, неонатологи) оценивается их взаимодействие. Итогом являются обсуждение проблем клинической практики, выявление и коррекция слабых сторон практической подготовки. Аттестация обучающихся проводится ответственным за их обучение преподавателем по каждому изучаемому практическому навыку. Тест считается сданным успешно и по данному навыку выставляется оценка «Зачтено», если обучающийся выполнил его с результатом 70% и более. При аттестационном выполнении практического навыка преподаватель не может задавать вопросы и комментировать действия экзаменуемого. Исключением являются те случаи, когда обучающийся совершил грубую ошибку, которая исключает возможность правильного выполнения навыка. В этом случае аттестация по данному навыку прекращается и аттестуемому выставляется незачетная оценка. При этом обучающийся не лишается возможности аттестоваться по другим практическим навыкам, если это предусмотрено программой аттестации. Несданные практические навыки

подлежат повторной аттестации после дополнительной подготовки. Ежегодно на кафедре в рамках сертификационных циклов обучается около 100 врачей анестезиологов-реаниматологов. Тестирование обучающихся в симуляционном центре является частью сертификационного экзамена. Таким образом, накопленный опыт показал, что СО позволяет повысить качество профессиональной подготовки врачей анестезиологов-реаниматологов, в том числе и за счет усиления мотивации курсантов в достижении конечного результата обучения. Внедрение СО по оказанию медицинской помощи пациентам в критическом состоянии дает возможность не только объективно оценивать исходный уровень профессиональной подготовки врачей, но и его динамику в процессе обучения, тем самым определяя качество организации учебного процесса на кафедре. Ожидаемым результатом перехода на данную практико-ориентированную систему обучения является значительное снижение риска профессиональных ошибок, обусловленных человеческим фактором, и повышение безопасности пациентов. Одной из задач ближайшего времени видится необходимость объективной оценки роли симуляционного образования в повышении качества оказания реанимационной помощи в клинике.

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*Каюмов Т.Х.
Андижанский институт сельского
хозяйства и агротехнологий*

ЭНЕРГЕТИЧЕСКИЕ ЗАТРАТЫ СИСТЕМЫ ПЕРЕРАБОТКИ ОТХОДОВ МЕТАНОВЫМ СБРАЖИВАНИЕМ

Аннотация. В статье приведены анализ системы переработки отходов метанового сбраживания. Показано расходы энергии по действующим системам биогазовых установки мира. Проведено исследование в удельный расход энергии на перемешивание навоза в метантенке. Дано советы к повышению интенсивности теплообмена, по одновременно увеличивать работа способность системы и сберечь затраты энергии на перемешивание.

Ключевые слова: биогаз, утилизация, переработка отходов, биореактор, метантенк, биомасса, теплоизоляция, мезофиль, психрофиль, термофиль.

*Kayumov T.Kh.
Andijan Institute of Agriculture and Agrotechnology*

ENERGY COSTS OF METHANE FERMENTATION WASTE TREATMENT SYSTEM

Abstract. The article provides an analysis of the methane digestion waste processing system. The energy consumption of existing biogas systems in the world is shown. A study was conducted into the specific energy consumption for mixing manure in a digester. Advice is given to increase the intensity of heat transfer, while simultaneously increasing the work capacity of the system and saving energy costs for mixing.

Key words: biogas, recycling, waste processing, bioreactor, digester, biomass, thermal insulation, mesophile, psychrophile, thermophile.

Введение. Расчеты показывают, что при переработке жидких стоков животноводческих, птицеводческих ферм и малых фермерских хозяйства, а также органических отходов пищевых производства на биогаз ежегодно можно получать в три раза больше энергии, чем производят атомные электростанции страны. С проблемой утилизации отходов тесно смыкается другая - все более обостряющаяся - охрана окружающей среды, которая также требует интенсивной и рациональной переработки отходов животноводства. Концентрация птицеводчество и животноводства, как известно, связана с проблемой утилизации отходов ферм. Современная биотехнология предусматривает любые превращения субстрата в кормовой

продукт и обратно. Целесообразность осуществления таких процессов определяют главным образом санитарно-эпидемиологические и в меньшей мере технические факторы.

В последние годы разработаны и внедряются в хозяйствах биореакторы нового поколения. Ускорение процесса биохимических превращений достигается в них за счет подготовки исходно загружаемой биомассы и интенсивного отвода газообразных продуктов при пониженном давлении.

Объект исследований. В существующих биогазовых установках процесс метанового сбраживания является энергоемким. На его поддержание расходуется значительная часть выделяемого биогаза, который может быть использован как товарный. Энергия при этом затрачивается:

- на измельчение и перекачивание биомассы (навоза);
- на подогрев вновь загружаемой биомассы и компенсацию теплотерь в окружающую среду с целью поддержания необходимой температуры биомассы в процессе ее сбраживания;
- на перемешивание биомассы.

Из анализа литературных источников следует, что расход энергии на измельчение и перекачивание биомассы, а также теплотери через поверхность метантенка в окружающую среду, зависящие от применяемой теплоизоляции составляют незначительную часть от общих затрат энергии (до 7%).

Термофильный режим сбраживания, который в последнее время получил наибольшее распространение, обуславливает более высокую скорость распада органического вещества, более высокий выход биогаза и более высокую степень обеззараживания. Вместе с тем, сбраживание отходов в термофильном режиме температур, некоторые исследователи считают неэкономичным из-за высокой потребности в энергии и существующего представления о нестабильности эксплуатации метантенков при высоких температурах.

Сравнительно быстро обновляемая биомасса в объеме метантенка обычно требует большого количества затрат энергии на поддержание теплового режима брожения.

Вайсом с соавторами установлено, что при 60° С выход метана (СН₄) в 2,5 раза больше, чем при 37°С. При этом время пребывания биомассы в метантенке существенно сокращается, Пфедфер наблюдал четырехкратное увеличение скорости процесса при 60°С по сравнению с таковой при 35°С для культур, использующих домашние отходы.

Термофильный режим характеризуется также более высокой технико-экономической эффективностью по сравнению с мезофильным и психрофильным режимами. В большинстве существующих установок на

ход теплоты, на нагрев биомассы, поступающей в метантенк, составляет значительную часть затрачиваемой энергии на переработку биомассы.

Данные по расходу энергии в биогазовых установках в странах мира является ниже следующим:

«НИИКОМЖ» (Россия) - ёмкость метантека 250 метр³, рабочие температура процесса 40 °С. Расход энергии на перемешивание навоза, 6,8 % от общего расхода теплоты и расход энергии на нагрев, вновь загружаемого навоза в 80,32 % от общего расхода теплоты. Расход энергии на компенсацию тепловых потерь в 12,81% от общего расхода теплоты.

Из вышесказанных анализ показывает затраты энергии в биогазовая установка, П.В.Богданов в своей работе приводит данные по биогазовой установке Пярнуской межколхозной свинофермы для мезофильного режима брожения. Из этой же выводов видно, что основная часть затрат энергии (более 73%) приходится на подогрев навоза до температуры сбраживания для термофильного режима этот показатель имеет еще большее значение.

Исследователи считают, что расчет теплового баланса возможен, если в каждом конкретном случае, для установки определенной конструкции и размеров, а также для определенного вида навоза (КРС, свиной, овечий и т.п.) будут известны подача и влажность навоза, состав биогаза и количество теплоты, выделяемой при сгорании биогаза.

Для выбора, обоснования и расчета тепловых аппаратов, входящих в предлагаемую технологию переработки навоза и теплового баланса линии в целом необходимо знать основные теплофизические характеристики сбраживаемого навоза (температуропроводность α ; вязкость μ ; ρ плотность; теплоемкость °С), зависимости, характеризующие теплоотдачу на границе "сбраживаемый навоз - ограждающая поверхность установки". Эти показатели в свою очередь зависят от температурного режима брожения.

Таблица 1

**Удельный затраты энергии на работу биогазовая установка
Пярнуской межколхозной свинофермы**

Виды затрат	Удельный расход энергии навоза, МД ж/м³	Доля затрат, %
Подогрев навоза	151,91	73,7
Теплопотери метантенка в окружающую среду	9,79	4,7
Эквивалентный расход энергии на электропривод (перекачиваний, перемешивание и т.п.)	29,27	14,2
Внутрицеховые нужды	15,30	7,4
Всего:	206,27	100%

Плотность сброживаемого навоза с увеличением содержания в нем сухого вещества в отличие от исходного навоза увеличивается. Минимального значения данный показатель достигает при температуре, характерной для термофильного режима сброживания. При такой температуре идет интенсивный распад беззольного вещества. Выделяющийся газ не успевает прорываться сквозь слой навоза, скапливается в нем, что приводит к значительному увеличению первоначального объема.

Динамическая вязкость сброживаемого навоза с увеличением его влажности от 86 до 98% и температуры с 15 до 70°C уменьшается соответственно с 1,4 до 0,008 Па с, что приводит к уменьшению затрат на перемешивание навоза в биогазовой установке.

Проведенные рядом авторов лабораторные и производственные опыты показали, что перемешивание навоза в метантенке необходимо для получения максимального количества биогаза. С другой стороны, ряд авторов считает, что с микробиологической точки зрения интенсивное перемешивание в метантенке не дает никаких преимуществ.

Относительный интервал длительности перемешивания варьировался от 6 до 100% и большей частью составлял менее 20%, что свидетельствует в пользу коротких интервалов перемешивания.

Исходя из этих интервалов перемешивания (4,8 часов/сутки), и расходов энергии на перемешивание, сброживаемого навоза в метантенке необходимо затрачивать энергию 0,085-0,34 МДж/м³ навоза сутки.

Отсюда удельный расход энергии (Дж/м³ навоза) на перемешивание навоза в метантенке определяется по формуле:

$$E = (0,085 + 0,34) \times \tau_{сбр}, (1)$$

где

$\tau_{сбр}$ - время сброживания, сутки.

Проведенный анализ затрат энергии на поддержание оптимального режима перемешивания навоза в установке позволяет сделать вывод о наибольшей приемлемости способа перемешивания путем многоуровневого поршневого движения биомассы. Большинство авторов считают, что перемешиваемая биомасса в реакторе должна иметь ограниченную скорость (до 0,5 м/с), так как большая скорость движения субстрата с микробиологической точки зрения невыгодна. Кроме того, она хотя и приводит к повышению интенсивности теплообмена, но одновременно увеличивает и затраты энергии на перемешивание. Убедиться в этом легко, проанализировав известные уравнения теплоотдачи и гидравлических сопротивлений при турбулентном движении жидкости в трубном теплообменнике

$$N_u = 0,021R_e^{0,8} \times P_z^{0,43} (2)$$

$$\Delta P = \frac{\xi_{mp} \ell}{d} + \frac{\sum \xi_m \rho \omega^2}{2} \quad (3)$$

Где, N_u - критерий Нуссельта; Re - критерий Рейнольдова; P_2 - критерий Прандтля; ΔP - гидравлическое сопротивление теплообменного аппарата на стороне данной рабочей среды; ω - скорость рабочей среды; ρ - плотность среды; ℓ - длина канала; d - диаметр канала; ξ - коэффициент трения;

$\sum \xi_m$ - сумма коэффициентов местных сопротивлений. Из (2) и (3) находим

$$\alpha = A1 \omega^{0,8},$$

$$\Delta P = A2 \omega^{1,75}$$

где: $A1$ и $A2$ коэффициенты пропорциональности.

Из полученных соотношений видно, что увеличение скорости потока в два раза обеспечивает рост теплоотдачи в 1,75 раза, а рост гидравлического сопротивления в этом случае происходит до 3,4 раза.

Вывод. Из вышеизложенных соображений следует, что нельзя рассматривать интенсификацию процесса изолированно от производимых при этом затрат энергии.

Таким образом, проведенный анализ затрат энергии на системы обеспечения в процесс метанового сбраживания позволит сделать вывод о том, что главное внимание при поиске путей снижения энергоемкости метанового сбраживания следует уделять системам рекуперации теплоты сброженного навоза и перемешивания биомассы в биореакторах. При этом, учитывая интенсивный способ обработки биомассы в термофильном режиме, целесообразно выбирать рекуператоры интенсивного действия. Кроме того, выбираемые аппараты должны удовлетворять требованиям, предъявляемым к установкам, работающим с неньютоновским характером жидкости, к числу которых относится биомасса.

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*Каюмова Н.А., доктор педагогических наук
профессор
заведующий кафедрой «Алгоритмы и технологии программирования»
Каршинский государственный университет*

ИНТЕГРАТИВНЫЕ ПОДХОДЫ В ОБРАЗОВАНИИ ИНФОРМАТИКИ

Аннотация. Одна из тенденций развития педагогических технологий состоит в интеграции и адаптации возможностей современных информационных технологий для решения актуальных задач профессионального образования, выпускающего специалистов, готовых осуществлять профессиональную деятельность в условиях функционирования высокотехнологичной информационной образовательной среды. В исследовании рассмотрены основные положения методики обучения теоретическим дисциплинам с использованием современных цифровых технологий как в контексте сложившейся методологии, так и в качестве фактора её развития, порождающего глубинные изменения и информационно-технологического мышления педагога, включающего осознанную необходимость освоения профессионально ориентированных знаний в области информатики и её раздела – педагогической информатики.

Ключевые слова: информатика, педагогическое образование, высокотехнологичная образовательная информационная среда, педагогика, педагогические компьютерные технологии, информационные технологии в образовании.

*Kayumova N.A., doctor of pedagogical sciences
professor
Head of the Department of Algorithms and Programming Technologies
Karshi State University*

INTEGRATIVE APPROACHES IN COMPUTER SCIENCE EDUCATION

Abstract. One of the trends in the development of pedagogical technologies is the integration and adaptation of the capabilities of modern information technologies to solve current problems of vocational education, producing specialists who are ready to carry out professional activities in the context of the functioning of a high-tech information educational environment. The study examines the main provisions of the methodology for teaching theoretical disciplines using modern digital technologies both in the context of the existing methodology and as a factor in its development, generating profound changes in

the information and technological thinking of the teacher, including the conscious need to master professionally oriented knowledge in the field of computer science and its section – pedagogical informatics.

Key words: computer science, teacher education, high-tech educational information environment, pedagogy, pedagogical computer technologies, information technologies in education.

Построение системы высшего профессионально-педагогического образования имеет свои особенности. В отличие от других вузов выпускникам педагогических университетов необходимо не только освоить определенную предметную область, но и быть готовым к организации обучающей, развивающей и воспитывающей деятельности учащихся. Причем профессионально-предметные компетенции не обеспечивают профессионально-педагогических компетенций. Поэтому обучение будущих учителей должно иметь профессионально-педагогическую направленность, которая предполагает неразрывное сочетание педагогических и предметных аспектов образовательной деятельности студента, овладение предметным содержанием в контексте преподавательской деятельности. Обучение студента в рамках бакалавриата непедагогического вуза, а затем по магистерской программе педагогического образования приводит к снижению качества их профессионально-педагогической подготовки.

Качественная подготовка будущих учителей-предметников, в том числе и учителей информатики, возможна в педагогических университетах, обеспеченных соответствующей образовательной средой для педагогического образования разного уровня и различной направленности.

Следует отметить, что подготовка будущих учителей информатики за четыре года по программе бакалавриата вместо пяти лет в рамках специалитета привела к сокращению профессионально-педагогической подготовки студентов несмотря на значительное увеличение осваиваемого теоретического содержания и технологического обеспечения необходимостью предпрофессиональной подготовки школьников в ИТ области. Поэтому возможно или повышать уровень подготовки выпускника бакалавриата в процессе профессионально-педагогической деятельности благодаря тьюторскому сопровождению, или организовать подготовку бакалавра и магистра педагогического образования по информатике другим способом.

Развитие многоуровневого педагогического образования по информатике предлагается связать с переосмыслением функций бакалавров и магистров, а также с реализацией интегративного подхода к подготовке студентов в контексте фундаментализации и профессионально-педагогической направленности их образования. Интегративный подход позволит обеспечить согласованность подготовки студентов на уровне

бакалавриата и магистратуры, установить взаимопроникновение межпредметных компетенций в области дидактики и информатики, выделить внутри-предметные системообразующие элементы информатики в таких самостоятельных направлениях как программирование, большие данные, робототехника, моделирование, технологии связи, информационная безопасность, объединить возможности научных, школьных и производственных площадок для проведения научных исследований. Такая интеграция дает возможность повысить качество подготовки будущих учителей информатики к предпрофессиональному обучению в области информатики на уровне среднего общего образования.

Рассмотрим основные особенности реализации интегративного подхода к подготовке будущих учителей информатики для осуществления профессионально-педагогической деятельности в ИТ-классах.

Во-первых, программу бакалавриата предлагается нацелить на подготовку учителей информатики для основного общего образования. Во-вторых, целесообразно предусмотреть для программы бакалавриата определенную специализацию, например обучение учащихся основной школы в области робототехники или искусственного интеллекта.

В-третьих, программа магистратуры нацелена на подготовку выпускника бакалавриата педагогического образования к обучению информатике учащихся старшей школы на базовом уровне. В-четвёртых, в зависимости от направленности магистерских программ предлагается осуществлять подготовку, которая позволит обучать информатике не только на базовом уровне учащихся в классах разных профилей (например, социально-экономического), но и на углубленном уровне, в том числе, обучение информатике в классах информационно-технологического профиля. В-пятых, внутри магистерских программ предлагается сосредоточиться на определенной специализации. Например, для предпрофессионального обучения информатике в ИТ-классах, интегрировав по два школьных направления, можно предложить три специализации: технологии связи и информационная безопасность; программирование и большие данные; робототехника, моделирование и прото-типирование (рис. 1).



Рис. 1. Многоуровневое педагогическое образование в ИТ-области

Рассмотрим интегративный подход к подготовке магистров педагогического образования в ИТ-области в контексте фундаментализации и профессионально-педагогической направленности образования. Первый уровень магистратуры (рис. 2) предлагает инвариантные модули подготовки, которые необходимо освоить учителю информатики ИТ-классов любого направления. Второй уровень магистратуры (рис. 3) кроме инвариантных модулей подготовки предлагает к освоению модули определенной специализации (программирование и большие данные; технологии связи и информационная безопасность; робототехника, моделирование и прото-типирование).

На первом году обучения студент магистратуры необходимо заложить основы научно-исследовательской деятельности, рассмотреть теоретико-методологические вопросы в контексте обучения старшеклассников информатике, формировать представление о теории и методике обучения информатике на базовом и углубленном уровне, раскрыть фундаментальные основы информатики для обучения учащихся ИТ-классов, дать представление о каждом направлении специализации, организовать прохождение производственных практик в рамках одного из направлений специализации. Это позволит сформировать теоретические и методические фундаментальные основы предпрофессионального обучения информатике на уровне среднего общего образования, осуществить выбор

дальнейшей траектории образования, определить тему научно-исследовательской работы.

МАГИСТРАТУРА <i>первый год</i>	
Методология и методы научного исследования	Избранные вопросы профильного курса информатики
Современные проблемы науки и образования	Математические основы информатики
Инновационные процессы в образовании	Информационные и телекоммуникационные технологии
Теоретико-методологические вопросы методики обучения информатике в средней школе	Введение в информационную безопасность Социально-правовые основы информационной безопасности
Методика обучения информатике на базовом и углубленном уровне	Введение в образовательную робототехнику и моделирование
Информационные технологии в обучении	Искусственный интеллект в образовании
Проектирование занятий с использованием ИТ	Программирование на языках высокого уровня

Рис. 2. Первый уровень магистратуры педагогического образования в ИТ-области

МАГИСТРАТУРА <i>второй год</i>		
Методика обучения информатике на углубленном и профильном уровне		
Методика подготовки к Единому государственному экзамену		
Внеурочная и проектная деятельность по информатике		
<i>Робототехника, моделирование и прототипирование</i>	<i>Программирование и большие данные</i>	<i>Технологии связи и информационная безопасность</i>
Моделирование и прототипирование	Алгоритмы и структуры данных	Телекоммуникационные сети
Основы трехмерного сканирования	Основы обработки больших данных	Безопасность вычислительных сетей
Аддитивные технологии	Методы машинного обучения	Современные сетевые сервисы
Основы мехатроники и робототехники	Олимпиадные задачи по программированию	Элементы сетевой безопасности
Программирование в робототехнике	Проектировании и создании АИС	Математические основы криптографии
Олимпиадные задачи по робототехнике	Олимпиадные задачи по анализу данных	Олимпиадные задачи по информационной безопасности
Технологии Индустрии 4.0	Разработка нейросетей	Средства защиты информации
Облачные технологии в робототехнике	Взаимодействие с системами управления БД	Безопасность <u>мультиагентных систем</u>

Рис. 2. Второй уровень магистратуры педагогического образования в ИТ-области

На втором году обучения студент магистратуры получает дальнейшее формирование представления о теории и методике обучения информатике на базовом и углубленном уровне, овладением технологии подготовки старшеклассников к итоговой аттестации, углубление теоретической подготовки в соответствии с выбранной специализацией, получение опыта профессионально-педагогической деятельности с учащимися определенных ИТ-классов и проведение научного исследования по теме выпускной квалификационной работы.

Таким образом, предлагаемый интегративный подход к многоуровневой педагогической подготовке в области информатики связан с переосмыслением функций бакалавров и магистров, согласованностью и вариативностью подготовки по программам бакалавриата и магистратуры, обновлением содержания и технологий обучения информатике старшеклассников, взаимопроникновением компетенций в области дидактики и информатики, выделением инвариантной составляющей предметной и методической подготовки студентов, объединением

возможностей научных, школьных и производственных площадок, с развитием учебных и производственных практик в определенном направлении педагогического образования в ИТ-области.

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Кеулимжаев Б.К.
студент направления «Эконометрика»
Каракалпакский государственный университет

ЗАРУБЕЖНЫЙ ОПЫТ ЭКОНОМИЧЕСКИХ КЛАСТЕРОВ

Аннотация. В статье рассматривается история происхождения экономических кластеров в развитых странах. А также предложены вопросы внедрения методов кластеризации в экономику Республики Узбекистан.

Ключевые слова: кластер, технополис, кластеризация, трансферы, промышленные территориально-производственные объединения.

Keulimzhaev B.K.
student of Econometrics
Karakalpak State University

FOREIGN EXPERIENCE OF ECONOMIC CLUSTERS

Abstract. The article discusses the history of the origin of economic clusters in developed countries. The issues of introducing clustering methods into the economy of the Republic of Uzbekistan are also proposed.

Keywords: cluster, technopolis, clustering, transfers, industrial territorial and production associations.

Передовые страны, достигшие успехов в усилении своей конкурентоспособности, за последние два десятилетия, как правило, делали акцент на инновационность производства и создание инновационных сетей. Создание эффективных инновационных сетей практически трансформировалась в концепцию формирования конкурентоспособных промышленных кластеров. Такая концепция стала основой национальной промышленной политики и ведущих инициатив в области взаимодействия государственного и частного капиталов.

Обостренная конкуренция фирм кластера на внутреннем рынке и за рубежом выливается в сотрудничество и совместную экспансию. Фирмы кластера благодаря тесному взаимодействию становятся носителями одной и той же коммерческой идеи, обеспечивающей преимущественное положение на внутренних и внешних рынках.

Однако, тесное сотрудничество членов кластера несет в себе определенную опасность утраты самостоятельности и способности к активному поведению на рынке, сопровождаемых ослаблением темпов освоения новых товаров, технологий и услуг. Во избежание этого используются кластерные стратегии, которые строятся на центрах деловой

активности, уже доказавших свою силу и конкурентоспособность на мировом рынке. При этом усилия концентрируются на поддержке существующих кластеров, создании новых кластеров и сетей компаний, ранее не контактировавших между собой. В наиболее явной форме осуществляют подобную стратегию такие страны, как Бельгия, Великобритания, Германия, Дания, Италия, Канада, Нидерланды. Финляндия, Франция и др. Например, в Германии и Великобритании действуют программы создания биотехнологических кластеров на базе регионального размещения фирм. В Норвегии правительство стимулирует создание кластеров, укрепляя сотрудничество между фирмами, специализирующимися в сфере морских промыслов. В Финляндии развит лесопромышленный кластер, куда входит производство древесины и древесных продуктов, бумаги, мебели, полиграфического и связанного с ним оборудования. Тесное взаимодействие фирм финского лесопромышленного кластера в распространении знаний обеспечивает им конкурентные преимущества перед основными торговыми соперниками, благодаря чему Финляндия, имея 0,5% мировых запасов древесины, обеспечивает 10% мирового экспорта продуктов лесопереработки, в том числе 25% качественной бумаги.

В Японии еще в 1983 г. была принята концепция развития технополисов и последующий опыт показал, что темпы их экономического роста значительно превышают средние показатели по стране. Сначала было создано более 100 технопарков, обеспечивших образование исследовательских комплексов, которые способствовали быстрому развитию деловых и научно-технических связей. Технопарки становились центрами взаимодействия образования и науки с промышленностью при активной государственной поддержке на различных уровнях власти и являясь основой создания будущих кластеров. В 1998 г. были организованы региональные центры консолидации усилий промышленности, университетов и правительства, направленных на поиск наиболее привлекательных проектов высокой социально-экономической значимости для развития регионов или отдельных территорий. Эти центры также занимались вопросами координации и развития совместных исследований для производства конкурентоспособной продукции. осуществляли техническое консультирование, занимались обучением и повышением квалификации предпринимателей и специалистов. Кроме того, большое внимание уделялось организации деловых встреч всех заинтересованных сторон для создания различных объединений и кластеров, одновременно решались вопросы трансфера технологий с соблюдением патентных, лицензионных и авторских прав. Процесс создания кластеров в японском варианте, первоначально основан на создании системы субподрядных и субконтрактных связей между рядом крупных и сетью средних и малых предприятий. Типичный крупный японский кластер состоит из одного

относительно большого головного предприятия, пользующегося услугами двух или трех уровней субподрядных фирм, расположенных обычно в географической близости к нему. Вместо вертикальной интеграции, самостоятельные субподрядчики первого уровня связаны с головным предприятием долгосрочными договорами. Аналогичным образом установлены связи поставщиков первого и последующих уровней. Например, автопромышленный кластер фирмы «Тойота» имеет многоступенчатую сеть из 122 прямых поставщиков и почти 36 тысяч субподрядных малых и средних предприятий. Субподрядчики всех звеньев образуют своего рода клуб с высокими рыночными барьерами для новичков и иностранных конкурентов. Это в значительной мере исключают потенциальную конкуренцию, свойственную свободному рынку, однако чисто ценовые соображения при закупке компонентов способствуют оптимизации производства.

Следует заметить, что автомобильная индустрия, соединяя в автомобилях множество производителей и доводя их до конечного потребителя, производит мощное мультипликативное воздействие на экономику. Поэтому в регионах, где складывается высокая концентрация автомобильных и смежных производств, возникают предпосылки для формирования кластеров. В настоящее время на территории Европы действует около 30 автомобильных кластеров. Если до недавнего времени промышленные территориально-производственные объединения были феноменом наиболее развитых экономик, то в последние годы наблюдается зарождение автомобильных кластеров в развивающихся странах - от Восточной Европы и до Китая.

По их данным, к настоящему времени драйвером экономического роста – кластеризацией охвачено порядка 50% экономик ведущих стран. Лидером по количеству кластеров (380), которые объединяют более половины предприятий и производят 60% ВВП, являются США. В Италии в 206 промышленных кластерах работают 43% всех занятых в отрасли. Предприятия, входящие в кластеры, обеспечивают более 30% экспорта страны. В Китае существует более 60 специальных кластеров, которые объединяют около 30 тыс. предприятий с 3,5 млн сотрудников, ими реализуется продукции на сумму примерно 200 млрд долларов в год.

В Узбекистане в 2018-2022 годах было создано 506 кластеров. За январь-декабрь 2022 года ими произведено промышленной продукции на сумму 28,7 трлн сумов. За последние пять лет объем продукции увеличился в 32 раза.

Объем инвестиций, направленных на развития кластеров, за 2018-2022 годы увеличился в 5,2 раза, а количество занятых – в 2,5 раза. Доля кластеров в общем объеме экспорта промышленной продукции в 2019 году составила 5%, а в 2022 году достигла 11,4%.

В то же время производительность труда в системе кластеров в период с 2018 по 2022 год увеличилась в 12,9 раза, коэффициент рентабельности инвестиций (ARR) вырос с 1,0 до 1,4.

«Проведенный анализ свидетельствует о высокой эффективности процесса кластеризации промышленности. Расчеты показали, что в обрабатывающем секторе промышленности интегральный индекс мощности кластера (Pc) составляет 0,201. Это показывает наличие значительного потенциала роста, возможностей дополнительного привлечения инвестиций, включая иностранные, а также субъектов предпринимательства, с повышением уровня кластеризации отраслей экономики», – говорится в сообщении.

Опыт ведущих стран показывают, что кластеризация отрасли приводит к повышению эффективности и росту производительности труда в экономике. В отраслях промышленности кластеризация позволяет создать полную производственную цепочку от сырья до готовой продукции, а также сконцентрировать такие отрасли, как наука, торговля, логистика в одной системе.

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Кодирова Е.В.
Ташкентский государственный
транспортный университет

ЦИФРОВАЯ ГРАМОТНОСТЬ: ВАЖНЫЕ НАВЫКИ ДЛЯ УСПЕШНОЙ КАРЬЕРЫ В СОВРЕМЕННОМ МИРЕ

Аннотация. В современном информационном обществе цифровая трансформация значительно изменила требования к профессиональным навыкам. Цифровая грамотность стала неотъемлемой частью успеха в современной профессиональной сфере, и, следовательно, тема статьи является крайне актуальной. В данной статье рассмотрены ключевые аспекты цифровой грамотности и обоснована их важность для современной профессиональной сферы. Проанализированы требования рынка труда к цифровым навыкам и их влияние на карьерные возможности. Также в статье исследована связь между уровнем цифровой грамотности и профессиональной успешностью. В заключении статьи предложены рекомендации по развитию цифровой грамотности и её роли в профессиональном развитии.

Ключевые слова: компьютеры, программное обеспечение, Цифровая грамотность, кибербезопасность, цифровая безопасность, интернет-грамотность, цифровая коммуникация, защита данных, цифровая экономика.

Kodirova E.V.
Tashkent State Transport University

DIGITAL LITERACY: ESSENTIAL SKILLS FOR A SUCCESSFUL CAREER IN TODAY'S WORLD

Abstract. In the modern information society, digital transformation has significantly changed the requirements for professional skills. Digital literacy has become an integral part of success in the modern professional sphere, and, therefore, the topic of the article is extremely relevant. This article examines the key aspects of digital literacy and substantiates their importance for the modern professional sphere. The labor market requirements for digital skills and their impact on career opportunities are analyzed. The article also explores the connection between the level of digital literacy and professional success. The article concludes with recommendations for the development of digital literacy and its role in professional development.

Keywords: Computers, software, Digital literacy, cybersecurity, digital security, Internet literacy, digital communication, data protection, digital economy.

Цифровая грамотность представляет собой набор знаний, навыков и умений, необходимых для эффективного использования цифровых технологий и ресурсов интернета. В современном мире, где цифровые технологии играют ключевую роль во многих аспектах жизни, включая бизнес, образование, здравоохранение, коммуникацию и развлечения, цифровая грамотность становится неотъемлемой составляющей успешной карьеры.

Важность цифровой грамотности для современной карьеры проявляется в нескольких аспектах:

1. Требования рынка труда: Сегодня большинство вакансий требуют от соискателей уверенного владения цифровыми инструментами. Работодатели ценят способность эффективно использовать информационные технологии, а также готовность к обучению новым цифровым навыкам.

2. Профессиональное развитие: Цифровая грамотность важна для повышения профессиональной эффективности. От уверенного владения офисными программами и облачными сервисами до понимания базовых принципов кибербезопасности, цифровая грамотность позволяет работникам быть более продуктивными и адаптивными к изменениям в сфере технологий.

3. Карьерные возможности: Люди с высоким уровнем цифровой грамотности более конкурентоспособны на рынке труда. Уверенное владение цифровыми навыками может открывать возможности для роста карьеры, включая переход на более высокооплачиваемые и перспективные позиции.

4. Предпринимательство и инновации: Для предпринимателей и инноваторов цифровая грамотность является ключевым фактором успеха. Она позволяет эффективно использовать цифровые инструменты для развития бизнеса, достижения целей и создания инновационных продуктов и услуг.

В целом, цифровая грамотность не только открывает доступ к множеству возможностей в современной профессиональной сфере, но также является необходимым инструментом для адаптации к постоянно меняющемуся цифровому миру и обеспечивает успешное функционирование на современном рынке труда.

Цифровая грамотность охватывает широкий спектр навыков и умений, необходимых для эффективной работы в современной профессиональной сфере. Важность этих аспектов обусловлена рядом факторов, включая быстрое развитие технологий, рост цифровой экономики и повышение конкуренции на рынке труда.

Ключевые аспекты цифровой грамотности и их важность для современной профессиональной сферы

1. Основы работы с компьютером и программным обеспечением: Владение базовыми навыками работы с компьютером, офисными программами, а также понимание основных принципов работы с различными типами программного обеспечения становится обязательным для большинства профессиональных областей.

2. Интернет-грамотность: Умение эффективно осуществлять поиск, анализировать и интерпретировать информацию из интернета является важным навыком в сфере профессиональной деятельности в условиях информационного общества.

3. Цифровая коммуникация: Знание особенностей электронной почты, мессенджеров, социальных сетей и возможность эффективной коммуникации в цифровом пространстве становятся важными в современной коммерческой среде.

4. Цифровая безопасность: Понимание основных принципов безопасности в цифровом пространстве, защита конфиденциальной информации, а также знание методов защиты от киберугроз становятся критически важными для предотвращения кибератак и утечек данных.

5. Аналитические и критические навыки: Умение эффективно анализировать цифровую информацию, работать с большими объемами данных, принимать осознанные решения на основе цифровых данных и проводить критическую оценку информационных ресурсов.

Важность цифровой грамотности для современной профессиональной сферы обосновывается тем, что данные аспекты помогают создавать конкурентные преимущества на рынке труда, повышать производительность труда, обеспечивать эффективное взаимодействие соответствующим образом с клиентами и коллегами, а также защищать конфиденциальность и целостность данных. В итоге, цифровая грамотность становится обязательным компонентом успешной профессиональной деятельности в современной эпохе цифровой трансформации.

Требования рынка труда к цифровым навыкам и их влияние на карьерные возможности

Требования рынка труда к цифровым навыкам резко возросли в связи с тем, что современная профессиональная сфера стала все более ориентированной на цифровую экономику и технологические инновации. В текущем информационном и технологическом контексте цифровые навыки стали ключевым фактором, определяющим конкурентоспособность на рынке труда и открывающим возможности для карьерного роста. Рассмотрим основные требования рынка труда к цифровым навыкам и их воздействие на карьерные возможности:

1. Техническая экспертиза: Работодатели часто требуют у соискателей навыки работы с конкретными программными продуктами, технологиями и системами. Владение такими навыками, как программирование, аналитика

данных, управление проектами на платформах с учетом цифровых технологий, стало необходимым условием для многих вакансий.

2. Умение работы с большими объемами данных: В условиях роста объемов данных и их роли в принятии управленческих решений, кандидаты, обладающие навыками анализа данных и работы с базами данных, становятся особенно востребованными на рынке труда.

3. Цифровая коммуникация и мультимедийные навыки: Владение навыками работы с социальными сетями, умение создания мультимедийного контента, а также цифровая графика и веб-дизайн часто указываются в требованиях многих вакансий.

4. Цифровая безопасность и защита данных: В связи с угрозами кибербезопасности, работодатели все больше ценят специалистов, обладающих цифровыми навыками в области защиты данных и преодоления киберугроз.

5. Гибкость и умение обучаться: К тому же, работодатели ценят способность к обучению новым цифровым навыкам и гибкости в адаптации к изменениям в цифровом окружении.

Получение цифровых навыков может существенно повысить конкурентоспособность соискателя на рынке труда, открывая дополнительные карьерные возможности. Обладание этими навыками позволяет увеличить шансы на получение более высокооплачиваемых должностей, расширить спектр доступных вакансий и улучшить перспективы карьерного роста. В целом, цифровая грамотность и наличие цифровых навыков становятся ключевыми факторами для карьерного успеха в современной профессиональной среде.

Связь между уровнем цифровой грамотности и профессиональной
успешностью

Исследования показывают тесную связь между уровнем цифровой грамотности и профессиональной успешностью. Вот несколько ключевых аспектов этой связи, на которые указывают исследования:

1. Конкурентоспособность на рынке труда: Люди с высоким уровнем цифровой грамотности имеют больше шансов найти и удержаться на работе, особенно в сферах, где цифровые навыки являются ключевыми.

2. Уровень заработной платы: Исследования показывают, что профессионалы с высокой цифровой грамотностью могут рассчитывать на более высокую заработную плату, так как их навыки востребованы на рынке труда.

3. Профессиональное развитие: Люди с хорошей цифровой грамотностью чаще имеют возможность для профессионального развития, так как они способны быстро осваивать новые технологии и инструменты, что позволяет им быть более эффективными в своей работе.

4. **Повышение производительности:** Цифровая грамотность позволяет работникам быть более продуктивными, умело используя инструменты и ресурсы, доступные в цифровой среде.

5. **Профессиональная устойчивость:** Люди с высокой цифровой грамотностью часто более успешно адаптируются к изменениям в технологиях и процессах работы, что повышает их устойчивость в профессиональном плане.

Таким образом, уровень цифровой грамотности тесно связан с профессиональной успешностью, и в современной цифровой экономике цифровые навыки становятся всё более важными для достижения успеха в карьере.

Рекомендации по развитию цифровой грамотности и её роли в профессиональном развитии

Вот несколько рекомендаций по развитию цифровой грамотности и её роли в профессиональном развитии:

1. **Интеграция цифровой грамотности в образовательные программы:** Цифровая грамотность должна стать обязательной частью образовательной программы, начиная с начальной школы и заканчивая профессиональным образованием.

2. **Обучение взрослых:** Предоставление доступа к обучению цифровой грамотности для взрослых, включая программы переподготовки и курсы, чтобы поддержать их профессиональное развитие.

3. **Профессиональные курсы по цифровой грамотности:** Работодатели могут предоставлять финансирование или доступ к профессиональным курсам по развитию цифровых навыков для своих сотрудников.

4. **Поддержка отраслевых стандартов:** Развитие отраслевых стандартов для цифровой грамотности и включение их в требования к вакансиям и профессиональному развитию.

5. **Обучение на рабочем месте:** Предоставление возможностей для обучения и развития цифровых навыков на рабочем месте, включая доступ к онлайн-ресурсам и обучающим материалам.

Цифровая грамотность играет важную роль в профессиональном развитии, поскольку она помогает работникам успешно адаптироваться к технологическим изменениям, повышает их конкурентоспособность и открывает доступ к новым возможностям в карьере. Поэтому развитие цифровой грамотности является важной частью стратегии профессионального развития как на индивидуальном, так и на организационном уровне.

Заключение:

Цифровая грамотность имеет важное значение для успешной карьеры в современном мире.

Основные аргументы в пользу этого вывода:

1. Развитие цифровой грамотности позволяет человеку продуктивно трудиться и реализовывать свои цели в рамках цифрового общества.

2. Важность формирования цифровой грамотности на всех уровнях образования подчеркивает необходимость освоения этих навыков для успешного включения в современное социально-экономическое пространство.

3. Цифровая грамотность рассматривается как базовая компетенция, необходимая для достижения успеха в современной профессиональной сфере.

4. Владение цифровыми технологиями и навыки работы с информацией на различных уровнях являются важными для достижения профессионального роста и успешной карьеры.

Таким образом, современный мир предъявляет высокие требования к уровню цифровой грамотности, и она играет важную роль для успешной карьеры людей в цифровом обществе.

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*Кудайбергенова У.К., доктор философии
по биологическим наукам (PhD)
Кудайбергенова Г.Р.
студент 1 курса магистратуры
специальность «Методика обучения точных
и естественных наук (биология)»
Нукусский государственный педагогический
институт им.Ажинияза
Республика Узбекистан*

МЕТОДЫ ОЦЕНКИ СТЕПЕНИ ЗАГРЯЗНЕНИЯ ПОЧВЫ

Аннотация. В статье рассмотрены основные методы оценки загрязненности почвы. Загрязнение почв — это вид деградации почв который происходит по воздействию антропогенного фактора. При деградации почв содержание химических веществ превышает природный региональный фоновый уровень.

Ключевые слова: предельно допустимая концентрация (ПДК), Ориентировочно- допустимые концентрация (ОДК), плодородие, деградация, биологическая активность почвы, процесс, самоочищение.

*Kudaibergenova U.K., Doctor of Philosophy
in Biological Sciences (PhD)
Kudaibergenova G.R.
1st year master's student
specialty "Methods of teaching exact and natural sciences (biology)"
Nukus State Pedagogical Institute named after Ajiniyaz
The Republic of Uzbekistan*

METHODS FOR ASSESSING THE DEGREE OF SOIL POLLUTION

Annotation. The article discusses the main methods for assessing soil contamination. Soil pollution is a type of soil degradation that occurs under the influence of anthropogenic factors. When soils degrade, the content of chemicals exceeds the natural regional background level.

Key words: maximum permissible concentration (MAC), Approximate permissible concentration (APC), fertility, degradation, biological activity of soil, process, self-purification.

Почва – особое природное образование, обладающие рядом свойств, присущих живой и неживой природе, сформировавшееся в результате длительного преобразования поверхностных слоев литосферы под

совместным взаимообусловленным взаимодействием гидросферы, атмосферы, живых и мертвых организмов. Почвенный покров – важнейшее природное образование. Его роль в жизни общества определяется тем, что почва представляет собой источник продовольствия, обеспечивающий 95-97 % продовольственных ресурсов для населения планеты. Особое свойство почвенного покрова – его плодородие [4].

Загрязнение почвы в настоящее время – самая глобальная проблема всего человечества и вызывает тревогу. Загрязнение почвы носит глобальный характер и может привести к непоправимым последствиям. Разрушение плодородного слоя нарушает природный баланс, обмен веществ в природе [5].

Загрязнение почв — это вид деградации почв который происходит по воздействию антропогенного фактора. При деградации почв содержание химических веществ превышает природный региональный фоновый уровень.

Загрязняющие вещества или загрязнители— это вещества антропогенного происхождения, поступающие в окружающую среду в количествах, превышающих природный уровень их поступления [3].

На сегодняшний день существует много способов загрязнения почвы. Загрязнителем почвы может быть любой физический агент, химическое вещество и биологический вид, попадающие в окружающую среду или возникающие в ней в количествах, превышающих свою обычную концентрацию. Основным показателем, характеризующим воздействие загрязняющих веществ на окружающую среду – предельно допустимая концентрация (ПДК). В почву попадают различные твердые и жидкие отходы промышленного производства, сельского хозяйства и коммунально-бытовых предприятий. Степень загрязнения — почвы- это отношение содержания загрязняющего вещества в почве к его ПДК. [6].

Исследования степени загрязненности проводятся несколькими методами. К основным методом степени загрязненности почвы является определение ПДК (Предельно допустимая концентрация). Метод позволяет определить какое количество химических веществ содержится в почве и сравнить их с установленными предельно допустимыми значениями.

Благодаря биологической активности и возможности к самоочищению, почва может переработать и нейтрализовать часть химических соединений. Самоочищение почв, как правило, - медленный процесс. Токсичные вещества накапливаются, что способствует постепенному изменению химического состава почв, нарушению единства геохимической среды и живых организмов. Из почвы токсические вещества могут попасть в организмы животных, людей и вызвать тяжелейшие болезни и смертельные исходы. Метод ПДК позволяет определить справится ли почва или необходимо предпринять ряд мер для обезвреживания химических соединений [8].

В основе исследования степени загрязненности почвы лежат определение ОДК (Ориентировочно- допустимые концентрации), которая определяет безопасность продуктов питания. Сравнение состава почвы с ориентировочно допустимыми концентрациями вредных веществ основано на транслокационном признаке, в результате действия которого химические вещества способны попадать из грунта в сельскохозяйственные продукты, которые могут причинить вред здоровью человека [7].

При применении метода биологического тестирования используется живые организмы (животные, растения или микроорганизмы) для определения степени содержания токсикантов в исследуемом грунте. Например, при использовании растений, применяется оценка:

- степень всхожести семян;
- длина корешков зародышевого растения;
- длина побегов.

Полученные в ходе замеров результаты сравнивают с установленной нормой. Результат сравнений показывает фитотоксические показатели почвы и степень ее загрязненности. Для определения загрязненности почвы могут применяться водоросли, микроорганизмы и дождевые черви [1].

При использовании метода биологической активности почвы определяется уровень, на котором находится биологическая активность того или иного типа почвенного покрова. Основные показатели, подлежащие фиксации:

нефтепродукты и производные;

- тяжелые металлы;
- радиоактивные элементы.

Среди показателей качества почвы для оценки важны:

- ✓ влажность;
- ✓ количество гумуса;
- ✓ кислотность;
- ✓ элементы питания;
- ✓ фанулометрический состав [2].

На основе изучения показателей применяется метод бонитировки почвы - сравнение плодородности. В процессе бонитировки формируется сравнительный показатель — балл бонитета.

Максимальный показатель, который может быть присвоен по шкале бонитета – 100 баллов. Данный метод важен для определения плодородности почв, что является важным показателем с экономической точки зрения, если почва предназначена для сельскохозяйственных работ [8].

Таким образом, использование методов оценки загрязненности почвы позволяет определить меру для обезвреживания загрязняющих веществ, определить плодородность и биологическую активность почвы.

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*Кудайбергенова У.К., доктор философии
по биологическим наукам(PhD)
Тлеумуратова Н.Ф.
студент 1 курса магистратуры
специальность «Методика обучения точных
и естественных наук (биология)»
Нукусский государственный педагогический
институт им.Ажинияза
Республика Узбекистан*

МЕТОДЫ БИОИНДИКАЦИИ ДЛЯ ОЦЕНКИ КАЧЕСТВА ВОДНОЙ СРЕДЫ

Аннотация. В статье рассматриваются методы биоиндикации для оценки качества водной среды. Метод биоиндикации основан на реакции живых организмов на загрязнение окружающей среды. При использовании метода биоиндикации необходимы индикаторные организмы — биоиндикаторы.

Ключевые слова: реакция, факторы, экосистема, метод, водоросли, беспозвоночные.

*Kudaibergenova U.K., doctor of philosophy
in biological sciences (PhD)
Tleumuratova N.F.
1st year master's student
specialty "Methods of teaching exact and natural sciences (biology)"
Nukus State Pedagogical Institute named after Azhiniyaza
The Republic of Uzbekistan*

BIOINDICATION METHODS FOR QUALITY ASSESSMENT WATER ENVIRONMENT

Annotation. The article discusses bioindication methods for assessing the quality of the aquatic environment. The bioindication method is based on the reaction of living organisms to environmental pollution. When using the bioindication method, indicator organisms—bioindicators—are needed.

Key words: reaction, factors, ecosystem, method, algae, invertebrates.

Ухудшение экологического состояния водной среды связано с одновременным воздействием нескольких факторов, то есть имеет комплексный характер. Чтобы оценить качество вод в водоеме и определить

степень участия каждого из источников загрязнений, преимущественно используют различные методы оценки.

На сегодняшний день существует много методов определения качества водных ресурсов. Это различные методы количественного химического анализа (КХА), физико-химического анализа, космического анализа, ГИС-технологии (геоинформационные системы). С целью более точного прогноза экологического состояния водной среды, наряду с использованием химических способов, учитывают реакцию тех или иных организмов на антропогенное воздействие — применяют методы биологической индикации [5].

Метод биоиндикации относится к сфере биологического мониторинга и является обязательной составляющей экологического мониторинга. К наиболее разработанной системе биологического мониторинга относится гидробиологический мониторинг поверхностных вод.

Метод биоиндикации основан на реакции живых организмов на загрязнение окружающей среды. В основе биоиндикации лежит знание о токсичности загрязняющих веществ для живых организмов и их своеобразные реакции на токсичность. Дело в том, что живые организмы служат своеобразными индикаторами загрязнения, так как в них возникают определенные реакции:

- ✓ исчезновение видов живых организмов
- ✓ изменение численности живых организмов в зоне загрязнения
- ✓ изменение качеств и биохимического состава организмов [1].

При решении задач биоиндикации, каждая группа живых организмов в качестве биологического индикатора имеет свои преимущества и недостатки, которые определяют границы ее использования. Различные виды живых существ показывают, чем загрязнена окружающая среда. В качестве биоиндикаторов выбирают наиболее чувствительные к исследуемым факторам биологические системы или организмы [3].

При использовании метода биоиндикации необходимы индикаторные организмы — биоиндикаторы, представляющие сообщество или группу особей одного вида, поведение, состояние и наличие которых указывает на изменения в среде их обитания.

Основные функции биоиндикаторов:

- установить в экосистемах зон скопления загрязнений;
- прослеживание скорости изменений в окружающей среде;
- определение меры вредности влияния того или иного компонента

на живую природу.

Основные преимущества природных биоиндикаторов перед химическими способами оценки состояния водной среды:

- все значимые данные о водной среде объединяются, что позволяет отобразить ее общее состояние;

- биологические индикаторы способны реагировать даже на очень слабые воздействия если исследуемая водная среда находится в зоне долговременной антропогенной нагрузки,
- отсутствует необходимость регистрации параметров среды;
- физические и химические способы измерения биологических параметров становятся необязательными;
- дают ориентир на места скопления загрязнений;
- даёт возможность провести оценку меры вредности производимых человеком на водную среду и контролировать действие этих веществ;
- живые организмы как биоиндикаторы оказывают помощь в нормировании на экосистемы допустимой нагрузки, различной по степени устойчивости к антропогенному воздействию [4].

Наличие в водной среде загрязнителей химической природы - поллютантов способно вызвать сбои в функционировании целых экологических систем, включая токсические эффекты, возникновение которых связано с биоаккумуляцией, т.е. накоплением в живых организмах загрязнителей [2].

Для проведения биоиндикации выбирают наиболее чувствительные растения. Методом изучения качества водной среды по состоянию водорослей является альгоиндикация.

Для оценки выполняется с помощью водорослей трех групп:

- ✓ перифитон;
- ✓ фитобентос;
- ✓ фитопланктон [5].

Перифитоны, прикрепленные к субстрату, которые из-за непродолжительного жизненного цикла и высокой скорости размножения быстро реагируют на изменение среды.

Наиболее простая методика биоиндикации, это использования беспозвоночных организмов как индикатор. Эта методика подходит для любых типов водоемов. Метод основан на том, что различные группы водных беспозвоночных приурочены к водоемам с определенной степенью загрязненности.

Метод биоиндикации имеют свои недостатки:

- ✓ – численность большинства водных организмов имеет сезонность и зависят от погодных условий;
- ✓ – для большинства методов требуются квалифицированные специалисты в определении видов живых организмов.
- ✓ - вместе с методами биоиндикации необходимо применять метод биотестирования, для выявления и оценки действия факторов окружающей среды на организм.

Таким образом, все перечисленные методы биоиндикации широко используются для оценки антропогенного воздействия на водную

экосистему. При любых неблагоприятных условиях разнообразие видов в биоценозе уменьшается, а численность устойчивых видов возрастает.

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Кудратов Т.У., к.т.н.

соискатель

НИИИВП

Узбекистан

Якубов М.А., д.т.н.

НИИИВП

профессор

Узбекистан

Мирхасилова З.К., PhD

доцент

НИУ «ТИИМСХ»

Узбекистан

ОСОБЕННОСТИ ИСПОЛЬЗОВАНИЯ ВОДНЫХ РЕСУРСОВ В БУХАРСКОМ ВОДОХОЗЯЙСТВЕННОМ РАЙОНЕ И ИЗМЕНЕНИЕ МЕЛИОРАТИВНОГО СОСТОЯНИЯ ОРОШАЕМЫХ ЗЕМЕЛЬ

Аннотация. В статье обсуждаются проблемы водообеспечения орошаемых земель Бухарского оазиса, состояние эксплуатации ирригационных каналов и дренажных систем, приходные и расходные элементы водного и солевого баланса. Раскрыты причинно-следственные связи сохранения площади мало- и средnezасоленных земель в зависимости от размеров водозаборов, водоотведения и солеотведения.

Ключевые слова: водность года, ирригация, дренаж, мелиорация, засоление почв.

Kudratov T.U., Ph.D.

applicant

NIIIVP

Uzbekistan

Yakubov M.A., Doctor of Technical Sciences

NIIIVP

professor

Uzbekistan

Mirkhasilova Z.K., PhD

associate professor

National Research University "TIIMSKH"

Uzbekistan

FEATURES OF WATER RESOURCES USE IN THE BUKHARA WATER MANAGEMENT REGION AND CHANGES IN THE AMELIORATION CONDITION OF IRRIGATED LAND

Annotation. The article discusses the problems of water supply to irrigated lands of the Bukhara oasis, the state of operation of irrigation canals and drainage systems, incoming and outgoing elements of the water and salt balance. The cause-and-effect relationships of preserving the area of low- and moderately saline lands depending on the size of water intakes, drainage and salt removal are revealed.

Key words: water content of the year, irrigation, drainage, reclamation, soil salinization.

Известно, что в Бухарская область, расположена в южном регионе республики Узбекистан, характеризуется большим количеством теплых дней с температурой воздуха выше +10°C, обладает благоприятными условиями для выращивания средне и тонковолокнистых сортов хлопчатника, фруктов и других сельскохозяйственных культур [1]. Из-за аридности климата как и на всех пустынных регионах здесь, ощущается недостаток водных ресурсов.

В настоящее время орошаемая площадь Бухарской области составляет 276,3 тыс.га. Основным источником воды для орошения здесь является река Амударья. При достаточности водных ресурсов река Зарафшан также может питать земли Бухарской области в объеме ≈ 100 млн.м³ в год (или около 6%).[2] Для водообеспечения области и орошения сельскохозяйственных угодий построены и эксплуатируются 29 крупных насосных станций, 17081 км оросительных каналов, из которых 2202,5 км. -магистральные, межрайонные и межхозяйственного звена; протяженность внутрихозяйственных каналов составляет 14977 км. Ежегодный водозабор из всех источников в Бухарскую область составляет 4045-4804 млрд.м³ в год.

Для регулирования мелиоративного состояния, понижения уровней грунтовых вод построена коллекторно-дренажная сеть (КДС) общая протяженность которых по области составляет 8851,6 км.

Коллекторно-дренажная сеть, разделена между государством и фермерскими хозяйствами и кластерами. По состоянию на 01 января 2021 г. в Бухарской области общая протяженность коллекторно-дренажной сети, находящихся на балансе мелиоративной экспедиции составляет 3192 км, из которых 858,9 км (26,9%) нуждаются в ремонте, из закрытых горизонтальных дрен протяженностью 154,2 км в ремонте нуждаются 10,1 км (6,5%).[3]

На балансе кластеров и фермерских хозяйств имеются: открытые коллектора 4505,2 км, из которых требуют ремонта 1152,4 км (25,6%); закрытые горизонтальные дрены – 998,8 км, из которых 707,4 км (70,8%) требует ремонта.

Из открытых коллекторов, находящихся на балансе мелиоративной экспедиции, протяженностью 3192,9 км, требуют ремонта 858,9 км (26,9 %),

из коллекторов находящихся на балансе кластеров и фермеров требуют ремонта 4500 км (или 25,6%). В Бухарском, Рометанском и Гиждуванском районах от 32 до 45% открытых коллекторов нуждаются в ремонте.

Закрытые горизонтальные дрены, находящихся на балансе кластеров и фермеров, повсеместно требуют ремонта, в среднем по области 70,8% закрытых дрен нуждаются в ремонте, а в Каганском районе они достигают 96,7%, в Каракульском и Караулбазарском районах их доля составляет 100% от общей протяженности. [4] Это свидетельствует о недостаточности внимания на проведение соответствующих эксплуатационных мероприятий и нехватке выделяемых финансовых средств на поддержание существующих коллекторно-дренажных систем.

Для улучшения мелиоративного состояния орошаемых земель в Бухарской области построены также 671 скважин вертикального дренажа (СВД), которые обслуживают 42,95 тыс.га. Их рабочее время составило 591-702,2 мото-часов, при котором было откачено 83-107 млн.м³ подземных вод. В последние годы коэффициент полезной работы (КПР) у них не превышает 0,1. В зоне действия СВД средняя глубина грунтовых вод (УГВ) составляет 2,5-2,6 м от поверхности земли. Минерализация откачиваемых подземных вод колеблется в пределах 2,8-2,95 г/л. Из общего объема откачиваемых вод (83-107 млн.м³) в коллектора отводится в разные годы 31-48 млн.м³; в оросительные каналы 17-36 млн.м³; для прямого полива используется 18-39,5 млн.м³.

Направленность водно-солевых балансов орошаемых земель имеет важное значение.

При сложившихся размерах водозаборов 4045-4803 млрд.м³ и средней минерализации оросительных вод 1,293-1,319 г/л на орошаемые земли поступает от 5335,9-6209,7 тыс.т. солей в год. Отток солей за пределы оросительной системы осуществляется дренажным стоком. Объем дренажного стока составляет 1863,7-2019,8 млрд.м³ и при средней их минерализации 3,3-3,4 г/л ежегодный отвод солей равен 6334,7-7023,0 тыс.тонн. [5;6;7] Разность между притоком и оттоком т.е. баланс складывается небольшим выносом в размере 2,96-3,96 т/га в год. Такие величины оттока солей являются недостаточным для сокращения доли засоленных земель. В целом в Бухарской области площади засоленных земель составляют 234,2-234,8 тыс.га или ≈85,5% от орошаемой. Превалирующее место принадлежит малозасоленному типу, они составляют ≈62% (или 170,0 тыс.га); средnezасоленные земли составляют 21,0% или ≈58,0 тыс.га. И на небольшой площади сохраняются сильнозасоленные земли 6,3 тыс.га (или 2,3%).

Таким образом, современное состояние использования водно-земельных ресурсов в Бухарском оазисе показывает что необходима комплексная оценка состояния эксплуатации оросительно-дренажных систем и разработка совершенных механизмов регулирования

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*Кудратова Л.А.
старший преподаватель
кафедра физической культуры и спорта
Ташкентский государственный аграрный университет*

*Ходжанов А.Р.
доцент
кафедра физической культуры и спорта
НИУ Ташкентский институт инженеров ирригации и механизации
сельского хозяйства*

РОЛЬ И ПОДГОТОВКА ЦЕНТРАЛЬНОГО АМПЛУА В ГАНДБОЛЕ

Аннотация: Гандбол — это командный вид спорта, который требует от игроков выполнения определенных позиционных ролей для координации, атакующей и оборонительной стратегий. Из этих ролей центральное положение имеет большое значение как стержень нападения и защиты. В этой статье будут рассмотрены ключевые обязанности центрального игрока и обсуждено, как спортсмены могут наилучшим образом подготовиться физически и тактически, чтобы преуспеть на этой ответственной позиции.

Ключевые слова: гандбол, роль игроков, роль центрального, стратегии, методы, обучение, тренеры.

*Kudratova L.A.
senior lecturer
Department of Physical Culture and Sports
Tashkent State Agrarian University
Hojanov A.R.
associate professor
Department of Physical Culture and Sports
National Research University of Tashkent Institute of Irrigation and
Agricultural Mechanization Engineers*

ROLE AND PREPARATION OF THE CENTER ROLE IN HANDBALL

Abstract. Handball is a team sport that requires players to perform specific positional roles for coordination, attacking and defensive strategies. Of these roles, the central position is of great importance as the linchpin of offense and defense. This article will review the key responsibilities of a center player and discuss how athletes can best prepare physically and tactically to excel in this demanding position.

Keywords: handball, role of players, role of center, strategies, methods, training, coaches.

Введение: Гандбол – один из самых популярных видов спорта, а также одно из самых удобных средств физического развития студентов и укрепления их здоровья. Это действительно увлекательная игра, которая подойдет как взрослым, так и подросткам. Гандбол (дат. håndbold, англ. handball от hand — рука и ball — мяч) — командная игра с мячом 7 на 7 игроков (по 6 полевых и вратарь в каждой команде). Играют преимущественно руками (правила также допускают использование при игре головы, корпуса или бёдер). Цель игры — как можно больше раз забросить мяч в ворота (3×2 м) соперника. Играют два тайма по 30 минут, а перерыв между таймами — 10 минут.

В ходе игры у каждого игрока будет возможность проявить свои личные качества. Однако в то же время игра требует от каждого гандболиста подчинения своих личных стремлений общей цели.

Федерация Гандбола Республики Узбекистан была основана в 1992 году. До 1960 года в Узбекистане проводились соревнования по гандболу 11х11, где на протяжении многих лет сильнейшими были курсанты Ташкентского высшего общевойскового училища (ТВОКУ). Толчком к развитию в Узбекистане гандбола 7:7 послужило включение этой игры в программу студенческих игр в 1960 году, которые проводились в Харькове. После этого малый гандбол приобрел большую популярность среди студенческой молодежи. Во всех регионах республики действуют гандбольные спортивные школы. С 1991 года чемпионат Узбекистана проводится регулярно.

С помощью системы педагогических наблюдений и специальных контрольных упражнений тренеры получают полную информацию о навыках и умениях, необходимых спортсменам для игры в гандбол. На тренировках по гандболу подбираются контрольные упражнения для определения физической подготовки и психических качеств студентов. Результаты, полученные в ходе тестов, предоставляют преподавателю информацию о том, как вновь поступивший спортсмен будет заниматься в дальнейшем. Выбранный тренер проводит отборочные испытания в несколько этапов. В секцию гандбола принимаются студенты с хорошим здоровьем.

После отбора талантливых студентов он проводит с ними начальную подготовку по гандболу на основе контрольных тестов. В дальнейшем игроки отбираются исходя из требований гандбола к юным спортсменам. Оценка конкретных показателей, подтверждающих способность студента играть в гандбол, зависит, прежде всего, от результатов тестирования и наблюдения. Очень важно правильно выбрать методы и инструменты для развития уникальных способностей юного гандболиста.

Методика проведения тестов и анализ подготовки к игре положены в основу организации тренировочных групп по гандболу и прогнозирования результатов детей в спорте. Также необходимо учитывать информацию о

педагогическом мастерстве и состоянии здоровья участников. Кроме того, очень важно правильно оценить умственные способности студента. Это позволяет определить уровень развития психических качеств юного спортсмена, изучить приемы игры гандболиста.

В таком динамичном и быстро развивающемся виде спорта, как гандбол, центральный игрок играет ключевую роль, организуя нападение и оборону команды. Их способность контролировать темп, эффективно распределять мяч и предугадывать движения соперника имеет решающее значение для успеха. Подготовка к этой центральной роли требует комплексного подхода, охватывающего физические, технические и тактические аспекты.

Физическая подготовка

Центральный игрок должен обладать исключительной выносливостью и ловкостью, чтобы выдерживать суровые условия игры. Он должен уметь преодолевать огромные расстояния, быстро менять направление и сохранять самообладание под давлением. Регулярные тренировки сердечно-сосудистой системы, плиометрика и упражнения на укрепление основных мышц необходимы для развития этих физических качеств.

Кроме того, центральный игрок должен обладать сильной верхней частью тела, чтобы способствовать эффективному пасу и броску. Упражнения с отягощениями, такие как жим лежа, подтягивания и ряд упражнений с гантелями, могут улучшить их мышечное развитие и силу.

Техническая подготовка

Техническое мастерство имеет первостепенное значение для центрального игрока. Они должны владеть фундаментальными навыками точной передачи, броска и дриблинга. Регулярные тренировочные упражнения и игровые симуляторы имеют решающее значение для оттачивания этих приемов.

Передача является краеугольным камнем роли центрального игрока. Он должен уметь отдавать четкие и точнейшие передачи товарищам по команде на всех позициях, независимо от расстояния или угла. Это требует глубокого понимания техники передачи, включая передачу сверху, сбоку и с отскоком.

Центральный игрок должен владеть различными ударами, включая удар в прыжке, удар с опоры и удар с разворота. Он должен уметь регулировать скорость, силу и траекторию своего удара в зависимости от игровой ситуации.

Дриблинг позволяет центральному игроку сохранять владение мячом, продвигаясь к воротам или создавая голевые возможности для партнеров по команде. Они должны уметь вести дриблинг обеими руками, контролировать мяч одной рукой и быстро менять направление.

Тактическая подготовка

Тактическая осведомленность необходима центральному игроку, чтобы преуспеть. Он должен понимать атакующие и оборонительные построения команды и уметь соответствующим образом адаптировать свою игру.

В нападении центральный игрок выступает в качестве проводника атаки команды. Они должны анализировать оборону соперника, выявлять слабые места и создавать голевые моменты для себя или своих товарищей по команде. Они должны уметь читать игру и быстро принимать решения, исходя из ситуации.

В защите центральный игрок играет жизненно важную роль в организации оборонительных действий команды. Он должен общаться со своими товарищами по команде, предугадывать движения соперников и нарушать их проходы. Он также должен уметь менять позиции и эффективно отмечать разных игроков.

Психологическая подготовка

В дополнение к физической, технической и тактической подготовке центральный игрок также должен обладать сильными умственными качествами. Он должен уметь справляться с давлением, оставаться сосредоточенным в неблагоприятных условиях и принимать взвешенные решения в критические моменты игры.

Методы ментальной тренировки, такие как визуализация, осознанность и постановка целей, могут помочь центральному игроку развить эти качества. Они также должны регулярно заниматься саморефлексией и получать обратную связь от тренеров и товарищей по команде, чтобы определить области для улучшения.

Вывод

В заключение отметим, что центровой занимает лидирующую позицию на площадке, с которой управляется весь ход игры. Комплексные тренировки, развивающие физические таланты, тактические навыки и физическую подготовленность, позволяют центровым преуспевать под давлением и максимизировать свое влияние на результаты. Обладая нужными качествами и подготовкой, центры могут по-настоящему взять на себя роль центра и стать движущей силой успеха своей команды.

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Кузиев О.А.
ассистент
кафедры анестезиологии реаниматологии
и скорой медицинской помощи
Андижанский государственный медицинский институт

НАРУШЕНИЕ ФУНКЦИОНАЛЬНЫХ ПЕЧЕНОЧНЫХ ТЕСТОВ ПРИ ПОРАЖЕНИИ ПЕЧЕНИ ВО ВРЕМЯ БЕРЕМЕННОСТИ

Резюме. Заболевания печени, связанные с беременностью, встречаются приблизительно у 3 % беременных и являются важной причиной как материнской, так и фетальной смертности. В последние годы были получены значимые данные относительно патогенеза, диагностики и лечения этих болезней. В публикуемом обзоре акцент сделан на изменении показателей функциональных печеночных тестов у беременных как при физиологически протекающей беременности, так и при заболеваниях печени, являющихся следствием беременности, а также на механизмах этих изменений. Приводятся сведения о сроках нормализации функциональных печеночных тестов после родоразрешения или при естественном течении заболевания.

Ключевые слова: функциональные печеночные тесты; беременность; преэклампсия; эклампсия; острая жировая дистрофия печени беременных; HELLP-синдром; внутрипеченочный холестаз беременных; неукротимая рвота беременных; разрывы печени.

Kuziev O.A.
assistant
Department of Anesthesiology, Reanimatology
and Emergency Medical Care
Andijan State Medical Institute

ABNORMAL LIVER FUNCTION TESTS FOR LIVER DAMAGE DURING PREGNANCY

Summary. Pregnancy-associated liver disease occurs in approximately 3% of pregnant women and is an important cause of both maternal and fetal mortality. In recent years, significant data have been obtained regarding the pathogenesis, diagnosis and treatment of these diseases. The published review focuses on changes in the indicators of functional liver tests in pregnant women, both during physiological pregnancy and liver diseases resulting from pregnancy, as well as on the mechanisms of these changes. Information is provided on the timing of normalization of liver function tests after delivery or during the natural course of the disease.

Key words: liver function tests; pregnancy; preeclampsia; eclampsia; acute fatty liver degeneration in pregnant women; HELLP syndrome; intrahepatic cholestasis of pregnancy; uncontrollable vomiting of pregnant women; liver ruptures

Чаще всего врачу-инфекционисту приходится сталкиваться с проблемой дифференциальной диагностики заболеваний печени у беременных в случае необходимости исключения вирусного гепатита. Надежнее всего это можно сделать, используя современные методы лабораторной диагностики (табл. 1), однако это занимает

некоторое время и поэтому не отменяет необходимости знания клинической картины и возможных сдвигов в функциональных печеночных тестах при заболеваниях печени, которые могут встречаться у беременных. Отклонения в функциональных печеночных тестах регистрируются примерно у 3 % беременных. Большинство заболеваний печени у беременных (см. ниже) связано непосредственно с беременностью (84 %, по данным Н.У. Wong с соавт.), хотя существует и другая точка зрения, согласно которой главной причиной желтухи беременных называют вирусные гепатиты [1, 2]. Чаще всего отклонения функциональных печеночных тестов регистрируются в первом (34 %) и третьем триместре беременности (58 %), реже — во втором (8 %) [1]. В настоящем обзоре внимание будет акцентироваться в основном на изменениях лабораторных показателей при заболеваниях печени, связанных с беременностью. Краткие сведения о клинических проявлениях некоторых заболеваний содержатся в табл. 2.

Классификация болезней печени у беременных [3, 4]

1. Имеющие отношение к беременности:

- неукротимая рвота беременных;
- внутрипеченочный холестаза беременных;
- заболевания, являющиеся следствием повышения артериального давления:

- а) преэклампсия/эклампсия;
- б) HELLP-синдром;
- в) инфаркт печени/разрыв печени;
- острая жировая дистрофия печени беременных.

2. Не имеющие отношения к беременности:

- предсуществующие заболевания печени:
- а) вирусные;
- б) цирроз печени и портальная гипертензия;
- в) состояние после трансплантации печени;
- г) аутоиммунные болезни;
- д) жировая болезнь печени (стеатогепатит);
- приобретенные во время беременности:

- а) аутоиммунные;
- б) вирусные;
- в) сосудистые (синдром Бадда — Киари);
- г) лекарственные поражения.

Прежде всего следует помнить, что даже при нормально протекающей беременности некоторые лабораторные показатели могут отклоняться от нормы в ту или другую сторону (табл. 3). В одном из проспективных анализов величина показателей аспартатаминотрансферазы (АСТ), аланинаминотрансферазы (АЛТ), билирубина и гамма-глутамил-транспептидазы (ГГТ) у 20 % из 430 обследованных с физиологически протекающей беременностью была ниже, чем в норме, в то же время уровень щелочной фосфатазы (ЩФ) закономерно повышался к концу беременности за счет плацентарной фракции и развития костной системы плода [5]. Считается, что трехкратное увеличение активности ЩФ в 3-м триместре беременности должно расцениваться как вариант нормы [6]. При этом важное значение имеет определение ГГТ, так как в случае физиологически

протекающей беременности уровень ГГТ остается в норме, что отличает ситуацию от той, когда ЩФ увеличивается вследствие патологических причин, например холестаза [6].

Таблица 1. Скрининг на гепатиты

Гепатит	Маркер
А	Вирус гепатита А, антитела суммарные
В*	Вирус гепатита В, HBsAg (австралийский антиген) + Вирус гепатита В, HBcorAg, антитела суммарные
С	Вирус гепатита С, антитела суммарные

Примечание: * — для подтверждения диагноза гепатита В необходимо выявление двух приведенных маркеров одновременно.

Таблица 2. Клинические симптомы при болезнях печени у беременных

Симптомы	Наиболее вероятный диагноз	Другие возможные диагнозы
Зуд	ВХБ	Преэклампсия, ОЖДПБ, билиарная обструкция, предсуществующие болезни (первичный билиарный цирроз, первичный склерозирующий холангит), лекарственные поражения
Боль в эпигастрии тошнота и рвота (2-й и 3-й триместр) Головная боль Нарушение зрения	Преэклампсия, HELLP-синдром, ОЖДПБ	Болезни желчного пузыря, холангит, вирусные гепатиты

Тошнота и рвота (1-й триместр)	Неукротимая рвота беременных	Вирусные гепатиты
Желтуха	Вирусные гепатиты	HELLP-синдром, болезни желчного пузыря, холангит, лекарственные поражения. Редко — ВХБ, ОЖДПБ, преэклампсия
Обесцвечивание стула и темная моча	Билиарная обструкция вследствие желчнокаменной болезни	ВХБ, холангит, вирусные гепатиты, другие редкие причины билиарной обструкции

Таблица 3. Некоторые биохимические показатели при нормально протекающей беременности [6, 7]

Показатель	Норма	Триместр		
		1-й	2-й	3-й
Гемоглобин, г/л	121–151	110–135	103–130	100–130
АСТ, Ед/л	7–40	10–28	10–29	11–30
АЛТ, Ед/л	0–40	6–32	6–32	6–32
Билирубин, мкмоль/л	0–17	4–16	3–13	3–14
ГГТ, Ед/л	11–50	5–37	5–43	3–41
ЩФ, Ед/л	30–130	32–100	43–135	133–418
Желчные кислоты, мкмоль/л	5–10	-	5,3–5,7	5,6–6,5
Альбумин, г/л	35–46	28–37		

Снижение концентрации альбумина при беременности в подавляющем большинстве случаев связано с гемодилюцией: объем циркулирующей плазмы увеличивается приблизительно на 30 %, сердечный выброс — на 40 %. При этом печеночный кровоток изменяется мало [8]. Уровень желчных кислот в норме обычно низкий (менее 14 мкмоль/л) вследствие эффективного клиренса при первом прохождении через печень. Небольшое повышение возможно непосредственно после приема пищи. В целом же данный показатель является очень чувствительным маркером холестаза [6]. Уровень альфа-фетопротеина закономерно увеличивается во время беременности вследствие его продукции печенью плода. Также в период беременности наблюдается повышение уровня фибриногена и некоторых факторов свертывания (I, II, V, VII, X и XII) [3].

HELLP-синдром, острая жировая дистрофия печени беременных (ОЖДПБ), разрывы и инфаркты печени в подавляющем большинстве случаев являются осложнениями *преэклампсии и эклампсии*. Нарушение плацентации обуславливает гипоперфузию плаценты, которая в некоторых случаях прогрессирует в эндотелиальную дисфункцию, что, в свою очередь, ведет к мультисистемному патологическому процессу, или преэклампсии [9].

Частота *HELLP-синдрома* составляет около 0,1 %, однако в пересчете на пациенток с преэклампсией возрастает до 3–10 % [10, 11]. Хотя *HELLP-синдром* чаще всего возникает при преэклампсии, описаны случаи его развития у беременных с нормальным давлением [12]. Причиной развивающихся изменений являются нарушения кровообращения в микроциркуляторном русле, активация тромбоцитов и вазоспазм. Таким образом, в основе повреждения печени лежат сосудистые расстройства. При биопсии выявляются перипортальные гемorragии и отложения фибрина [13].

Последние данные подтверждают роль нарушения метаболизма оксида азота в развитии преэклампсии и *HELLP-синдрома* [14, 15]. К основным изменениям при лабораторных анализах следует отнести гемолиз (с ростом концентрации билирубина и лактатдегидрогеназы более 600 Ед/л), умеренное повышение уровня трансаминаз (до 200–700 Ед/л) и снижение числа тромбоцитов менее $100 \cdot 10^9/\text{л}$ [16–18]. Какой-либо корреляции между выраженностью артериальной гипертензии, нарушением печеночных тестов и результатами биопсии не отмечено [13]. Считается, что гематологические и биохимические показатели коррелируют с тяжестью заболевания, однако не являются предиктором его исхода [19].

Наиболее эффективным способом лечения *HELLP-синдрома* является родоразрешение [16, 17]. В первые два дня отклонения в лабораторных показателях достигают пика, а затем нормализуются в течение 3–11 дней, хотя некоторые авторы указывают на более продолжительные сроки [3, 16, 17]. В послеродовом периоде назначают кортикостероиды, которые способствуют более быстрой нормализации лабораторных показателей и артериального давления [20]. ОЖДПБ чаще всего встречается в 3-м триместре и является проявлением преэклампсии (50–100 %) [16,17]. Достаточно редко (с частотой 1 на 13 000 случаев) ОЖДПБ может быть жизнеугрожающим состоянием с материнской смертностью около 18 % и вероятностью гибели плода 23 % [21, 22]. Гистологическое исследование печени выявляет микровезикулярное или смешанное микро- и макровезикулярное ожирение с депозитами в периферической области. Воспаление выражено в минимальной степени [23]. К типичным изменениям лабораторных показателей следует отнести умеренное повышение сывороточных трансаминаз (уровень АСТ и АЛТ обычно ниже 1000 Ед/л), удлинение протромбинового и частичного тромбопластинового времени, снижение концентрации фибриногена, увеличение уровня креатинина при развитии почечной недостаточности, гипогликемию и повышение билирубина до 170 мкмоль/л. Весьма часто наблюдаются лейкоцитоз и тромбоцитопения. Увеличение концентрации аммиака, аминокислот, лактацидоз отражают развивающуюся при этом состоянии

митохондриальную дисфункцию. Синдром диссеминированного внутрисосудистого свертывания развивается примерно у 10 % больных [3].

В тех случаях, когда ОЖДПБ сопровождается тромбоцитопенией, дифференциальная диагностика с HELLP-синдромом может быть затруднительна. Определенную помощь может оказать ультразвуковое исследование: для ОЖДПБ характерна «белая» печень. Также следует ориентироваться на степень повышения сывороточных трансаминаз (см. ниже). При ОЖДПБ оно обычно не столь значительно, как при HELLP-синдроме.

Повышение активности трансаминаз при основных болезнях печени у беременных:

1. Минимальное или умеренное:

- неукротимая рвота беременных;
- лекарственные поражения;
- острая жировая дистрофия печени беременных;
- внутрипеченочный холестаза беременных;
- алкоголь.

2. Значительное:

- вирусные гепатиты;
- лекарственные поражения и действие токсинов;
- HELLP-синдром;
- тяжелая преэклампсия/эклампсия;
- инфаркт печени/разрыв печени.

При ОЖДПБ улучшение состояния и нормализация печеночных функциональных тестов наступают в первые дни после родоразрешения [1]. При своевременно проведенном лечении летальные исходы наблюдаются редко [22].

Разрывы и инфаркты печени являются исключительно редким осложнением преэклампсии/эклампсии (1 случай разрыва печени на 40 000–250 000 беременностей) и обычно встречаются в 3-м триместре [24, 25]. Инфаркты печени встречаются еще реже. Чаще всего поражается правая доля печени [24]. Многочисленные подкапсульные кровоизлияния приводят к истончению капсулы печени, ее разрыву и развитию внутрибрюшного кровотечения. В области кровоизлияний часто обнаруживают множественные псевдоаневризмы, что увеличивает риск сосудистых нарушений, свойственных данной патологии [24]. Клиническая картина соответствует геморрагиче-

скому шоку. Характерны значительное повышение активности АЛТ (более 1000 Ед/л) и признаки коагулопатии. Разрывы печени относят к жизненно опасным состояниям с материнской смертностью 59–70 % и перинатальной — 75 % [24]. В случае благополучного исхода показатели функциональных печеночных тестов нормализуются в течение 6 месяцев [23, 26]. Однако возможно развитие поздних осложнений в виде абсцессов

печени и плеврального выпота. В этом случае можно ожидать повторного повышения активности сывороточных трансаминаз.

Несмотря на то что причин для повышения активности ЩФ у беременных достаточно много, можно выделить, пожалуй, только одно заболевание печени, являющееся следствием беременности, главным проявлением которого выступает холестаза. Речь идет о *внутрипеченочном холестазае беременных* (ВХБ). Считается, что ВХБ является самым частым заболеванием печени, связанным с беременностью [3]. Частота ВХБ составляет 0,05 %, но может варьировать в зависимости от географического региона и расовой принадлежности: от 0,01–0,02 % в Северной Америке до 1–1,5 % в Швеции и до 5–21 % в Чили [27]. Чаще всего ВХБ встречается в 3-м триместре, хотя описаны и более ранние проявления, уже с 13-й недели беременности [27–29]. Патогенез этого состояния до конца не ясен [29]. Примерно в 15 % случаев выявляют генетический полиморфизм в одном из гепатоканаликулярных транспортных протеинов (АВСВ11 (насос, экспортирующий соли желчных кислот) или АВСВ4 (флиппаза фосфатидилхолина)). В небольшом числе исследований сообщается о генетических вариациях и/или гетерозиготных мутациях в АВСС2 (переносчик органических связанных анионов), АТР8В1 (F1C1) и ядерных рецепторах желчных кислот (фарнезоидные X-рецепторы) [30–33]. Для клиницистов представляет интерес тот факт, что в случае мутации АВСВ4 при ВХБ уровень ГГТ обычно повышен, в то время как в случае мутации АВСВ11, АТР8В1 и FXR уровень ГГТ в норме или незначительно увеличен [3]. Это представляется важным, так как обычно считают, что симультанное повышение уровней ЩФ и ГГТ указывает на холестатическое заболевание печени, предшествующее беременности, в то время как изолированное увеличение концентрации ЩФ в большей степени характерно для ВХБ [34].

ВХБ проявляется только зудом у 80 % пациентов, зуд и желтуха наблюдаются в 20% случаев [27]. Уровень билирубина в этом случае обычно невысокий (до 85 мкмоль/л), повышение трансаминаз, холестерина и триглицеридов выражено в минимальной степени или отсутствует. При биопсии печени определяют центрилобулярный стаз желчи [27]. Наиболее важным лабораторным показателем при ВХБ является уровень желчных кислот, который повышен почти у 92 % пациенток с акушерским холестазом (рост трансаминаз регистрируется только у 60 % и считается вторичным по отношению к повреждению печеночных мембран токсичными желчными кислотами, а билирубина — у 25 % больных) [34]. В проспективном исследовании, проведенном в Швеции между 1999 и 2002 годом, показано, что риск фетальных осложнений в виде преждевременных родов, асфиксии и нарушения пассажа мекония возрастает на 1,5–2 % на каждый 1 мкмоль/л уровня желчных кислот свыше 40 мкмоль/л (превышение данного уровня расценивается как тяжелая форма ВХБ). Удельный вес женщин с тяжелой

формой ВХБ составляет около 20 % [35]. Клинические симптомы холестаза обычно разрешаются в течение 2 дней после родов, но повышение ЩФ может удерживаться до 4–6 недель [17, 36].

Таблица 4. Изменение функциональных печеночных проб при заболеваниях печени у беременных [6, 7]

Заболевание	Аминотрансферазы	Желчные кислоты	Билирубин	ЩФ	Мочевая кислота	Тромбоциты	Протромбиновое время	Белок в моче
Неукротимая рвота беременных	× 2–5	Норма	Норма	× 1–2	Норма	Норма	Норма	Норма
Внутрипеченочный холестаз беременных	× 1,5–8	× 30–100	× 1,5–15	× 1–2	Норма	Норма	Норма	Норма
Острая жировая дистрофия печени беременных	× 3–15	Норма	× 4–15	× 1–2	↑	+/- ↓	+/- ↑	+/- ↑
Преэклампсия/эклампсия	× 2–5	Норма	Норма	× 1–2	↑	+/- ↓	+/- ↑	↑
HELLP-синдром	× 1–30	Норма	× 1,5–10	× 1–2	↑	↓	+/- ↑	+/- ↑
Разрыв печени	× 2–100	Норма	+/- ↑	↑	Норма	+/- ↓	+/- ↑	Норма

Неукротимая рвота беременных (НРБ) развивается менее чем в 1 % случаев в ранние сроки беременности и может вести к тяжелой дегидратации, голоданию и нарушению обмена. Патогенез этого состояния недостаточно ясен. Считается, что уровень хорионического гонадотропина (ХГТ), пик которого приходится на 1-й триместр беременности, хорошо коррелирует с тяжестью НРБ. ХГТ активирует рецепторы тиреотропного гормона, что ведет к его супрессии и повышению активности свободного тироксина (Т4) [37, 38]. Другие теории акцентируют внимание на значимости генетических, физиологических, гормональных факторов, однако ни одна из них не является исчерпывающей [39]. Изменения функциональных печеночных тестов встречаются приблизительно у 60 % пациенток с НРБ, и чаще всего у женщин, требующих госпитализации [40]. Другие отклонения в анализах могут быть связаны с развивающейся почечной недостаточностью, вторичной по отношению к дегидратации, и электролитными сдвигами, такими как гипокалиемия и гипوماгнемия, которые являются следствием рвоты [3].

По мере улучшения состояния печеночные пробы нормализуются. Если этого не происходит, то, скорее всего, у пациентки есть другое заболевание печени и требуется консультация специалиста-гепатолога. Подводя итоги, необходимо отметить, что болезни

печени, связанные с беременностью, являются редкими, однако знание их клинических особенностей и возможных отклонений лабораторных показателей чрезвычайно важно для инфекциониста, так как позволяет обоснованно исключить как острые, так и хронические вирусные гепатиты и рекомендовать оптимальную тактику лечения.

Конфликт интересов. Не заявлен.

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Куйчиева З.И.
и.о. доцента
Джизакский политехнический институт

РОЛЬ СЕМЬИ В ИЗУЧЕНИИ НЕМЕЦКОГО ЯЗЫКА

Аннотация. В этом исследовании исследуется роль семьи в изучении немецкого языка, особенно в Узбекистане. Семейная роль очень важна для развития у учащихся чувства обучения, поскольку она сильно влияет на них. Позитивное отношение родителей, образование и осведомленность в соответствии с индивидуальными требованиями и потребностями обеспечивают постоянное поощрение и поддержку учащихся.

Kuychieva Z.I.
acting associate professor
Jizzakh Polytechnic Institute

THE ROLE OF THE FAMILY IN LEARNING GERMAN LANGUAGE

Annotation. This study investigates the role of family in English language learning particularly in Uzbekistan. Family role is very important to grow the sense of learning in learners as they are greatly influenced by it. Parents' positive attitude, education and awareness according to individual requirements and needs provide constant encouragement and support for the learners.

Семья играет самую важную роль в развитии и образовании детей. Участие родителей в обучении детей является ключевым фактором улучшения успеваемости детей, а также их общего поведения и посещаемости. Роль родителей в ранние годы жизни ребенка оказывает самое большое влияние на его развитие. Качественное домашнее обучение в большей степени способствует интеллектуальному и социальному развитию детей, чем род занятий, образование или доход родителей. Раннее детство - важнейший период для каждого ребенка во всем мире. Это период, когда ребенок нуждается в сотрудничестве и надзоре со стороны родителей и других родственников в семье. В контексте Узбекистана сознательные родители уделяют особое внимание образованию и когнитивному развитию своих детей. С другой стороны, люди с низким доходом часто не в состоянии обеспечить своим детям здоровую домашнюю обстановку, способствующую обучению. Роль семьи в воспитании детей очень велика. Роль семьи оказывает огромное влияние на развитие и образование детей. Семейный уклад также имеет большое отношение к нравственному развитию ребенка. В семьях, где существует прочная основа любви, дети учатся семейным узам и взаимному доверию. Семейные ценности также

помогают развивать умственную и интеллектуальную силу детей. Цель этого документа также состоит в том, чтобы рассмотреть, какую поддержку семьи или помощь учащиеся получают дома при изучении немецкий языка. В нем также обсуждается отношение или атмосфера в семье, препятствующие процессу обучения, и какие конкретные родительские роли или виды деятельности облегчают изучение немецкий языка.

Родители отличаются друг от друга как в своих отношениях со своими собственными детьми, так и в своих чувствах или реакциях по отношению к школьному обучению своих детей. Некоторые родители лучше умеют общаться со своими детьми, чем другие. Одни проявляют теплоту и поддержку, другие могут быть отвергающими или даже небрежными. Некоторые родители - умные, компетентные люди, другие могут быть необразованными, неграмотными, неспособными понять смысл ситуаций, связанных с их детьми, даже если они любят их. Некоторые высоко ценят образование, но другие рассматривают образование как нечто, требуемое законом и обществом. Ценности у разных родителей разные. Цели и стандарты для их отдельных семей будут отличаться друг от друга. Педагоги и исследователи широко признают, что отношения между родителями и детьми тесно связаны с важными аспектами эмоционального, социального и когнитивного развития детей. Родители рассматриваются как основные факторы, способствующие формированию у детей самооценки, навыков межличностного общения, достижений и полоролевого поведения. Данные исследований свидетельствуют о том, что дети, у которых наблюдаются проблемные отношения со своими родителями, с большей вероятностью имеют низкую самооценку и сравнительно отстают в развитии. Есть несколько исследований, которые показывают, что отношение к школе и интеллект довольно сильно зависят от домашнего окружения ребенка. В частности, такое отношение было связано с социально-экономическими аспектами.

Сообщается, что дети из среднего и высшего классов подвергаются большему давлению, требующему более высокой успеваемости в этих направлениях и положительной оценки школьных достижений. Вообще говоря, ожидается, что дома повлияют на успеваемость детей и что это влияние имеет определенную связь с социально-экономическим статусом семьи. Когда ребенок приходит из "хорошей" семьи, где родители адекватно удовлетворяют потребности его семьи и где есть достаточные возможности для интеллектуальных интересов, основы прочно закладываются к тому времени, когда ребенок идет в школу. Однако в случае с обедневшим ребенком отец и мать могут из-за нехватки финансов не иметь возможности или желания стимулировать ребенка интеллектуально, его словарный запас ограничен, он неточно или неправильно произносится. Эмоциональная атмосфера в доме может оказывать большое влияние на ребенка. При холодном беззаботном отношении, нерегулярности и уклонении от

дисциплины ребенок может проявлять такие нежелательные черты, как нечестность, агрессия и отсутствие пунктуальности. Ссоры, неудовлетворенность и нестабильность домашней атмосферы могут нарушить его эмоциональное равновесие, и он может стать деморализованным. Родительский антагонизм по отношению к школе также может оказывать пагубное влияние на ребенка, поскольку он также перенимает это отношение в подражание своим родителям. Надлежащая роль семьи помогает учащимся раскрыть свои когнитивные способности. К ним следует хорошо относиться и мотивировать дома. Хорошие привычки и характеристики формируются на основе семейного окружения, которое ведет их к построению перспективного будущего. По мере того, как учащиеся из образованных семей получают больше опыта использования немецкий языка, они осваивают его в своей повседневной деятельности. Следует признать, что тематическое исследование включало небольшую выборку, и поэтому результаты следует интерпретировать осторожно. Это исследование проводилось не для построения какой-либо теории. Скорее, в нем представлены некоторые качественные результаты и некоторые появляющиеся закономерности относительно того, как семья влияет на изучение немецкий языка детьми, что можно сделать для ускорения этого обучения и какую роль могли бы сыграть родители, чтобы их дети легко выучили английский язык. Наконец, ожидается, что качественные результаты и понимание, полученные в результате опроса, в какой-то степени это позволит родителям осознать свою роль в изучении немецкий языка их детьми.

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*Курбанов А.Б., кандидат экономических наук
доцент
Университет экономики и педагогики
Республика Узбекистан*

СОВЕРШЕНСТВОВАНИЕ ИНВЕСТИЦИОННОЙ ДЕЯТЕЛЬНОСТИ В РЕГИОНАХ

Аннотация. В данной статье анализируются теоретические основы инвестиций и потоков капитала. Были проанализированы и заключены мнения ученых-экономистов. Кроме того, в статье анализируется доля инвестиций в долгосрочные вложения в акции, облигации и другие ценные бумаги, выпущенные государственными и частными компаниями, а также в объекты акселерации, банковские облигации. В отличие от финансовых вложений, реальные инвестиции отражаются как инвестиции в прирост основного капитала и материальных производственных резервов. Анализируется необходимость создания такой свободной среды в экономике, а также методы государственного регулирования инвестиций путем подчинения их рыночным правилам.

Ключевые слова: Инвестиции, Финансовые инвестиции, Реальные инвестиции, Внутренние инвестиции, иностранные инвестиции, венчурные компании, инвестиционная привлекательность.

*Kurbanov A.B., candidate of economic sciences
associate professor
University of Economics and Pedagogy
Republic of Uzbekistan*

IMPROVING INVESTMENT ACTIVITY IN THE REGIONS

Abstract. This article analyzes the theoretical basis of investment and capital flows. The opinions of Economist scientists were analyzed and concluded. In addition, the article analyzes the share of investments in long-term investments in shares, bonds and other securities issued by public and private companies, as well as in objects of acceleration, bank bonds. Unlike financial investments, Real investments are reflected as investments in the growth of fixed capital and material production reserves. The need to create this free environment in the economy, as well as the methods of state regulation of investment by subjecting it to market rules are analyzed.

Key words: Investment, Financial Investment, Real Investment, Domestic Investment, foreign investment, venture companies, investment attractiveness.

Введение

Инвестиционная политика и ее эффективное управление в национальной экономике является одним из важных оснований развития экономики страны. Это повторно производство, темпы роста в развитии науки, науки и масштаба создают условия для занятости значительной части населения. Структурные изменения в экономике, рациональное размещение и развитие производственных сил в стране часто зависят от эффективной реализации инвестиционной политики. Прохождение новых производственных мощностей и основных средств и использование практических операций также важно в области инвестиций. В результате инвестиционной политики в Узбекистане объем прямых иностранных инвестиций в фиксированные активы в течение 2021 годов составил 101,5% по сравнению с аналогичным периодом 2020 или 6,6 млрд. Долл. США по сравнению с аналогичным периодом прошлого года. В рамках инвестиционной программы были внедрены 197 проектов, поэтому были созданы 38 000 рабочих мест. Кроме того, в рамках территориальных инвестиционных программ было реализовано 10 586 проектов на сумму 5986 проектов в 59,1 трлн. Матч также рассматривал на совещании - в частности, он был отмечен в конце 2020 года, что экспорт составил 15,1 миллиарда долларов. В то же время был запущен экспорт 47 видов новых продуктов и достиг новых перспективных рынков ряда стран. [1].

Инвестиционная политика является одной из важнейших областей социально-экономического развития любого государства. Поскольку благодаря этой политике высокий рост страны, объем и качество продукции, удовлетворение материальных и моральных потребностей, удовлетворение всей государственной инфраструктурой. Текущая инвестиционная политика, которая делает экономическую структуру, должна сосредоточиться на модернизации сельского хозяйства, занятости, занятости природных ресурсов, развития, устранения профессиональных проблем.

Обзор литературы по теме

Инвестиционная индустрия доступна в нынешней ситуации в текущей ситуации на национальном и мировом уровнях. Желательно рассмотреть экономическое содержание инвестиций. Следует отметить, что многодизикация этого процесса также отражена в определениях, приведенных ему. В частности, Шодомонов, Р.Алаев - «Инвестиции проводятся в разработке базового и оборотного капитала, деньги в форме в экспансии производственных мощностей. В виде фондов инвестиционные ресурсы называются инвестиционными номинальными инвестициями, которые могут быть Купленный на эти средства, называется инвестиционным исследованием », - говорят они. «Инвестиции - это сборник расходов на отрасль, сельское хозяйство, транспорт, строительство и другие секторы промышленности, сельского хозяйства, транспорта, строительства и других

секторов промышленности, говоря: «Области инвестиций особенно подчеркиваются в области сектора». Д. Тожибува описывает инвестиции следующим образом: «Инвестиции понимаются для будущих результатов: финансовые ресурсы для расширения или реконструкции производства, образования и подготовки квалифицированных специалистов». Из этого ясно, что автор подчеркивает инвестиционную деятельность в этом определении [5].

В некоторых источниках «Инвестиции - долгосрочные капитальные вложения в различные сектора экономики и ценных бумаг» [5]. Как и прежде, в отличие от предыдущих определений, портфолио (то есть ценные бумаги) также указаны.

Цель инвестиционной деятельности в рыночной экономике состоит в том, чтобы получить предпринимательский доход или интерес. Инвестиции делятся на финансовые и реальные инвестиции в какую-либо объект, который будет размещен и в производстве капитала [6].

Акции, облигации и другие ценные бумаги, выпущенные государственными и частными компаниями, также представляют долгосрочные рассрочки на количество акций, а также более быстрые переходы, банковские депозиты. В некоторых источниках некоторые источники предоставляются как международные финансовые и кредитные мероприятия, включая ценные бумаги.

По нашему мнению, этот процесс еще не рассматривается как международная деятельность. В отличие от финансовых вложений, реальные инвестиции отражают наложение запасов капитала и материальных продуктов.

Анализ и результаты

В развитых странах большинство реальных инвестиций являются частные инвестиции. Экономика основана через реальные инвестиции, а также политики экономического регулирования за счет реальных инвестиций, а также кредиты, субсидии. В первую очередь будут направлены государственные инвестиции в инфраструктурные сферы. Эффективность инвестиций обычно увеличивается за счет увеличения доли активных элементов. Широкая концепция является инвестициями, и все виды недвижимости и интеллектуальных ценностей, которые размещены в других формах деятельности, и действия, в результате чего они получают выгоду или социально эффективно. В такой интерпретации слова «инвестиции» эффективные значения могут быть включены:

- средства, целевые банковские депозиты, акции, облигации и другие ценные бумаги;
- перемещение и недвижимость (здания, сооружения, оборудование и другие материальные значения);
- Закон и недвижимость, произвольное право, «Нау-Хоу» и другую интеллектуальную собственность;

➤ право на землю и другие природные ресурсы, а также права собственности и т. Д.

➤ Сумма всех заявок, юридических лиц и граждан по инвестициям осуществляется в инвестициях. Решение инвестиционной деятельности (инвесторов) принимает решение инвестировать в эти объекты частных, заимствованных и инвестиций интеллектуальной собственности. Предметом инвестиционной деятельности можно считать инвестором или несколькими инвесторами - участниками в каталоге или других мероприятиях [2].

Кроме того, внутренние и иностранные инвестиции также выделяются из-за внедрения инвестирования в страну. Инвестиции в отечественные инвестиции, инвесторы дополнительно добавляются к бизнес-мероприятиям и имуществу и другим видам прав на другие виды деятельности, а также права на интеллектуальную собственность являются прямыми иностранными инвестициями. Инвестиции не только финансовые ресурсы, а также новое оборудование, современные иностранные технологии, новое управление в рыночной экономике. Следует также учитывать, что необходимость привлечения иностранных инвесторов для создания благоприятных инвестиционных возможностей бесплатно в стране. Эта ответственность должна сначала взять государство. Необходимо реализовать эффективную инвестиционную политику в стране, а также реализацию системы иностранного капитала, принимающей систему принятия иностранного капитала.

1-таблица

Динамика инвестиций в основной капитал в Республике Узбекистан и их распределение регионов (млрд. Сумов)

Регионы	2015	Доля регион ы,%	2020	Доля регион ы,%	2022	Доля регион ы,%	Измене ние в 20221 году по сравне нию с 2015 м (пункт)	Измене ние доля регион ы,% (+;-)
Всего	1646 3,7	100,0	4481 0,4	100,0	20200 0,1	100	12,3	x
Республика Каракалпакс тан	496,4	3,0	6021, 2	13,4	8167, 4	4,0	16,5	1,0
области:								
Андижанска я	726,2	4,4	1956, 5	4,4	8755, 1	4,3	12,1	-0,1
Бухарская	2147, 2	13,0	4075, 9	9,1	11248 ,7	5,6	5,2	-7,5
Джизакская	440,8	2,7	1304, 9	2,9	12974 ,2	6,4	29,4	3,7

Кашкадарьинская	1792,8	10,9	5894,7	13,2	19921,7	9,9	11,1	-1,0
Навоийская	1741,8	10,6	1809,1	4,0	16042,6	7,9	9,2	-2,6
Наманганская	660,6	4,0	2227,5	5,0	11982,5	5,9	18,1	1,9
Самаркандская	1083,1	6,6	3237,2	7,2	13426,0	6,6	12,4	0,1
Сурхандарьинская	655,3	4,0	1843,6	4,1	9923,0	4,9	15,1	0,9
Сырдарьинская	406,2	2,5	1083,3	2,4	7174,5	3,6	17,7	1,1
Ташкентская	1606,1	9,8	4428,1	9,9	18994,4	9,4	11,8	-0,4
Ферганская	930,9	5,7	2542,3	5,7	11320,0	5,6	12,2	-0,1
Хорезмская	416,9	2,5	1531,5	3,4	6663,2	3,3	16,0	0,8
г. Ташкент	3309,0	20,1	6854,6	15,3	44778,8	22,2	13,5	2,1

Механизм привлечения привлекательности привлечения отечественных и иностранных инвестиций в центр Республики Узбекистан заключается в механизме привлечения внутренних и иностранных инвестиций, создание организационных, экономических, правовых условий. В частности, несмотря на условия пандемии, 202000,1 млрд. сумов были потрачены на основные капиталы, которые увеличились на 12,3 пункта по сравнению с 2015 годом. В 2022 году регионы республики Каракалпакистана различаются в инвестиционной доле в частности, в 2022 году Республика Узбекистана увеличилась на 16,5 пункта по сравнению с 2015 годом. Доля джизакской области составляла 6,4 % и увеличилась на 29,4 пункта по сравнению с 2015 годом. Доля Кашкадаринской области в общей сложности потраченная на инвестиции увеличилась на 9,9 %, а следующее увеличение увеличилось на 11,1 пункта. Из данных таблицы можно увидеть, что Наманганская область составила 5,9% на 18,1%. В общих инвестициях в регионе Сырдарья низкая, она составляет 17,1% в годовом исчислении, занимает 2-е место в стране. Одной из вышестепенной областей инвестиций является Хорезмская область, в 2022 году, увеличилось на 16,0% по сравнению с 2015 годом [14]. Но во всех регионах страны инвестиционный климат уникален. Инвестиционный климат воплощает все проблемы и проблемы, принимаемые инвестором. Оцениваются удобные и неудобные аспекты инвесторов, а также идеология, политика, экономика и культура страны, стремящиеся включить их капитал. Зарубежные коллективные получатели должны разработать модель инвестиционного климата, особенно в период перехода к рыночной экономике. Эта модель действует как средство определения

внешнеэкономических отношений для них. Его основными областями должны быть для иностранных инвесторов:

- будет четкое понимание факторов, влияющих на иностранных инвесторов;

- позволяет глубоко развивать экономическую ситуацию в своей стране;

- можно знать поведение иностранных инвесторов во всех отношениях.

- следовательно, иностранные инвестиции для развивающихся стран являются фактором следующих процессов:

- ускорение экономического и технического процесса;

- рекламный и модернизация производственного оборудования;

- ведущие передовые методы организации производства;

- обучения, соответствующее требованиям рыночной экономики;

Выводы и предложения

В транзитной системе экономическая политика будет связана с деятельностью распределения валового дохода государства и перераспределения. Таким образом, государство состоит и используется в государстве. Он также получает ресурсы не только в государственных предприятиях, но и из других академических.

Банки играют особую роль в реализации инвестиционной политики государства. Работа по финансированию реальных банков страны верна на развитие страны, работа по финансированию реальной экономики экономики. Кредитные инвестиции, направленные на развитие коммерческих банков в развитии экономики, растут каждый год.

Выручка государства в виде налогов и других доходов будет распределена через бюджет и формирует инвестиционные ресурсы в его распоряжении. Не рекомендуется ограничивать инвестиционную политику государства. Правильно расширить этот объем и ввести его три элемента:

- баллы инвестиций за счет собственного дохода государства и полученной задолженности;

- существо благоприятные инвестиционные условия для национальных и иностранных инвесторов;

- Поощряйте инвестиционную деятельность во всех секторах.

Эти три аспекта инвестиционной политики также применяются в Узбекистане. Инвестиционная политика государства будет служить для выполнения своей структурной политики. В конце Узбекистана необходимо перейти на модернизированную экономику. Это достигается через активное инвестору государства. Конечно, это состояние обеспечивает приоритет укупу утильев. Однако это также создает необходимые условия для развития других ссылок. Инвестиции в государстве служат национальный круг повторно. Поскольку государство состоит из структур и промышленной инфраструктуры основных отраслей и производственной

инфраструктуры. Их деятельность имеет национальное значение и обеспечивает производство социального циркуляции. Создает товары и услуги, которые наиболее важны для экономики. Потребление товаров и услуг, созданных в государственном учителе, гарантирует ремонты в других чтениях¹. Потому что они состоят из важных ресурсов. Существуют машины, топливо и энергетические, управление водой и коммуникационные предприятия в штате Роб. Производство их очень необходимо для других диалогов. Национальная роль государства является инвестиция в инвестиционный сектор. Эта политика финансируется посредством бюджетных инвестиций. Показания инвестиционной деятельности в Узбекистане является одним из самых высоких в мире. Это указывает на то, что либерализация инвестиционных процессов в Узбекистане эффективна.

В этом случае преимущество государства наблюдается в инвестиционном процессе. Однако вклад смешанного студеля также высок. Оба работают состояние состояния. Этот показатель показывает, что государство перераспределяло доход государства и приводит к разработке и размещению инвестиционных ресурсов. Эта ситуация ограничивает инициативу заявителей мобильных и сообществ в этом отношении, если такая ситуация требует структурных изменений. В последнее время эти два инвестиционных ресурса соблюдают, чтобы пройти в неработающие сектора и сосредоточиться на личном потреблении. Этот процесс можно объяснить двумя факторами. Во-первых, население ориентирована на строительство своих собственных денежных средств больше жилья для его дохода для защиты доходов от инфляции. Если мы получим частные инвестиции, очень большая часть их тратится на строительство личного жилья. Это не служит для увеличения потенциала производства частных государств. Во-вторых, можно предотвратить частные инвестиции на национальный рынок технологических технологий, которые необходимые технологии можно найти на зарубежных рынках и отсутствию валютных ресурсов. Такие причины также влияют инвестиции в команду в сообществе. Здесь деятельность жилищных кооперативов также служит для прямых инвестиций в этой области.

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*Курбонов А.Б.
доцент
Каршинский университет
информационных технологий и менеджмента*

ПЕРСПЕКТИВЫ РАЗВИТИЯ АГРАРНОГО ПРЕДПРИНИМАТЕЛЬСТВА В РЕГИОНАХ

Аннотация. В статье акцентируется внимание на специфических особенностях предпринимательства и роли предпринимательства. Также были изучены и проанализированы мнения ученых, проводивших научные исследования в сфере агропредпринимательства. Проанализированы показатели развития бизнеса и разработаны прогнозные показатели. Были даны предложения и рекомендации по нехватке специалистов в сфере сельского хозяйства и решению существующих проблем в предпринимательстве.

Ключевые слова: Сельское хозяйство, предпринимательство, агробизнес, технологии, эффективность, уровень предпринимательских наклонностей.

*Kurbonov A.B.
associate professor
Department of Information Technologies and Management
Karshi University*

PROSPECTS FOR THE DEVELOPMENT OF AGRICULTURAL ENTREPRENEURSHIP IN REGIONAX

Annotation. The article focuses on the specific features of entrepreneurship and the role of entrepreneurship. The opinions of scientists who conducted scientific research in the field of agribusiness were also studied and analyzed. Business development indicators were analyzed and forecast indicators were developed. Suggestions and recommendations were made on the shortage of specialists in the field of agriculture and solving existing problems in entrepreneurship.

Key words: Agriculture, entrepreneurship, agribusiness, technology, efficiency, level of entrepreneurial inclinations.

Введение

Развитие агропромышленного комплекса в нашей республике является одной из стратегических задач современности. Исходя из требований рыночной экономики только за счет усиления ее развития будет

создана возможность укрепить национальную экономику нашей страны и использовать ее имеющиеся резервы для роста национального богатства.

Развитие агропромышленного комплекса зависит от развития двух основных направлений. Во-первых, это зависит от увеличения объемов производства сельскохозяйственной продукции, во-вторых, от развития ее перерабатывающей промышленности. Позитивное решение этих двух вопросов зависит от укрепления малого предпринимательства.

Агропромышленный комплекс требует, чтобы сельскохозяйственное производство и промышленная переработка создаваемой в нем продукции осуществлялись на основе интеграции сельского хозяйства и промышленности. Это обеспечивает удовлетворение потребности в сельскохозяйственной продукции в течение всего года. Часть производимой сельскохозяйственной продукции направляется на непосредственное потребление, а часть превращается в готовую продукцию путем переработки.

В Узбекистане и его регионах малое предпринимательство развивается на основе государственной программы независимо от отрасли народного хозяйства. Потому что государство обеспечивает экономическую стабильность страны на основе поддержки малого бизнеса.

Методология исследования и научно-методические основы

При реализации данного исследования рассмотрены теоретические и методологические основы развития малого предпринимательства, развитие малого бизнеса в аграрном секторе, роль сельскохозяйственной продукции в развитии рынка, изучение факторов, влияющих на него, а также работа ряда ученых, проводивших научные исследования, являются теоретическими. На основе диалектической теории научного исследования, анализа и синтеза в качестве методологии исследования использовались методы статистического анализа.

Обзор литературы

На основе исследований современных экономистов проблем предпринимательства и анализе сущности предпринимательства можно разделить на следующие направления:

Первое направление - предпринимательство - это самостоятельная экономическая деятельность, направленная на получение прибыли.

Второе направление - целью предпринимательской деятельности является не отрицая прибыли достижение высокой эффективности производства, основанной на сумме отношений при реализации новых сочетаний ресурсов как определяющей сущности предпринимательства [4].

Третье направление заключается в том, что в управлении движением ресурсов в предпринимательской деятельности необходим творческий подход. Сюда можно отнести Д. В. Бусыгина [5], В. Д. Камаева [7], И.Н.Герчикову [6], Ф. М. Русинова [8] и других. В исследованиях этих

ученых предпринимательство отражается не как простая трудовая деятельность, а как активная творческая деятельность.

По мнению А. Н. Асаула [1], предпринимательство – это специфический вид экономической деятельности, суть которого состоит в стимулировании и удовлетворении спроса общества на конкретные потребности его членов посредством рыночного обмена и направлены на получение конкурентных преимуществ за счет рыночного дисбаланса. Предпринимательство в сельском хозяйстве предполагает участие отдельных субъектов и объектов предпринимательской деятельности. По мнению И.В. Украинцевой [2], хозяйствующие субъекты – это предприниматели, которые осуществляют хозяйственную деятельность и несут полную ответственность.

Анализ и результаты

В агропромышленном комплексе требуется, чтобы сельскохозяйственное производство и промышленная переработка создаваемой в нем продукции осуществлялись на основе интеграции сельского хозяйства и промышленности. Это обеспечивает удовлетворение потребности в сельскохозяйственной продукции в течение всего года. Часть производимой сельскохозяйственной продукции направляется на непосредственное потребление, а часть превращается в готовую продукцию путем переработки [10].

Учитывая, что сельскохозяйственное производство носит циклический характер необходимо улучшить кредитование. Если проблема кредитования связана с природными климатическими условиями, инвестиционный риск возрастает. Поэтому развитие малого предпринимательства в АПК связано не только с субъективными, но и объективными трудностями. Поэтому государственная и местная власть, исходя из сложившихся условий, должна проводить политику, стимулирующую развитие малого бизнеса и создание интегрированного механизма [9].

С точки зрения основных целей и задач экономических реформ проводимых в нашей стране можно сказать, что создание условий для развития рыночной экономики в регионе следует считать приоритетной задачей. В первые дни независимости в целях создания условий свободной конкуренции в рыночной экономике были созданы различные субъекты собственности на основе приватизации всех государственных предприятий. В результате повсеместной реализации решений по поддержке малого предпринимательства, сокращения проверочной работы, снижения финансовых затрат на ведение бизнеса, внедрения регистрационно-уведомительной системы количество зарегистрированных и действующих субъектов малого предпринимательства резко возросло также изменения происходят положительные в их экономических показателях. В результате таких усилий во всех отраслях экономики созданы субъекты малого

предпринимательства, а их количество в Кашкадарьинской области по состоянию на 1 января 2023 года достигло 78 552 человек.

По данным анализа численности субъектов малого предпринимательства Кашкадарьинской области по составу отраслей мы можем наблюдать, что существуют несоответствие в распределении субъектов малого предпринимательства по отраслям. Количество промышленных предприятий в 2023 году увеличилось в 1,2 раза по сравнению с 2018 годом, а их доля в экономике снизилась в 0,2 раза, а также сферы торговли и бытовых услуг (0,7), жилищно-коммунального хозяйства (0,7), видно, что доля в сфере образования (0,9) снизилась. В регионе за последние пять лет увеличилась доля таких отраслей экономики, как строительство (1,0), сельское хозяйство (1,1), транспорт (2,3), здравоохранение, спорт и социальное обеспечение (1,2).

По данным статистики, в регионе насчитывается 58,2 тыс. Человек ищущих работу и 2532 человека признанных безработными на биржах труда, или 0,002 процента от общего числа трудоспособного населения. При анализе численности занятого в малом и частном предпринимательстве Кашкадарьинской области и ее районов по данным выявлено, что в агропромышленном комплексе в среднем занято 19,7% населения, тогда как в сельской местности проживает 56,4% населения.. Это означает, что хотя процент занятых на предприятиях малого бизнеса в аграрном секторе и увеличивается, он низок по сравнению с темпами роста работающего населения. Это требует ускоренного развития малого предпринимательства в агропромышленном комплексе.

Выводы и предложения

Исследования показали, что внедрение промышленных предприятий в сельское хозяйство является основой развития других отраслей. Поэтому развитие малого предпринимательства в отрасли должно стать приоритетом экономики региона. В этой связи необходимо широко использовать иностранные и внутренние инвестиции. 25,2 процента инвестиций, привлеченных в область в 2022 году, будут соответствовать вкладу малого бизнеса. Более широкое развитие инвестиционной сферы в АПК является основой развития малого предпринимательства в сельском хозяйстве и обеспечивает увеличение доли предпринимательства в объеме произведенной продукции, выполненных работ и оказанных услуг.

С использованием метода скользящей средней экстраполяции было спрогнозировано количество действующих в регионе субъектов предпринимательства по отраслям на ближайшие несколько лет. Согласно прогнозу, в 2024-2026 годах количество субъектов малого предпринимательства в регионе увеличится, то есть достигнет 76 819 и 77 471 соответственно. Ожидается, что в 2026 году их число увеличится до 33 176 по сравнению с 2018 годом.

Комплексная оценка уровня влияния организационно-экономических решений на эффективность путем классификации факторов повышения эффективности агропромышленного комплекса и предприятий, с другой стороны, требует определения взаимосвязей показателей эффективности. Исходя из отмеченных аспектов, основными принципами разработки факторов повышения эффективности промышленности и предприятий должны стать: взаимозависимость при разработке классификаций факторов по всем показателям эффективности; определение ресурсного потенциала и использование резервов для повышения экономической эффективности; необходимо обеспечить достоверность и обоснованность расчета прироста эффективности на основе группировки факторов.

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*Мадаминова Н.Э., к.м.н.
старший преподаватель
кафедра травматологии - ортопедии, оториноларингологии
и детской анестезиологии – реаниматологии,
Андижанский государственный медицинский институт*

ВЫБОР ЭФФЕКТИВНОЙ ТЕРАПИИ ПРИ ВОСПАЛИТЕЛЬНЫХ ЗАБОЛЕВАНИЯХ ГЛОТКИ

Аннотация. Воспалительные процессы верхних дыхательных путей и глотки занимают лидирующее положение как в отношении частоты обращения к врачу-оториноларингологу, так и по разнообразию патогенных факторов, вызывающих процессы, сопровождающиеся болью в горле.

Ключевые слова: глотка, лор -органов, тонзилэктомия, воспалительные заболевания.

*Madaminova N.E., Ph.D.
senior lecturer
traumatology - orthopedics, otorhinolaryngology
and pediatric anesthesiology - resuscitation
Andijan State Medical Institute*

SELECTION OF EFFECTIVE THERAPY FOR INFLAMMATORY DISEASES OF THE PHARYNX

Annotation. Inflammatory processes of the upper respiratory tract and pharynx occupy a leading position both in terms of the frequency of visits to an otolaryngologist and in the variety of pathogenic factors that cause processes accompanied by sore throat.

Key words: pharynx, ENT organs, tonsillectomy, inflammatory diseases.

Актуальность. В ежедневной врачебной практике не только лор-специалиста, но также педиатра, терапевта и врача общей практики воспалительные заболевания верхних дыхательных путей (ВДП), в частности глотки, занимают одну из лидирующих позиций среди обращений. Воспалительные процессы в лимфоидном кольце глотки занимают лидирующее положение как по частоте обращения к врачу, так и по разнообразию патогенных факторов, вызывающих процессы, сопровождающиеся болью в горле. Интересно отметить, что воспалительные заболевания лимфоидного кольца глотки составляют более 30% от всех патологий лор-органов. Элементы лимфоглоточного кольца

играют важную роль в общей иммунной системе организма. Это объясняется тем, что лимфоидная ткань находится в области перекрестка дыхательных путей и верхней части пищеварительного тракта, где существует высокий риск получения травмы и инфицирования.

Одной из ведущих жалоб, встречающихся при воспалительной патологии ВДП и глотки, является ощущение дискомфорта и (или) боли в горле. Согласно эпидемиологическим данным, эта жалоба находится в тройке наиболее распространенных симптомов, с которыми пациенты обращаются к врачам первичного звена.

Системные анальгетики часто дают слабовыраженный обезболивающий эффект при воспалительном процессе в горле, тем самым уступая по эффективности препаратам местного действия. Несмотря на очевидную необходимость ограничения показаний к проведению тонзиллэктомии, данный способ лечения продолжает занимать одно из ведущих мест в тактике лечения больных хроническим тонзиллитом. Особенно высок показатель проведенных оперативных вмешательств в странах с рыночными основами финансирования медицины. Например, в Соединенных Штатах Америки ежегодно производится до 390 000 тонзиллэктомий. Одним из негативных последствий подобной тактики лечения является выраженный болевой синдром в послеоперационном периоде.

Лекарственное средство ЛСК в форме раствора для полоскания рта является проверенным на практике и исследованным препаратом с подтвержденной эффективностью. Оно обеспечивает минимальное количество побочных действий и обладает быстрым, но в то же время качественным проникновением в ткани ротоглотки.

На основе проведенного одиночного слепого рандомизированного клинического исследования по проверке эффективности, представленного итальянской группой ученых, была выявлена достоверная эффективность и хорошая переносимость раствора ЛСК для местного применения при острой воспалительной реакции в полости рта. Исследование было проведено с целью оценки анальгетического эффекта раствора ЛСК, используемого для полоскания горла, в сравнении с бензидамина гидрохлоридом (БГ). В рамках исследования в группу исследуемых были включены 120 пациентов в возрасте от 18 до 40 лет, которые получали стоматологическое лечение. Среди них были как мужчины, так и женщины. С целью исследования все пациенты были разделены на две равные группы, каждая из которых состояла из 60 чел. Первая группа получала противовоспалительную терапию раствором ЛСК в дозе 160 мг на 100 мл. Вторая группа пациентов получала БГ по 15 мл дважды в сутки в течение 7 дней. Оценивались возможности обоих препаратов в облегчении боли и контроле воспалительных процессов. Исследование показало, что раствор ЛСК является эффективным средством местного применения для облегчения

боли и контроля возбудителей воспаления. Каждая из двух схем лечения в целом переносилась пациентами хорошо и не вызывала побочных действий.

Устойчивая тенденция, наблюдаемая в течение последних 10–15 лет, наравне с необоснованным назначением антибактериальных средств при воспалительном процессе ВДП и глотки – повсеместное снижение чувствительности основных возбудителей патологии лор-органов к антибактериальным средствам. Исследования, проведенные как в России, так и за рубежом, подтверждают, что неконтролируемое использование антибиотиков, самолечение пациентами, недостаточные дозировки, а также широкое применение препаратов с недостаточно изученной биоэквивалентностью и сомнительным качеством привели к существенным трудностям в медицине. Особенно пострадали важные препараты, такие как цефалоспорины, тетрациклины и синтетические пенициллины. В свою очередь, недавние исследования указывают на отчетливую тенденцию: очень скоро еще один класс жизненно важных антибактериальных средств – макролиды – будет находиться под угрозой.

Заключение

Широкий терапевтический потенциал, хорошая переносимость, а также простота применения позволяют рекомендовать ЛСК как средство для широкого применения у пациентов с острым инфекционным процессом в глотке, в том числе в педиатрической практике. Данный препарат является одним из эффективных средств для лечения заболеваний, протекающих с болью в горле, и поскольку отсутствует взаимодействие с другими лекарственными средствами, его можно использовать в составе комбинированной терапии с антисептиками. Также ЛСК может с успехом использоваться для купирования воспалительных процессов в глотке, в том числе и после двусторонней тонзиллэктомии.

Включение в схему терапии при бактериальном поражении ВДП и глотки цефалоспоринов 3-го поколения привнесло значительные изменения в терапию, став неотъемлемой частью лечения пациентов как в стационарных, так и в амбулаторных условиях. Это позволило разработать более экономичные схемы лечения, одновременно обеспечивая высокую антибактериальную активность, хорошую переносимость и удобство приема, что делает их основным выбором при лечении бактериального воспалительного процесса ВДП и глотки.

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*Мамадалиев А.Т.
Наманганский инженерно-строительного института
Республика Узбекистан, г.Наманган*

ПРИЧИНЫ ЗАГРЯЗНЕНИЯ ВОЗДУХА В ГОРОДЕ ТАШКЕНТА И МЕРЫ ПО ПРЕДОТВРАЩЕНИЮ

Аннотация. В данной статье представлена информация о причинах загрязнения атмосферного воздуха города Ташкента и его предотвращении.

Ключевые слова: Атмосферный воздух, уровень загрязнения, концентрация дисперсных частиц, оксиды серы, оксиды углерода, оксиды азота, зеленая зона.

*Mamadaliyev A.T.
Namangan Civil Engineering Institute
Republic of Uzbekistan, Namangan*

CAUSES OF AIR POLLUTION IN TASHKENT CITY AND PREVENTION MEASURES

Abstract. This article provides information about the causes of air pollution in the city of Tashkent and its prevention.

Key words: Atmospheric air, pollution level, concentration of dispersed particles, sulfur oxides, carbon oxides, nitrogen oxides, green zone.

В нашей стране ведется последовательная работа в области охраны окружающей среды, рационального использования природных ресурсов, улучшения санитарно-экологической обстановки.

В то же время результаты проведенного в этой связи анализа свидетельствуют об отсутствии комплексного подхода и стратегического планирования при реализации государственных функций в области охраны окружающей среды, а также о недостаточных полномочиях природоохранного органа для эффективного выполнять поставленные задачи.

В последнее время мы видим, что Ташкент занял высокие места среди крупных городов мира по уровню загрязнения атмосферного воздуха, то есть в онлайн-индексе портала IQAir. По данным портала IQAir, основанного на показателях, зафиксированных станциями Узгидромета, концентрация мелких дисперсных частиц РМ-2,5 в воздухе Ташкента составляла 212 мкг/м³ в те дни, когда она занимала высокие места, что является засекреченным показателем. как «очень вредный» и в 42 раза

превышающий стандарт, установленный Всемирной организацией здравоохранения.. в 4 раза больше[1].

По данным ВОЗ, PM-2,5 является самым опасным для здоровья показателем загрязнения воздуха.

Исходя из данных обстоятельств, по данным Министерства экологии, охраны окружающей среды и изменения климата Республики Узбекистан

Одной из основных причин загрязнения воздуха является растущий спрос на уголь в отраслях экономики, в частности, перевод тепличных хозяйств на использование угольного топлива [2].

За последние 5 лет темпы роста потребления угля в экономике превысили 22 процента. За этот период количество теплиц увеличилось в 2,5 раза, а 60 процентов этих теплиц перешли на использование угля в качестве основного источника отопления. Кроме того, с 2018 года в два раза увеличилось использование угля на Ново-Ангренской ТЭЦ в Ташкентской области.

Эксперты утверждают, что при сжигании 10 тонн угля образуется 220 кг сажи, 360 кг оксидов серы, 80 кг оксидов углерода и азота.

Можно сказать, что вторым фактором загрязнения воздуха в Ташкенте является рост промышленности Ташкента. В Узбекистане действует более 97 000 промышленных предприятий, из них более 16 000 расположены в Ташкенте, что, в свою очередь, приводит к увеличению выбросов загрязняющих веществ в воздух вокруг Ташкента [2].

Еще одним фактором загрязнения является резкое увеличение количества автотранспортных средств: в 2021 году в Узбекистане было зарегистрировано 3,14 млн автомобилей, а в 2023 году их количество увеличилось на 32% до 4,6 млн. Автомобили, работающие на бензине Аи-80, выбрасывают в атмосферу большую часть выбросов углекислого газа и мелких частиц PM_{2,5}. В среднем по Ташкенту ежедневно передвигается около 730 тысяч автомобилей. Кроме того, в день в столицу из регионов въезжает до 300 000 автомобилей [2].

Можно подчеркнуть, что одной из основных причин загрязнения является использование мазута в качестве дополнительного топлива теплостанциями для обеспечения теплом населения. Если в 2018 году на Ташкентской АЭС было израсходовано 118,9 тысяч тонн мазута, то сегодня этот показатель превысил 270 тысяч тонн (рост в 2,3 раза). За последние пять лет использование мазута на Ангренской ТЭЦ увеличилось почти вдвое[2].

В последнее время зеленая зона города Ташкента и его окрестностей уменьшилась. В частности, за время действия моратория на вырубку деревьев и кустарников было незаконно вырублено около 49 тысяч деревьев.

Загрязнение воздуха в Ташкенте обусловлено направлением и скоростью ветра, температурой воздуха, солнечной радиацией, количеством

и продолжительностью атмосферных осадков, температурными инверсиями (слоем теплого воздуха, препятствующим рассеиванию смешанных частиц по вертикали) и другими природными факторами. Город Ташкент окружен горами и расположен глубоко. Из-за этого, из-за того, что ветер не циркулирует, запыленный поток воздуха остается в городе, становится влажным и не уходит естественным путем.

Синоптики дают следующие рекомендации жителям и гостям города Ташкента в условиях сильного загрязнения воздуха:

- Старайтесь как можно чаще не выходить из дома.
- Находясь на улице, необходимо носить медицинскую маску и менять ее каждый час.
- При появлении одышки, насморка, хрипов, гриппа, покраснения и зуда глаз, сильного зуда в горле, кашля необходимо немедленно обратиться к аллергологу.

Рекомендуется промывать нос и горло солевым раствором, держать окна закрытыми и расстелить перед окнами влажные полотенца.

Теперь остановимся на следующих мерах, предложенных Министерством экологии, охраны окружающей среды и изменения климата Республики Узбекистан для снижения и предотвращения загрязнения воздуха в Ташкенте:

- запрет на использование моторного топлива экологической категории ниже стандарта Евро-4 (бензин марки АИ-80);
- в целях снижения трафика автотранспортных средств и обеспечения безопасности движения они предназначены для перевозки грузов в часы пик суток (с 07:00 до 10:00 утра и с 17:00 до 20:00).), массой 3,5 и 12 т., ограничивающие движение транспортных средств массой более тонны;
- запрет на движение всех видов автотранспортных средств, выпущенных до 2010 года, установление льгот, преференций и субсидий владельцам автотранспортных средств для перехода на современные автотранспортные средства (электромобили);
- введение в последние годы в качестве эксперимента по снижению пробок на автомагистралях правила вождения автомобилей в «четные и нечетные» дни с целью оптимизации движения автомобилей;
- организация зон, свободных от транспортных средств, на значимых центральных улицах города;
- перевод общественного транспорта на полностью электрический, газобаллонный и другие альтернативные виды топлива, а также организация дорожной инфраструктуры;
- объявление моратория на строительство всех видов строительных объектов (кроме объектов социального и государственного значения);
- запрет использования угольного топлива в промышленных целях в прилегающих к городу Ташкенту районах Ташкентской области;

- создание искусственных водоемов с целью обеспечения смягчения микроклимата, положительного влияния на качество атмосферного воздуха;
- строгий запрет на использование мазута в качестве резервного топлива в теплоцентрах, действующих в городе Ташкенте;
- создание «зеленых поясов» вокруг города Ташкента с целью снижения скорости ветра и предотвращения перемещения частиц почвы на основе научных и тщательно проработанных выводов;
- установка табло и мониторов, постоянно отображающих показатели качества воздуха.

В заключение можно сказать, что на промышленных предприятиях 1-й и 2-й категории по экологическому воздействию в целях охраны атмосферного воздуха города Ташкента будет установлено пылегазоочистное оборудование, а существующие будут реконструированы, внедрение станций мониторинга источников загрязнения атмосферного воздуха, установка автоматических станций мониторинга окружающей среды. Это, в свою очередь, дает возможность контролировать, анализировать, устранять вредные вещества на промышленных предприятиях и стабилизировать экологическую ситуацию за счет цифровизации экологической обстановки.

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*Мамадалиев А.Т.
Наманганский инженерно-строительного института
Республика Узбекистан, г.Наманган*

САМОРОДНЫЕ МИНЕРАЛЫ И ИХ ЗНАЧЕНИЕ В НАЦИОНАЛЬНОЙ ЭКОНОМИКЕ

Аннотация. В статье приведены сведения о минералах, относящихся к классу чистых элементов, их происхождении, строении, сингониях, проявлении симметрии, химических свойствах, внешнем виде, оптических и механических свойствах, а также их использовании в народном хозяйстве.

Ключевые слова: Самородные элементы, полиморфизм, друза, оптические свойства, механические свойства, связь, твердость, эндогенный пневматолит, графит, резиновая промышленность, ювелирная промышленность, медь, золото, серебро, дендриты.

*Mamadaliyev A.T.
Namangan Civil Engineering Institute
Republic of Uzbekistan, Namangan*

NATIVE MINERALS AND THEIR IMPORTANCE IN THE NATIONAL ECONOMY

Annotation. The article provides information about minerals belonging to the class of pure elements, their origin, structure, syngonies, manifestation of symmetry, chemical properties, appearance, optical and mechanical properties, as well as their use in the national economy

Key words: Native elements, polymorphism, drusen, optical properties, mechanical properties, connection, hardness, endogenous pneumatolyte, graphite, rubber industry, jewelry industry, copper, gold, silver, dendrites.

Минералы, относящиеся к классу самородные элементов, состоят из атомов химических элементов, одинаковых или близких друг другу по строению и свойствам. Сейчас в природе встречается более 30 видов минералов. Самородными элементами, образующими минералы, могут быть металлы, полуметаллы и неметаллы.

Чистое датирование характерно для цветных металлов и меди. Известны метеориты из чистого железа и его сплавов с никелем и кобальтом (железные и железокаменные метеориты). Чистые металлы в чистом виде встречаются редко. В большинстве случаев их можно рассматривать как сплавы природного происхождения. В неметаллах много серы и углерода. В редких случаях наблюдаются полуметаллы — маргиумуш, сурьма, висмут.

Полиморфизм характерен для самородных элементов. Например, углерод может проявляться в виде графита и алмаза. Сера также имеет две модификации.

Происхождение самородных элементов связано главным образом с эндогенными: магматическими, гидротермальными и метаморфическими процессами. Чистые серебро и медь иногда образуются в зонах окисления сульфидных месторождений. В образованиях россыпей могут образовываться промышленно важные месторождения исходно чистых металлов (золота, платины).

Значение самородных элементов в строении литосферы незначительно. Они составляют более 0,1% от общей массы земной коры и не относятся к породообразующим минералам. Но некоторые из них имеют большое практическое значение. Среди исходных элементов наиболее распространены платина, золото и серебро.

Золото - Au. Имеет небольшие количества добавок Ag, Pd, Rh, Cu, Fe. Золото с содержанием серебра более 20% называется электрумом.

Форма встречи — плотная масса, в виде листочков. Кристаллы имеют форму октаэдров, шестигранников, додекаэдров и встречаются редко. Иногда он образует дендриты и нити.



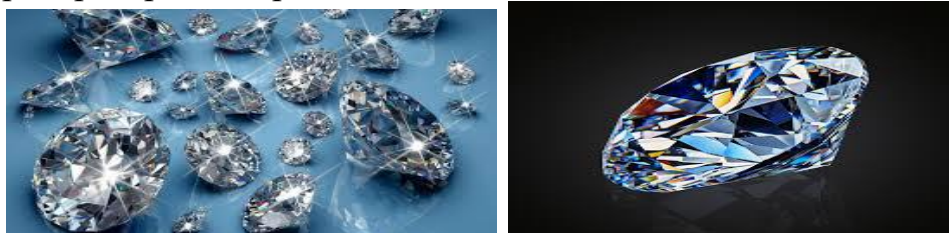
Твердость 2,5-3, удельный вес 19,3 г/см³ (в чистом виде -19,3

г/см³), цвет золотисто-желтый, шлейф желто-металлический, блеск сильный металлический, поддается дроблению. Часто встречается в гидротермальных и рассеянных отложениях. Это драгоценный металл. Симметрия кубическая, симметрия гексаоктаэдрическая-3L₄4L₃6L₂9PC

К особым свойствам золота относятся высокая ковкость и эластичный, высокая химическая стабильность, неокисляемость, нерастворимость в кислотах. Можно выделить две основные группы золота: первичное, недргоценное и вторичное, рассеянное. В Центральных Кызылкумах (Мурунгов) имеется крупное месторождение чистого золота. В Северной Нуроте широко распространены разбросанные месторождения золота.

Золото в основном используется как важный драгоценный металл в ювелирном деле, производстве монет и медалей, электронике, оптике, приборостроении и медицине.

Алмаз – минерал **C** происходит от греческого слова адамас, означающего неопределимый, а цветные и непрозрачные алмазы могут содержать оксиды Si, Mg, Ca, Fe, Al, Ti и другие минеральные включения. Кубические сингонии (октоэдры и др.) встречаются в виде кристаллов. Твердость 10 по шкале Мооса (в 1000 раз больше, чем у кварца, в 150 раз больше, чем у корунда), удельный вес $3,5 \text{ г/см}^3$, бесцветный, прозрачный, синий, желтый, зеленый, коричневый и черный. Он связан с алмазоподобными, хрупкими, очень основными магматическими породами, а также распространен в рассеянном виде



Алмаз – это чистый прозрачный алмаз, который является очень драгоценным камнем, в результате его обработки получают бриллианты. Неювелирные виды алмазов используются в качестве абразивных и режущих материалов, при сверлении, шлифовке, резке стекла.

Минерал Сера- **S** обычно имеет примеси As, Se, Te и встречается цельной, иногда землистой и порошкообразной кучей. Кристаллы имеют дипирамидальную форму. Твердость 1-2, удельный вес 2 г/см^3 .

Цвет чистой серы желтый, линий почти нет, по краям алмазоподобный блеск, преломление маслянистое.

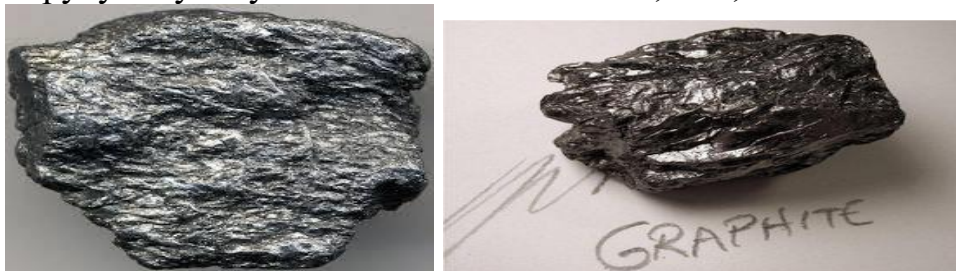


Источником серы в большинстве случаев являются эндогенные пневматолиты, пары воды и газы, выделяющиеся во время и после извержений вулканов. В гипергенных условиях он может образовываться за счет разложения сульфидов и гипса и деятельности серобактерий.

Сера используется в производстве серной кислоты, в производстве сульфатной целлюлозы. Его также используют при производстве красителей, взрывчатых веществ и химических ядов против сельскохозяйственных вредителей в резиновой и текстильной промышленности.

Название **графита** - минерала **C** происходит от греческого слова графо - писать. Симметрия дигексоганально-дипирамидальная - $L_6 6L_2 7PC$. Прямые кристаллы встречаются редко. Иногда в виде шестиугольных

пластинок-таблеток от серого до черного цвета с блестящей черной полосой. При твердости 1 он оставляет ощущение жирности на руке и затемняет руку и бумагу. Относительная масса 2,09-2,23 г/см³.



Происхождение минерала графита эндогенное, метаморфическое и контактно-метаморфическое, он может образовываться в результате процессов регионального метаморфизма и встречается в мраморах, гнейсах, кристаллических сланцах, углях и горных породах с органическими веществами в контакте с магматическими породами. Самый крупный рудник в Узбекистане – Таказгон в Овминзатове.

Минерал графит применяется в металлургической промышленности для производства металлических сварочных стержней, электродов, в электротехнической промышленности, в атомной промышленности как замедлитель и дефлектор нейтронов, при производстве смазочных материалов, карандашей и красок, в резиновой промышленности.

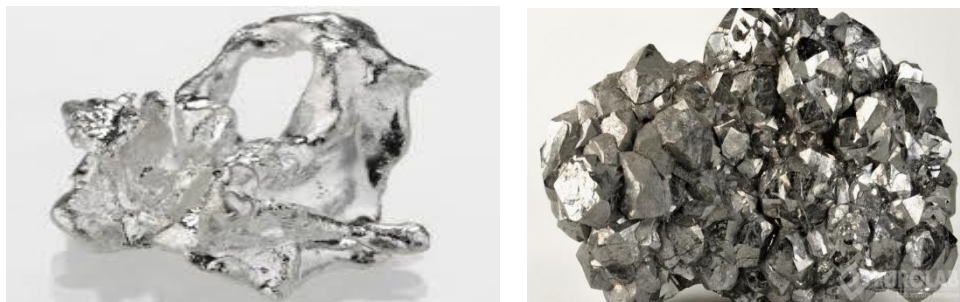
Медный минерал **Cu** обычно химически чистый, иногда может содержать в качестве примесей Ag, Au, Fe (до 2,5%). Симметрия кубическая, симметрия гексаоктаэдрическая-3L₄4L₃6L₂9PC.



Цвет меди медно-красный, иногда коричневый. Цвет строчки медно-красный, блестящий. Блеск металлический. Прозрачность - матовая. Его твердость 2,5-3, плотность 8,9 г/см³.

В Узбекистане медь была обнаружена многими учеными в аналогичных песчаниках меловых и верхнетричных отложений. Очень небольшое количество обнаружено также в зоне окисления рудных месторождений Курамских гор. В Узбекистане очень распространены меловые и верхнетричные песчаники. Медные песчаники очень распространены в северо-западной части Ферганской долины (Наукат, Варзик, Шакаптар и др.), на юго-западе Хисарских гор (Шакарликостон, Кохитанг, Тюбегатан, Ковурдок и др.).

Медный минерал применяется в электротехнике, приборостроении, машиностроении. Медь используется в производстве электрических проводов, теплообменников, труб и различных сплавов.



Чистое самородное серебро – в зависимости от содержания Ag известны следующие виды. Кюстелит (содержание золота до 10%), медно-серебристый (содержание меди до 0,1%), висмут-серебро (содержание висмута до 5%), сурьмяное серебро (содержание сурьмы до 11%). Сингония кубическая. Симметрия гексооктаэдрическая - $3L_44L_36L_29PC$.

Серебристая тонкая пластинка встречается в виде крыльев, листьев и «тканых» дендритов. Чаще встречаются проволочные формы. В природе чаще встречаются неправильные зерна и крупные агрегаты серебра.

Кристаллы серебра обычно кубические, октаэдрические и в меньшей степени додекаэдрические. Встречаются также кристаллы-двойники. Цвет серебристо-белый, сверху часто покрыт черной каймой. Твердость 2,5-3. хрупкий Соединительной плоскости нет. Относительная масса 10,1-11,1 г/см³. Это лучший проводник тепла и электричества.

В Узбекистане чистое самородное серебро встречается в месторождениях Курамских гор, в полиметаллических месторождениях Восточного Карамозора.

Серебро в основном сплавляется с медью и используется для изготовления столового серебра, монет и других вещей. Чистое серебро используется в ювелирных изделиях, изготовлении тиглей для щелочной плавки, изделий для отбеливания серебра, образования химических соединений и в других целях. Основная масса серебра (около 80%) добывается не в чистом виде, а как побочный продукт на богатых серебром свинцовых, цинковых, золотых и медных рудниках.

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*Мамадова Д.
преподаватель
Средняя школа № 26
Кашкадарьинская область Шахрисабзского района*
*Хусанова Д.
преподаватель
Средняя школа № 26
Кашкадарьинская область Шахрисабзского района*

ИСПОЛЬЗОВАНИЕ СОВРЕМЕННЫХ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ ПРИ ОБУЧЕНИИ АЛГЕБРЕ И ОСНОВАМ АНАЛИЗА

Аннотация. В статье рассматривается целесообразность использования различных современных компьютерных технологий в эпоху информационно-коммуникационных технологий, организация, управление и контроль занятий в процессе компьютерного образования в зависимости от взаимоотношений ученика и компьютера.

Ключевые слова: математика, современные информационные технологии, компьютерное образование, технические средства, автоматизированная образовательная система.

*Mamadova D.
teacher
Secondary school No. 26, Kashkadarya region
Shakhrisabz district*
*Khusanova D.
teacher
Secondary school No. 23, Kashkadarya region
Shakhrisabz district*

USING MODERN INFORMATION TECHNOLOGIES IN TEACHING ALGEBRA AND FUNDAMENTALS OF ANALYSIS

Annotation. The article discusses the feasibility of using various modern computer technologies in the era of information and communication technologies, the organization, management and control of classes in the process of computer education, depending on the relationship between the student and the computer.

Key words: mathematics, modern information technologies, computer education, technical means, automated educational system.

Сегодня невозможно представить себе процесс обучения без использования информационно-коммуникационных технологий.

Информационно-коммуникационные технологии используются как непосредственно на занятиях, так и при подготовке к ним. Наличие информационно-образовательной среды образовательной организации является законодательно закрепленной нормой, отраженной в государственных образовательных стандартах. В образовательных стандартах нового поколения представлены строгие и формализованные требования к информационно-образовательной среде. Профессиональный стандарт педагога включает в себя требования к ИКТ-компетентности педагога, причем ИКТ-компетентность педагога является многоуровневой и включает в себя обще-пользовательскую ИКТ-компетентность, общепедагогическую ИКТ-компетентность и предметно-педагогическую ИКТ-компетентность. Предметно-педагогическая ИКТ-компетентность раскрыта очень подробно именно для учителя математики.

Важными являются следующие информационно-коммуникативные потенциалы, определяющие готовность современного учителя к работе в условиях информатизации общества:

- Использование ИКТ в образовательном процессе – прекрасная возможность повысить эффективность образования. В частности, по этому слайду нетрудно узнать разницу между процессом обучения и обучением с использованием ИКТ.

- Чтобы использовать ИКТ на уроках математики, сначала необходимо узнать о компьютерных программах и о том, как их использовать. Это означает, что компьютерные программы помогают учащимся не только формировать свои знания и умения, но и развивать творческие способности посредством использования компьютеров.

- Автоматизированная система обучения дает возможность самостоятельно освоить курс обучения или большую его часть.

Преимущества компьютерного обучения много: сокращается время, необходимое учащимся для развития определенных навыков; увеличивается количество практических заданий; ускоряется темп работы студентов; в результате необходимости активного управления со стороны компьютера учащийся становится учебным субъектом; студенты имеют возможность моделировать и непосредственно демонстрировать процессы, которые студентам сложно наблюдать и наблюдать; становится возможным обеспечить урок удаленными ресурсами с использованием средств связи; общение с компьютером приобретает характер дидактической игры, благодаря чему повышается мотивация учащихся к учебной деятельности и т. д.

Одним из актуальных вопросов является использование достижений информатики для обеспечения междисциплинарной связи в современную эпоху, когда в преподавание математики стремительно входят новые технические средства, в том числе компьютеры и другие информационные технологии.

Внедрение компьютерных технологий в образовательных учреждениях открывает широкий путь оптимизации учебного процесса.

В последующее десятилетие использование компьютеров в преподавании математики осуществлялось по нескольким основным направлениям. К ним относятся компьютерная оценка знаний, разработка и освоение различных видов образовательных программ, разработка познавательных математических игр и т.д.

Еще одной областью использования компьютеров в математическом образовании является моделирование некоторых учебных ситуаций. Цель использования программ моделирования – обеспечить понимание материала, который сложно представить и визуализировать при использовании других методов обучения. С помощью моделирования информация может быть представлена обучающимся в виде компьютерного мультимедиа в графическом режиме. Поэтому они склонны углубленно изучать математику и проявлять значительную степень самостоятельности в процессе обучения.

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Существует большое количество классификаций информационно-коммуникационных технологий как по функциональному значению, так и по структуре и содержанию самих этих технологий. По методическому назначению информационно-коммуникационные технологии делятся на следующие категории:

- демонстрационные программные средства — средства, которые обеспечивают наглядное представление учебного материала;
- информационно-справочные, информационно-поисковые системы, базы данных и знаний, электронные библиотеки и др.
- компьютерные тренажеры — средства, предназначенные для отработки умений, навыков учебной деятельности;
- инструментальные программные средства — средства предназначенные для обработки текстовой, числовой, графической, звуковой и видео информации, создания и ведения баз данных, работы с электронными таблицами, создания мультимедийных презентаций;

- средства телекоммуникаций — средства, предназначенные для организации групповой учебной деятельности;
- автоматизированные обучающие системы — системы, предназначенные для формирования набора компетенций учебной и практической деятельности и обеспечение необходимого уровня усвоения, устанавливаемого обратной связью, реализуемой средствами программы;
- интегрированные информационные системы — средства, которые объединяют в себе возможности всех перечисленных средств и могут быть расширены добавлением дополнительных компонентов, обеспечивающих управленческую и организационную деятельность.

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Сегодня интерес и внимание к широкому использованию инновационных технологий, педагогических и информационно-коммуникационных технологий в образовательном процессе растут с каждым днем. Одна из основных причин этого заключается в том, что в традиционном образовании учащихся учат приобретать только готовые знания, а в образовании современные технологии позволяют им искать полученные знания, самостоятельно изучать и анализировать их, даже учат их сделать свои выводы. В этом процессе педагог создает условия для развития, становления, образования и воспитания личности.

Профессиональный потенциал и уровень образования учителя математики, знания современных методов образования, а также постоянная самостоятельная работа учителя над собой, будучи в курсе всех новшеств в науке, обладают передовыми методами. Он должен уметь делиться его опыт общения с опытными учителями-методистами и демонстрация эффективных методов обучения. Повышение качества и эффективности образования во всех общеобразовательных школах и других образовательных учреждениях требует внедрения в учебный процесс современных педагогических, инновационных и информационно-коммуникационных технологий, популяризации передовых практик работы.

Наиболее перспективными из приведенных являются интегрированные информационные системы. В интегрированных системах используются возможности самых разных средств. На основе интегрированных информационных систем сегодня создается

информационно-образовательная среда образовательной организации. Интегрированная информационная система позволяет получить доступ к любой информации, хранящейся во внутренней сетевой инфраструктуре организации и в глобальной сети Интернет, уменьшает объемы бумажного документооборота, предоставляет единый интерфейс для получения информации для решения разных задач и в разных структурных подразделениях тем самым упрощая организационно-методический и административно-управленческий процесса образовательной организации.

Интегрированные информационные системы позволяют достигать таких образовательных результатов как реализация проектной деятельности, развитие системного, критического, прогностического и творческого мышления, умения создавать математические модели объектов и явлений, ставить задачи и предложить разные варианты их решения.

В заключение отметим, что эффективное использование интерактивных методов и информационно-коммуникационных средств на занятиях по математике облегчает усвоение учебного материала. Чтобы учащиеся основательно усвоили математику, они должны эффективно использовать те материалы, которыми педагог может руководить самостоятельно, а урок должен быть интересным.

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*Метинкулов Ж.Т.
ассистент
кафедра «Радиоэлектроника»
Джизакский политехнический институт*

ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ МЕТОДОВ АДРЕСАЦИИ В КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЯХ

Аннотация: в настоящее время компьютеры имеют большое значение в жизни человека, спрос на компьютерные системы растет с каждым днем, а компьютерные сети также развиваются быстрыми темпами. Спрос на информационные технологии высок, и существует необходимость обращения к информации. В этой статье объясняется, как обращаться с информацией.

Ключевые слова: Компьютерные сети, глобальные, локальные и локальные сети, IP-устройства.

*Metinkulov J.T.
assistant
Department of Radioelectronics
Jizzakh Polytechnic Institute*

INCREASING THE EFFECTIVENESS OF ADDRESSING METHODS IN COMPUTER TECHNOLOGIES.

Abstract. Nowadays, computers are of great importance in human life, and the demand for computer systems is increasing day by day, and computer networks are also developing rapidly. The demand for information technologies is high and there is a need to address information. This article explains how to address information.

Keywords. Computer networks, global, local and local networks, IP devices.

Модемное устройство, используемое в телефонных сетях, используется для подключения компьютеров к глобальным сетям. Это небольшое электронное устройство, которое можно разместить внутри компьютера или отдельно. В компьютере данные хранятся в виде цифровых сигналов, а через телефонную сеть передаются аналоговые сигналы. Сигналы компьютера преобразуются из цифрового в аналоговый с помощью модема и передаются по телефонной сети. Модем, подключенный к компьютеру на другом конце сети, преобразует аналоговые сигналы в цифровой сигнал и передает его на компьютер [1]. Устройство,

преобразующее сигнал из цифровой формы в аналоговую, называется модулятором. 3-битный сетевой адрес — одна из основных функций сетевого уровня. Сетевые адреса всегда логичны, то есть представляют собой программные адреса, которые можно изменить с помощью соответствующих конфигураций [2]. Сетевой адрес всегда относится к хосту/узлу/серверу или может представлять всю сеть. Сетевой адрес всегда настраивается на сетевой интерфейсной карте и обычно сопоставляется системой с MAC-адресом устройства (аппаратный адрес или адрес уровня 2) для связи уровня 2. Существуют разные сетевые адреса:

- 1) ИП
- 2) IPX
- 3) AppleTalk

IP-адресация обеспечивает механизм различения хостов и сетей. Поскольку IP-адреса назначаются иерархически, хост всегда находится в определенной сети [3]. Хост, которому необходимо взаимодействовать за пределами своей подсети, должен знать сетевой адрес назначения, на который должен быть отправлен пакет/данные. Хостам в разных подсетях необходим механизм идентификации друг друга. Эту задачу можно выполнить через DNS [4]. DNS — это сервер, который предоставляет адрес уровня 3 удаленного хоста, сопоставленный с именем домена или полным доменным именем. Когда хост получает адрес уровня 3 (IP-адрес) удаленного хоста, он пересылает все свои пакеты на свой шлюз. Шлюз — это маршрутизатор, оснащенный всей информацией, которая обеспечивает пересылку пакетов на хост назначения [5,6].

Метод доступа к сети: после получения запроса на пересылку маршрутизаторы пересылают пакет следующему узлу (соседнему маршрутизатору). Следующий маршрутизатор на пути следует тому же примеру, и в конечном итоге пакет данных достигает пункта назначения. Сетевой адрес может быть одним из следующих:

- Одноадресная рассылка (на один хост)
- Мультикаст (для группы)
- Трансляция (для всех)
- Anycast (с таргетингом на ближайший)

По умолчанию маршрутизатор никогда не передает широковещательный трафик [7]. Для многоадресного трафика используется специальная обработка, поскольку видеопоток или аудио имеют наивысший приоритет. Anycast аналогичен одноадресной рассылке, за исключением того, что при наличии нескольких пунктов назначения пакеты доставляются в ближайший пункт назначения. Если у устройства есть несколько путей достижения пункта назначения, оно всегда будет выбирать один путь предпочтительнее других [8]. Этот процесс выбора называется маршрутизацией. Маршрутизация осуществляется специальными сетевыми устройствами, называемыми маршрутизаторами, или может

осуществляться с помощью программных процессов. Программные маршрутизаторы имеют ограниченную функциональность и ограниченную область применения.

Маршрутизатор всегда настроен с несколькими маршрутами по умолчанию. Маршрут по умолчанию сообщает маршрутизатору, куда пересылать пакет, если для определенного пункта назначения маршрут не найден [9]. Если существует несколько путей достижения одного пункта назначения, маршрутизатор может принять решение на основе следующей информации:

- 1) Номер перехода
- 2) Пропускная способность
- 3) Метрика
- 4) Длина префикса
- 5) Задержка

Маршруты могут быть настроены статически или изучены динамически. Один маршрут можно сделать более предпочтительным по сравнению с другими [10]. Для большинства сегментов Ethernet максимальный размер передаваемого блока (MTU) составляет 1500 байт. Пакет данных может иметь большую или меньшую длину в зависимости от приложения. Устройства в пути также имеют аппаратные и программные возможности, которые определяют, какой объем данных и размеры пакетов может обрабатывать устройство. Если размер пакета данных меньше или равен размеру пакета, который может обработать транзитная сеть, он обрабатывается нейтрально. Если пакет больше, он разбивается на более мелкие части и затем передается. Это называется фрагментацией пакетов.

Каждая часть содержит один и тот же адрес назначения и источника и легко маршрутизируется по транзитному пути. На приемной стороне он снова собирается. Если пакет с битом DF (фрагментация), установленным в 1, поступает на маршрутизатор, который не может обработать пакет из-за его длины, пакет отбрасывается [11]. Когда пакет получен маршрутизатором с битом MF (больше фрагментов), установленным в 1, маршрутизатор знает, что это фрагментированный пакет и что части исходного пакета уже в пути. Если упаковка слишком мала, дополнительные расходы возрастут. Если пакет слишком сильно фрагментирован, промежуточный маршрутизатор может оказаться не в состоянии его обработать и он может быть отброшен.

Протокол разрешения адресов (ARP). При обмене данными хосту необходим адрес уровня 2 (MAC) компьютера назначения, который принадлежит к тому же широковещательному домену или сети. MAC-адрес физически записывается на сетевую интерфейсную карту (NIC) устройства и никогда не изменяется. С другой стороны, IP-адрес в свободном доступе редко меняется. В случае какой-либо неисправности, если сетевой адаптер будет изменен, MAC-адрес также изменится. Таким образом, для

реализации связи уровня 2 требуется сопоставление между ними. Чтобы узнать MAC-адрес удаленного хоста в широковещательном домене, компьютер, который хочет инициировать соединение, может спросить: «Кому принадлежит этот IP-адрес?» отправляет широковещательное сообщение ARP с запросом. Поскольку это широковещательная рассылка, все хосты в сегменте сети (широковещательном домене) получают этот пакет и обрабатывают его. Пакет ARP содержит IP-адрес хоста назначения, с которым хочет связаться хост-отправитель [12]. Когда хост получает предназначенный для него ARP-пакет, он отвечает своим MAC-адресом. После того, как хост получит MAC-адрес назначения, он может связаться с удаленным хостом, используя протокол связи уровня 2. Это сопоставление MAC-адресов хранится в кэше ARP отправляющего и принимающего хостов. В следующий раз, если им понадобится связь, они смогут напрямую обратиться к соответствующему кэшу ARP. Обратный ARP — это механизм, при котором хост знает MAC-адрес удаленного хоста, но для связи требуется знание IP-адреса. ICMP — это протокол сетевой диагностики и отчетов об ошибках.

ICMP принадлежит к набору протоколов IP и использует IP в качестве протокола-носителя. После создания пакета ICMP он инкапсулируется в IP-пакет. Поскольку IP сам по себе является ненадежным протоколом, ICMP тоже. Любая обратная связь сети возвращается на исходный хост. Если в сети произойдет какая-либо ошибка, об этом будет сообщено через ICMP. ICMP содержит десятки диагностических сообщений и сообщений об ошибках. ICMP-echo и ICMP-echo-reply — наиболее часто используемые сообщения ICMP для проверки доступности сквозных хостов. Когда хост получает запрос ICMP-эхо, он ДОЛЖЕН отправить обратно ICMP-эхо-ответ. Если в транзитной сети возникнет какая-либо проблема, ICMP сообщит об этой проблеме. Интернет-протокол версии 6 (IPv6) Исчерпание адресов IPv4 привело к появлению Интернет-протокола следующего поколения версии 6 [13].

IPv6 имеет 128-битную адресацию для своих узлов, обеспечивая достаточное адресное пространство для будущего использования по всей планете или за ее пределами. В IPv6 введена адресация Anycast, но удалена концепция широковещательной передачи. IPv6 позволяет устройствам автоматически получать адрес IPv6 и обмениваться данными внутри этой подсети.

Эта автоматическая настройка снижает надежность серверов протокола динамической конфигурации хоста (DHCP). Таким образом, хосты смогут взаимодействовать друг с другом, даже если DHCP-сервер в этой подсети выйдет из строя. IPv6 представляет новую функцию мобильности IPv6. Машины, оснащенные Mobile IPv6, могут перемещаться без изменения своего IP-адреса. IPv6 все еще находится в стадии перехода и, как ожидается, в ближайшие годы полностью заменит IPv4. В настоящее

время существует несколько сетей, работающих на протоколе IPv6. Для сетей с поддержкой IPv6 IPv4 имеет некоторые механизмы перехода, позволяющие легко общаться и перемещаться по разным сетям. Это:

- 1) Реализация двух стеков
- 2) Рытье туннеля
- 3) NAT-ПТ

Требование UDP Кто-то может спросить, зачем нам нужен ненадежный протокол для передачи данных? Мы реализуем UDP, где пакеты подтверждения разделяют большую часть полосы пропускания вместе с фактическими данными. Например, если видео передается в потоковом режиме, его пользователям отправляются тысячи пакетов. Подтверждение всех пакетов очень сложно и может привести к значительной потере пропускной способности. Наилучший механизм доставки базового протокола IP обеспечивает максимальные усилия для доставки пакетов, но даже если некоторые пакеты в видеопотоке теряются, эффект не является катастрофическим и его можно легко обнаружить с помощью управляющего сообщения Интернет-протокола (ICMP). можно игнорировать. В видео- и голосовом трафике потеря нескольких пакетов иногда игнорируется.

Заключение.

Если сделать вывод из приведенной выше информации, то существует необходимость адресации каждой компьютерной сети. Это связано с тем, что не все компьютерные сети подключены к одной системе. Теперь, когда мы обсудили некоторые ключевые компоненты сетей и TCP/IP, у вас есть информация, необходимая для изучения более важных проблем безопасности в конвергентной среде. Знание того, как строятся сети, дает вам лучшее понимание того, какие физические или логические уязвимости появляются при выборе одной конкретной конструкции сети вместо другой. Знание того, как структурированы пакеты, позволяет лучше понять, как их можно спроектировать или изменить для достижения конкретной цели. Знание того, как пакеты передаются и доставляются, позволяет лучше понять, что может случиться с пакетами по мере их перемещения от источника к пункту назначения. Глубокое понимание основ работы в сети и TCP/IP имеет решающее значение для выявления, понимания и устранения уязвимостей в вашей конвергентной среде.

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*Мирзаева М.М.
старший преподаватель
кафедра основ профилактической медицины
Андижанский государственный медицинский институт*

ДВИЖЕНИЕ – ФАКТОР ЗДОРОВЬЯ

Резюме: здоровье, физическое воспитание и повседневная физическая активность взаимосвязаны. Здоровье во многом зависит от уровня нормальной физической активности. Существует связь между ежедневной физической активностью и частотой заболеваний сердечно-сосудистой системы в разных группах населения. В ходе жизнедеятельности человек совершает различные действия, размер которых определяется биологическими особенностями организма, а их реализация зависит от социальных факторов.

Ключевые слова: здоровье, движение, физические упражнения, здоровый образ жизни, активность, бег, ходьба, здоровье, вода, солнце, воздух.

*Mirzaeva M.M.
senior lecturer
Department of Basics of Preventive Medicine
Andijan State Medical Institute*

MOVEMENT IS A HEALTH FACTOR

Annotation. Health, physical education, and daily physical activity are interrelated. Health is largely dependent on the level of normal physical activity. There is a relationship between daily physical activity and the frequency of diseases of the cardiovascular system in different groups of the population. During the life activity, a person performs various actions, the size of which is determined by the biological characteristics of the organism, and their implementation depends on social factors.

Keywords: Health, movement, exercise, healthy lifestyle, activity, running, walking, health, water, sun, air.

Актуальность: Конечная величина различных движений в течение определенного периода времени (час, сутки) называется двигательной активностью. Приемлемая модель движений должна удовлетворять естественную биологическую потребность ребенка в движении (кинезофилию).

Ежедневная двигательная активность – это деятельность, совершаемая ребенком в процессе его жизнедеятельности: деятельность в процессе физического воспитания; физическая активность, осуществляемая во время тренировок, полезных общественных работ и работы; Он представляет собой сочетание спонтанной деятельности без внешнего воздействия в свободное время. Его можно измерить и оценить по динамическому компоненту и конкретным видам деятельности, количеству шагов, величине энергозатрат и изменению частоты сердечных сокращений.

Цель работы: Физическая активность является важной составляющей здорового образа жизни и характера детей и подростков. Речь идет о социально-экономических условиях общества, его ценностях, организации физического воспитания, индивидуальных особенностях высшей нервной системы, строении тела и функциональных возможностях растущего организма, количестве свободного времени, характере его занятий. От интенсивности использования зависит также распространенность спортивных сооружений и зон отдыха для детей и подростков.

Материал и методы.

Нормальной считается активность, последовательно проявляющаяся на протяжении всей жизни. Уровень обычной двигательной активности может не соответствовать биологической потребности в движении тела и существующим возрастным нормам, способствующим укреплению, сохранению и хорошему развитию здоровья детей и подростков. Данная аномалия часто встречается у детей школьного возраста и приводит к неравномерности развития, нарушениям здоровья детей и подростков.

Обычный уровень физической активности детей и подростков определяется биологическими и социальными факторами. Ведущими биологическими факторами, формирующими потребность организма в движении, являются возраст и пол.

Средняя дневная активность увеличивается с возрастом. Двигательная активность девочек 8-9 лет почти не отличается от активности мальчиков того же возраста. Но с возрастом возрастная разница в двигательной активности становится существенной (у девочек она уменьшается).

Дети, которые не занимаются каким-либо видом спорта или физкультурой, имеют относительно меньшую физическую активность. Она резко снижается (до 50 процентов), особенно при обучении в школе.

Недостаток движения (гипокинезия) вызывает множество различных региональных морфофункциональных изменений в организме: от адаптации к низкому уровню двигательной активности до очень глубоких (предпатологических и патологических) изменений: развития астенического синдрома, снижения функциональных возможностей и

нарушения двигательной активности. деятельность опорно-двигательного аппарата и вегетативные функции.

Чрезмерная двигательная активность (гиперкинезия) встречается сравнительно редко и возникает преимущественно вследствие ранней специализации ребенка в спорте. При этом наблюдается снижение симпатико-адреналиновой системы, белковая недостаточность, снижение иммунитета.

Результаты и их обсуждение.

Создание благоприятных условий для регулярного участия в массовых спортивных соревнованиях и различных спортивных мероприятиях является социальным фактором, формирующим привычную двигательную активность. Образ жизни семьи, порядок ее передвижения также влияют на формирование осознанной потребности в двигательной деятельности у детей.

Неблагоприятные климатические условия и времена года также оказывают существенное влияние на двигательную активность детей. В зимний период активность как мальчиков, так и девочек снижается.

Необходимо создать в общеобразовательных учреждениях условия для удовлетворения потребности детей в движении в социальных и оздоровительных целях. Эта потребность должна быть удовлетворена за счет не менее 2 часов ежедневной двигательной активности студентов.

Двигательная активность такого размера – это участие учащихся в комплексе повседневных мероприятий в каждой школе, включая физкультуру перед учебными занятиями, минуты физкультуры на уроках, активные игры на переменах, спортивные часы в группах продленного дня, занятия по физкультуре, внеклассные спортивные занятия, общешкольные олимпиады и дни здоровья, самостоятельная физкультура.

Для этого необходимо включить в программу обучения учащихся младших классов школы активно-двигательные предметы (танцевальное искусство, выполнение ритмических движений под музыку, современные и бальные танцы, традиционные и национальные спортивные игры).

Возрастные нормы двигательной активности учитывают общие закономерности процесса роста и развития, кинезофилию (биологическую потребность организма в движении) в зависимости от возраста и устанавливают нижний (минимально необходимая величина) и верхний (предельно допустимая величина) пределы колебаний, которые могут произойти. дает возможности.

Для практических целей наиболее распространенным является возрастной показатель суточной локомоции (количество шагов за 24 часа).

Выводы

Общественное обследование здоровых детей с нормальным морфофункциональным развитием, с благоприятными и разумными занятиями физической культурой и распорядком дня позволило

гигиенически обосновать нормы суточного передвижения детей и подростков различного возраста и пола.

В подростковом возрасте количество локомоций уменьшается, часто наблюдается количество движений, выполняемых в положении сидя или стоя, но со значительными затратами энергии. Такие движения встречаются в профессиональном обучении, работе, при занятиях некоторыми видами спорта (тяжелая атлетика, гимнастика, парусный спорт и др.) и включаются в итоговый подсчет количества локомоций подростка.

Физическая активность регулирует жизнедеятельность различных органов и систем организма человека. Движение – опора здоровья. Повышает сократимость миокарда, улучшение коронарного кровообращения сопровождается расширением капиллярных сосудов.

Повышается легочная вентиляция, улучшается деятельность малого круга кровообращения, кровообращение. Положительно влияет на работу грудной клетки и желудочно-кишечного тракта. Физическая активность оказывает большое положительное влияние на железы внутренней секреции. Под их воздействием усиливается деятельность желез внутренней секреции и омолаживается организм человека.

По мнению японских ученых, человеку необходимо проходить 10 000 шагов в день, чтобы поддерживать нормальную активность и здоровье. В среднем это 6-7 километров. На протяжении многих лет физический труд выполнялся с помощью человеческих рук. С 20 века активность народного движения снизилась. Определенный уровень бездействия начал оказывать негативное влияние на здоровье человека.

Быть здоровым и прожить долгую жизнь во многом зависит от самого человека. Абу Али ибн Сина, султан медицины, думал о долгой жизни, следуя правилу иметь мягкий и сдержанный характер, вовремя питаться, аккуратно ходить и очищать тело от лишнего, посещать сауну каждый месяц, баню каждую неделю. Важно уделять особое внимание правильной осанке, дыханию через нос, прилеганию одежды к телу, гармонии физических и психических движений, достаточному сну и поддержанию бодрости.

Мнения ученого-энциклопедиста несколько столетий назад не потеряли своего значения и сегодня. Здоровье человека связано с его ладонями и подошвами. По словам Ибн Сины, они доказали связь между внутренними органами человека и мозгом. По рекомендациям специалистов, если каждый день тренировать пальцы, многие органы оздоровятся и укрепятся:

- большой палец улучшает работу мозга и укрепляет волю;
- указательный палец улучшает работу желудка и ускоряет пищеварение;
- средний палец снижает повышенное давление и улучшает работу кишечника;

- безымянный палец повышает функцию печени;
- тишина улучшает сердечную деятельность и предотвращает умственное напряжение.

Тренировка пальцев проводится следующим образом: нажимайте и растягивайте суставы большого пальца левой руки большим и указательным пальцами правой руки в течение 5-7 минут. Сначала три пары точек на большом пальце прижимаются тыльной стороной и ладонью. Затем пальцы правой руки прижимаются левой рукой. Это упражнение следует делать 1-2 раза в день.

Когда человек идет босиком (по грунтовой дороге), к точкам под ногами прикрепляются камни на земле и интенсивно массируются. Между Землей и телом человека происходит обмен зарядами, что оказывает определенное оздоравливающее воздействие на организм и повышает его защитную функцию. Для этого:

- ходьба босиком (по грунтовой дороге) в течение 45 минут;
- мыть ноги в холодной воде; После того, как ноги высохнут, наденьте носки и ходите, пока ноги не согреются.

Много гулять зимой с теплыми ногами, а летом ходить босиком по грунтовой дороге очень полезно. Движение очень важно в жизни человека. Активные люди всегда здоровы и сильны. Старайтесь больше гулять, выполнять легкую физическую работу. Не забывайте перед сном гулять на свежем воздухе хотя бы 30 минут. Примите теплую ванну и поспите 7–8 часов в хорошо проветриваемом помещении. Тогда ваша душа отдохнет вместе с вашим телом. Вы будете жить дольше и легко избавитесь от печали преждевременного старения.

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Мирмухамедов Б.Б.
старший преподаватель
кафедра медицинской профилактики
Андижанский государственный медицинский институт
Узбекистан, Андижан

СОЦИАЛЬНО-ПРОФИЛАКТИЧЕСКИЕ МЕРОПРИЯТИЯ ПО ОПТИМИЗАЦИИ ПИТАНИЯ И ПИЩЕВОГО СТАТУСА ДЕТЕЙ И ПОДРОСТКОВ

Аннотация. В современных социально-экономических условиях особое значение приобретает деятельность государственных органов, направленная на улучшение качества жизни населения. Особое внимание должно быть уделено качеству жизни детей и подростков. Гармоничное физическое развитие, отсутствие болезней у подрастающего поколения – это основной путь экономического подъема и интеллектуального развития общества в будущем.

Ключевые слова: питание; дети; дефицит; йод; кальций; витамины; калорийность; белки; жиры; углеводы; рацион питания.

Mirmukhamedov B.B.
senior teacher
Department of Medical Prevention
Andijan State Medical Institute
Uzbekistan, Andijan

SOCIAL-PREVENTIVE MEASURES TO OPTIMIZE NUTRITION AND NUTRITIONAL STATUS OF CHILDREN AND TEENAGERS

Annotation. In modern socio-economic conditions, the activities of government bodies aimed at improving the quality of life of the population. Particular attention should be paid to the quality of life of children and adolescents. Harmonious physical development and absence of diseases in the younger generation –is the main path to economic recovery and intellectual development of society in the future.

Key words: nutrition; children; shortage; iodine; calcium; vitamins; calorie content; proteins; fats; carbohydrates; diet.

Цель исследования. Научное обоснование системы региональных социально-профилактических мероприятий по оптимизации питания и пищевого статуса детей и подростков с целью профилактики алиментарно-зависимых заболеваний.

Актуальность. В современных социально-экономических условиях особое значение приобретает деятельность государственных органов направленная на улучшение качества жизни населения. Особое внимание должно быть уделено качеству жизни детей и подростков. Гармоничное физическое развитие, отсутствие болезней у подрастающего поколения – это основной путь экономического подъема и интеллектуального развития общества в будущем [1].

Формирование здорового ребенка неразрывно связано с питанием. Питание, как фактор внешней среды, имеет уникальное свойство превращаться из внешнего фактора во внутренний, в органы и системы организма. Рациональное питание воздействует на развитие центральной нервной системы, интеллект ребенка [1, 5.]. При этом, повышается устойчивость детского организма к различным неблагоприятным факторам внешней среды, обеспечиваются высокий уровень его адаптационных возможностей, что ведет к снижению заболеваемости и детской смертности [2,5].

Многочисленные исследования свидетельствуют, что состояние здоровье подрастающего поколения характеризуется негативными тенденциями, увеличением функциональных отклонений и хронических заболеваний [4,5]. Состояние пищевого статуса зависит от питания в организованных коллективах и домашних условиях. Дефицит поступления в организм ребенка макро- и микронутриентов способствует замедлению темпов биологического созревания, ухудшению функциональных показателей организма, ведет к увеличению хронических заболеваний, препятствующих получению профессионального образования, снижению уровня репродуктивного здоровья, пригодности юношей к военной службе [2].

Цель исследования: Научное обоснование системы региональных социально-профилактических мероприятий по оптимизации питания и пищевого статуса детей и подростков с целью профилактики алиментарно-зависимых заболеваний.

Материалы и методы исследования. Исследование проходило в период 2018–2021 гг. в соответствии с календарным планом работ, ретроспективные данные для анализа за 2017-2020 гг. Объекты исследования: воспитанники дошкольные образовательные учреждения (ДОУ) в возрасте 3–6 лет и учащиеся школ г. Андижан в возрастном интервале 7–17 лет.

Проведен анализ эффективности проводимых мероприятий по оптимизации питания детей и подростков школьного возраста на фоне реализации программы модернизации школьного питания в Андижан. Совокупный объем исследования составил 135 детей дошкольного и школьного возраста. Для оценки обеспеченности организма дошкольников и школьников йодом с суточным рационом проводилось исследование

концентрации йода в моче у детей и подростков в четырех возрастных группах: 3–6 лет, 7–10 лет, 11–13 лет, 14–17 лет. Всего было проанализировано 26 проб. С целью изучения эффективности проводимых профилактических мероприятий в образовательных учреждениях города, был сделан сравнительный анализ показателей уровня йодурии по данным 2018 и 2021 гг. в группе школьников. Нормируемое соотношение основных пищевых веществ для школьников белков, жиров, углеводов (Б:Ж:У) – 1:1,1: 4,8. Рекомендованное соотношение кальция, фосфора и магния (Са: Р: Mg) для школьников 1: 1: 0,22. Для оценки статуса питания детей и оценки мероприятий, направленных на профилактику йоддефицитных состояний, проводились лабораторные исследования биохимических показателей обмена веществ – обеспеченность организма йодом (концентрация йода в моче), отражающих величину его потребления с пищей. Для этого на подготовительном этапе были подготовлены списки дошкольников и школьников.

Оценка полученных показателей проводилась в соответствии с нормативами, рекомендованными ВОЗ (BMI-for-age 5–19 years); в качестве критерия определения в детском и подростковом возрасте избыточной массы считался показатель ИМТ более 85-го перцентиля, для ожирения – свыше 95-го перцентиля, дефицит массы тела устанавливался при показателях менее 10 перцентиля.

Статистический анализ осуществлялся с использованием пакета прикладных программ «Statistica 6.0» и возможностей MS Excel. Для описания количественных показателей использовались медиана (P50) и процентиля, средние, минимальные и максимальные значения признаков.

Результаты исследования. По данным меню-раскладок рацион питания в ДО обеспечивал заданную для данного рациона потребность в энергии, макро- и микронутриентах в среднем на 95%. Энергетическая ценность и качественный состав рациона питания дошкольников представлена в таблице 1.

Таблица 1. Энергетическая ценность и качественный состав фактического рациона питания детей 3-6 лет в ДОУ.

Нутриент	Нормы физиологической потребности детей 3-6 лет	Фактическое потребление	
		М±m	% от НФП
Калорийность, ккал	1800	1901,2±122,7	105,6
Общие белки, г	54	65,0±6,7	120,4
Общие жиры, г	60	72,8±12,8	121,3
НЖК, г	20	22,6±3,1	113,0
ПНЖК, г	16	15,1±2,5	94,3
Углеводы, г	261	246,5±12,3	94,4
Крахмальные полисахариды, г	-	112,4±3,8	-

НФП – нормы физиологических потребностей

НЖК – насыщенные жирные кислоты

ПНЖК – полиненасыщенные жирные кислоты

При анализе структуры отдельных групп нутриентов выявлен дисбаланс жировой составляющей. На фоне избыточного поступления общих жиров отмечался дефицит растительного жира (на 21,0%), избыток НЖК (на 13,0%), что возможно было связано с недостаточным потреблением растительного масла, использованием в рационе питания подливок и соусов для заправки вторых блюд. Содержание витаминов – А, В1, В2, РР, С и кальция было в пределах НФП, содержание фосфора, магния и железа превосходило НФП в среднем на 25%.

Анализ результатов изучения меню-раскладок показал, что продуктовый набор соответствовал суточному рекомендуемому уровню потребления по всем основным группам продуктов. Уровень потребления мяса составлял 95,0%, птицы – 105,0%, молока и кисломолочных продуктов – 97,1%, творога – 98,2%, сыра – 115,0%, колбасных изделий – 102,8%, масла сливочного – 101,4%, масла растительного – 100,9%, круп и макаронных изделий в среднем 101,4%. Дефицит потребления макронутриентов при сравнении с НФП составлял у дошкольников младших групп – 35%, подготовительных групп – 20%. Фактический уровень потребления общих белков детьми младших групп соответствовал 69,0% от НФП, подготовительных групп – 82,0% от НФП вместо 120,4% заявленных по меню ($p < 0,01$), белков животного происхождения – 62,1% и 83,1% от НФП соответственно, разница по меню составляла от 25,1% в младшей группе и 4,1% в подготовительной группе ($p < 0,01$). Потребление общих жиров было ниже данных меню-раскладок на 52,2% у детей младших дошкольных групп и на 33,7% у детей подготовительных групп ДООУ ($p < 0,05$), потребление общих углеводов – на 22,2% и 14,2% соответственно ($p < 0,05$). Фактически дети восполняли энергию с рационами питания от 70,9% и 82,7% от физиологических норм ($p < 0,01$).

Исходя из полученных данных фактически съеденной пищи детьми установлено, что дошкольники также недостаточно получали витамины и минеральные вещества с пищей. Выявлен дефицит витамина А, где фактический уровень потребления составил 69,0% и 87,7% от НФП, что на 37,0% и 18,3% меньше, чем по меню ($p < 0,01$), витамина С - 81,4% и 84,8% от НФП (ниже на 31,6%, 28,2% чем по меню, $p < 0,01$), В1 - 55,5% и 88,9% от НФП (ниже на 44,5% и 11,1% чем по меню, $p < 0,01$), В2 – 80,0% и 90,0% от НФП (разница на 30,0% и 20,0%, $p < 0,01$).

Фактическое потребление кальция составляло у дошкольников младших групп $487,9 \pm 43,1$ мг, старших групп $621,8 \pm 24,5$ мг (разница на 43,0% и 28,0% соответственно, $p < 0,05$), фосфора – $673,9 \pm 39,7$ мг и $768,5 \pm 31,3$ мг (разница на 53,8% и 42,0%, $p < 0,01$), магния – $156,4 \pm 11,5$ мг и

183,7±12,4 мг (разница на 55,2%, и 39,6%, $p<0,05$), железа – 8,2±1,3 мг и 9,9±0,9 мг (разница на 46,0% и 29,0%, $p<0,05$).

Наиболее распространенными продуктами на завтрак были молоко и йогурты (33,8%), кондитерские изделия: печенья, вафли, пирожные в разовых упаковках (31,3%), бутерброды (10,0%), мучные изделия (6,1%), фрукты (3,8%), творог и творожные изделия в упаковках (5,0%), соки (5,1%), горячие напитки (4,9%). По своей структуре такой завтрак можно квалифицировать как легкий перекус, так как в среднем его энергетическая ценность составляла около 7% от суточной физиологической потребности (в среднем 128,6 ккал). Что касается ужина дома, то опрос родителей показал, что все дети дома ужинали после прихода из ДО. В большинстве случаев (67,8%) их ужин был нерационален. По своей структуре вечерний прием пищи у детей был идентичен структуре ужина взрослых членов семьи. В вечерних приемах преобладали мясные блюда (котлеты, курица) с макаронными и крупяными изделиями (65,4%), колбасные изделия (69,5%), блюда из жареного и отварного картофеля (8,9%), пельмени (7,3%), мюсли или хлопья с молоком, анализ полученных данных показал, что удельный вес детей, имеющих адекватный уровень потребления энергии с пищей в будние дни, составлял 86,1%. Избыточное потребление макронутриентов и, как следствие, энергии наблюдалось у 13,9% детей. Избыточное потребление общего белка выявлено у 83,1% от всей выборки детей. Животный белок поступал в избытке у 66,1% детей, растительный – у 46,8% детей. Избыточное потребление общего жира наблюдалось у 88,5% детей, НЖК поступали в избытке почти у всех детей (91,2–100%), а растительный жир и ПНЖК – в недостатке у 24,6–31,4% детей. Характеризуя питание детей в целом в будний день, можно отметить, что избыточное поступление энергии связано со значительным вкладом домашнего питания в вечернее время. В связи с этим, по приходу ребенка из ДО, необходимо организовывать более легкий ужин дома, который должен составлять 20–25% суточной потребности в энергии и пищевых веществах. Фактическое питание компенсировало физиологические потребности в энергетической ценности в среднем у 86,1% дошкольников, из них у 88,0% мальчиков и 83,0% девочек ($p=0,01$). Рекомендуемая доля общих белков в суточном рационе была у 89,2% детей, животного белка у 67,3% детей. Рационы в 100% случаев были избыточны по содержанию общих жиров, НЖК и недостаточны по ПНЖК. Адекватный уровень потребления углеводов был выявлен у 79,1% дошкольников. Рационы дошкольников были обеспечены макро- и микроэлементами. Среднесуточное количество кальция в питании детей составляло 935,1±47,3 мг (103,8±27,5% от НФП). Поступление фосфора и магния было избыточно и составляло на 50% и 40% выше рекомендуемых норм, железа – на 45% от НФП. Достоверные различия в поступлении с рационами питания фосфора ($p=0,01$) и магния ($p=0,01$) выявлено между мальчиками и девочками. Рекомендуемое

соотношение между кальцием, фосфором, кальцием и магнием в рационе составляло 1:0,8 и 1:0,2. Соотношение Ca: P и Ca: Mg у дошкольников было несбалансированным – 1:1,3 и 1:0,3. Потребление мяса составляло $62,9 \pm 10,5$ г в сутки ($103,9 \pm 19,1\%$ от рекомендуемых норм потребления). Уровень потребления молока – $282,4 \pm 25,0$ г в сутки ($112,9 \pm 10,0\%$ от рекомендуемых норм потребления (РНП), кисломолочных продуктов – $203,1 \pm 15,9$ г в сутки ($101,6 \pm 7,9\%$ от РНП), творога – $42,9 \pm 12,1$ г в сутки ($107,3 \pm 0,3\%$ от РНП) и яиц – $26,8 \pm 10,3$ г в сутки ($111,8 \pm 43,0\%$ от РНП). Отмечается, что девочек с недостатком массы тела встречалось больше, чем мальчиков во всех возрастных группах. Мальчиков во всех возрастных группах школьников с избыточной массой тела регистрировалось чаще, чем девочек. Достоверных различий не выявлено. Школьников с низким относительно возрастных стандартов ростом среди мальчиков выявлено $1,8\%$ и среди девочек – $3,0\%$, с высоким ростом во всей популяции школьников – $6,3\%$. При распределении школьников по группам физического развития (ФЗ) в зависимости от уровня его гармоничности, выявлено, что в среднем $47,2\%$ детей имели гармоничное физическое развитие. Доля девочек по всей выборке (7–17 лет), имеющих нормальную массу тела, составила $73,9 \pm 2,1\%$, дефицит массы тела выявлен – $13,7 \pm 1,1\%$, избыток массы тела – $9,4 \pm 0,6\%$, низкий рост – $3,0 \pm 0,3\%$. Нормальная масса тела выявлена у мальчиков (7–17 лет), в $71,1 \pm 0,1\%$ случаев, дефицит массы тела – в $11,5 \pm 1,3\%$, избыток массы тела – в $15,6 \pm 0,3\%$, низкий рост – в $1,8 \pm 0,1\%$ случаев.

При оценке влияния фактического питания на распространенность нарушений физического развития у школьников были выявлены прямые значимые ($p < 0,001$) корреляционные связи между ИМТ и энергетической ценностью рациона детей всех возрастных групп и обоих полов (с увеличением энергетической ценности рациона соразмерно увеличивалось значение ИМТ). Отмечается наиболее выраженная корреляционная связь между показателем ИМТ и энергетической ценностью рационов, частотой приема пищи в будние/выходные дни у мальчиков ($r = 0,62$), а также по всей выборке ($r = 0,53$).

Выводы: Сопоставление объективных и субъективных данных по гигиенической оценке питания детей дошкольного возраста свидетельствуют о нерациональном подходе к организации питания в образовательной среде и в условиях семьи. В дошкольных организациях в результате низкого уровня фактического потребления блюд и кулинарных изделий, изготовленных из биологически ценных продуктов, а в ряде случаев и отказа от них, формируется дефицит поступления в организм ребенка белков животного происхождения, ПНЖК, ряда витаминов, кальция и железа.

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*Мулданов Ф.Р.
старший преподаватель
кафедры «Радиоэлектроника»
Джизакский политехнический институт*

МЕТОДЫ ПОСТРОЕНИЯ СИСТЕМЫ РОБОТА ГЛАЗАНАЛИЗАТОРА НА ОСНОВЕ ВИДЕОИЗОБРАЖЕНИЯ И ИХ ПРИМЕНЕНИЕ

Аннотация. В данной статье представлен анализ методов идентификации потоков цветного видеоизображения от роботизированной системы глазного анализатора.

Ключевые слова: цифровое изображение, технология Open MP, интенсивность, пиксель, векторизация, крайние точки, изображение лица человека.

*Muldanov F.R.
senior lecturer
Department of Radio Electronics
Jizzakh Polytechnic Institute*

METHODS FOR BUILDING A ROBOT EYE ANALYZER SYSTEM BASED ON VIDEO IMAGES AND THEIR APPLICATION

Abstract. This article presents an analysis of methods for identifying color video image streams from a robotic eye analyzer system.

Keywords: digital image, Open MP technology, intensity, pixel, vectorization, extreme points, image of a person's face.

Анализ потоков цветных видеоизображений системой роботизированного глазного анализатора: особенности идентификации на основе теории геометрического моделирования данных и метода геометрической оптимизации идентификации цвета. Представлены объекты потока видеоизображений, а также общие понятия математического, программного и технического обеспечения создания системы анализатора глаз робота [1,2]. Ядром создаваемой системы безопасности является сама система видеораспознавания лиц, которая решает две основные задачи: во-первых, идентификация - то есть сравнение внешности человека, попавшего в объектив видеокамеры, с фотографией, хранящейся в базе данных, и во-вторых, проверка - то есть лица похожие на это изображение в базе из поиска состоит из на основе технологии идентификации строятся поисковые системы и на основе проверки выбираются различные варианты

контроля доступа [3,4]. Важным компонентом данной системы является оценка работы системы в различных условиях: в темное и светлое время суток, а также в период пикового пассажиропотока. Технология Video ID редко используется «сама по себе». Он должен быть установлен в техническом решении, предназначенном для конкретного применения [5,6].

В настоящее время эта система используется в медицине для исследования внутренних органов человека с помощью эндоскопического аппарата, для определения продуктивности обрабатываемых полей на сельскохозяйственных угодьях с помощью дронов, для определения поверхностных ресурсов с помощью спутников из космоса и в ряде областей. Роботизированный глазной анализатор также используется в системах биометрической верификации (сравнение один-к-одному) и идентификации (сравнение один-ко-многим) [7,8]. В последние годы совершенствование систем зрения роботов привело к интересу к роботам-анализаторам глаз, позволяющим обнаруживать эмоциональное и психическое состояние человека.

Сегодня большинство предприятий используют в своей системе безопасности инструкции АСУ (системы статистической обработки и управления потоками видеоизображений) для выполнения последовательности сравнений с изображениями лиц в МБ. Чтобы будущие роботы могли успешно общаться с людьми, необходимо правильно оценивать состояние человека [9,10].

Такого робота-анализатора глаз требует разработки новых алгоритмов и программного обеспечения. Главное условие изображения, которое входит в программа – обратить внимание на четкость изображения. Он обладает способностью различать и распознавать изображение человеческого лица, которое ищется в видеопотоке [11,12].

Процесс распознавания лиц можно назвать совокупностью различных задач, которые служат для идентификации человека по цифровому изображению или видео. В целом этот процесс выглядит так: после того, как система получает изображение с видеокамеры, с помощью алгоритмов определяются границы лица (этап обнаружения). Затем наступает этап распознавания, на котором лицо видоизменяется (меняет яркость, уплощается, масштабируется и т. д.) и приводится к некоторой заданной форме [13]. После этого свойства рассчитываются и сравниваются непосредственно со стандартами, хранящимися в базе данных. Этот последний этап сравнения называется идентификацией или проверкой, в зависимости от системы. Проверка: сравнить образцы по схеме «1:1». Чтобы идентифицировать человека, система сравнивает биометрический образец с единственным биометрическим шаблоном, хранящимся в базе данных, и задает вопрос: «Является ли он тем человеком, которого сравнивают с шаблоном?» отвечает на вопрос.

с видеокамер передается на компьютер, который обрабатывается с помощью специального алгоритма, определяющего расположение участка лица по его основным признакам (глаза, рот, брови, нос и т. д.).

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ЎҒИЛ БОЛАЛАРНИ ОИЛАВИЙ ҲАЁТГА ТАЙЁРЛАШНИНГ ИЖТИМОЙ-ПСИХОЛОГИК МУАММОЛАРИ

Аннотация. Ушбу мақолада ёшларнинг оила тўғрисидаги тасаввур ва тушунчалари ҳамда оилага нисбатан қадриятлар йўналганлиги никоҳ-оила муносабатларининг барқарорлигини таъминлашда муҳим ҳисобланади. Шундан келиб чиқиб, оила қадриятларига ўсмирлик ёшидаги болаларнинг муносабатини ўрганиш мақсадида Рокич томонидан таклиф этилган “Қадриятлар йўналганлигини ўлчаш” методининг ўзбек тилига ўгирилган вариантдан фойдаландик. Мазкур методика шахснинг қадриятларини аниқлашга мўлжалланган. Қадриятларни билиш тизими шахснинг йўналганлиги мазмунини белгилайди ва уни ўраб турган дунёга, одамларга, ўзига, дунёқараши, ҳаётий фаоллиги мотивациясининг моҳияти, ҳаётий концепция ва “фалсафий ҳаёт” асосини ташиқил этади.

Калит сўзлар: Рокич методикаси, оила, ўсмир ва ўспирин ўғил болалар, терминал ва инструментал қадриятлар, ажрашишлар, ота-она муносабатлари, севги-муҳаббат, респондентлар, ҳузур-ҳаловат.

Muratova Sh., PhD

associate professor

"Pedagogy and Psychology" Department

SamSMU

PSYCHOLOGICAL PROBLEM OF PREPARING A BOY FOR FAMILY LIFE

Annotation. In this article, youth awareness and understanding of the family and a positive orientation towards the family are important factors in ensuring the integrity of marital relations. Based on this, we used the Uzbek version of the “Measurement of Leadership Orientation” method proposed by Rokeach in order to study the attitude of pubertal children to family education. This method is designed to determine a person's identity. The human cognitive system determines the content of the personality's orientation and forms the basis of the world, man, self, worldview, motivation for life, life concept and “philosophical life”.

Key words: Rokeach's technique, family, teenagers and teenage boys, terminal and instrumental values, divorce, parental relationships, love-love, reciprocal gaze, mood.

Тадқиқотларимиздан маълум бўлишича, оила мустаҳкамлиги инсоннинг никоҳдан қониқиши, ўзаро муносабатлар соғломлиги, эр-хотиннинг бир-бирларини тушуниши, кадриятлар ориентацияси, дунёқараш ва психологик мослик, никоҳга маънавий-психологик жиҳатдан тайёрлик каби омилларга боғлиқ бўлади. Аксинча ҳолатларда эса, оилавий ҳаётда инсониятнинг ижтимоий ва маънавий тараққиёти учун зид бўлган ҳолатлар: туғилишнинг камайиши, ажралишлар сонининг кўпайиши, ажралишлар салбий оқибатининг кишилар ҳаётига таъсирчанлигини ортиб бориши, никоҳсиз оилаларнинг кўпайиши ва бошқа қатор салбий ҳодисалар юз бера бошлайди.

Маълумки, фарзанд тарбиясининг дастлабки босқичидаёқ ўсмирларни келажақдаги мустақил ҳаётда ўзини-ўзи бошқара оладиган, ўз даврининг муносиб кишиси бўлиб етишиши учун ота-она ва ўқитувчилар масъулдир. Ота – фарзанд тарбиясида масъулиятнинг биринчи навбатида туради. Бола то балоғатга етгунча ўша масъул ҳимоясида бўлади. Агар бола ақлан заиф ёки жисмонан ҳимояга муҳтож бўлса, у ҳолда балоғат ёшига етганда ҳам масъул қўл остида бўлади. Иккинчи босқич фарзанд ҳаётида унинг келажаги учун энг муҳим, келажақда ким бўлишини белгилайдиган босқичдир. Чунки бу босқич фарзанд учун илм, ҳунарга эга бўладиган, жамият учун фойда келтирадиган, жамиятнинг бир аъзоси сифатида камол топадиган даврдир. Ҳақиқатан ҳам биринчи босқични амалга оширмасдан, иккинчи босқичга ўтиш мумкин эмас. Шундай экан, ўсмир ўғил болаларни мустақил ҳаётга тайёрлашда отанинг вазифаси катта аҳамиятга эга. Отанинг оиладаги мавқеи – фарзандлар учун, айниқса, ўғил болалар учун жасорат сабоғи. Ҳеч кимга сир эмаски, ҳозирги кунда баъзи ўғил болалар, айниқса, қишлоқ жойларда ўзининг қобилиятини намоён қилишга тортинчоқлик қилади.

Бундан шу нарса аён бўладики, аёлларга хос тортинчоқлик, итоаткорлик, уятчанлик каби хислатлар ўғил болаларда ҳам шакллана боради. Айниқса, юқорида айтиб ўтилганидек, ўғил болада тортинчоқлик устун бўлади. Уларда эркак кишидаги жасурлик, ботирлик, қаттиққўллик, чидамлилик ва эпчиллик етишмайди.

1. Ўғил болаларнинг оилавий ҳаёт тўғрисидаги кадриятларни ўрганиш натижалари

Ёшларнинг оила тўғрисидаги тасаввур ва тушунчалари ҳамда оилага нисбатан кадриятлар йўналганлиги никоҳ-оила муносабатларининг барқарорлигини таъминлашда муҳим ҳисобланади. Шундан келиб чиқиб, оила кадриятларига ўсмирлик ёшидаги болаларнинг муносабатини ўрганиш мақсадида Рокич томонидан тақлиф этилган “Қадриятлар йўналганлигини ўлчаш” методининг ўзбек тилига ўгирилган вариантдан фойдаландик. Мазкур методика шахснинг қадриятларини аниқлашга мўлжалланган. Қадриятларни билиш тизими шахснинг йўналганлиги мазмунини белгилайди ва уни ўраб турган дунёга, одамларга, ўзига, дунёқарашини,

ҳаётий фаоллиги мотивациясининг моҳияти, ҳаётий концепция ва “фалсафий ҳаёт” асосини ташкил этади.

Ҳозирги кунда М.Рокичнинг кадриятларни билиш методикаси кадриятлар рўйхатини аҳамиятлигига асосланган ва кўп тарқалган методика ҳисобланади.

М.Рокич кадриятларни икки гуруҳга ажратади:

- терминал кадриятлар – индивидуал мавжудликка интилиш якуний мақсад эканлигига ишонч;

- инструментал кадриятлар – қандайдир ҳаракат ёки шахс хислати ҳар қандай вазиятда муҳимлигини афзаллигига ишониш (Кадриятлар қатори иловада келтирилган).

Тадқиқотимизда Тошкент шаҳри ва Самарқанд вилоятининг Иштихон, Пастдарғом, Пайариқ, Жомбой туманларидан 360 нафар синалувчи қатнашди. Шундан 210 нафари ўсмирлик ёшидаги, 150 нафари эса ўспиринлик ёшидаги йигитлардир.

Ушбу методика ўз ичига олган кадриятларга муносабатларини билдириш учун танловда иштирок этган синалувчиларга тақдим этилди ва ҳар бир кадриятнинг улар учун қанчалик қадрлилиги нуқтаи назаридан баҳолаб бериш вазифаси қўйилди.

Тадқиқотимизнинг олдида қўйилган мақсади кенг қамровли эканлигидан келиб чиқиб, биз методиканинг кадриятлар қаторини танлаб олдик ва методика муаллифи ишлатган қайта ишлов услубидан бир оз бошқароқ усулда фойдаландик. Чунки бизни қизиқтирган асосий масала – тақлиф этилган кадриятларнинг қайсилари биз танлаган респондентлар учун энг қадрли ва аҳамиятли эканлигини билишдан иборат эди. Маълумотларни қайта ишлаш жараёнида биз қуйидаги тамойилга амал қилдик, яъни йигитлар рейтинг тизимида белгилаб чиққан ҳар бир кадриятлар йўналишидаги (инструментал, терминал) 16та кадриятлар орасида энг кўп марта баҳоланган кадрият - сифатларини ажратиб олдик. Яъни аҳамиятлилики бўйича ўнликка кирган сифатларни биз энг эътиборли тарзда белгиладик ва уларнинг орасида энг қадрлисини аниқлаб, шу асосда ёшларнинг ҳаётий ижтимоий тасаввурларини ўргандик.

Олинган натижаларга кўра, юқорида белгиланган ўнтаклик рейтинг қаторига кирганларни мос равишда шу ўринда неча киши белгилаганига эътибор қаратдик ва шу рақамларни санаб чиқиб, танловда қатнашганлар умумий сонини максимал сон бўлиши мумкинлигидан келиб чиқиб, ўша рақамга бўлдик. Масалан, “Бахтли оилавий ҳаёт” кадрияти 210 нафар ўсмирлик ёшидаги йигитлар жавобида “1” рақами билан энг қадрли сифатлар тарзида биринчи ўринда баҳоланган бўлса, неча киши шу тарзда баҳолаганини 210 га, яъни назарий жиҳатдан қабул қилинган сонга бўлдик.

Аниқроқ айтадиган бўлсак, агар ушбу танловда 210 нафар ўсмир йигитлар “Бахтли оилавий ҳаёт” кадрияти рўпарасига “1” рақамини қўйган бўлса, оддий коэффициент чиқариш формуласидан фойдаланиб, 74 ни 210

га бўлиб, 100га кўпайтирдик ва 35,2 коэффициентига эга бўлдик. Шу тарзда барча гуруҳларнинг маълумотларини қайта ишлаб, танланган ҳар бир гуруҳ учун энг аҳамиятли бўлган ва келажагини шу кадриятлар билан тасаввур қилишлари бўйича жавобларга эга бўлдик.

Ўсмирлик ёшидаги ўғил болаларнинг терминал кадриятларни баҳолаш натижаларига кўра, “фаол қизгин ҳаёт” (19,5), “бахтли оилавий ҳаёт” (18,1), “муҳаббат” (севган киши билан маънавий ва жисмоний яқинлик) (15,7) кадриятлари юқори кўрсаткичларни ифодалайди. Бу шундан далолат берадики, ўсмирлик ёшидаги респондентлар ўз келажак оилавий ҳаётларидан фаол ва қизгин, бахтли оилавий ҳаёт ва севги муҳаббат асосидаги ҳаётни орзу қиладилар. Аммо уларда “фикрлаш ва хулоса чиқаришдаги мустақиллик” (5,2), “кўпчилик томонидан тан олинмиш” (9,5), “соғлиқ” (жисмонан ва руҳий) (11,4) кадриятлари бўйича паст натижаларнинг намоён бўлиши келгуси оилавий ҳаётлари ҳақида ишончсизлик ва иккиланишлар мавжудлигига ишора қилади. Чунки, фаол ва қизгин, бахтли оилавий ҳаётни таъминлаш учун йигитларда фикрлаш ва хулоса чиқаришдаги мустақиллик, бахтли оилавий ҳаётнинг кўпчилик томонидан тан олинмиши, эътироф этилиши кадриятига нисбатан етарлича тушунча ва тасаввурлар талаб этилади. Шу жиҳатдан, бу ёшдаги респондентларда оилани бошқариш, оилавий муносабатларда эркакнинг ўрни, вазиятли ҳолатларда қарорлар қабул қилиш бўйича тушунча ва малакаларни шакллантириш тадбирларини олиб бориш мақсадга мувофиқ ҳисобланди.

Ўспиринлик ёшидаги ўғил болаларнинг терминал кадриятларни баҳолаш натижалари бўйича эса, “бахтли оилавий ҳаёт” (18,7), “кўпчилик томонидан тан олинмиш” (ҳурмат қозониш) (16,7), “фаол қизгин ҳаёт” (14,8), “муҳаббат” (севганкиши билан маънавий ва жисмоний яқинлик) (13,8) кадриятлари юқори кўрсаткичларни намоён қилган. Мазкур ёш давридаги респондентларда кадриятларнинг бундай баҳоланиши ёш ўлғайиб бориши билан оилавий ҳаётга нисбатан қарашлар, тушунчалар кенгайиб бориши ҳолати билан изоҳланиши мумкин. Респондентларда “ҳузур-ҳаловат” (вақтичоғлик, айш-ишрат) (5,2), “ҳаракат ва фаолиятдаги эркинлик” (7,4) кадриятлари паст даражада ифодаланган (2.1.1-жадвал). Бу респондентларда оилавий ҳаёт фақат ҳузур-ҳаловат, вақтичоғлик, айш-ишратдан иборат эмаслиги, оила кургандан кейин ҳаракат ва фаолиятдаги эркинлик пасайиши тўғрисидаги қарашлар мавжудлигидан далолат беради.

1.1-жадвал

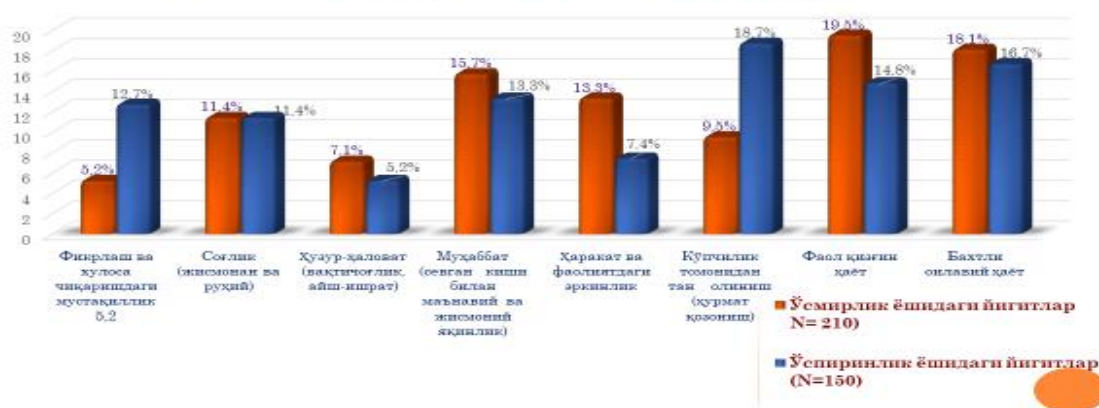
Ўсмирлик ва ўспиринлик ёшидаги ўғил болаларнинг терминал кадриятларни баҳолаш натижалари (N= 360)

№	Терминал кадриятлар	Ўсмирлик ёшидаги йигитлар (N= 210)		Ўспиринлик ёшидаги йигитлар (N= 150)	
		Абс.	коэф.	Абс.	коэф.
1.	Фикрлаш ва хулоса чиқаришдаги мустақиллик	11	5,2	19	12,7
2.	Соғлик (жисмонан ва руҳий)	24	11,4	17	11,4
3.	Ўзур-ҳаловат (вақтичоғлик, айш-ишрат)	15	7,1	8	5,2
4.	Муҳаббат (севганкишибиланмаънавий ва жисмоний яқинлик)	33	15,7	20	13,3
5.	Ўаракат ва фаолиятдаги эркинлик	28	13,3	11	7,4
6.	Кўпчилик томонидан тан олинис (хурмат қозонис)	20	9,5	25	18,7
7.	Фаол қизғин ҳаёт	41	19,5	22	14,8
8.	Бахтли оилавий ҳаёт	38	18,1	28	16,7

Ўсмирлик ва ўспиринлик ёши давридаги респондентларда терминал кадриятлар ифодаланишининг қиёсий таҳлилига кўра, ўсмирлик ёшидаги ўғил болаларда “фаол қизғин ҳаёт” (19,5), “бахтли оилавий ҳаёт” (18,1) кадриятлари юқори баҳоланган бўлса, ўспиринлик ёши даврида эса “кўпчилик томонидан тан олинис” (хурмат қозонис) (16,7), “бахтли оилавий ҳаёт” (16,7) кадриятлари юқори даражаларни кўрсатган. Ушбу ҳолатни психологик таҳлил қилиб кўрадиган бўлсак, юқорида таъкидланганидек, ўсмирлик ёшидаги “фикрлаш ва хулоса чиқаришдаги мустақиллик” (5,2), “кўпчилик томонидан тан олинис” (9,5) кадриятлари ўспиринлик ёши даврида фарқланишларни намоён этмоқда. Хусусан, ўспиринларда “кўпчилик томонидан тан олинис” (хурмат қозонис) (16,7), “бахтли оилавий ҳаёт” (16,7), “фикрлаш ва хулоса чиқаришдаги мустақиллик” (12,7) кадриятларининг бир мунча юқори баҳоланганлигини кузатишимиз мукин. Ушбулардан шундай хулоса қилиш мумкинки, оилавий ҳаёт тўғрисидаги кадриятларнинг ифодаланиши инсоннинг ёши, ҳаётий тажрибаси ортиб бориши билан такомиллашиб борар экан. Аммо, ёш ёки турмуш тажрибасининг ортиб бориши айримларда оилавий кадриятларга нисбатан муносабат ўзгармасдан қолиши мумкинлигини ҳам унутмаслик лозим бўлади. Демак, ёш даври ёки оилавий ҳаёт тажрибасига эга бўлиш ҳар доим ҳам бахтли оилавий ҳаёт ва оила мустақамлигини таъминлашда аҳамият касб этмас экан.

Ўсмирлик ва ўспиринлик ёшидаги ўғил болаларнинг терминал кадриятларни баҳолаш натижалари 2.1. 1-расмда диаграмма кўринишида тасвирланган.

**ЎСМИРЛИК ВА ЎСПИРИНЛИК ЁШИДАГИ ЎҒИЛ БОЛАЛАРНИНГ ТЕРМИНАЛ
ҚАДРИЯТЛАРНИ БАҲОЛАШ НАТИЖАЛАРИ (N= 360)**



Шундан келиб чиқиб таъкидлаш мумкинки, ёшларни, айниқса, ўғил болаларни оилавий ҳаётга тайёрлаш муҳим ижтимоий-психологик муаммолардан бири сифатида илмий тадқиқ қилиниши ҳар жиҳатдан мақсадга мувофиқ ҳисобланади.

Юқоридаги мулоҳазаларимизни ўсмирлик ва ўспиринлик ёшидаги йигитларда терминал қадриятларни баҳолаш натижаларининг корреляция кўрсаткичлари ҳам тасдиқлайди.

Эмпирик натижаларнинг умумий кўрсаткичлар бўйича таҳлиliga мувофиқ уларнинг ўзаро ички муносабатларини К.Пирсоннинг корреляцион таҳлил усули орқали ўрганишга ҳаракат қилдик. Натижада оилавий қадриятларнинг оилавий ҳаётга тайёрлашдаги ўрнини ўрганиш учун қўлланилган методикалар кўрсаткичлари бўйича корреляцион таҳлилни амалга оширдик. Кўрсаткичлар таҳлили қуйидаги муҳокамалар предмети ҳисобланади.

Ўсмирлик ёшидаги ўғил болаларнинг терминал қадриятларни баҳолаш натижаларига кўра, ўсмирлик ёшидаги ўғил болаларнинг қадриятларни баҳолаш кўрсаткичлари билан оилавий ҳаётга тайёрлик даражасидаги хусусиятлар ўртасидаги интеркорреляциядаги коэффициентлар қуйидаги муносабатни акс эттирди. Ўсмирларда “фаол қизгин ҳаёт” қадриятининг “муҳаббат” (севган киши билан маънавий ва жисмоний яқинлик) ($r=0,420$, $p\leq 0,01$), “фикрлаш ва хулоса чиқаришдаги мустақиллик” ($r=0,306$, $p\leq 0,01$) ва “соғлик” (жисмонан ва руҳий) ($r=0,499$, $p\leq 0,01$) ҳолат қадриятининг уйғунлиги кузатилмоқда. Бироқ айрим ўринларда ўсмирларда оилавий ҳаёт хузур-ҳаловат (вақтичоғлик, айш-ишрат)дан иборат деган қадриятлар ифодаланади ($r=-0,285$, $p\leq 0,01$). (2.1.2-жадвал) Шунга кўра, оилавий қадриятларни шакллантиришда ушбу ҳолатларни инобатга олиш муҳим.

Инструментал қадриятлар баҳоланишига кўра, ўспиринлик ёшидаги ўғил болаларнинг қадриятларни баҳолаш кўрсаткичлари билан оилавий

ҳаётга тайёрлик даражасидаги хусусиятлар ўртасидаги интеркорреляциядаги коэффициентлар қуйидаги муносабатни акс эттирди.

1.2-жадвал

**Ўсмирлик ёшидаги йигитларда терминал кадриятларни баҳолаш
натижаларининг корреляция кўрсаткичлари**

№	Терминал кадриятлар	1	2	3	4	5	6	7	8
1.	Фаол қизғин ҳаёт	1	0,148	0,420**	0,306**	0,499**	0,487**	0,485**	-0,217**
2.	Бахтли оилавий ҳаёт		1	-0,185	0,285	0,327**	-0,296**	0,446**	0,487**
3.	Муҳаббат (севганкиши билан маъ-навий ва жисмоний яқинлик)			1	0,408**	0,430**	0,488**	0,464**	0,486**
4.	Фикрлаш ва хулоса чиқариш-даги мустақиллик				1	0,344**	0,330**	0,869**	0,839**
5.	Соғлиқ (жисмонан ва руҳий)					1	0,813**	0,721**	0,754**
6.	Ҳузур-ҳаловат (вақтичоғлик, айш-ишрат)						1	-0,235**	-0,408**
7.	Ҳаракат ва фаолиятдаги эркинлик							1	-0,273**
8.	Кўпчилик томонидан тан олиниш (хурмат қозониш)								1

Изоҳ: * $p \leq 0,05$; ** $p \leq 0,01$

Ўсмирларда “тарбияланганлилик” (хушхулқлик, одобилик) кадриятининг “ҳаётдан завқланиш” (юмор ҳисси) ($r=0,317, p \leq 0,01$), “маъсулият” (бурч ҳисси, ваъданинг устидан чиқиш) ($r=0,406, p \leq 0,05$) ва “маълумотлилик” (кенг билимлиликда юксак маданий даража) ($r=0,512, p \leq 0,05$) кадриятлари юқори кўрсаткичларни намоён қилди. Шу билан бир қаторда айрим ҳолатларда ўспиринларда оилавий муносабатларда “ўзига катта талаблар қўйиш” ($r=-0,093, p \leq 0,01$), “масалага ҳар томонлама қарай олиш” (бошқаларнинг нуқтаи назарини тушуна олиш, ўзгача дид, одатларни ҳурмат қилиш) кадриятлари ($r=-0,143, p \leq 0,01$), “маъсулият” (бурч ҳисси, ваъданинг устидан чиқиш) кадриятининг “рационализм” (оқил ва мантиқий фикрлаш, яхшилаб ўйлаб қарор қабул қилиш) ($r=-0,143, p \leq 0,01$) таъкиди манфий муносабатларни ифодалади. Ушбулардан келиб чиқиб, қайд этиш мумкинки, оила ва оилавий муносабатларга ҳар томонлама қараш орқали ёндашиш талаб этишлигини унутмаслик лозим.

Ўспиринлик ёши давридаги йигитларда “бахтли оилавий ҳаёт”ни таъминлашдаги кадриятлар ўрнининг ўзига хослиги эса “фикрлаш ва хулоса

чиқаришдаги мустақиллик” ($r=-0,285$, $p\leq 0,01$) ва “хузур-ҳаловат” (вақтичоғлик, айш-ишрат) ($r=-0,296$, $p\leq 0,01$), “кўпчилик томонидан тан олинмиш” (хурмат қозониш) ($r=-0,268$, $p\leq 0,01$)ни ифодалаш борасида номувофиқликка сабаб бўлиши мумкин экан (2.1.3-жадвал).

1.3-жадвал

Ўспиринлик ёшидаги йигитларда терминал қадриятларни баҳолаш натижаларининг корреляция кўрсаткичлари

№	Терминал қадриятлар	1	2	3	4	5	6	7	8
1.	Фаол қизғин ҳаёт	1	0,233	0,310**	0,305*	0,476**	0,426**	0,449**	-0,214**
2.	Бахтли оилавий ҳаёт		1	0,391	0,285	0,331**	-0,296**	0,432**	-0,268**
3.	Муҳаббат (севганкиши билан маънавий ва жисмоний яқинлик)			1	0,418**	0,421**	0,476**	0,454**	0,466**
4.	Фикрлаш ва хулоса чиқариш-даги мустақиллик				1	0,321**	0,325**	0,869**	0,839**
5.	Соғлик (жисмо-нан ва руҳий)					1	0,783**	0,731**	0,768**
6.	Хузур-ҳаловат (вақтичоғлик, айш-ишрат)						1	-0,225**	-0,411**
7.	Ҳаракат ва фаолиятдаги эркинлик							1	-0,261**
8.	Кўпчилик томонидан тан олинмиш (хурмат қозониш)								1

Изоҳ: * $p\leq 0,05$; ** $p\leq 0,01$

Тадқиқотимизда йигитларда инструментал қадриятларнинг оилавий ҳаётга тайёрлик даражасини ифодалашдаги ўрнини ҳам ўрганишга ҳаракат қилдик. Инструментал қадриятларни баҳолаш натижаларига кўра, “тарбияланганлилик” (хушхулқлик, одоблилик) (мос равишда ўсмир ва ўспиринларда – 17,1 ва 9,3), “ҳаётдан завқланиш” (юмор ҳисси) (мос равишда ўсмир ва ўспиринларда – 16,2 ва 8,7), “маъсулият” (бурч ҳисси, ваъданинг устидан чиқиш) (мос равишда ўсмир ва ўспиринларда – 14,2 ва 12,0), “маълумотлилик” (кенг билимлиликда юксак маданий даража) (мос равишда ўсмир ва ўспиринларда – 13,8 ва 13,3) каби қадриятлар юқори рейтингларда қайд этилган. Лекин уларнинг гуруҳ доирасидаги қайтарилишидаги фикрлар уйғунлиги ўсмир ва ўспиринларнинг фикрлари уйғунлигидан ва яқинлигидан дарак беради. Масалан, “масъулият” (бурч

хисси, ваъданинг устидан чиқиш) қадриятига эътибор берадиган бўлсак, ўсмирлар 1-ўринга (14,3), ўспиринларнинг аксарияти бу қадриятни 3-чи (12,0) ўринга қўйиб, танлашда фикрлар бирлигини кўрсатган бўлса, ўсмирлар учун бу қадриятдан афзалроқлари мавжуд ва бу қадриятга муносабат билдиришда уларнинг фикрида яқдиллик унчалик кўринмайди. Жумладан, “тарбияланганлилик” (хушхулқлик, одоблилик) қадрияти ўсмирларда - 17,1 га, ўспиринларда эса 9,3га, “хаётдан завқланиш” (юмор ҳисси) ўсмирларда – 16,2 ва ўспиринларда - 8,7га тенг бўлган (2.1.4-жадвал). Бундай ҳолатни психологик жиҳатдан таҳлил қиладиган бўлсак, ўсмирлик ёшидаги йигитларда ўзлари тарбияланиш жараёнида бўлганликлари туфайли бу қадриятни юқорироқ баҳолаган деган хулосани беради. Ўспиринларда бу қадриятнинг нисбатан пастроқ белгиланиши уларнинг олдида оилавий ҳаётга тайёрланишда тарбиядан кўра муҳимроқ, яъни оилани моддий жиҳатдан таъминлаш вазифаси, оила олдидаги масъулиятни ҳис қилиш, илмли, маданиятли турмуш ўртоқ танлаш, касбий фаолият сирларини пухта эгаллаш, жамиятда ўз ўринларини эгаллашга нисбатан интилиш каби қадриятлар турганлиги билан изоҳлаш мумкин.

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*Муротмусаев К.Б., к.м.н.
доцент
кафедра педагогики непрерывного образования
Университет Ориентал
Республика Узбекистан, Ташкент
Туропов Х.М.
преподаватель русского языка и литературы
Профессионально-техническая школа
Республика Узбекистан, Бахмальский район Джизакская область*

ЛИДЕРСТВО КАК ВАЖНЫЙ ПСИХОЛОГИЧЕСКИЙ ФАКТОР В УПРАВЛЕНЧЕСКОЙ ДЕЯТЕЛЬНОСТИ

Аннотация. В статье рассмотрены вопросы эффективного лидерства в различных организациях. Авторами подробно описаны и анализированы элементы ситуационного лидерства, а также рассмотрены вопросы соотношения личностных характеристик человека и его лидерских способностей. Приведены наглядные примеры лидерских качеств у разных исторических персон.

Ключевые слова: лидерство, эффективное лидерство, ситуационное лидерство, менеджмент, руководитель.

*Murotmusaev K.B., Ph.D.
associate professor
Department of Pedagogy of Continuing Education
Oriental University
Republic of Uzbekistan, Tashkent
Turopov Kh.M.
teacher of Russian language and literature
Vocational School
Republic of Uzbekistan, Bakhmal district, Jizzakh region*

LEADERSHIP AS AN IMPORTANT PSYCHOLOGICAL FACTOR IN MANAGEMENT ACTIVITIES

Abstract: the paper examines the issues of effective leadership in different organizations. The authors describe and analyze elements of situational leadership and consider the relationship between personal characteristics of a person and his/her leadership abilities. The authors give illustrative examples of leadership qualities in different historical persons.

Key words: leadership, effective leadership, situational leadership, management, manager.

Что делает человека эффективным лидером? Этот вопрос давно интересует ученых. Один из наиболее известных и простых ответов дает теория великих людей. Ее сторонников можно встретить среди историков, политологов, психологов и социологов. Теория великих людей (great person theory) утверждает, что человек, который обладает определенным набором личностных черт, будет хорошим лидером независимо от характера ситуации, в которой он находится. Если эта теория верна, то должны существовать какие-то ключевые черты личности, делающие человека великим лидером и выдающимся руководителем [3]. Что это: высокий интеллект, харизма (обаяние), общительность, смелость? Или их сочетание? Что лучше: быть экстравертом или интровертом? Должен ли правитель быть абсолютно безжалостным, как предлагал в 1513 году Никколо Макиавелли в своем знаменитом трактате «Государь»? Или лучшими руководителями являются высокоморальные люди? А может, правильный ответ дал великий Лао-цзы, написавший две тысячи лет назад: «Страна управляется справедливостью, война ведется хитростью». Или же главное значение имеет не сама личность лидера, а социальные характеристики окружения, в котором она формировалась: состав семьи, образование, прежние занятия?

Психологи, озаботившись данным вопросом, провели множество специальных исследований. Ныне их количество уже измеряется сотнями. И что же? Да почти ничего! Некоторые довольно слабые зависимости действительно можно найти. Но в целом можно сказать, что сильных взаимосвязей не существует. Как ни удивительно, оказалось, что очень мало личностных черт напрямую связаны с лидерской эффективностью, и найденная взаимозависимость обычно бывает довольно слабой.

Вот некоторые соотношения, обнаруженные между отдельными личностными характеристиками и лидерством.

1. Лидеры обычно обладают чуть более высоким интеллектом, чем их «толпы». Но не намного. Претенденту на лидерство ни в коем случае нельзя отрываться от среднего интеллектуального уровня его последователей. «Чересчур умные» неминуемо отторгаются толпой. Страшно далеки они от народа... Высоколобый интеллектуал может занять место ближайшего помощника, мудреца, тайного советника вождя, а в лучшем случае — серого кардинала. Но «путь на трон» ему чаще всего заказан. Увы.

2. *Мотивация власти.* Многие лидеры движимы сильным желанием власти. У них сильна концентрация на собственной персоне, забота о престиже, честолюбие, избыток энергии. Такие лидеры, как правило, лучше социально подготовлены, проявляют большую гибкость и способность к адаптации. Властолюбие и способность к интригам помогают им длительное время оставаться «на плаву». Но для них существует проблема эффективности. Например, Бориса Ельцина обычно рассматривают как лидера, обладающего чрезвычайно сильным стремлением к власти. Ему

удавалось править Россией почти 10 лет. Однако вопрос, был ли он для страны эффективным руководителем, при этом остается открытым [2].

3. Исследование исторических записей показало, что среди 600 известных монархов наиболее знаменитыми были либо очень высокоморальные, либо исключительно аморальные личности. Отсюда можно предположить, что есть два пути к знаменитости: надо или быть образцом морали и добродетели или обладать беспринципностью Макиавелли[6].

4. Американский психолог Симонтон (Simonton) собрал информацию, касающуюся 100 личностных свойств всех президентов США. Сюда входили характеристики семей, в которых они росли, образование, прежние занятия и собственно черты личности. Только три из этих переменных: рост, размер семьи и количество книг, опубликованных президентом до того, как он вступил на эту должность, — коррелируют с эффективностью деятельности президента на своем посту (определяемой по оценкам историков). Симонтон установил, что президенты США, выросшие в небольших семьях, чаще оставались в истории как великие политические деятели. Например, Франклин Рузвельт, которого считают одним из самых выдающихся американских президентов, был единственным ребенком. Остальные 97 характеристик, включая и черты личности, согласно результатам данного исследования вообще никак не связаны с эффективностью человека в качестве лидера.

5. Существует небольшая положительная зависимость между ростом человека и вероятностью, что он станет лидером группы. Так, почти все выборы в Соединенных Штатах выигрывал более высокий кандидат, исключение составляют только два случая: победа Ричарда Никсона над Джорджем МакГоверном в 1972 году и победа Джимми Картера над Джеральдом Фордом в 1976 году. В 1992 году Билл Клинтон был на 4 дюйма (10 см) выше Джорджа Буша. В 1996 году он был всего лишь на полдюйма (примерно 1,5 см) выше Роберта Доула. Оказавшись в Белом Доме, высокие президенты чаще становятся заметными историческими фигурами[3]. Можно утверждать, что у высокого человека чуть больше шансов стать лидером. Однако не стоит забывать, что величайшими лидерами были Наполеон, Гитлер, Ленин, Сталин и множество других, которые не могли похвастаться высоким ростом.

6. Как ни странно, существует очень мало свидетельств того, что такие черты, как харизма (обаяние), смелость, склонность к доминированию или уверенность в себе являются показателями эффективности деятельности человека в качестве лидера.

Итак, какую-то скромную взаимосвязь между личными характеристиками и лидерскими способностями можно обнаружить. Но в целом очень трудно предсказать, насколько хорошим лидером будет человек, только на основании его личностных черт. Поэтому со временем

исследователи стали склоняться к мнению, что недостаточно рассматривать одни лишь черты личности. Нужно учитывать и ситуацию, в которой эти черты проявляются. Это не значит, что свойства личности вообще не влияют на шансы стать лидером. Просто нужно рассматривать как личность человека, так и характер ситуации, в которой ему или ей приходится играть лидерскую роль. Согласно этой точке зрения, для того чтобы стать эффективным лидером, не нужно быть «великим человеком». Скорее, нужно оказаться подходящим человеком в подходящем месте и в подходящее время [4].

Лидер не может быть таковым всегда и везде. Он может проявить свои лидерские качества только в подходящей ситуации. Например, руководитель предприятия может очень успешно действовать в одних ситуациях и терпеть неудачи в других. Рассмотрим пример Стива Джобса, в возрасте 21 года основавшего вместе со Стефаном Возняком легендарную компанию «Эппл компьютерс». Эксцентричный Джобс меньше всего был похож на традиционного корпоративного топ-менеджера. Он воспитывался контркультурой 60-х годов, и к компьютерам обратился, уже имея за спиной опыт употребления ЛСД, путешествие в Индию и жизнь в коммуне. В те дни, когда еще не было никаких персональных компьютеров, необычный стиль Джобса был как раз тем, что нужно для создания новой индустрии. В течение пяти лет он превратился в лидера корпорации стоимостью несколько миллиардов долларов. Оказалось, однако, что неортодоксальная манера Джобса плохо подходит для тонкого и сложного дела управления большой корпорацией в условиях рыночной конкуренции. Компания «Эппл» начала терпеть убытки, проигрывая в соревновании с конкурентами. В 1985 году Джобс был вынужден уйти из дела под нажимом Джона Скалли, человека, которого сам Джобс когда-то пригласил руководить своей фирмой. Интересно, что спустя несколько лет компанию «Эппл» опять возглавил Стив Джобс [8]. Это произошло тогда, когда перед компанией встала необходимость произвести технологический рывок: качественно улучшить операционную систему своих «Макинтошей», восстановить доверие клиентов и прежнее положение на рынке.

Наверное, вы уже поняли, что корпоративный лидер, который хочет оставаться эффективным длительное время, должен уметь быстро адаптироваться к изменчивым обстоятельствам и гибко варьировать свое поведение. Получается это не у всех. Точнее — у очень немногих. Гораздо чаще руководитель заикливается на одном стиле поведения, который, например, оказался эффективным в дни становления компании, но совершенно не подходит для периода интенсивного роста и удержания завоеванных позиций. В результате фирма со временем теряет способность конкурировать на рынке. Еще один характерный пример — печальная судьба легендарного Джона Акерса, исполнительного директора IBM, бесславно уволенного из корпорации в 1993 году, после многих лет яркой и

успешной карьеры. Сделав в 1980-х годах IBM флагманом компьютерной индустрии, Акерс оказался не в состоянии справиться со стремительными технологическими изменениями, которые охватили компьютерную промышленность с начала 90-х. Не случайно в современном западном HighTech-бизнесе редко бывает, чтобы топ-менеджмент благополучно почивал в своих креслах более пяти лет. Периодическая «смена караула» позволяет корпорациям оставаться динамичными, адекватно ориентироваться в быстро меняющемся мире[7].

Существует несколько теорий лидерства, фокусирующих внимание одновременно на личных свойствах лидера и на ситуации, в которой он действует. Наиболее известная — это ситуационная теория лидерства (contingency theory of leadership) Фреда Фидлера (Fiedler). Ситуационная теория лидерства утверждает, что эффективность лидера зависит как от того, насколько данный лидер ориентирован на задачу или на отношения, так и от того, в какой степени лидер контролирует группу и реализует свое влияние на нее. Предположение Фидлера состоит в том, что лидеров можно разделить на два больших типа. Представители первого ориентированы главным образом на задачу, второго — на взаимоотношения. Лидер, ориентированный на задачу (task-oriented leader), больше обеспокоен тем, чтобы работа была сделана как следует. Взаимоотношения и чувства работников его не интересуют. Потенциальные преимущества такого стиля — это скорость принятия решений, подчиненных общей цели, суровый контроль над подчиненными. Лидер, ориентированный на взаимоотношения (relationship-oriented leader), в первую очередь интересуется тем, какие чувства и взаимоотношения возникают в среде работников. Он стремится повысить эффективность труда путем улучшения человеческих отношений: поощряет взаимопомощь, позволяет подчиненным принимать участие в выработке важных решений, учитывает настроение и потребности работников и т.д. Разумеется, Позднее было установлено, что стиль некоторых руководителей может быть ориентироваться одновременно и на работу, и на человека.

Фидлер утверждал, что ни один из этих двух типов лидера не является более эффективным, чем другой. Все зависит от обстоятельств и от характера ситуации, а именно от того, какова степень контроля лидера и его влияния среди членов группы. Это краеугольный камень его ситуационной теории. В ситуации «высокого контроля» у лидера прекрасные межличностные отношения с подчиненными, его положение в группе бесспорно признается как влиятельное и главенствующее, а работа, которую выполняет группа, хорошо структурирована и четко определена. В ситуации «низкого контроля» имеет место обратное — у лидера плохие взаимоотношения с подчиненными, и работа, которую должна выполнить группа, определена неясно.

Лидеры, ориентированные на задачу, наиболее эффективны в ситуациях либо с очень высоким, либо с очень низким контролем. В случае очень высокого контроля люди довольны и счастливы, все идет гладко, и нет нужды беспокоиться о чувствах подчиненных или их взаимоотношениях. Это тот случай, когда «у руководителя в руках большая дубина, но ее все любят». Здесь лидер, сконцентрировавшийся только на выполнении задачи, добивается наилучших результатов. Когда контроль ситуации очень низок, лидеру, ориентированному на задачу, лучше удается организовать ситуацию. Используя свои полномочия, он с помощью приказов и дисциплинарных взысканий может внести хоть какой-то порядок в запутанную и неопределенную рабочую обстановку. Это случай прямого принуждения: «Большую дубину в руках руководителя никто не любит, но все ей подчиняются». Однако необходимо учитывать, что ориентация на задачу и диктаторство (или оскорбление подчиненных) — это не одно и то же [7].

В ситуациях средней степени контроля самыми эффективными являются лидеры, ориентированные на взаимоотношения. В этом случае все шестеренки рабочего механизма вращаются довольно гладко, но все же требуется уделять некоторое внимание «неполадкам», возникающим из-за плохих взаимоотношений и оскорбленных чувств. Лидер, способный сгладить эти шероховатости, действует в такой ситуации наиболее успешно. Ситуационная теория прошла проверку на многочисленных группах лидеров: от президентов транснациональных корпораций до армейских командиров. Результаты всех этих исследований, как правило, соответствуют предположениям Фидлера.

Когда мы обсуждали характеристики лидеров, ориентированных на задачу и ориентированных на взаимоотношения, не напомнило ли это вам что-нибудь? Признайтесь честно: не показалось ли вам, что лидеры-мужчины более склонны ориентироваться на задачу, а лидеры-женщины — на отношения? Если это так, то вы далеко не одиноки: гендерные (т.е. полоролевые) стереотипы относительно лидерского стиля мужчин и женщин распространены очень широко. Считается, что женщины больше думают о чувствах своих сотрудников, обладают лучшими навыками общения и поэтому более ориентированы на отношения. Мужчин же часто рассматривают как жестких, авторитарных лидеров макиавеллиевского типа, которые не особенно обращают внимание на чувства своих подчиненных и намного меньше беспокоятся об их взаимоотношениях. Соответствуют ли такие гендерные стереотипы действительности?

Психологи изучили сотни научных исследований в поисках ответа на вопрос, чем лидерский стиль женщин отличается от лидерского стиля мужчин. Они обнаружили, что действительно, как и принято считать, женщины обычно практикуют более демократичную манеру руководства, чем мужчины. Возможно, это происходит потому, что женщины обладают

лучшими навыками общения. Это позволяет им при принятии решений использовать способности членов группы и, если нужно, вежливо отвергать их советы [4].

Значит ли это, что женщины — лучшие руководители, чем мужчины? Как мы можем предположить исходя из ситуационной теории лидерства, это зависит от характера ситуации. Женщины обычно являются лучшими лидерами (как по объективным показателям их работы, так и по оценкам сослуживцев) в тех сферах деятельности, где особенно важны навыки общения, например в сфере образования. Мужчины обычно бывают более успешными лидерами там, где требуется способность решительно отдавать приказы и осуществлять контроль, например в армии.

Прежде чем сделать далеко идущие выводы из этих данных, мы должны учесть некоторые дополнительные факторы. Во-первых, найденные различия не так уж велики. Есть много женщин, вполне способных усвоить «маскулинный» (мужской) стиль руководства, особенно если характер работы этого требует. И есть много мужчин, обладающих не меньшими навыками общения, чем женщины. Кроме того, при любом исследовании лидерской эффективности возникает следующая проблема: отражают ли собранные данные действительно существующие различия или только распространенные стереотипы относительно лидерства? Если, например, женщину характеризуют как менее эффективного лидера, чем мужчину, происходит ли это потому, что она действительно худший руководитель или потому, что ее сослуживцы используют другую шкалу для оценки ее действий?

Старая мудрость говорит, что из-за половой дискриминации женщина должна быть «в два раза лучше, чем мужчина», чтобы преуспеть. К сожалению, различия в оценке деятельности лидеров мужчин и женщин существуют на самом деле. Если женщина практикует стереотипный «маскулинный» стиль руководства, если она типичный «босс» и ориентирована на задачу, ее оценивают более негативно, чем руководителя-мужчину с таким же стилем. Это проявляется особенно ярко в случаях, когда оценки делают мужчины. Психологи Дор Батлер и Флоренс Гейс (Butler & Geis) просили своих ассистентов, девушек и юношей, сыграть роль лидера в группе студентов, обсуждающих проблему из области бизнеса [4]. Лидеры — и юноши, и девушки — были настойчивы, но дружелюбны и решительно брали дискуссию в свои руки. Как остальные члены группы реагировали на такого лидера? Результаты оказались неутешительными для женщин. Когда мужчина утверждался во главе группы и действовал настойчиво, другие члены группы реагировали благосклонно. Если же подобным образом действовала женщина, то члены группы, особенно мужчины, реагировали гораздо более негативно. Получается, что мужчины чувствуют себя очень неудобно, если женщина использует тот же руководящий стиль, какой обычно позволяют себе мужчины.

Понятия «лидер» и «руководитель» похожи по значению, поэтому часто употребляются как синонимы. Но они не тождественны. Лидерство — это психологический феномен, тогда как руководство — сугубо управленческий. Лидер спонтанно занимает доминирующее положение в группе с явного или скрытого согласия большинства ее членов. Его влияние и авторитет имеют в основном неформальный характер [3]. Руководитель — это формальный начальник, занимающий официальную должность. Поэтому фактический лидер группы не всегда является ее официальным руководителем и наоборот.

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*Мухаммадиев Б.С.
старший преподаватель
Джизакский политехнический институт*

НЕЛИНЕЙНОСТЬ СТАТИЧЕСКОЙ ХАРАКТЕРИСТИКИ ПРЕОБРАЗОВАТЕЛЕЙ МЕХАНИЧЕСКИХ НАПРЯЖЕНИЙ

Аннотация: в работе рассмотрены на основании научно-технической литературы анализ нелинейности статической характеристики трансформаторного преобразователя механических напряжений (ТПМН), питаемого синусоидальном током, а также анализ результатов теоретического и экспериментального исследования зависимости степени нелинейности напряжения.

Ключевые слова: трансформаторный преобразователь механических напряжений (ТПМН), электродвижущая сила (ЭДС), статическая характеристика, напряжения, погрешность, нелинейность, конструкция, чувствительность, быстроедействие.

*Muhammadiev B.S.
senior lecturer
Jizzakh Polytechnic Institute*

NONLINEARITY OF STATIC CHARACTERISTICS OF MECHANICAL STRESS CONVERTERS

Annotation: based on scientific and technical literature, the paper considers the analysis of the nonlinearity of the static characteristic of a transformer converter of mechanical stresses (TPMN) powered by a sinusoidal current, as well as the analysis of the results of theoretical and an experimental study of the dependence of the degree of nonlinearity of the voltage.

Keywords: transformer converter of mechanical stresses (TPMN), electromotive force (EMF), static characteristic, voltage, error, nonlinearity, design, sensitivity, speed.

При создании новых конструкций трансформаторных преобразователей механических напряжений надо обратить особое внимание к соответствующей патентной литературе, так как на этапе анализа известных технических решений, используется обобщенные приемы улучшения характеристик трансформаторных преобразователей механических напряжений.

Из анализа различных конструкций трансформаторных преобразователей механических напряжений можно сделать вывод о том, что независимо от конструктивных особенностей преобразователей, в них происходит преобразование информации в трех физических цепях, а именно: механической, магнитной и электрической [1].

В результате анализа патентных материалов получен ряд обобщенных приемов конструктивного совершенствования трансформаторных преобразователей механических напряжений, где наиболее важными характеристиками являются: чувствительность и погрешность преобразования направления главных напряжений [2], а также при разработке методики расчета трансформаторного преобразователя механических напряжений (ТПМН) с дискретным выходом исходным уравнением является статистическая характеристика [3].

При разработке методики расчета трансформаторного преобразователя механических напряжений (ТПМН) с дискретным выходом исходным уравнением является статистическая характеристика которая необходима, в первую очередь, для определения оптимальных соотношений геометрических параметров магнитопровода, число обмоток и оптимального режима работы преобразователя [4].

Одной из важнейших метрологических характеристик, нормируемых при разработке средств автоматизации является статическая характеристика преобразователя.

Анализ классификации обобщенных приемов показывает, что наибольшее количество обобщенных приемов совершенствования конструкций разработана с целью уменьшения погрешности, обусловленной воздушным зазором, т.к. эта погрешность является наибольшей по величине и по существу определяет значение суммарной погрешности трансформаторных преобразователей механических напряжений [5].

Трансформаторный преобразователь представляет собой трансформатор, у которого под влиянием входного сигнала изменяется взаимная индуктивность, что приводит к изменению вторичного, выходного напряжения. Преобразователи, преобразующие значение измеряемой величины в значение взаимной индуктивности, называются взаимоиндуктивными или трансформаторными.

Изменение температуры преобразователя вызывает изменение ЭДС. При увеличении температуры возрастает активное сопротивление первичных обмоток и полное их сопротивление. Это уменьшает первичный ток и ЭДС [6].

При наличии двух обмоток на магнитной цепи при изменении магнитного сопротивления R_M будет изменяться взаимная индуктивность M между обмотками катушек, равная

$$M = \frac{w_1 w_2}{l_M}$$

При разработке методики расчета трансформаторного преобразователя механических напряжений (ТПМН) с дискретным выходом исходным уравнением является статистическая характеристика которая необходима, в первую очередь, для определения оптимальных соотношений геометрических параметров магнитопровода, число обмоток и оптимального режима работы преобразователя.

В качестве критериев оптимизации параметров преобразователя используется обычно следующие: максимальная чувствительность, минимальная погрешность и максимальное быстродействие [7].

Анализ статической характеристики трансформаторного преобразователя механических напряжений (ТПМН), питаемого синусоидальном током, показывает, что статическая характеристика нелинейно. Для оценки степени нелинейности используется метод, рассмотренный в работе [8].

Степень нелинейности, при использовании в качестве информативной величины амплитуду синусоидального напряжения на вторичной обмотке ТПМН, можно определить по формуле [9].

Анализ зависимости степени нелинейности статической характеристики от параметров ТПМН показывает, что основными факторами определяющему нелинейность статической характеристики являются воздушный зазор, частота питания первичной обмотки ТПМН и потери на вихревые токи в материале исследуемого объекта (рис.1.).

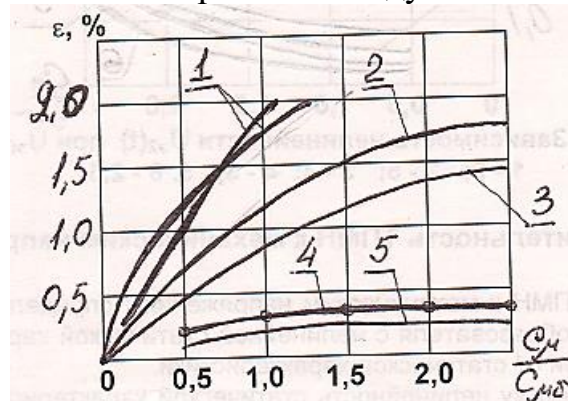


Рис.1. Зависимость степени нелинейности статической характеристики ТПМН при f : 1 – 5 кГц; 2 – 400 Гц; 3 – 50 Гц; 4,5 – импульсном питании.

В то же время, абсолютное значение степени нелинейности статической характеристики ТПМН не превышает 2%, что позволяет на практике считать статическую характеристику линейной.

Рассмотрим нелинейность статической характеристики ТПМН при импульсном питании.

Одним из факторов, определяющих нелинейность статической характеристики, является нелинейность электрического напряжения на измерительной обмотке ТПМН в первом и втором режимах работы преобразователя.

Для уменьшения влияния переходного процесса на работу преобразователя электрическое напряжение – интервал времени в ТПМН отсчет интервала времени производится не с момента подачи на возбуждающую обмотку квадратичного импульса, а с момента достижения напряжения

на измерительной обмотке некоторого опорного напряжения $U_{\text{э}01}$, определяемого по нижеследующей формуле:

$$U_{\text{э}0} > 6U_{\mu}'' K_{I_{\mu}U_{\text{э}}} R_{\mu} \left(\frac{C_{\mu}C_{\mu\delta}}{C_{\mu}+C_{\mu\delta}} \right)^2$$

Окончанием интервала времени является момент достижения напряжения $U_{\text{э}}(t)$ минимально допустимого значения опорного напряжения $U_{\text{э}02}$. Допустимое значение $U_{\text{э}02}$ определяется при максимально допустимым воздушном зазоре во втором режиме работы ТПМН, так как в этом режиме крутизны $U_{\text{э}}(t)$ наименьшая.

При исследовании статической характеристики преобразователя было установлено, что во время режиме работы при питании квадратично изменяющимся во времени током эффективность короткозамкнутых управляющих обмоток изменяется с течением времени [10].

Теоретический расчет как нелинейности напряжения на измерительной обмотке, так и статической характеристики ТПМН с дискретным выходом производился численным методом на ЭВМ с погрешностью не более 0,01%.

Анализ результатов теоретического и экспериментального исследований зависимости степени нелинейности напряжения $U_{\text{э}}(t)$ от воздушного зазора при различных значений опорного напряжения $U_{\text{э}01}$ в первом режиме работы ТПМН (рис.2.) показал, что нелинейность напряжения на измерительной обмотке увеличивается с уменьшением воздушного зазора и опорного напряжения $U_{\text{э}01}$.

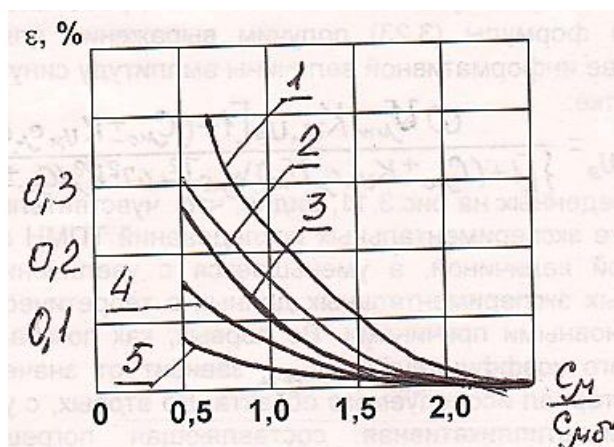


Рис.2. Зависимость нелинейности $U_{\text{н1}}(t)$ при $\frac{U_{\text{э02}}(t)}{U_{\text{э01}}(t)}$:
1-5; 2-4 (теоретич.); 3-4 (экспер.); 4-3; 5-2,5.

Во втором режиме на форму напряжения влияет соотношения постоянных времени переходного процесса в материале исследуемого объекта

и управляющих обмотках, которое можно охарактеризовать соотношением $\frac{R_{\mu k}}{R_{\mu}}$.

Установлено, что связь между механическими напряжениями и магнитными свойствами среды характеризуется магнитоупругой чувствительностью [11], а также поскольку в практике преобразования механических напряжений в ферромагнитных деталях методом высших гармоник используется всего несколько четных или нечетных гармоник, при этом большая часть информации не используется [12].

Анализ результатов исследований индуктивного преобразователя механических напряжений с мостовой схемой включения [3] показывает, что рассматриваемый преобразователь может применяться для преобразования составляющих линейного напряженного состояния, причем высокие метрологические характеристики (погрешность не более 4%) обеспечиваются при настройке на узкий диапазон преобразуемых напряжений [13].

Нелинейность напряжения во втором режиме, из которых следует, что наличие двух переходных процессов вызывает изменение характера зависимости нелинейности напряжения от воздушного зазора по сравнению с аналогичной зависимостью для первого режима работы ТПМН. Кроме того, ТПМН с управляющими обмотками, работающими в пассивном режиме,

то есть значения $\frac{R_{\mu k}}{R_{\mu}}$ находятся в пределах 1 ... 15, имеет нелинейность напряжения более, чем 10 раз, большую по сравнению с ТПМН с управляющими обмотками, работающими в активном режиме. Поэтому

в дальнейшем данные результатов исследований приведены для ТПМН с импульсным питанием и управляющими обмотками, работающими в активном режиме.

Исследование нелинейности статической характеристики ТПМН с дискретным выходом (рис.1. зависимости 4 и 5) показали, что абсолютное значение нелинейности статической характеристики ТПМН при импульсном питании значительно меньше, чем при синусоидальном питании и не превышает значения 0,4%, что показывает преимущество импульсного питания ТПМН. Расхождение теоретических данных с экспериментальными не превышает 30%.

Для уменьшения дополнительной температурной погрешности в рассматриваемом элементарном преобразователе в задающей цепи подбирались типы резисторов и конденсаторов по температурному коэффициенту так, чтобы $\dot{\Delta}_{MU_\mu} = 0$ [14].

Анализ принципа работы рассмотренного преобразователя показывает, что его быстродействие выше, по сравнению с преобразователями аналогичного принципа действия, так как весь процесс преобразования происходит за два импульса тока, тогда как при синусоидальном питании, преобразовании в постоянное напряжение происходит, как минимум, через три периода колебаний питающего тока. Кроме того, выбором тока возможно совмещение в трансформаторном преобразователе механических напряжений функций получения информации с ее первичной обработкой. Технология изготовления таких датчиков не требует дорогостоящего оборудования, в отличие от датчика на основе рpn-диода, не требует для своего изготовления высоковакуумного устройства и установки для ионных пучков и ионного сплавления. [15,16].

Таким образом, из этого дела вывод, находим что точность и быстродействие конструкций преобразователей механических напряжений с дискретным выходом два раза выше по сравнению с известными преобразователями [17], а также экспериментальные и теоретические исследования нелинейности статической характеристики ТПМН показали, что абсолютное значение нелинейности при импульсном питании значительно меньше, чем при синусоидальном питании. Количественной характеристикой измеряемых величин является размер. Качественной характеристикой измеряемых величин - ее размерность. Размерности левой и правой частей уравнений не могут не совпадать, так как сравнивать между собой можно только одинаковые свойства [18,19].

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*Назаров Х.Т.
доцент
кафедра географии и природных ресурсов
Жомолов Е.А.
студент магистратуры
факультет географии и экологии
Кошокова Ф.Ю.
студент магистратуры
факультет географии и экологии
Шермаматва Д.Б.
студент
факультет географии и экологии
Самаркандский государственный университет
Узбекистан, г.Самарканд*

ЗНАЧЕНИЕ РАБОТЫ АБУ ТАХИРХОДЖИ «САМАРИЯ»

Аннотация. В данной статье описаны природно-географические особенности пригородов Самарканда, а также представлена информация о производстве Абу Тахирходжи «Самария».

Ключевые слова: почести, наследие, ценности, самоотверженность, «Метафизику» Аристотеля, «Мнения добродетельных жителей города» Фараби, «Индию» Беруни, «Медицинские законы» Ибн Сины, «Бабурнаме» Бабура.

*Nazarov X.T.
associate professor
Department of Geography and Natural Resources
Jomolov E.A.
master's student
Faculty of Geography and Ecology
Qoshokova F.U.
master's student
Faculty of Geography and Ecology
Shermamatva D.B. Student
Faculty of Geography and Ecology
Samarkand State University
Uzbekistan, Samarkand*

THE IMPORTANCE OF ABU TAKHIRKHOJA'S WORK "SAMARIA"

Abstract. This article describes the natural and geographical features of the suburbs of Samarkand, and also provides information about the work of Abu Tahirhoja "Samaria".

Key words: honors, heritage, values, dedication, "Metaphysics" by Aristotle, "Opinions of the Virtuous Citizens of the City" by Farabi, "India" by Beruni, "Medical Laws" by Ibn Sina, "Baburnama" by Babur.

Введение. Сегодня развитие механики в науке, наряду со всеми нашими предметами, имеет большое значение для уникального научного наследия таких великих картин, как Абу Наср Фараби, Аль-Хорезми, Абу Рейхан Беруни, Абу Али ибн Сина и «Захириддин Мухаммад Бабур, которые служат основой наших предметов в развитии географии. Изучая их наследие, мы видим, что для нашей науки открываются новые аспекты. Их глубокие, острые взгляды являются свидетелями того, что с веками они не потеряли свою ценность, а чувство гордости за наследие, оставленное нашими предками, становится ещё крепче и увеличивает наше уважение к нашей великой истории.[2] Современная наука – это постоянно развивающаяся наука. Оно неизмеримо развилось и добилось больших успехов, особенно в последующие десятилетия. Теперь с помощью своих исследований человек все глубже и глубже проникает в клеточную мембрану, детально изучая биохимические процессы, происходящие внутри клеточной мембраны. Изучая генетические особенности растений и животных всесторонне, дала достигнуть повышения их продуктивности. Выращивание, культурализация и управление некоторых видов растений и животных, которые ранее не использовались начали приносить несравнимую пользу народному хозяйству. Изучение появления и изменений, происходящих с живыми организмами в космических условиях, становится важной областью современной биологии. В связи с тем, что эти достижения связаны с дальнейшим совершенствованием микроскопической техники, возникло несколько научных отраслей и самостоятельных наук. Поэтому первая половина XX века была эрой атомной физики, а вторая половина, несомненно, эрой молекулярной биологии. Эти успехи современной биологии имеют давнюю историю, а современные достижения являются результатом ее эволюционного развития.[1;2;5]

Основная часть. Великие ученые нашей науки, рожденные в совершенно иных социально-экономических условиях, вызывают гордость в сердце каждого. В связи с этим как главными основоположниками нынешних наук считаем таких учёных и деятелей, как Абу Наср Фараби, Аль Хорезми, Абу Рейхан Беруни, Абу Али Ибн Сина, Захириддин Мухаммад Бабур. Вклад этих великих людей в мировую науку ценится до сих пор и будет цениться в будущем. Следует также сказать, что смотреть на прошлое с уважением – признак истинного просветления.[3;6] Не следует упускать из виду тот факт, что уважительный взгляд на прошлое является

признаком подлинного просвещения. Аристотель обычно упоминается первым, когда речь заходит о естественных науках. Действительно, древнегреческий учёный высказал весьма ценные идеи по изучению животного мира, его систематизации и морфологии. После этого в Европе наступил застой в науке вплоть до XVIII века.[1;4;7]

Сведения, свидетельствующие о развитии естественных наук в Средней Азии, существовали уже в VII-VIII веках. Когда мы глубоко изучаем труды ученых Средней Азии, посвященные изучению природы, зарождению и эволюции жизни на Земле, естественному и искусственному отбору, первичным и вторичным сигнальным системам, эволюционному развитию живых существ, которые считаются основой современной науки, мы являемся свидетелями того, что такие проблемы, как охрана природы, были решены раньше европейских ученых 900-1000 лет назад.[4;5]

Однако, как и в Европе во времена Аристотеля, в Средней Азии еще не было идеальных категорий для естественных наук. Эти проблемы развивались и совершенствовались на основе трудов ученых из стран в страны, время от времени, и дошли до нас. Изучение научного наследия учёных Средней Азии имеет давнюю историю, а изучение и интерпретация трудов учёных широко практиковались ещё во времена Абу Насра Фараби. В результате уникальные труды большинства ученых были реализованы и на протяжении многих веков играли роль энциклопедического словаря в странах Запада и Востока. Из таких источников уместно указать «Метафизику» Аристотеля, «Мнения добродетельных жителей города» Фараби, «Индию» Беруни, «Медицинские законы» Ибн Сины, «Бабурнаме» Бабурра.[4;5;6;7]

Наука, культура и природные ресурсы Средней Азии уже давно привлекают народы мира. По этой причине между Средней Азией и странами Востока и Запада были установлены торгово-экономические, культурные и научные связи, а дипломатические отношения развивались посредством послов.[1;4] Чжан Сян, китайский учёный, приехавший в Среднюю Азию в 138-126 гг. до н.э., Он объездил Иссык-Куль, Ферганскую долину, Хорезмский оазис и написал статьи о языке, обычаях, занятиях, сельском хозяйстве, ремеслах и торговле народа.[1;2] Среди работ, изучающих особенности природы и естественной географии нашей страны, большое значение имеет труд Абу Тахирходжи «Самария». В работе полностью описаны природно-географические особенности пригородов Самарканда. Работа отличается отдельным описанием географических объектов вокруг города Самарканда. «Самария» была переведена с персидско-таджикского языка на узбекский язык в 1921 году Абдулмомином Саттори (1903-1925), молодым учёным из Самарканда.[6;7] Стоит отметить о таком молодом таланте как Абдулмомин Саттори Абдулмомин Саттори стал известен как историк в двадцатидвухлетнем возрасте и привлек внимание просвещенных людей того времени. В прессе

того времени были опубликованы его научные статьи, такие как «Будда», «Кокташ», «Окрестности Готфари», «Юсуф Хамадони», «Рухабад».[3;4;5;]

После смерти Абдулмомина Саттори перевод «Самарии» отредактировал и подготовил к печати Садриддин Айний в 1925 году. Работа, наполненная предисловием и комментариями известного писателя, так и осталась готовящейся к печати. Спустя 45 лет известный учёный Борибой Ахмедов подготовил «Самарию» к изданию. Он переработал допущенные переводчиком неточности на основе существующих рукописей Самарии и издания (1904 г.), сделанного Н. И. Веселовским, с целью восстановить некоторые места, удаленные Садриддином Айний, предисловие и обогатив необходимыми комментариями. Однако из-за различных препятствий, типичных депрессии того времени, опубликовать «Самарию» не удалось и на этот раз. Вот работа в ваших руках. Если вы заметили, ученые звания ученых, участвовавших в подготовке «Самарии», остались такими, какие они были на тот момент.[1;2;3]

Однако Борибой Ахмедов, который в то время был кандидатом исторических наук, сейчас является доктором исторических наук, членом-корреспондентом Академии наук Узбекистана, лауреатом государственной премии республики имени Абу Рейхана Беруни. Мы не сочли необходимым вносить изменения в эти элементы, чтобы будущие поколения не забыли судьбу произведения «Самария», второй раз подготовленного к печати двадцать лет назад. Но все же нам бы хотелось, чтобы он был записан как исторический документ. В заключение призываю ученых и писателей нашей страны, а также всех, кто интересуется изучением истории нашего народа, к сотрудничеству с творческим коллективом объединения. Это сотрудничество служит сохранению наших исчезающих духовных ценностей, знакомя наш народ с памятниками прошлого.

Выводы. Наверное, нет более священного долга для каждого молодого поколения Родины, чем любить, изучать и понимать историю своей Родины, в то время как наша независимость укрепляется с каждым днём.

Долг каждого из нас — изучать жизнь и деятельность учёных, живших в нашей стране, оставленное нам богатое наследие, и использовать их труды в развитии современной науки для будущего поколения. Сколько страниц истории родины затронуло нас печатью страдания и невежества, которые в эпоху тирании решительно преградили нам путь, когда мы мечтали ознакомиться с этими страницами в изучении нашего прошлого, и сколько культурного наследия мы потеряли, привело к тому, что наша культура была растоптана. Наша древняя культура, национальное достояние, которые сохранилось до наших дней, и мы и мы должны их изучать наше богатейшее национальное наследие. Мы должны изучать о нашей древней культуре и сохраненном для нас национальном наследии которые сохранились до наших дней.[1;2;3;4]

В данной научной работе мы постарались обратить внимание на взглядах наших учёных, живших в Средней Азии, особенно их вклад в географию как естественную науку, и показать, насколько они важны в современной географии. Выше мы постарались осветить нашу цель, которую мы поставили в процессе работы над этой научной работой.

Вклад ученых Средней Азии велика в развитие мировой истории, культуру личности и развитии естественных наук Среди наук возникновение науки географии, практическое доказательство многих теорий, вклады наших великих соотечественников до сих пор с уважением упоминаются учеными мира. Среди этих ученых было немало тех, кто занимался картографией, являющейся неотъемлемой частью географии. К сожалению, то, что о работах среднеазиатских ученых очень мало информации, а также то, что они в основном на арабском или персидском языке, затрудняет их использование.[2;6;7]

Произведение Абу Тахирходжи «Самария» – в полной мере раскрывающее природно-географические особенности города Самарканда и его окрестностей. Топономическая основа названия города Самарканд подробно описывает особенности рельефа горных систем вокруг города. Указаны общие характеристики города и причины их изменения. В работе показан водный режим реки Зарафшан, ручьев и их географическое положение в водных сетях региона. Также представлена ценная информация о расположении гор вокруг города.[1;4]

В работе подробно описаны места расположения медресе, мечетей и усыпальниц в городе и его окрестностях, а также их характеристики. Вышеупомянутый ученый создал богатое наследие, посвятив свою жизнь и богатый труд развитию нашей науки. Наш долг — изучить это ценное наследие, использовать его в развитии современной науки и передать будущим поколениям.[3;4;7]

В завершение наших слов мы сочли необходимым подчеркнуть, что более глубокое изучение жизни великих учёных и их богатого наследия повысит уважение к ним и уважение к истории нашего народа. Это позволит нам гордиться тем, что мы являемся поколением самоотверженных, великих ученых и создаем свое собственное будущее.

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*Назарова М.С.
Тошкент иқтисодиёт ва технологиялар университети
иқтисодиёт кафедраси катта ўқитувчиси*

МЕВА-САБЗАВОТЧИЛИК ТАРМОҚЛАРИ БАРҚАРОРЛИГИНИ ТАЪМИНЛАШДА КЛАСТЕРЛАР ФАОЛИЯТИНИНГ ТАКОМИЛЛАШТИРИШ

Аннотация. Бугунги кунда кластерларнинг ривожланиши барқарор инновацион ривожланишга ва минтақадаги қишлоқ хўжалигининг рақобатбардошлигини ва умуман агросаноат мажмуасини ривожлантиришга ёрдам берадиган муҳим воситалардан бири ҳисобланади. Ушбу мақолада мева-сабзавотчилик тармогини барқарор ривожлантиришда хорижий давлатлар тажрибасидан ўрганган ҳолда агрокластерлар тизимини янада ривожлантириш ва такомиллаштиришга қаратилган таклиф ва тавсиялар ишлаб чиқилган.

Калит сўзлар. озиқ-овқат, сув танқислиги, сув таъминоти, мевали дарахтлар, узумзорлар, аграр соҳа, барқарор, ривожланиш, хорижий тажрибалар.

*Nazarova M.S.
senior teacher
department of economics
Tashkent University of Economics and Technologies*

IMPROVING THE ACTIVITY OF CLUSTERS IN ENSURING THE SUSTAINABILITY OF FRUIT AND VEGETABLE NETWORKS

Annotation. Today, the development of clusters is one of the important tools that promotes sustainable innovative development and competitiveness of the region's agriculture and the development of the agro-industrial complex as a whole. This article develops proposals and recommendations aimed at further development and improvement of the agricultural cluster system, taking into account the experience of foreign countries in the sustainable development of the fruit and vegetable industry.

Keywords. nutrition, water shortage, water supply, fruit trees, vineyards, agricultural sector, sustainable development, foreign experience.

Дунёда аҳоли сони шиддат билан ўсаётганлиги ва шунга яраша уларнинг озиқ-овқат ва қишлоқ хўжалиги маҳсулотларига бўлган эҳтиёжлари тобора ортиб бораётган бир пайтда, уларни таъминлайдиган асосий тармоқ, яъни қишлоқ хўжалигида аграр ислохотларни янада чуқурлаштириш, озиқ-овқат билан таъминлаш, аҳолини ижтимоий

химоялашга қаратилган тадбирларнинг самарали тизимини яратишни тақозо этади. Шу боис озиқ-овқат маҳсулотлари бозорига маҳсулот етказиб берувчи фермер ва деҳқон хўжаликлари олдида ҳам маъсулиятли вазифалар турмоқда.

Мамлақтимиз Президенти Ш.Мирзиёев 2019 йил 5 ноябрдаги мева-сабзавот тармоғини янада ривожланириш ва экспортини ошириш, аҳоли томорқасидан самарали фойдаланишни таъминлаш масалаларига бағишланган видеоселектор йиғилишида “Ўзбекистонда бир нечта йирик экспортёр кластер ташкил этиш, қишлоқ хўжалигида қўшимча қиймат занжирини яратиш ва даромадни ошириш, маҳсулот ишлаб чиқарувчиларни аниқ бозор, аниқ молиявий манба билан ишлайдиган тадбиркорга бириктириш лозимлиги”ни⁸³ таъкидлаб ўтганлар.

Албатта бу борада, ўз ечимини кутаётган масалалар борки, бунда боғдорчилик соҳасини ривожлантиришнинг ташкилий-иқтисодий механизминини амалиётга жорий этиш мақсадга мувофиқдир:

- юқори ҳосил берадиган, касаллик ва зарқунандаларга чидамли, табиат инжиқликларига бардой бера оладиган ва бозордаги талаб ўзгаришларига тезда жавоб берадиган мевали дарахтлар навларини кўпайтириш ва ҳудудларнинг жойлашган ўрни ва табиий иқлим шароитини инобатга олган ҳолда жойлаштириш масаласини ҳал этишни;

- маълумки, сув етишмаслиги ҳисобига мавжуд боғлар нобуд бўлиш ҳолатлари кузатилмоқда. Чунки, аксарият вилоятларда мевали дарахтларга сув етказиш тизими насослар орқали амалга оширилмоқда. Шу боисдан нафақат сув танқислиги, насослардан фойдаланиш, ёқилғи мойлаш материаллари сотиб олиш ҳамда электр энергияси сарф-харажатлари юқорилиги эса сув таъминотига ўзига хос тўсиқларни вужулга келтирмоқда. Шу нуқтаи назардан сув таъминоти тизимини моддий-техник қуроллантириш учун инвестиция (давлатнинг мақсадли имтиёзли кредитлари, турли грантлар, хусусий тармоқ маблағлари ва бошқа молиявий манбалар ҳисобидан) жалб қилишни рағбатлантириш механзмлари ишлаб чиқилиши ва жорий этилиши зарур;

- мевали боғларни илмий асосланган агротехник қоидалар доирасида, ҳудудларнинг тупроқ таркиби, мевали дарахтлар тури ва навлари, ҳосилдорлиги каби кўрсаткичларини ҳисобга олган ҳолда тупроқ унумдорлигини оширишда маҳаллий ва минерал ўғитлар билан таъминлаш тизимини такомиллаштириш;

- мевали дарахтлар ва узумзорлар таркибини ҳудудий бозорлар ва мавжуд имкониятларини ҳисобга олган ҳолда экспортга маҳсулот ишлаб чиқариш масаласини ҳисобга олган ҳолда мевали боғлар таркибини оптималлаштириш;

83 Халқ сўзи газетаси. 2019 йил 6 ноябрь, №229 сон.

- боғдорчилик тармоғини механизациялаштириш даражасини ошириш мақсадида тармоқни боғдорчилик ва узумчилик техникалари билан таъминлаш, мавжуд техника воситаларини таъмирлаш ва эҳтиёт қисмлар билан таъминлаш масаласини ҳал этиш;

- сув танқислигини ҳисобга олган ҳолда суғориш техника ва технологияларни такомиллаштириш, жумладан тоғли ва тоғолди ҳудудларда микро ва томчилатиб суғориш усулларини кенг қўллаш тизимини йўлган қўйиш.

Мамлакатимиз қишлоқ хўжалигида озиқ-овқат муаммоларининг мавжудлиги ва қишлоқ хўжалигидаги ички ва ташқи тенденциялар ҳамда қишлоқ хўжалигини ривожланиш стратегик аҳамиятининг ортиши, ушбу тармоқда тўпланган ижобий тажрибаларни жаҳон хўжалигида эришилган сўнгги илмий-техник тараққиёт ютуқларидан фойдаланган ҳолда қишлоқ хўжалигини молиявий таъминотини барқарорлаштириш шароитида тармоқда агрокластерларни янада ривожлантириш зарур ҳисобланади.

Қишлоқ хўжалиги агрокластери қишлоқ хўжалиги ишлаб чиқарувчилари, озиқ-овқат саноати корхоналари, уларга хизмат кўрсатадиган инфратузилма ташкилотлари, озиқ-овқат ва бошқа бозорларда қулай иш муҳитида фаолият юритадиган, ҳудуднинг рақобатбардошлигини ва барқарорлигини оширишга ёрдам берадиган ўзаро муносабатларни амалга оширувчи уюшма ҳисобланади.

Жаҳон амалиётида аграр соҳанинг барқарорлигини таъминлашда алоҳида аҳамиятга эга бўлган тармоқлараро ва ҳудудий интеграциялашган тузилмалардан бири агрокластер ҳисобланади, мамлакатимизда бу тармоқни янада ривожлантириш ва шакллантириш учун барча имкониятлар мавжуддир. Бугунги кунда кластерларнинг ривожланиши барқарор инновацион ривожланишга ва минтақадаги қишлоқ хўжалигининг рақобатбардошлигини ва умуман агросаноат мажмуасини ривожлантиришга ёрдам берадиган муҳим воситалардан бири ҳисобланади.

Мамлакатимизда мева-сабзавотчиликни жадал ва инновацион ривожлантириш учун мева-сабзавот кластерларини иккита йўналишда шакллантириш жорий этилмоқда:

биринчи йўналиши - мева-сабзавот маҳсулотларини ишлаб чиқаришдан то сотишгача бўлган белгиланган жараённи мустақил равишда амалга оширувчи ягона ёки ўзаро боғлиқ корхоналар гуруҳи доирасида мева-сабзавот маҳсулотлари ишлаб чиқаришни ташкил этиш кластери;

иккинчи йўналиши - қишлоқ хўжалиги ишлаб чиқарувчиларига қишлоқ хўжалиги юмушларини ташкил қилиш учун экиш материали, аванс тўловларини тақдим этувчи ва улардан ишлаб чиқарилган маҳсулотни келишилган нархларда сотиб олувчи қишлоқ хўжалиги ишлаб чиқарувчилари, тайёрловчи корхоналар, қайта ишловчилар, экспорт қилувчилар ўртасида кафолатланган шартномалар асосида “уруғ –кўчат – маҳсулот етиштириш –тайёрлаш –сақлаш – қайта ишлаш –транспортровка

қилиш –бозорга етказиш” тамойили бўйича узлуксиз занжирни шакллантирадиган мева-сабзавот маҳсулотлари ишлаб чиқаришни ташкил этиш кластери.

Кластер қуйидаги вазифаларни ўзида мужассамлаштириши лозим:

–мева-сабзавот маҳсулотлари етиштириш, сақлаш, қайта ишлаш ва сотишга чуқур ихтисослашиш;

–мева-сабзавот маҳсулотларини етиштириш, қабул қилиш, тозалаш, саралаш, қуритиш ҳамда қайта ишлашда янги инновацион технологияларни жорий этиш;

–ер майдонларидан фойдаланиш: ажратилган ер майдонларидан самарали ва унумли фойдаланиш, майдонларга сифатли, жаҳон андозаларига мос экспортбоп мева, узум ва сабзавот экинларни жойлаштириш, самарасиз ва истикболсиз қишлоқ хўжалик экинлари ўрнига босқичма-босқич мева, узум ва сабзавот экинлари жойлаштириш;

–мева-сабзавот етиштириш бўйича илғор хорижий тажрибаларни ўрганиш, улардан минтақа ва ҳудудий шароитларда кенг фойдаланиш, мева-сабзавотчилик соҳасига хорижий мутахассисларни жалб қилиш;

–экспортга йўналтирилган қишлоқ хўжалиги маҳсулотларини етиштириш, уларнинг селекцияси ва уруғчилигини кластер ҳудудларида ўзлаштириш, ривожлантириш, илмий тадқиқот муассасалари билан ҳамкорликни йўлга қўйиш; -серҳосил мева, узум ва сабзавот экинларини экиш, маҳсулот етиштириш, сақлаш, қайта ишлаш ва сотиш жараёнини тўлиқ қамраб олувчи тизимни шакллантириш, шунингдек замонавийинновацион, ресурс тежамкор технологияларни мева-сабзавот маҳсулотларини етиштириш жараёнларига жорий қилиш;

–малакали янги иш ўринларини ташкил этиш.

Қишлоқ хўжалигида ишлаб чиқаришни тўғри ташкил қилиш механизмларидан бири бу халқаро тажрибаларга таянган ҳолда кластерлар тизимини ривожлантириш ҳисобланади. Кластер тизимининг афзаллиги шундаки, мазкур жараёнда барча меҳнаткашларнинг манфаатлари уйғунлашади, яъни хом ашё етиштиришдан тортиб, уни қайта ишловчи корхоналаридаги барча ишчи-ҳодимларнинг маҳсулот сифатига бирдек жавобгар бўладилар. Чунки якуний жараён натижасига кўра, товарни сотишдан тушган қўшимча қийматнинг бир қисми шу ишга ҳисса қўшган меҳнаткашларга тақсимланади.

Мамлакатда агрокластер фаолиятини янада такомиллаштириш учун қуйидаги вазифалар бажарилиши лозим:

- агрокластер шаклланишининг ўзига хос хусусиятларини аниқлаш ва ўрганиш;

- қишлоқ хўжалиги ишлаб чиқаришини ташкил этишнинг кластерли шаклига ўтишнинг иқтисодий асослари ва шартларини ўрганиш;

- ҳудудларни жойлашган ўрнини эътиборга олган ҳолда минтақавий агрокластерлар барқарор ривожланишининг белгиланган шартларидан

самарали фойдаланиб, унинг илмий асосланган принципларини ишлаб чиқиш;

- минтақада қишлоқ хўжалигини барқарор ривожлантиришни таъминлашда агросаноат мажмуасининг тузилишини ва унинг индивидуал элементларининг ролини асослаш;

- аграр иқтисодий бoшқаришнинг турли даражаларда қишлоқ хўжалиги фаолиятини ташкил этишнинг кластер шакллари афзалликларини ўрганиш;

- ишлаб чиқаришни ташкил қилишнинг кластер шаклининг ривожланиш муаммолари ва истикболларини ўрганишдан иборатдир.

Хулоса қиладиган бўлсак, **мева-сабзавот кластери фаолиятини такомиллаштиришда қуйидаги асосий вазифалар ҳал қилиниши лозим:**

- экинлар ҳосилдорлигини ошириш мақсадида селекция ва уруғчилик соҳасида янги технологияларни, “ноу-хау”ларни жорий этиш, инновацион ишланмалар яратиш ва кенг қўллаш;

- маҳсулот етиштириш, тайёрлаш, сақлаш ва қайта ишлашнинг замонавий, интенсификация ва ресурстежамкор технологияларни кенг жорий этиш орқали самарали фаолият юритиш;

- чуқур маркетинг тадқиқотлари олиб бориш асосида ички ва ташқи бозорда рақобатбардош маҳсулотлар ишлаб чиқаришни йўлга қўйиш, маҳсулот етиштиришнинг мақбул ҳажмларини белгилаш;

- маҳсулотлар етиштириш, тайёрлаш, ташиш, сақлаш ва қайта ишлаш ҳамда уларни ички ва ташқи бозорларда сотиш мақсадида чакана ва улгуржи савдо тизимини йўлга қўйиш, шу жумладан хорижий давлатларда савдо уйлари ва республика ҳудудларида фирма дўконларини очиш;

- илғор хорижий тажрибаларни ўрганиш ва маҳаллий шароитларда улардан кенг фойдаланиш, кластер тизимини кенг жорий этишда хорижий эксперт ва мутахассисларни жалб қилиш;

- ташқи иқтисодий фаолият билан шуғулланиш, товар-хон ашёларни импорт-экспорт операцияларини амалга ошириш, инвестициялар, шу жумладан тўғридан-тўғри хорижий инвестицияларни жалб қилиш;

- кооперация алоқаларини мустаҳкамлаш ва ривожлантириш;

- аҳолини иш билан таъминлаш.

Фойдаланилган адабиётлар рўйхати:

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*Нарбеков Н.Н.
и.о. доцента
Джизакский политехнический институт
Узбекистан, Джизакская область, г.Джизак
Парманов Н.Н.
ассистент
Джизакский политехнический институт
Узбекистан, Джизакская область, г.Джизак*

АНАЛИЗ ИССЛЕДОВАНИЙ РАСЧЕТА МЕХАНИЧЕСКИХ НАПРЯЖЕНИЙ В РАСЧЕТНЫХ СХЕМАХ СО СТАТИЧЕСКИ НЕОПРЕДЕЛИМЫМИ НАГРУЗКАМИ

Аннотация. В данной работе рассматривается важный аспект инженерной практики - анализ механических напряжений в расчетных схемах с статически неопределяемыми нагрузками. Статическая неопределенность представляет собой ключевой вызов для инженеров при проектировании и анализе конструкций, требующий применения специализированных методов и инструментов.

Ключевые слова: расчетные схемы, статическая неопределенность, механические напряжения, анализ, методы, инженерная практика, оптимизация, вычислительные методы, искусственный интеллект, перспективы.

*Narbekov N.N.
acting associate professor
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh region, Jizzakh
Parmanov N.N.
assistant
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh region, Jizzakh city*

ANALYSIS OF STUDIES ON THE CALCULATION OF MECHANICAL STRESSES IN DESIGN SCHEMES WITH STATICALLY INDETERMINATE LOADS

Abstract. This work examines an important aspect of engineering practice - the analysis of mechanical stresses in design schemes with statically indeterminate loads. Static uncertainty represents a key challenge for engineers in the design and analysis of structures, requiring the use of specialized methods and tools.

Key words: design schemes, static uncertainty, mechanical stresses, analysis, methods, engineering practice, optimization, computational methods, artificial intelligence, prospects.

В современном инженерном дизайне структур и механизмов широко используются расчетные схемы, подвергающиеся статически неопределимым нагрузкам. Это требует тщательного анализа механических напряжений в таких системах для обеспечения их безопасной и эффективной работы.

Статическая неопределенность в механике означает, что для полного определения равновесия системы не хватает недостающих реакций или связей. Это означает, что внешние силы и моменты не могут быть равновесными без дополнительных условий или ограничений. По сути, статически неопределенные конструкции имеют больше неизвестных, чем уравнений равновесия.

Влияние статической неопределенности на расчетные схемы велико и может быть как положительным, так и отрицательным:

Усложнение расчетов: Неопределенность требует более сложных расчетов и методов анализа. Инженеры должны использовать специализированные инструменты и методы для анализа таких конструкций.

Дополнительные ограничения: для решения статически неопределенных задач требуются дополнительные ограничения или условия, которые обычно представлены как дополнительные уравнения равновесия или граничные условия.

Неожиданные поведенческие особенности: Статическая неопределенность может привести к неожиданным поведенческим особенностям конструкции, таким как концентрация напряжений, необычные деформации или неэффективное использование материалов.

Возможности оптимизации: Статическая неопределенность также может предоставить возможности для оптимизации конструкции. Путем изменения распределения нагрузок и связей можно добиться более эффективного использования материалов и уменьшить влияние недостающих реакций.

Необходимость предварительного анализа: прежде чем приступить к расчетам, необходимо провести предварительный анализ, чтобы определить степень статической неопределенности и выбрать подходящий метод решения задачи.

В целом, статическая неопределенность является важным аспектом в проектировании и анализе конструкций, и понимание ее влияния на расчетные схемы позволяет инженерам принимать более обоснованные решения при проектировании и оптимизации механических систем.

Статически неопределимые конструкции встречаются в различных областях инженерной практики и имеют широкий спектр применений. Вот несколько типичных примеров:

Неподвижная опора с несколькими шарнирами: Конструкции, такие как рамы и фермы, которые имеют один или несколько шарнирных соединений, могут быть статически неопределенными из-за недостаточного количества реакций.

Балки с перемычками или навесами: Конструкции с перемычками или навесами, которые могут создавать сложные распределения нагрузок и моментов, также могут быть статически неопределенными.

Арочные конструкции: Арки и дуги, хотя они кажутся стабильными, часто являются статически неопределенными из-за неоднозначности в распределении нагрузок и реакций.

Смешанные конструкции: Конструкции, состоящие из различных элементов, таких как стержни, балки и арки, могут также быть статически неопределенными из-за различных граничных условий и способов соединения.

Эти примеры демонстрируют, что статическая неопределенность является распространенным явлением в инженерной практике и требует тщательного анализа и рассмотрения при проектировании и анализе конструкций.

Перспективы развития методов анализа механических напряжений в статически неопределенных системах направлены на улучшение точности, эффективности и доступности инструментов для инженеров. Несмотря на значительные достижения в этой области, все еще есть несколько направлений, которые являются ключевыми для будущего развития:

Интеграция современных вычислительных методов: Продолжающийся рост вычислительной мощности позволяет использовать более сложные и точные методы решения статически неопределенных задач, такие как метод конечных элементов, методы оптимизации и многие другие. Интеграция этих методов в специализированные программные пакеты делает их более доступными для инженеров.

Эти тенденции в развитии методов анализа механических напряжений в статически неопределенных системах обещают улучшить процессы проектирования и обеспечить более безопасные и эффективные инженерные решения в будущем.

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Нарбеков Н.Н.

и.о. доцента

*Джизакский политехнический институт
Узбекистан, Джизакская область, г.Джизак*

Парманов Н.Н.

ассистент

*Джизакский политехнический институт
Узбекистан, Джизакская область, г.Джизак*

ИССЛЕДОВАНИЕ СОВРЕМЕННЫХ МЕТОДОВ РАСЧЕТА МЕТОДОМ КОНЕЧНЫХ ЭЛЕМЕНТОВ СТАТИЧЕСКИ ОПРЕДЕЛИМЫХ ЭЛЕМЕНТОВ

Аннотация. В данной работе предоставляется анализ современных методов расчета статически определяемых элементов с использованием метода конечных элементов (МКЭ). Рассматриваются основные аспекты МКЭ, включая его преимущества и ограничения. В работе детально рассматриваются четыре основных метода: метод силовых элементов, метод скоростных элементов, метод перемещений и метод распределенной нагрузки.

Ключевые слова: метод конечных элементов, расчет, статически определяемые элементы, адаптивность, высокопроизводительные вычисления, интеграция, мультифизические модели, алгоритмы, неопределенность, вероятностный анализ.

Narbekov N.N.

acting associate professor

Jizzakh Polytechnic Institute

Uzbekistan, Jizzakh region, Jizzakh

Parmanov N.N.

assistant

Jizzakh Polytechnic Institute

Uzbekistan, Jizzakh region, Jizzakh city

STUDY OF MODERN METHODS FOR CALCULATING STATICALLY DETERMINATE ELEMENTS USING THE FINITE ELEMENT METHOD

Abstract. This paper provides an analysis of modern methods for calculating statically determined elements using the finite element method (FEM). The main aspects of FEM are discussed, including its advantages and limitations. The work examines in detail four main methods: the force element method, the

velocity element method, the displacement method and the distributed load method.

Keywords: Finite element method, calculation, statically determined elements, adaptability, high-performance computing, integration, multiphysics models, algorithms, uncertainty, probabilistic analysis.

Метод конечных элементов (МКЭ) является одним из наиболее мощных и распространенных численных методов для решения инженерных задач. Его применение в анализе и проектировании структур и конструкций позволяет эффективно моделировать и решать различные инженерные проблемы, включая статически определимые элементы. В данной статье проводится исследование различных методов расчета статически определимых элементов с использованием метода конечных элементов.

Давайте рассмотрим каждый из этих методов подробнее:

1. Метод силовых элементов (Method of Force Elements):

Этот метод основан на представлении структуры как системы из отдельных силовых элементов, каждый из которых обеспечивает сопротивление определенным внешним нагрузкам. Основная идея заключается в замене непрерывного распределения внешних нагрузок конечным числом точечных силовых элементов. Затем решается система уравнений равновесия для каждого элемента, что позволяет найти распределение внутренних усилий и перемещений в структуре.

2. Метод скоростных элементов (Method of Velocity Elements):

Этот метод базируется на использовании скоростей элементов в качестве основной переменной. В отличие от метода силовых элементов, где основными переменными являются силы, здесь мы рассматриваем скорости как основные параметры. Это позволяет моделировать динамическое поведение структуры и анализировать ее реакцию на внешние воздействия с точки зрения движения.

3. Метод перемещений (Displacement Method):

Этот метод основан на представлении структуры в терминах перемещений узлов. Основная идея заключается в том, что форма искомого решения определяется положением и перемещениями узлов структуры. Зная граничные условия и законы сохранения массы и энергии, можно выразить перемещения в узлах в виде линейной комбинации базисных функций (например, функций формы) и коэффициентов, которые необходимо определить.

4. Метод распределенной нагрузки (Distributed Load Method):

Этот метод используется для учета распределенных нагрузок на структуру. Вместо того, чтобы моделировать каждую нагрузку как отдельную точечную силу или момент, мы рассматриваем их как распределенные по длине, площади или объему. Метод распределенной нагрузки позволяет учитывать влияние нагрузок на структуру в

соответствии с их распределением, что особенно важно при анализе больших и сложных систем.

Каждый из этих методов имеет свои преимущества и ограничения, и выбор конкретного метода зависит от конкретной задачи, требований к точности и вычислительным ресурсам.

Развитие адаптивных методов и автоматизация: Современные исследования сосредотачиваются на разработке адаптивных методов МКЭ, которые могут автоматически реагировать на изменения в геометрии и нагрузках. Это позволяет повысить эффективность расчетов и точность результатов.

Использование высокопроизводительных вычислений (HPC): С ростом вычислительной мощности суперкомпьютеров и развитием параллельных вычислений, исследования в области МКЭ становятся более амбициозными и могут решать более сложные задачи.

Интеграция с машинным обучением и искусственным интеллектом: Современные исследования идут в направлении интеграции методов МКЭ с методами машинного обучения и искусственного интеллекта для автоматической оптимизации дизайна и прогнозирования поведения материалов и конструкций.

Мультифизические и мультишкальные модели: С увеличением потребностей в анализе взаимодействия различных физических явлений (например, механики, теплопередачи, электромагнетизма), современные исследования МКЭ становятся все более направленными на разработку мультифизических моделей.

Развитие алгоритмов и солверов: Важным направлением является разработка более эффективных и точных численных алгоритмов МКЭ, а также солверов, способных обрабатывать большие объемы данных и решать сложные задачи.

Учет неопределенности и вероятностный анализ: С ростом требований к безопасности и надежности, современные исследования МКЭ включают в себя учет неопределенности и проведение вероятностного анализа для оценки рисков и улучшения прогнозирования.

Эти тенденции и направления позволяют МКЭ оставаться актуальным и эффективным инструментом в инженерных и научных расчетах, исследованиях и разработках.

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Нармаматов И.Б.
доцент
кафедра “Инновационная экономика”
КарМИИ

ВОЗМОЖНОСТИ ОБЕСПЕЧЕНИЯ СТАБИЛЬНОСТИ НАЦИОНАЛЬНЫХ ПЛАТЕЖНЫХ СИСТЕМ В НОВОМ УЗБЕКИСТАНЕ

Аннотация. Вопрос совершенствования методологических и практических основ обеспечения устойчивости национальных платежных систем служит важным аспектом в процессе интеграции современной экономики, в которой важное значение имеют научные и практические выводы и рекомендации, предлагаемые узбекскими и зарубежными экономистами.

В статье обозначены актуальные проблемы, связанные с обеспечением ликвидности и финансовой устойчивости компаний в Республике Узбекистан и разработаны научные предложения по их решению.

Ключевые слова: предприятие, ликвидность, финансовая устойчивость, инфляция, девальвация, стоимость, кредит, документарный аккредитив, платежное поручение, процентная ставка.

Narmamatov I.B.
associate professor
Department of “Innovative Economics”
KarMII

OPPORTUNITIES FOR ENSURING THE STABILITY OF NATIONAL PAYMENT SYSTEMS IN THE NEW UZBEKISTAN

Annotation. The issue of improving the methodological and practical foundations for ensuring the sustainability of national payment systems is an important aspect in the process of integration of the modern economy, in which scientific and practical conclusions and recommendations proposed by Uzbek and foreign economists are important.

The article identifies current problems related to ensuring liquidity and financial stability of companies in the Republic of Uzbekistan and develops scientific proposals for solving them.

Key words: enterprise, liquidity, financial stability, inflation, devaluation, cost, loan, documentary letter of credit, payment order, interest rate.

Введение. Сегодня в условиях международной финансово-экономической глобализации в Республике Узбекистан стремительно развивается онлайн-режим дистанционного банковского обслуживания. В результате это приводит к удобным возможностям для клиентов, то есть продуктивности времени, сокращению штатов, сокращению бюрократических проволочек.

Коммерческим банкам желательно охватить больше клиентов и обслуживать их не за счет открытия филиалов и мини-банков, а за счет повышения эффективности дистанционного банковского обслуживания и экономии операционных затрат банков. В результате повышается конкурентоспособность банков, повышается уровень диверсификации дистанционного банковского обслуживания в банках, то есть клиентам банка предоставляется возможность выбора при использовании удобных для них видов дистанционного банковского обслуживания (интернет-банкинг, онлайн-банкинг, особенно мобильный банкинг и другие виды).

Основная часть. Положения Центрального банка Республики Узбекистан, утвержденного Постановлением № 34/8 от 23 октября 2010 года «О порядке работы в системах дистанционного обслуживания банковских счетов»⁸⁴ Обмен информацией клиентами банка по каналам связи банка через систему дистанционного обслуживания банковских счетов в коммерческих банках, то есть банки стали играть важную роль в предоставлении дистанционных банковских услуг.

Передовой зарубежный опыт показывает, что развитие розничных платежных услуг коммерческих банков снижает потребность в наличных деньгах, уменьшает объем расходов, связанных с осуществлением платежей, и ускоряет переход розничных платежей.

В США министерство финансов разработало специальный счет электронных переводов (счет электронных переводов), чтобы гарантировать, что все платежи федерального правительства осуществляются без наличных денег. Всем тем, у кого нет расчетного счета в банке на этот счет.

Розничные банковские услуги – это финансовые услуги, оказываемые коммерческими банками физическим лицам.

Относительно широко распространены следующие виды розничных банковских услуг:

- привлечение депозитов от физических лиц;
- предоставление кредитов физическим лицам;
- оказание расчетных услуг физическим лицам;
- оказание контрольно-кассовых услуг физическим лицам;
- валютно-обменные операции с физическими лицами.

⁸⁴ Постановление Правления Центрального Банка Республики Узбекистан "О Внесении Изменений В Положение О Проведении Расчетов С Использованием Программного Комплекса «Банк - Клиент»

Результаты и выводы. На сегодняшний день розничные банковские услуги являются одним из самых прибыльных видов бизнеса для банков. Розничные банковские услуги разнообразны и включают в себя валютно-обменные операции, срочные, до востребования и сберегательные вклады, сертификаты, депозитарии, потребительские кредиты, консультационные и многие другие услуги.

Сегодня все эти услуги широко предлагаются клиентам в США, странах Европы, Японии и других странах с развитой банковской системой.

Одной из основных задач в развитии банковской системы является повышение качества банковских услуг, расширение спектра услуг и доведение их до уровня банков развитых стран.

В итоге мы видим, что количество пользователей ДБО в коммерческих банках на 1 января 2011 года составило 24 545 человек, а на 1 января 2020 года достигло 1 015 345 человек⁸⁵.

В частности, всего 7,6 трлн в рамках социальных программ, направленных на обеспечение занятости населения и развитие семейного предпринимательства. в сумме сумов, в том числе 4,9 трлн. непосредственно физическим лицам. выделены льготные кредиты в сумме сумов.

Расчеты, проведенные в Индии, показали, что на предприятиях торговли и услуг проведение операции с использованием дебетовой карты в 10 раз дешевле, чем оформление снятия наличных в кассе банка.

Следует отметить, что в ряде стран мира действуют ограничения на осуществление расчетов наличными. Например, в Бельгии с января 2014 года введен лимит в размере 3 000 (трех тысяч) евро для осуществления платежей наличными⁸⁶. Это ограничение распространяется не только на покупку товаров и услуг, но и на сделки с недвижимым имуществом (наличными можно оплатить только до 10% недвижимого имущества).³

Платежи на основе пластиковых карт занимают важное, уникальное место в системе розничных платежных услуг.

Важно отметить, что в развитых странах большинство расчетов по пластиковым картам осуществляется кредитными картами. Это объясняется тем, что коммерческие банки улучшили кредитование физических лиц в этих странах. В Республике Узбекистан, поскольку абсолютную основную часть всех находящихся в обращении пластиковых карт (более 90 процентов) составляют дебетовые карты, основу платежной системы на основе пластиковых карт составляют платежи посредством дебетовых карт.

В Республике Узбекистан все более активно развивается розничная платежная система на основе пластиковых карт, однако вес наличных денег в денежной массе остается высоким. По информации Центрального банка

85 www.cbu.uz Информация Центрального банка Республики Узбекистан.2011-2020 гг.

86 Швандар К. В Зарубежный опыт развития системы безналичных платежей: практика и результаты. Финансовый журнал / Financial journal №1 2015

Республики Узбекистан, на конец 2022 года общий объем депозитов, привлеченных коммерческими банками, увеличился на 1,3 процента по сравнению с 2021 годом и достиг 1.95 миллиардов долларов. составил сум. Также мы видим, что количество пользователей дистанционным банковским обслуживанием, т.е. юридических и физических лиц, на 1 января 2022 года достигло 10 153 458, что связано с расширением качества и объема предоставляемых банковских услуг за счет широкого использования современных информационно-коммуникационных технологий. технологий, повысилась эффективность работы, проводимой в банковской системе.

Также количество инфокиосков и банкоматов, установленных для обеспечения непрерывного приема платежей, за 2021 год увеличилось на 5 632 и на 1 января 2020 года достигло 9 203.

Заключение Постановление Президента Республики Узбекистан от 23 марта 2018 года № 3620 «О дополнительных мерах по повышению популярности банковских услуг»⁸⁷ описывает деятельность банков и пути устранения имеющихся у них недостатков.

Выводы и предложения. В результате проводимых реформ в банковской системе внедряются рыночные механизмы оказания услуг, расширяются их виды, повышается финансовая открытость для предпринимателей и населения. Внедряются новые банковские услуги, облегчающие осуществление операций по обмену валюты для населения, созданы условия для покупки иностранной валюты индивидуальными предпринимателями. Кроме того, в данном решении устранен ряд проблем и недостатков, препятствовавших соблюдению прав и законных интересов потребителей банковских услуг, особенно в регионах, и расширению финансовой открытости, а также культуры обслуживания и доверия к банковской системе.

На основании вышеизложенной информации можно сделать вывод, что на сегодняшний день удельный вес банковских услуг, оказываемых розничным клиентам в банковской системе, с каждым годом увеличивается. Тем не менее, мы видим, что использование банковских услуг и их популярность в нашей стране несколько медленнее по сравнению с некоторыми развитыми странами, а механизм реализации услуг недостаточно усовершенствован.

Устранение этих недостатков позволит повысить качество обслуживания клиентов в каждом банке и увеличить доходы банка от систем дистанционного обслуживания. Вопрос расширения возможностей использования («СМС-банкинг», «Интернет-банкинг», «Мобильный банкинг») и расширения возможности управления номерами депозитных счетов физических лиц посредством банковских пластиковых карт

⁸⁷ Постановление Президента Республики Узбекистан, от 23.03.2018 г. № ПП-3620

показывает, что он является одним из наиболее актуальные вопросы сегодня.

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Номазов Б.Б.
старший преподаватель
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт

РОЛЬ СТАТИСТИЧЕСКОЙ ИНФОРМАЦИИ В УЛУЧШЕНИИ НАЛОГОВОГО КОНТРОЛЯ

Аннотация. В данной статье рассмотрены вопросы организации камерального контроля, который является важной составляющей налогового контроля, а также задачи сотрудников налоговых органов по организации налогового контроля, источники и задачи организации бухгалтерского учета и информационного обеспечения. вопросы налогового контроля при проверке налоговой отчетности.

Ключевые слова: пандемия, налоговые льготы, валовой внутренний продукт, финансовая отчетность, налоговые отчеты, камеральный контроль, налоговый контроль, надежная база данных.

Nomazov B.B.
senior lecturer
Department of Innovative Economics
Karshi Institute of Engineering and Economics

THE ROLE OF STATISTICAL INFORMATION IN IMPROVING TAX CONTROL

Abstract. This article discusses the tasks of tax officials to support the population and business entities through taxes in the context of the pandemic, as well as in the organization of Cameroonian control, which is an important part of tax control in this period, the sources of organization of accounting information of tax control in the context of the pandemic.

Keywords: Coronavirus, pandemic, virus, tax deductions, net taxes, gross domestic product, financial statements, tax reports, desk control, tax control, reliable database.

В целях обеспечения реализации этих задач в республике, а также повышения платежеспособности по налогам и другим обязательным платежам, улучшения финансового положения хозяйствующих субъектов, сохранения рабочих мест, в процессе налогового администрирования решаются такие важные задачи, как широкое внедрение методов анализа с использованием современных информационно-коммуникационных технологий, радикальное совершенствование порядка и методологии проведения налоговых проверок.

Следует отметить, что на фоне борьбы с экономическими кризисами, возникшими в связи с пандемией, сегодня публикуются результаты большого количества научных исследований по анализу социально-экономических последствий кризиса для мировой экономики, в том числе для национальной экономики стран. Был проведен ряд научных исследований по социальной проблеме и ее экономическим последствиям, которые начались в Китае с начала прошлого 2020 года, затем начали распространяться более чем в 190 странах мира и достигли уровня пандемии коронавируса. В частности, название книги профессора А.Бекмуродова "Очередной глобальный экономический кризис стучится в дверь" [3], профессора Б.Бегалова "Независимый Узбекистан впервые регистрирует свое население" [4], профессор Н.Джумаева "Зачем нужна роль в международных рейтингах Узбекистана?" [5], профессор Н.Каримова "Вирус, который опустошил мир" [6], экономиста А.Умиров "Как устранить последствия пандемии" [7], С.Худойкулов, У.Жумаев "Налоговые льготы в налоговой системе Узбекистана и их влияние на бюджет в условиях пандемии" [8] в его научных статьях был проведен научный анализ и сделаны выводы о смягчении последствий пандемии и ее негативного воздействия на мировую и национальную экономику, а также о ее последующих социально-экономических последствиях. Однако в данной исследовательской работе недостаточно установлена поддержка населения и субъектов предпринимательства через налоги в условиях пандемии и содержание налогового контроля в этот период.

В ходе нашего исследования использовались методы научной абстракции, анализа, монографические и диалектические методы. Нынешняя мировая экономика ускорила распространение вредных заболеваний, которые могут быстро распространяться в общей сфере, а также глубокую интеграцию международных организаций в разных направлениях, быстрое распространение изменений рыночной конъюнктуры, либерализацию торговых отношений, увеличение числа международных организаций в разных направлениях и жесткую конкуренцию между ними. Одним из основных рисков для экономики Узбекистана является негативное влияние на общий объем нашего внешнеторгового оборота в связи с пандемией на экономики этих основных экономических партнеров-Китая, России, Турции, Кореи, Казахстана, с другой стороны, определенная степень замедления темпов роста национальной экономики, а также снижение налоговых поступлений из-за налоговых санкций. [8]

В целях смягчения и ликвидации последствий пандемии государство осуществило в общей сложности 82 трлн сумов мер. В частности, был создан антикризисный фонд и из бюджета выделено более 16 трлн сумов на мероприятия, связанные с борьбой с коронавирусом и поддержкой населения и предприятий. Кроме того, государственным предприятиям и

более чем 500 тысячам субъектов предпринимательства и почти 8 миллионам граждан была оказана практическая помощь в части налоговых льгот, условий кредитования и финансовой поддержки на общую сумму 66 триллионов сумов.

В результате мер, принятых в стране за последние 20 лет, и создания благоприятной предпринимательской среды создано 93,2 тысячи новых микрофирм и малых предприятий. Максимальное их количество – торговля (37,8 %), промышленность (19,9 %), сельское хозяйство, лесное хозяйство и рыболовство (16,1 %), строительство (6,4 %), услуги по проживанию и питанию (6,0 %), транспортировка и хранение (2,6%).

В качестве наиболее основных факторов можно рассматривать ставку единого социального взноса для предприятий некоторых категорий в 2020 году от 25 до 12 процентов, сохранение ставки налога на доходы, выплачиваемые в виде дивидендов, установление ставки налога на прибыль юридических лиц до 15 процентов, снижение налоговой нагрузки, упрощение системы налогообложения и совершенствование налогового администрирования. В этой связи следует отметить, что с 1 апреля по 31 декабря 2020 года было установлено снижение ставки единой социальной выплаты, которая рассчитывается на работников, и это дало свой эффект.

В последнее время мировая экономика ускорила распространение глубокой интеграции, структурных изменений на рынках, либерализации торговых отношений, усиление конкуренции между ними, а также вредных заболеваний. Одним из основных рисков для экономики Республики является негативное влияние на общий объем нашего товарооборота с нашими внешнеторговыми партнерами в связи с пандемией, в то время как, с другой стороны, замедление темпов роста национальной экономики в связи с определенным уровнем и сокращение налоговых поступлений в связи с налоговыми льготами повлияли на общий уровень.

Основываясь на результатах приведенного выше анализа, мы рекомендуем следующие предложения:

1. В целях обеспечения полного, совершенного и своевременного формирования базы данных внешних источников необходимо уравнивать ответственность руководителей предприятий и организаций, предоставляющих данные, с ответственностью налоговых агентов и повысить их ответственность, организовать те организации, которые предоставляют ошибки, принять решительные меры в отношении тех организаций, которые не предоставляют данные.

2. В целях повышения ответственности органов и организаций, предоставляющих информацию о наступлении обязательств налогоплательщиков в соответствии с Налоговым кодексом, меры ответственности должны быть предусмотрены ими в Налоговом кодексе, поскольку они не выполнили обязательства или выполнили их в

необходимом объеме, и наложение этих штрафных санкций, то есть такие случаи должны быть предусмотрены в Налоговом кодексе.

3. С помощью программы анализа рисков необходимо разработать процедуру объективной оценки деятельности незаконных хозяйствующих субъектов, которая определяется в результате жалоб из внешних источников. Необходимо разработать методику проведения проверок путем разделения видов нарушений в этом порядке на группы (красные, желтые, зеленые).

В результате реализации вышеуказанных предложений на практике в органах государственной налоговой службы увеличивается объем внешних исходных данных хозяйствующих субъектов, что позволяет проводить более полный камеральный контроль за деятельностью хозяйствующих субъектов и повышать эффективность камерунского контроля. Прежде всего, необходимо сформировать электронную базу данных по каждому налогоплательщику, объекту налогообложения, налоговой базе. Для формирования этой базы необходимо использовать информацию, имеющуюся в налоговых органах, финансовую и налоговую отчетность и декларации налогоплательщиков, а также внешние данные.

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Номазов Б.Б.
старший преподаватель
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт

МЕРЫ ПО СОВЕРШЕНСТВОВАНИЮ КОНЦЕПТУАЛЬНОЙ ОСНОВЫ МОДЕРНИЗАЦИИ НАЛОГОВОЙ СИСТЕМЫ

Аннотация. В статье обобщены задачи по совершенствованию концептуальных основ модернизации налоговой системы Республики Узбекистан и их реализации, а также научно обоснованы ее направления на ближайшую перспективу.

Ключевые слова: налоговая система, модернизация, модернизация налоговой системы, концептуальные основы модернизации налоговой системы.

Nomazov B.B.
senior lecturer
Department of Innovative Economics
Karshi Institute of Engineering and Economics

MEASURES FOR IMPROVING THE CONCEPTUAL BASIS OF TAX SYSTEM MODERNIZATION

Abstract. The article summarizes the tasks of improving the conceptual foundations of the tax system modernization in the Republic of Uzbekistan and their implementation, and scientifically substantiates its directions in the near future.

Keywords: tax system, modernization, tax system modernization, conceptual basis of tax system modernization.

Процесс либерализации экономики, обеспечение активного участия налоговой системы в обеспечении стабильности экономического роста, обострение проблем налогово-бюджетной политики и повышение налогового потенциала налогоплательщиков, использование эффективных инструментов налогового администрирования со стороны государства. государства во многом напрямую связаны с совершенствованием концептуальной основы модернизации налоговой системы. В целях улучшения этого вопроса правительство Узбекистана приняло ряд законодательных документов, в том числе:

-Постановление №ПФ №5468 от 29 июня 2018 года «О Концепции совершенствования налоговой политики Республики Узбекистан».

Указ Президента Республики Узбекистан от 18 июля 2017 года № ПФ-5116 «О мерах по коренному совершенствованию налогового администрирования, повышению собираемости налогов и других обязательных платежей»

Постановление Президента Республики Узбекистан PQ-3802 от 26 июня 2018 года «О мерах по коренному совершенствованию деятельности органов государственной налоговой службы»

Постановление Кабинета Министров Республики Узбекистан от 17 апреля 2019 года №320 «О мерах по дальнейшему совершенствованию деятельности органов государственной налоговой службы»

Указ Президента Республики Узбекистан от 10 июля 2019 года № PQ-4389 «О дополнительных мерах по налоговому администрированию» и основные нормативные документы, такие как «Стратегия налогового администрирования в Республике Узбекистан на 2019 год- 2021» концептуальная базовая модернизация налоговой системы «Почта на повестку дня вопросы совершенствования». Поэтому важно всесторонне изучить концептуальные основы реформирования и модернизации налоговой системы, что является причиной многих дискуссий сегодня, а также концептуальные основы эффективных налоговых моделей и ведущих брендов в мировой налоговой практике, как дельное направление.

В «Стратегии действий по пяти направлениям приоритетного развития Республики Узбекистан на 2017-2021 годы»[1] «продолжение политики снижения налогового бремени и упрощения системы налогообложения, совершенствования налогового администрирования и расширения соответствующих мер стимулирования» определяется как главный приоритет. Эти задачи были поставлены в «Стратегии развития нового Узбекистана на 2022-2026 годы» в более строгом и комплексном виде: «...продолжить политику снижения налогового бремени и упрощения системы налогообложения, совершенствования налогового администрирования и расширения соответствующих меры стимулирования[2]» определяется как важное направление.

Совершенствование концептуальных основ модернизации налоговой системы в Республике Узбекистан требует от теоретиков и практиков в области налоговой системы углубленного исследования следующих задач:

- модернизация налоговой системы: исследование ее необходимости, содержания, генезиса и трансформации в современных условиях;
- уточнение концептуальных основ и условий модернизации налоговой системы;
- изучение зарубежного опыта, связанного с эффективными мерами модернизации налоговой системы;
- провести анализ закономерностей развития модернизации налоговой системы Республики Узбекистан в современных условиях, ее системных проблем и государственных мер по их решению;

- методические подходы к оценке эффективности налоговой системы, анализу показателей оценки эффективности;
- разработка экономического моделирования факторов исполнения налоговых доходов и интегрального показателя эффективности налоговой системы;
- Обоснование научно-методических аспектов концепции модернизации налоговой системы Нового Узбекистана;
- научное обоснование перспектив формирования эффективной модели налоговой системы.

Налоговая система представляет собой совокупность налогов, сборов, пошлин и обязательных платежей, взимаемых с юридических и физических лиц, а также принципы их структуры, методы и налоговый контроль. Это определение представляет собой широкое понимание налоговой системы. Налоговое законодательство описывает систему налогов и других обязательных платежей, составляющих основу налоговой системы.

Сумма видов налогов и сборов, составляющих централизованный денежный фонд и другие фонды государства, называется налоговой системой.

Понятие налоговой системы относится к существующей налоговой практике в стране с точки зрения государственных и местных налогов и сборов.

Прежде чем выбрать идеальный подход и эффективные инструменты реформирования налоговой системы, необходимо изучить не только основы интерпретации налоговой системы, но также существующие принципы налогообложения и их применение к реформе налоговой системы.

При любом акте модернизации налоговой системы этот процесс должен осуществляться с учетом экономических, социальных и политических условий повышения эффективности экономической системы, опираясь на основополагающие принципы ее организации, ее уникальные аспекты.

С первых лет экономических реформ в нашей стране сложилась самостоятельная налоговая политика, определены и последовательно совершенствуются ее тактические и стратегические задачи. Глава государства определил приоритеты национальной налоговой политики, главной целью которой является обеспечение взаимной гармонии интересов налогоплательщиков и государственного бюджета. Одним из важнейших средств обеспечения такой гармонии является оптимальное установление налоговой нагрузки и, таким образом, обеспечение государственного бюджета необходимым объемом финансовых ресурсов при обеспечении того, чтобы налоговые обязательства налогоплательщиков не оказывали негативного влияния на их финансовую устойчивость.

В настоящее время наблюдается первый этап процесса модернизации налоговой системы Республики Узбекистан, и поскольку ее

государственный бюджет является основным механизмом формирования доходной части, необходимо дальнейшее изучение и оценка ресурсов. и масштабы его модернизации. Необходимо учитывать, насколько эти требования соответствуют особенностям национальной экономики. Важность проблемы модернизации налоговой системы заключается в том, что в мировую рыночную экономику интегрируются не только крупные, но и малые и средние предприятия страны.

Таким образом, «после принятия Концепции совершенствования налоговой политики в нашей стране проводится модернизация налоговой системы, и в целях обеспечения эффективной налоговой политики государства, в целях «дальнейшего поощрения честного (дисциплинированного)) налогоплательщика», «сократить долю легализации доходов и «скрытой экономики», налоговых отношений, необходимо согласовать и гармонизировать такие пропорции, как «переход на новую систему взаимодействия налоговых органов и налогоплательщиков на основе» рост сотрудничества», «повышение социальности и справедливости налоговой системы».

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*Норқобилова Ф.А., PhD
Қариш мухандислик иқтисодий- институти,
иқтисодиёт фанлари бўйича фалсафа доктори*

МИНТАҚА ХАЛҚ ХУНАРМАНДЧИЛИГИ ТЕХНОЛОГИЯСИНИ РИВОЖЛАНТИРИШНИНГ ПРОГНОЗ ВАРИАНТЛАРИ

Аннотация. Ушбу мақолада минтақада олиб борилаётган иқтисодий ислохотларнинг ҳозирги босқичи хунармандчилик соҳасини янада ривожлантириш, унга кенг иқтисодий имкониятлар бериш билан белгиланади асосида баҳолаш ёритилган.

Калит сўзлар: адекват, тадбиркорлик, тренд модел, бошқарув, эконометрия, прогноз, рентабел.

*Norgobilova F.A., doctor of philosophy (PhD) in Economic Sciences
Karshi Engineering Economic Institute*

FORECAST OPTIONS FOR THE DEVELOPMENT OF REGIONAL FOLK CRAFT TECHNOLOGY

Abstract. In this article, the current stage of economic reforms carried out in the region is determined by further development of the craft sector, providing it with wide economic opportunities.

Key words: adequate, entrepreneurship, trend model, management, econometrics, forecast, profitability.

Кириш. Янги Ўзбекистонни барпо этиш шароитида хунармандчиликни ривожлантириш, тадбиркорлик фаолиятини қўллаб-қувватлаш ва оилавий хунармандчиликни ривожлантириш орқали камбағалликни қисқартириш ва оилаларни даромадини ошириш соҳасидаги адолатли сиёсатини рўёбга чиқариш ҳисобланади.

Бунга кўп жиҳатдан ҳуқуқий базани мустаҳкамлаш, иқтисодиётнинг мазкур сектори учун барқарор қулайлик, имтиёз ва кредитлар тизимини шакллантириш масалаларига жиддий эътибор берилаётгани туфайли эришилмоқда.

Минтақа аҳолисини халқ хунармандчилик соҳасига жалб қилиш тизимини такомиллаштириш, «уста-шоғирд» аъёнлари асосида маҳаллаларда ёшларга хунар ўргатиш ва бандлигини таъминлаш, шунингдек, камбағалликни қисқартириш ҳамда хунармандчиликни ривожлантириш бўйича амалга бир қанча ислохотларни изчил давом этмоқда. Ўзбекистон Республикаси Президентининг 2021 йил 20 декабрдаги «Оилавий тадбиркорликни ривожлантириш ва аҳолининг даромад

манбаини кенгайтиришга доир қўшимча чора-тадбирлар тўғрисида»ги ПҚ-55-сон қарори [1] ва Ўзбекистон Республикаси Президентининг 2021 йил 30 декабрдаги ПҚ-77-сон «Хунармандчилик фаолиятини қўллаб-қувватлаш тизимини янада такомиллаштириш чора-тадбирлари тўғрисида»ги [2] Қарорлари қабул қилинди, ушбу қарор мамлакатимиз аҳолисини иш билан банд қилиш, уларнинг лойиҳаларини молиялаштириш, хунармандчилик соҳасини ривожлантириш ва хунармандларимиз фаолиятини қўллаб-қувватлаш, имтиёзли кредитлар йиллик 14 фоиз ставкада «Хунарманд» уюшмаси аъзоларига ишлаб чиқариш эҳтиёжлари учун асбоб-ускуна, эҳтиёт қисмлар ва хом ашё материалларини харид қилиш, хунармандчиликни ривожлантириш марказлари, «уста-шогирд» мактабларини ташкил этиш, уй-музейлар ва устахоналар қуриш ёки шу мақсадларда бино ва иншоотлар сотиб олиш учун 3 йилгача муддатга ҳамда айланма маблағларини тўлдириш учун 18 ойгача муддатга ажратилиши назарда тутилганлиги халқ хунармандчилик соҳасидаги ижобий ўзгаришлар кўзатилмоқда.

Хунармандчилик мамлакатда ишсизликни бартараф этиш, соғлом рақобатни шакллантириш аҳоли даромадини таъминлаш ҳамда иқтисодиётнинг барқарорлигини оширишдаги имкониятларини инобатга олган ҳолда, бу соҳанинг ривожланишига алоҳида эътибор берилмоқда.

Мавзуга оид адабиётлар шарҳи. Минтақа хунармандчиликни ривожлантиришнинг иқтисодий муаммолари ва минтақаларда халқ хунармандларнинг амалий санъатини янада ривожлантириш асосида минтақаларда миллий халқ хунармандчиликни рақамлаштириш масалаларида хорижлик иқтисодчи олимлардан Vasco [3] шунингдек, миллий иқтисодиётда оилавий хунармандчиликнинг ижобий томонлари шундаки корпоратив бошқарув ва хунармандчиликнинг ривожланишига институционал ёндашув нуқтаи назаридан, уларнинг ўзига хос томонлари ўрганилган (Banalieva, Eddleston, Zellweger; Steier) [4].

Ушбу йўналиш бўйича республикамиз олимлари А.Ўлмасов[5], Х.Мухитдинов[6], Ф.Норқобилова[7], О.М.Пардаева[8] ва бошқалар ўз ишларида минтақа хунармандчилиги оилавий бизнес ва ҳудудлар ривожланиши ўртасидаги боғлиқликнинг назарий модели халқ хунармандчиликнинг ижобий томонлари тадқиқ этади. Бунда асосий эътибор миллий хунармандчиликга қаратилган бўлиб, халқ хунармандчиликни рақамлаштиришнинг иқтисодий ва ижтимоий табиати нуқтаи-назаридан очиқ берилмаган.

Айни пайтда халқ хунармандчилик соҳасида рақамлаштириш ва истиқболларини белгилаш борасида олиб борилаётган ишлар ҳам масалага жиддий ёндашган ҳолда илмий тадқиқотлар олиб боришни тақозо этмоқда.

Тадқиқот методологияси. Тадқиқот ишида минтақада хунармандчилик йўналишларида яратилган иш ўринлари ўсиш тенденциясига эга бўлиб, унинг вақтга боғлиқ бўлган тренд моделини ишлаб чиққилди.

Таҳалиллар ва асосий натижалар. Қашқадарё вилоятида ҳунармандчилик йўналишларида яратилган иш ўринлари ўсиш тенденциясига эга бўлиб, унинг вақтга боғлиқ бўлган тренд моделини ишлаб чиққилди. Бунинг учун қатор ҳолатларни кўриб чиқдик, экспоненциал, полиномиал ва даражали функцияларни шулар жумласидандир, ammo чизиқли функцияда константа ноль бўлган пайтда детерминация коэффиценти 0.95 га тенг эканлиги ва барча мезонлар бўйича адекватлиги аниқланди, шу билан бирга константани Стюдент тест мезонларига кўра адекват эмаслиги аниқланди. Натижада вилоятда ҳунармандчилик йўналишларида яратилган иш ўринлари вақтга боғли тренд модели қуйидаги кўринишга эга бўлди.

$$y = 1797.1 * t$$

Бу ерда: y - Қашқадарё вилоятида ҳунармандчилик йўналишларида яратилган иш ўринлари сони. t – тренд.

Модел барча мезонлар бўйича адекват бўлиб, унинг натижаларини қуйидаги 1 – жаadwalда келтириб ўтганмиз.

1-жаadwal

Регрессион таҳлил натижалари

Model 1: OLS, using observations 2018-2021 (T = 4)

Dependent variable: WP

	qiymat	Standart hatolik	t- nisbat	p- qiymat
Trend	1797.07	238.157	7.546	0.0048
				**
O'rtacha bog'liq var	4663.250	S.D. bog'liq var		2236.405
So'm kvadrat rezident	5104669	S.E. of regression		1304.437
Markazsiz R-kvadrat	0.949948	Markazlashtirilgan R- kvadrat		0.659791
F(1, 3)	56.93814	P- qiymat (F)		0.004826
Jurnal ehtimoli	-33.79450	Akaike mezoni		69.58900
Shvarts mezoni	68.97529	Hannan-Quinn		68.24226
Rho	-0.908232	Durbin-Watson		3.012083

Ишлаб чиқилган модел натижаларига кўра вилоятда ҳунармандчилик йўналишларида яратилган иш ўринлари сони ҳар йили ўртача 1797,1 бирликка ошаётганлиги аниқланган. Мазкур трендни тузиш учун биз 2018-2021 йиллар маълумотларидан фойдаланганмиз, яъни 4 йиллик маълумот. Бу маълумот билан икки йил учун прогноз қилиш мумкин бўлади. Ўсиш тенденцияси мавжуд ҳолатда сақланиб турса 2022 йилга келиб яратилган иш ўринлари 8989,3 тани ташкил қилади ва 2023 йилга нисбатан 1,47 баробарга

ошиши таъминланади. 2024 йилга келиб эса 10782 бирликни ташкил қилиб 1,77 баробарга ошади.

Амалга оширилган ҳисоб китобларимиздан кўринадикки Қашқадарё вилоятида хунармандчилик йўналишларида яратилган иш ўринлари сони кейинги даврда юқори ўсиш суръатига эга бўлиб, аҳоли бандлиги ва даромадларини оширишдаги истиқболли йўналишлардан ҳисобланади. Фикримизча хунармандчиликка қаратилаётган эътиборни ва улар учун яратилаётган шарт-шароитларни маҳаллий даражада кенг миқёсда тушунтириш, амалиётга жорий қилиш соҳани янада барқарор ривожини таъминлашга хизмат қилади.

1– жадвал

2020 йилда аҳолининг хунармандчилик бўйича фаоллигини ўрганиш мақсадида ўтказилган социологик тадқиқотда иштирок этган респондентлар тўғрисида маълумот

Яшаш жойи бўйича:	- шаҳар (51,3%); - қишлоқ (40,2%); - бошқа (массив, туман маркази) (8,5%)
Ёш жихатидан таркиби:	- 18-30 ёш (54,7%); - 31-50 ёш (39,3%); - 51-64 ёш (6,0%).
Жинси:	- аёллар (25,4%); - эркаклар (74,6%).
Маълумоти бўйича таркиби:	- олий (82,9%) - ўрта махсус, касб-хунар (11%); - ўрта (6,1%).
Оила аъзолари сони бўйича таркиби:	- 2 та (1,7%); - 3 та (15,4%); - 4 та (22,2%); - 5 та (48,7%); - 6 та (12,0%).

Шунга асосланиб, оила функциялари системасига оила фаровонлигини таъминловчи омиллар, иккинчидан оилавий тадбиркорликни қарор топишида муҳим шарт сифатида қараш мақсадга мувофиқ бўлади.

Бундай ёндашув асосида оила институтининг ижтимоий йўналтирилган функцияларини хунармандчиликка интеграциялаштириш масаласи ётади.

Триангуляция(лот. triangulum учбурчак) — натижаларни мустақил равишда тасдиқлаш учун камида учта усулдан фойдаланган ҳолда бир хил кўрсаткични ўлчаш[10],.

Хунармандчилик соҳасидаги оилавий тадбиркорлик фаолиятининг молиявий ҳолатини баҳолашда ҳам тизимли ёндашувнинг таҳлилий усулларидан фойдаланиш жуда самарали ва қулай ҳисобланади. Ушбу соҳадаги тадқиқотларнинг аксарияти иқтисодиёт ва бошқарувга оидлиги

билан характерлидир. Шунингдек, айрим хорижий тадқиқотчилар оилавий бизнес тушунчасини тадқиқ қилиб, унинг оилавий бўлмаган бизнес билан фарқли жиҳатларини очиб беришга уринишган. Бир қатор муаллифлар оилавий фирмаларнинг ўзига хос бозор стратегияларини ҳисобга олиб ёндашади. Шунингдек, баъзи тадқиқотлар оилавий бизнесда бошқарув, роллар тақсимооти ва ахлоқий кадриятларини ўрганишга қаратилган[11]. Мазкур ишларни оилавий тадбиркорлик соҳасида олиб борилган тадқиқотлар ичида муҳим йўналишлар сифатида ажратиб кўрсатиш мумкин.

Кўришиб турганидек, оилавий бизнес муаммоларини ўрганишнинг мураккаблиги, унга турли хил назарий ёндашувларнинг хослигидан келиб чиқади. Хусусан, оилавий тадбиркорлик соҳасидаги тадқиқотларда қўлланилган назарияларни институционал назарий ёндашувлар ва ижтимоий соҳа иқтисодиёти назариялари бўйича йирик гуруҳларга бўлиш мумкин.

Сўнгги йилларда хунармандчиликдаги оилавий тадбиркорликка оид тадқиқотларда хусусий характердаги назариялар ҳам кенг қўлланилмоқда. Жумладан, агентлик назарияси оилавий бизнесни тадқиқ этишда кенг фойдаланиладиган умумий назария сифатида эътироф этилади. Бу назарияга кўра, оилавий бизнес эгаси (мулкдор) ва унинг аъзолари ўртасидаги бошқарувга оид муносабатлар чегараси таснифланган. Бундай мураккаб бошқарув жараёнлари агентлик назарияси асосида таснифланган. Оилавий тадбиркорликни тадқиқ этишда “оила занжири” назарияси[12], 2000 йилдан буён тадқиқотда қўлланилаётган барқарор оилавий бизнес назарияси (СФБТ) каби махсус ишлаб чиқилган назариялар ҳам муваффақиятли қўлланилмоқда. Бундан ташқари, оила ва бизнес тизимларининг ўзаро муносабатидаги турли стратегияларни ва оилавий бизнеснинг бошқа турдаги бизнесдан фарқ қилувчи асосий устуворликларини тушунтиришга ёрдам берадиган янги назариялар ҳам пайдо бўлди.

Шуни алоҳида таъкидлаш жоизки, рўйхатнинг деярли учдан икки қисмини (64фоиз) Осиё давлатлари ташкил қилади. Буларнинг аксарияти ривожланаётган Осиё давлатларига тўғри келади. Ушбу рўйхатга акциялари молиявий бозорларда сотилаётган ва капиталлашуви 1 млрд. доллардан ошган ҳамда 20 фоиз акциялари оилаларга тегишли бўлган компаниялар ҳам киритилган.

Хунармандчилик фаолиятига киритилган инвестициялар ўзгариш жараёнини прогнозлаш учун ҳисобланган тренд моделлари 1-расмда кўрсатилган. Ҳосил қилинган тренд модели натижалари таҳлилига кўра, бу экспоненциал модел сифати анча юқори[13].

Юқорида ҳисобланган тренд моделлар таҳлили ва улардан олинган натижалар асосида олинган прогнозларни таҳлил қиладиган бўлсак, буни 1-жадвалдан кўришимиз мумкин. 2-жадвал таҳлили шуни кўрсатадики,

Қашқадарё вилоятида ҳунармандчилик корхоналари томонидан ишлаб чиқилган маҳсулот ҳажми моделидан олинган прогнозларга кўра 2020 йилга нисбатан 2021 йилга бориб 1,03 баробарга ошиши, 2026 йилга бориб эса 2,44 баробарга ошиши прогноз қилинди.

Хулоса ва таклифлар. Хулоса қилиб айтганда, кутилаётган натижа мамлакатимизда қадимдан мавжуд аммо яқин йиллар давомида йўқолиб бораётган ҳунар турларини тиклаш ва ривожлантириш, миллий меросимизни авлоддан-авлодга етказиб бериш, аҳоли ва хорижий мамлакатларига миллийлигимизни, урф-одатларимизни анъаналаримизни, ҳунармандчилик маҳсулотлари орқали англантишимиз, республикамизнинг ривожланмаган олис тоғли ҳудуд аҳолисини ҳам иш билан банд қилиш юқори даражадаги технологияларсиз ҳам мавжуд хом-ашёлар (жун, ипак, тери, тупроқ, ёғоч, темир ва б.) орқали ҳунармандчилик маҳсулотларини ишлаб чиқиш, даромалга эга бўлиш имкониятини яратиб беришдир.

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*Нортожиева Н.М.
студент 1 курса магистратуры
Каршинский инженерно-экономический институт*

РОЛЬ КОММУНАЛЬНЫХ УСЛУГ В ПОВЫШЕНИИ ЖИЗНИ НАСЕЛЕНИЯ

Аннотация. В данной статье рассматривается значение системы коммунального хозяйства в повышении уровня жизни населения и содержание мероприятий, проводимых в этой сфере. Также показана роль инфраструктур в коммунальной системе.

Ключевые слова: услуга, коммунальные услуги, жилье, население, уровень жизни, инфраструктура, потребность, благосостояние, качество, эффективность.

*Northozhieva N.M.
1st year master's student
Karshi Engineering and Economic Institute*

THE ROLE OF PUBLIC SERVICES IN IMPROVING THE LIFE OF THE POPULATION

Annotation. This article discusses the importance of the public utilities system in improving the standard of living of the population and the content of activities carried out in this area. The role of infrastructures in the communal system is also shown.

Key words: service, utilities, housing, population, standard of living, infrastructure, need, welfare, quality, efficiency.

В странах мира условия перехода к цифровой экономике и предоставления коммунальных услуг населению рассматриваются как один из основных факторов повышения уровня жизни населения. «Сегодня жилищный фонд расширяется пропорционально увеличению числа людей в мире, в том числе жилья в развитых странах в 2023 году будет 138,7 млн в Соединённых Штатах Америки, 245,3 млн в Великобритании, 44,1 млн в Германии., 38,8 миллиона во Франции и 136,9 миллиона в Канаде. составляет десять». Состояние развития сферы коммунальных услуг, основанной на удовлетворении важнейших социальных потребностей членов общества, а также восстановлении их трудоспособности, обусловлено тем, что она потребляет значительную часть энергетических ресурсов в экономике страны, развитие этого сектора имеет актуальную важность на современном этапе развития общества.

Расширение жилищного фонда в связи с быстрым ростом населения земного шара, с одной стороны, приводит к повышению уровня реальной потребности потребителей в коммунальных услугах, а с другой стороны, к качеству жилищного фонда. потребляемых услуг приводит к повышению уровня спроса, в связи с чем необходимо коренным образом пересмотреть подход к объему и качеству коммунальных услуг, создаваемых предприятиями коммунального хозяйства. Это порождает необходимость повышения эффективности системы ЖКХ и совершенствования процессов цифровизации в соответствии с происходящими изменениями.

Структурные изменения в национальной экономике происходят в результате реформ, направленных на коренное реформирование отраслей экономики, техническое и технологическое перевооружение в Республике Узбекистан. В частности, «...быстрое развитие сферы услуг, повышение роли и доли услуг в формировании валового внутреннего продукта, коренное изменение состава предоставляемых услуг, прежде всего, за счет их современной технологичности». типы» является одной из приоритетных задач. Исходя из этих задач, необходимо реформировать коммунальную сферу, повышать квалификацию работников, создавать среду свободной конкуренции в коммунальной сфере. Указ Президента Республики Узбекистан №ПФ-60 от 28 января 2022 года «О новой Стратегии развития Узбекистана на 2022-2026 годы», №PQ-2900 от 18 апреля 2017 года, «Постановление №. ПФ-5017 от 18 апреля 2017 года об организации Министерства жилищно-коммунального хозяйства Республики Узбекистан «Меры по дальнейшему совершенствованию управления системой жилищно-коммунального хозяйства для целесообразности реализации задач, указанных в Постановлении» «Об» и Законе «Об управлении многоквартирными домами» от 7 ноября 2019 года, а также в нормативных правовых документах, относящихся к данной сфере.

В ближайшие несколько лет правительство нашей страны уделяет особое внимание вопросу сервисного обслуживания в жилищно-коммунальном хозяйстве и повышению его эффективности. Указ Президента Республики Узбекистан от 18 апреля 2017 года «О мерах по дальнейшему совершенствованию управления системой жилищно-коммунального хозяйства» №ПФ-5017 от 18 апреля 2017 года «Об организации деятельности Министерства жилищно-коммунального хозяйства» и коммунального хозяйства в Республике Узбекистан» ЗП-2900 и Постановление Президента Республики Узбекистан от 28 января 2022 года «О Стратегии развития Узбекистана на 2022-2026 годы» №60. Соответственно, системный подход и цифровые технологии были использованы при формировании цифрового метода повышения качества оказания услуг жителям страны на предприятиях жилищно-коммунального хозяйства и описании его отдельных элементов.

Образ жизни населения и уровень социально-экономического развития будут связаны с проводимой в стране социальной политикой и развитием социальной сферы. В свою очередь, социальная сфера состоит из инфраструктур, обеспечивающих материальные и духовные блага населению. Если такие сферы, как образование, культура, искусство, спорт и здравоохранение служат воспитанию населения как совершенного человека, то развитие жилищного хозяйства и системы коммунального хозяйства создает условия для комфортной жизни населения и формирования достойного образа жизни.

В определении категории «Жилищно-коммунальное хозяйство – это сервисная услуга в хозяйствах членов общества» обоснованно учитывался ряд факторов и «эффективность коммунального хозяйства» – в этом целесообразность достижение максимальных результатов при минимальном объеме средств производства и труда на благо общества.

Система обслуживания населения в жилищно-коммунальном хозяйстве, обслуживание жилых массивов, административных и производственных зданий, непроизводственных и социальных зданий, сооружений, территорий и магистральных дорог, организация их использования, строительства - ремонта, транспорта, энергетики производственные и другие предприятия, предоставляющие различные товары и услуги, конечным результатом их комплексной деятельности являются направления, которые организуют жизнь человека, развивают городскую инфраструктуру, служат улучшению экологической среды.

На современном этапе обосновано, что объективная необходимость развития отрасли, повышения уровня жизни населения, увеличения реальных доходов населения, обеспечения занятости является одной из приоритетных задач сегодняшней день Правительства.

Пока теоретические основы системы оказания услуг населению в жилищно-коммунальном хозяйстве не будут тщательно разработаны и обоснованы, не удастся ее быстро развивать и решать другие важные задачи, которые ставятся на практическую повестку дня. Следует также признать, что в условиях современного перехода к цифровой экономике теоретические вопросы сферы обслуживания на предприятиях жилищно-коммунального хозяйства требуют глубокого и детального изучения с точки зрения рыночной экономики, исходя из специфических особенностей страна.

Развитие сферы услуг сыграло ключевую роль в переходе от одного типа экономической системы к другой на всех этапах развития человечества, где сфера услуг на протяжении длительного времени имела большое значение в жизни и деятельности человека. Производство товаров появилось в результате развития натурального хозяйства, роста видов и количества продукции. Подавление натурального хозяйства и развитие процесса товарообмена происходило на основе углубления разделения

труда, специализации производства, возникновения и развития частной собственности. Осуществляется углубление разделения труда, специализация производства, развитие частной собственности, взаимный обмен между участниками экономики, т. е. торговыми услугами. Также в период натурального хозяйства его члены пользовались отдельными видами услуг, включая взаимный обмен информацией, бытовые услуги, жилищно-коммунальные услуги, защиту от внешней среды. Естественно, они не понимали природы и социально-экономической значимости этих услуг. Однако эти виды услуг играли важную роль в удовлетворении повседневных потребностей участников натурального хозяйства. Учитывая неэффективность рынка и платёжеспособность реформ, чтобы показать требования текущего и долгосрочного устойчивого развития системы обслуживания населения на предприятиях жилищно-коммунального хозяйства, возникает объективная необходимость изучения природы сферы услуг. в жилищно-коммунальных предприятиях и процессах их производства и потребления. Для реформирования экономики теоретически существует различие между формальными и неформальными институтами, которые имеют особое значение. Несогласие с формальными и неформальными правилами является основной причиной неэффективности рынка оказания услуг населению в сфере жилищно-коммунального хозяйства и неплатежеспособности экономических реформ.

Система оказания услуг в жилищно-коммунальном хозяйстве обеспечивает обслуживание, организацию использования, строительство-ремонт, транспортировку, энергетическое производство жилых домов, административных и производственных зданий, непромышленных и социальных зданий, сооружений, территорий и линий электропередачи и других предприятий. предоставляя различные товары и услуги, конечным результатом ее комплексной деятельности является сфера, организующая жизнь человека, развивающая городскую инфраструктуру, служащая улучшению экологической среды.

Из вышеизложенного можно сделать вывод, что роль жилищно-коммунального хозяйства в повышении уровня жизни населения несравнима. Помимо экономического значения, он также имеет большое политическое и социальное значение. Однако желательно увеличить количество объектов инфраструктуры, повысить качество услуг и использовать зарубежный опыт для повышения качества жилищных услуг.

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*Нуманов К.К., к.э.н.
доцент
АнДИСХА
Солиев Р.Р.
ассистент
АнДИСХА*

ВОЗМОЖНОСТИ ПОВЫШЕНИЯ ИНВЕСТИЦИОННОЙ ПРИВЛЕКАТЕЛЬНОСТИ ЭКОНОМИКИ УЗБЕКИСТАНА В СОВРЕМЕННЫХ УСЛОВИЯХ

Аннотация. В статье анализируется нынешнее состояние экономики Узбекистана, а также возникшие негативные явления во внешнеэкономической деятельности республики за последние годы. В работе сделаны выводы о том, что современные структуры производства и внешнеторговый оборот пока не способны обеспечить устойчивое экономическое развитие в условиях глобализации. Учитывая эти явления, предлагаются конкретные меры, чтобы приспособить возможности экономики республики к условиям глобализационных процессов в мировой экономике.

Ключевые слова: интеграция, национальная экономика, внешнеторговый оборот, экспорт, импорт, конкурентоспособность, экономики, таможенные пошлины, ставка рефинансирования, диверсификация, инвестиционная привлекательность.

*Numanov K.K., Ph.D.
associate professor
AndISHA
Soliev R.R.
assistant
AndISHA*

OPPORTUNITIES FOR INCREASING THE INVESTMENT ATTRACTIVENESS OF THE ECONOMY OF UZBEKISTAN IN MODERN CONDITIONS

Annotation. The article analyzes the current state of the economy of Uzbekistan, as well as the negative phenomena that have arisen in the foreign economic activity of the republic in recent years. The work draws conclusions that modern production structures and foreign trade turnover are not yet capable of ensuring sustainable economic development in the context of globalization. Taking these phenomena into account, specific measures are proposed to adapt

the capabilities of the republic's economy to the conditions of globalization processes in the world economy.

Key words: integration, national economy, foreign trade turnover, export, import, competitiveness of the economy, customs duties, refinancing rate, diversification, investment attractiveness.

В условиях глобальной конкуренции на мировом рынке одной из важнейших задач государства является выбор приоритетов национальной экономической политики, от которой зависит очень многое: экономическая и финансовая безопасность страны, конкурентоспособность ее экономики на внутреннем и внешнем рынках, уровень жизни населения и степень достижения социальных целей. Главный вопрос, на который следует ответить нашей республике при формировании стратегии развития экономики- как должны соотноситься экономический суверенитет и экономическая безопасность, с одной стороны, и использование преимуществ международного разделения труда, и экономическая эффективность, с другой стороны? Как обеспечить внутреннюю и внешнюю конкурентоспособность отечественных производителей? Как сбалансировать интересы всех субъектов рынка товаров и услуг?

На сегодняшней день ход интеграции экономики Узбекистана в мировое хозяйство выявил ограниченность возможностей приспособления к мировым тенденциям национального хозяйства республики. Как показал, печальный опыт развал Советского Союза привела к разрыву целостного хозяйственно-производственного пространства, прекращению коопераций, связей между предприятиями, научно-производственными объединениями, что повлекло за собой возникновение многочисленных барьеров на пути взаимных торговых и других экономических отношений. В экономике бывших Советских республик, в том числе в Узбекистане, из-за существенного ослабления хозяйственных связей произошло глубокая формация воспроизводственного процесса в сторону чрезмерного развития сырьевых отраслей промышленности для нужд остального мира.

Как видно, из истории мировой экономики, страны, специализированные на развития ресурсопроизводящих отраслей экономики, не имеют сильного иммунитета против конъюнктурных колебаний мирового рынка. Для них всегда существует внешняя угроза нарушения внутреннего экономического равновесия. Естественно прочное будущее на подобной основе, влекущей за собой рост финансовой и технологической зависимости, неустойчивые бюджетные доходы и многие другие негативные последствия, не построишь.

Сопоставление динамики структуры внешней торговли товарами и услугами республики с данными по мировой торговле и экспорту наглядно показывает, что по своей структуре внешнеторговый оборот Узбекистана кардинальным образом отличается от международного экономического

обмена. В мировой торговле значительный удельный вес приходится на готовую продукцию и услуги, в которых воплощены достижения научно-технического прогресса. А в структуре республиканского экспорта преобладают базовые товары и простейшие виды услуг, импорте заметное место занимают товары и услуги, связанные с удовлетворением потребительского спроса (таблица)

Как видно из таблицы в последние годы в республиканском внешнеторговом обороте наблюдается негативные тенденции: превышение импорта над экспортом. Это показывает, что основная часть обрабатывающих отраслей, аграрный сектор и сфера услуг не в состоянии удовлетворять потребность внутреннего рынка по номенклатуре, качеству или количеству производимых товаров и услуг.

Таблица

**Динамика структуры внешней экономической деятельности
республики Узбекистан за 2000-2023 гг. (в долл. США)**

Структура	2000	2005	2010	2015	2018	2019	2020	2021	2022	2023
ЭКСПОРТ										
Хлопок-волокно	897,1	1033,3	1572,7	736,1	222,1	281,6	146,9	136,5	3,5	-
Продовольственные товары	176,4	206,1	1260,5	1316,4	1097,7	1517,5	1443,8	1471,8	1823,5	1770
Химическая продукция и изделия из нее	93,4	285	661,3	613	904,6	876,9	873,2	1225,3	1426,2	1310
Энергоносители и нефтепродукты	335,2	623	2973,8	2685,2	2666,2	2524,9	659	889,9	1215,2	939,50
Черные и цветные металлы	216,7	499,9	894,4	824,2	1167,1	1300,9	1241,9	1653,4	1658	1696
Машины и оборудования	111,8	452,8	715,4	159,3	214,1	451,4	442	702,8	989,3	1300
Золото	554,2	1164,7	2618,1	1920,6	2909,5	4918,3	5804,4	4109,8	4110,3	8150
Текстильная продукция	235,6	203,5	637,2	883,7	1603,1	1626,6	1578	1326,2	1521,5	2050
Услуги	449,1	659,3	1335,5	3061,3	3029,9	3560,3	2005	2547,4	4017,8	4425,3
Прочие	195,2	281,2	354,5	307,8	438,6	843,5	908,1	3229,7	2528,4	2779,2
Всего	3264,7	5408,8	13023	12507,6	14252,9	17901,7	15102,3	16610,6	19293,7	24420
ИМПОРТ										
Продовольственные товары	361,1	287,2	963,2	1585,3	1581,6	1885,1	2159,6	2926,2	3953,2	3490

Химическая продукция и изделия из нее	399,5	558,7	1265,7	2108,2	2554,8	3200,4	3436,7	4260,1	5046,5	4860
Энергоносители и нефтепродукты	112,7	103,7	654,6	725	879,5	928,1	1106,9	1541,0	1795,1	2630
Черные и цветные металлы	253,5	419,4	742,1	919,4	1773,3	2116,9	1751,3	2312,8	2821,1	2550
Машины и оборудования	1044,1	1770,4	4032,5	5026,7	8321,7	10635,2	8904,2	9454,4	11018,4	14930
Услуги	251	424,7	490,4	954,1	2242,9	24241,8	1221,4	1736,8	2547,5	3158,7
Прочие	525,5	527,2	1027,3	1097,9	2201,4	3088,7	2573,7	3229,7	3586,0	6521,3
Всего	2947,4	4086,3	9175,8	12416,6	19555,2	24276,1	21153,8	26203,7	30767,8	38140

Источник: Агентство по статистике Р. Уз.

Вследствие дисбаланса во внешней торговле зависимость узбекской экономики от внешних рынков остается очень высокой. Из этого можно сделать вывод, что пока конкурентоспособность национальной экономики желает лучшего. Это означает, что современные структуры производства и внешнеторговый оборот пока не способны обеспечить устойчивое экономическое развитие в условиях глобализации. Вдобавок к этому в структуре экономики республики ежегодно возрастает доля добывающей отрасли, что ведет к ее одностороннему развитию и снижению конкурентоспособности экономики в целом. Вместе с тем, в нынешней ситуации добывающие отрасли должны служить основой для развития других секторов экономики и способствовать обеспечению макроэкономической стабильности, модернизации экономики и социального благополучия населения Узбекистана. Сложившаяся к настоящему времени структура узбекской экономики, основанная преимущественно на экспорте сырья, энергоносителей, полуфабрикатов и импорте машин, оборудования, узлов, компонентов содержит в себе очевидные экономические и торгово-политические угрозы. Из-за этого можно сделать вывод, что топливно-сырьевая специализация сдерживает рост конкурентоспособности республики и делает нестабильным ее экономическое позиционирование в мире.

В условиях глобализации и интеграции мирохозяйственной системы, государство должно направлять усилия на развитие взаимовыгодного внешнеэкономического сотрудничества со странами ближнего и дальнего зарубежья и принимать участие в глобальных и региональных экономических процессах с целью обеспечения устойчивого

экономического развития. Т.к. в современных условиях конкурентоспособность экономики страны является показателем состояния и перспектив развития хозяйственной системы, обуславливает характер ее участия в международном разделении труда, выступает гарантом экономической безопасности и способность производить товары и услуги, удовлетворяющие требованиям мирового рынка, реализация которых способствует росту благосостояние населения. Учитывая этого можно сказать, что изменить характер участия республики в международном разделении труда невозможно, не развивая ресурсопотребляющие и обрабатывающие отрасли, то есть без новой индустриализации. Только таким образом можно диверсифицировать экспорт за счет готовых изделий, в т. ч. конкурентоспособной в мировом рынке продукции высокотехнологичных отраслей. Индустриализация экономики республики ослабила бы ориентацию потребителей на импорт и укрепила бы позиции местных производителей на внутреннем рынке.

В нынешних условиях, для того чтобы перейти на инновационный путь развития, вырваться из зависимого положения доноров сырьевых ресурсов, войти в мир развитых стран с высокотехнологичным производством и диверсифицированной экономикой, улучшения инвестиционного климата причем не только для зарубежных, но и для отечественных предпринимателей для Узбекистана является объективной необходимостью. Для привлечения инвестиций в экономику республики правительство Узбекистана в последние годы ввело ряд важных мер, включая бесплатную конвертацию национальной валюты, снижение торговых барьеров и таможенных платежей. В рамках дополнительных преференций Узбекистан предоставляет налоговые льготы участникам специальных экономических зон, налоговые льготы организациям с участием иностранного капитала, а также освобождение дохода от экспортных продаж от налога на прибыль. Несмотря на эти меры, из-за сложности существующей налоговой системы, высокой налоговой нагрузки для бизнеса, а также отсутствие единого подхода в налоговом администрировании, инвестиционная привлекательность национальной экономики на сегодняшний день остается очень низкой. Здесь необходимо отметить, что по мнению большинства экспертов сформировать благоприятный инвестиционный климат в республике можно за счет надлежащей защиты прав собственности, независимости судебной системы, серьезного сокращения масштабов коррупции, а также уменьшения административного давления на бизнес. Но на наш взгляд этого недостаточно, т.к. привлекательный инвестиционный климат невозможно создать без формирования полноценной конкурентной среды, наращивания капитализации банковской системы, уменьшения стоимости заимствований, снижения темпов инфляции, благодаря которым экономика нашей республики могла бы подняться до мирового уровня и

интегрироваться в мировое хозяйство. Это в свою очередь дает возможность и нашей экономике вписаться в транснациональные и глобальные процессы.

В современных условиях перспективное развитие национальной экономики предполагает встраивание в глобальный рынок товаров и услуг на основе формирования конкурентных преимуществ, которая позволит нашей республике завоевать достойные позиции в мире. Для того, чтобы приспособить возможностей экономики Узбекистана к условиям глобальной конкуренции, мы предлагаем конкретные меры:

- для того, чтобы помочь встать на ноги отечественным производителям, особенно для тех отраслей, создающие продукцию с высокой добавленной стоимостью, мы предлагаем снизить НДС до 10% и налога на прибыль до 7,5% для всех предприятий вне зависимости от их форм собственности;

- в настоящее время в республике для защиты собственных производителей применяются высокие таможенные пошлины на импортируемую продукцию, но к сожалению эти меры не принесли ожидаемых результатов. Учитывая этого, мы предлагаем другие способы, чтобы ослабить ориентацию потребителей на импорт и укрепить позицию отечественных производителей на внутреннем рынке. По нашему мнению, в условиях, когда внешнеторговый оборот отрицательный, целесообразно использовать эффективную тарифную защиту, т.е. обнуление пошлин на импортируемое сырье и материалов, которые необходимы для стимулирования и поддержанию собственного производства и не могут быть обеспечены отечественными поставщиками.

- В нынешних условиях ставка рефинансирования центрального банка очень высокие и составляет 14%. А это в свою очередь приводит к подорожанию кредитов коммерческих банков и для бизнеса и населению. Это означает, что если мы не снизим ставку рефинансирования, последствия могут быть негативными для всей экономической системы республики.

- В данное время тарифы на энергоносители (электроэнергия, газ) очень высокие для бизнеса и населения, что в свою очередь приводит к подорожанию товаров и услуг, тем самым, снижая конкурентоспособность отечественных производителей во внутреннем и внешних рынках. Исходя из этого, мы предлагаем пересмотреть тарифов на энергоносители в сторону снижения.

По нашему мнению, внедрения выше указанных мер позволило бы нашей республике увеличить темпы развития экономики за счет повышения инвестиционной привлекательности и решить следующие задачи:

- перейти на инновационный путь развития,
- войти в мир развитых стран с высокотехнологическими производствами и диверсифицированной экономикой,
- повышать устойчивость национальную экономику в условиях усиливающейся глобальной конкуренции.

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*Нурқулов Ф.Н., т.ф.д., проф.
Кимё технологиялари илмий-тадқиқот
институтининг лаборатория мудири.
Ҳакимов Ҳ.Д.
Қашқадарё вилояти ФВБ*

ПОЛИВИНХЛОРИД ПЛАСТИЗОЛЛАРИНИНГ ОЛОВБАРДОШЛИГИНИ ОШИРИШ УСУЛЛАРИНИ ТАДҚИҚ ҚИЛИШ

Аннотация. Ушбу тадқиқот ишининг мақсади полимер материаллар учун истиқболли оловни тўхтатувчи бўлиши мумкин бўлган фосфорни ўз ичига олган янги бирикмаларни синтез қилишдир. Асоси 100 масса улуши эмулсион поливинхлорид, 65 масса у. пластификатор (диоктилфталат) ва 2 масса у. стабилизатор (барий ва кадмий стеарати) ни таъкил этадиган композицияга 0,05 дан 0,5 масса улушигача бўлган миқдорда полифосфор хлорид антипирени киритилди. Ушбу полимерик органофосфорли антипирен ПВХ пластизолларнинг ёнувчанлигини камайтиришига таъсири ўрганилди ва уни ушбу материаллар учун ишлатишининг асосий имкониятлари кўрсатилди. ПВХнинг 100 масса улушига 0,05 дан 0,5 масса улуши миқдорида полимер тузидан фойдаланиши пластификатсияланган ПВХнинг ёнувчанлиги, тутун ҳосил бўлиши, алангаланишини камайтиришига олиб келиши аниқланди.

Калит сўзлар: ПВХ пластизоллар, органофосфорли антипирен, пластификатор, ёнувчанликни камайтириши, оловбардошлик.

*Nurkulov F.N., Ph.D.
professor
Head of the Laboratory of the Research Institute
of Chemical Technologies
Hakimov O.D.
Kashkadarya region FVB*

METHODS OF INCREASING THE FIREABILITY OF POLYVINCHLORIDE PLASTICIZERS RESEARCH

Annotation. The aim of this research work is to synthesize new phosphorus-containing compounds that can be promising flame retardants for polymeric materials. The basis is 100 mass fraction emulsion polyvinyl chloride, 65 mass u. plasticizer (dioctyl phthalate) and 2 mass u. polyphosphoric chloride flame retardant was added in the amount of 0.05 to 0.5 mass fraction to the composition of stabilizer (barium and cadmium stearate). The effect of this polymeric organophosphorus flame retardant on reducing the flammability of PVC

plastisols was studied and the main possibilities of its use for these materials were shown. The use of polymer salt in the amount of 0.05 to 0.5 mass fraction per 100 mass fraction of PVC was found to reduce the flammability, smoke generation, and flammability of plasticized PVC.

Keywords: PVC plastisols, organophosphorus flame retardant, plasticizer, reducing flammability, fire resistance.

Ҳозирги вақтда миллий иқтисодиётнинг барча тармоқларида термопластик полимер материалларга бўлган эҳтиёж доимий равишда ортиб бормоқда. Термопластиклар бир қатор ижобий хусусиятлар, жумладан, паст ўртача зичлик, юқори мустаҳкамлик хусусиятлари ва конструктив сифат коэффиенти, паст иссиқлик ўтказувчанлиги, юқори кимёвий қаршилик, ишқаланишга қаршилик ва технологик (ишлаб чиқариш) қобилияти туфайли кенг қўлланилди. Деярли барча полимер материалларнинг юқори ёнувчанлиги барча камчиликларнинг асосисидир. Ушбу фактнинг ўзига хос хусусияти ёнаётган бинонинг барча хоналарида ёнғиннинг тез тарқалиши, ёниш маҳсулотларининг юқори токсиклиги, хоналарда сезиларли даражада тутун ва ўртача ҳажмли ҳароратнинг тез кўтарилишидир.

Пластификатор полимер материалларнинг композит таркибига кирадиган асосий компонентлардан бири бўлиб, уларсиз полимер материалларни қайта ишлаш мумкин эмас. Шу билан бирга, кенг қўлланиладиган саноат пластификаторлари орасида ушбу бирикмаларнинг катта қисми ёнувчан моддаларга тегишли. Бу ароматик ва алифатик карбоксил кислоталарнинг эфирлари, полиэстерлар, шунингдек эпоксид қатронлари бўлган бирикмалардир. Полимер ва винилхлорид полимерлари асосида пластиклаштирилган материалларнинг ёнувчанлигини пасайтириш муаммоси кўпинча турли хил ҳалоген ва фосфорни ўз ичига олган бирикмалар (ФБ) сифатида ишлатиладиган термостабил, қийин ёнувчан ва паст учувчан пластификаторлар ёрдамида ҳал қилинмоқда. ФБдан фойдаланганда полимер материалларнинг ёнувчанлигининг пасайиши асосан киритилган фосфор миқдорида боғлиқ деб ҳисобланадики, у таркибида массаси бўйича камида 5 % бўлиши керак.

Ёнғиндан ҳимояланган полимер материалларни олишнинг энг кенг тарқалган, самарали ва тежамкор усули бу антипиренлардан (полимер материалларнинг ёнувчанлигини камайтирадиган моддалар) фойдаланишдир. Фосфорни ўз ичига олган антипиренлар энг самарали оловни тўхтатувчилар гуруҳига кирди. Қизил фосфор, фосфатлар ва полифосфатлар, фосфазенлар ва полифосфазенлар кўпинча материалларнинг ёнувчанлиги ва алангаланишини камайтириш учун ПВХ композитсияларига кўшимча сифатида ишлатилади. Ушбу турдаги антипиренларни истеъмол қилиш уларнинг материалларнинг ёнувчанлигини ва ёниш пайтида ҳосил бўладиган тутун зичлигини камайтириш қобилияти,

шунингдек ўз ичига олган ФБ антипиренли материалларнинг мукаммал кимёвий ва физик хусусиятлари ва бунинг натижасида ёнғин хавфи кам бўлган материалларни олиш қобилияти туфайли энг тез суръатлар билан ошиб бормоқда.

ФБ-антипиренларнинг таъсири конденсацияланган фазада намоён бўлади ва ёнувчанлик ва алангаланувчанликнинг пасайишига олиб келади. ФБ-антипиренларнинг таъсир қилиш механизми материалнинг пастки қатламларини кислород таъсиридан жисмоний ҳимоя қиладиган фосфор оксидлари ва кислоталарининг ҳосил бўлиши ёки сезиларли даражада паст экзометрик таъсир (эффект) билан уларнинг оксидланишини реакция йўналиши бўйича тартибга солиш билан боғлайди. Материалнинг карбонланган қатламининг сиртини жисмоний ҳимоя қилиш учун юзасида полифосфорик кислота ҳосил бўлиши, шунингдек, учувчан ёнувчи маҳсулотлар ҳосил бўлган прозил зонасининг водород радикалларининг ҳаракатчанлигини пасайишига олиб келадиган фосфорни ўз ичига олган парчаларнинг изолятсияси туфайли содир бўлади деб ҳисобланади. Шу билан бирга, фосфорни ўз ичига олган антипиренларни ишлаб чиқариш усуллари захарли ва ёнувчани оқ фосфордан фойдаланиш билан боғлиқ бўлган меҳнат талаб қиладди, улардан фойдаланиш бир қатор хавфсизлик чораларига риоя қилишни талаб қиладди, бу эса нархнинг ошишига олиб келади.

Аммо ФБнинг антипирен сифатида юқори самарадорлиги полимер материаллар учун ёнишни секинлаштирувчи сифатида ишлатилиши мумкин бўлган фосфорни ўз ичига олган янги бирикмаларни синтез қилиш бўйича ишларни давом эттиришга ёрдам беради.

Таdqикот объектлари ДС (ГОСТ) 14039-78да белгиланган талабларга жавоб берадиган Е 6250-Ж поливинхлорид эмулсиясига асосланган композицион таркиблар эди. Намуналарни тайёрлаш учун ишлатиладиган поливинхлорид оқ ёнувчи кукундир. ТУ 6-09-17-319-96 талабларига жавоб берадиган диоктилфталат (ДОФ) C₆H₄ (COOC₈H₁₇)₂ ва барий ва кадмий стеарат пластификатор ва стабилизатор сифатида ишлатилган.

Антипирен сифатида янги полимер органофосфор бирикмаси – [поли[(4-винилбензил) бис(2-фенилэтил)-лорметил]фенилитеил]фосфони хлорид] ўрганилди. Трофимов-Гусарова реакцияси натижасида қизил фосфордан синтез қилинган 4-винил-бензилхлорид ва бис(2-фенилэтил)фосфиндан муҳрланган ампулада янги фосфорорганик полимер олинди [10, 13-15]. Дастлабки мономерлар 1: 1 нисбатида олинган, реакция ДАК иштирокида аргон атмосферасида 65-70 °С гача қиздирилганда 0,5 соат давом этган. Органофосфор полимери органик эритувчилар билан кетма –кет ювиш орқали 86% ҳосил қилинган ($T_{пл}$ парчаланиш билан 312 °С) Полимер оқ кукун бўлиб, сувда ва органик эритувчиларда эримайди, чунки у ўзаро боғланган тузилишга эга.

ПВХнинг 100 масса улуши учун композитсияга киритилган поливинхлорид асосидаги антипирен миқдори 0,05 масса улушидан 0,5 масса улушигача ўзгарган, шу жумладан композитсиялардаги фосфор миқдори масса бўйича 0,0003 % -0,003 % ни ташкил этди. Керакли миқдордаги компонентлар бир хил масса олинмагунча яхшилаб аралаштирилади, шундан сўнг ҳосил бўлган масса 2 соат давомида чўктириш учун, газсизлантириш учун қолипларга куйилади, сўнгра аралашма 115 °С ҳароратда 10 дақиқа давомида печда (қуритиш шкафида) сақланади.

Секин ёнувчи ва ёнувчан қаттиқ моддалар ва материаллар (поливинхлорид намуналари) гуруҳини экспериментал аниқлаш ГОСТ 12.1.044-89га мувофиқ амалга оширилади. Экспериментал тадқиқотни ўтказиш учун композитциянинг ҳар бир тури учун бешта намуна, шунингдек, таркибида антипирени бўлмаган таққослаш намуналари тайёрланди.

ОТМ асбобида (қурилмасида) ёниш пайтида чиқувчи газларнинг максимал ҳарорати, уларнинг максимал ҳароратга йетган вақтини ва масса йўқотишини аниқлаш учун синовлар ўтказилди. Тақдиқот учун ПВХ пластизол намуналари антипирен қўшимчалар билан тайёрланган, уларнинг таркиби ПВХнинг 100 масса улуши учун 0,05 масса улушидан 0,5 масса улушигача ўзгариб туради, таққослаш намунаси сифатида қўшимчаларсиз ПВХ пластизол намунаси тайёрланди. Методикага мувофиқ намуналарнинг узунлиги 60 (± 1) мм, баландлиги 150 (± 3) мм, қалинлиги эса ҳақиқийга тўғри келади.

Чакнаш ҳарорати (нуқтаси) ($t_{\text{чак}}$) ва алангаланиш нуқтаси ($t_{\text{аланг}}$)ни аниқлаш ТВ (очик тигел) қурилмасида амалга оширилди. Тадқиқот учун аралашма қуруқ тигелга жойлаштирилди ва иситиш ГОСТ 12.1.044-89 да тавсифланган ўлчаш тартибига мувофиқ амалга оширилди. Усул (методика)га кўра, аралашманинг бир қисмида ёки бутун юзасида аланга пайдо бўлганда, эриган намунанинг ҳарорати очик тигелда ($t_{\text{чак}}$) учун олинади. Намуналар (синов аралашмаси) етарлича суюқликка олдиндар қиздирилади, лекин кутилган $t_{\text{чак}}$ дан 5 °С паст бўлган ҳароратдан ошмаслиги керак. Олинган композитсиянинг номаълум параметрларга эга эканлигига асосланиб ПВХ пластизолларнинг намуналарини тайёрлаш учун ишлатилган ва порлаш (чакнаш) нуқтаси аллақачон маълум бўлган пластификаторнинг чакнаш нуқтаси сифатида кутилган $t_{\text{чак}}$ олинган. Стандартда кўрсатилган усул бўйича тутун ҳосил қилиш коэффитсиенти (D_m)ни аниқлаш учун тутуннинг оптик зичлиги аниқланди. Шу мақсадда, ёниш пайтида ҳам, синов намунасининг маълум миқдорини ёқиш пайтида ҳам ҳосил бўладиган тутуннинг оптик зичлиги аниқланди.

Тадқиқот учун намуна сифатида пластизоллар энг кўп пластификатор (ПВХнинг 100 масса улушига 65 масса улуши) ва шунга мос равишда энг ёнувчан бўлган материаллар сифатида танланган. Ёнувчанлик

кўрсаткичларини аниқлаш натижалари 1-жадвалда келтирилган. Ёнувчанлик параметрларини аниқлаш натижаларини таҳлил қилиш шуни кўрсатдики, ПВХнинг 100 масса улушига ўрганилаётган антипиренларнинг 0,05;0,1;0,25 ва 0,5 масса улуши миқдорда киритилиши барча белгиланган параметрларнинг пасайишига олиб келди. Чиқувчи газларининг энг кўп бўлган 290 °С гача пасайиши тадқиқ қилинадиган таркибидаги антипирени 0,25 масса улушига тенг 4 намунада (1-жадвал) кузатилади, антипиренсиз 1 намуна учун эса у 590 °С га тенг (1-жадвал). 4-намуна учун чиқувчи газининг максимал ҳароратига эришиш вақтининг 190 с га ортиши қайд этилган, 1-намуна учун эса 50 с.

1 жадвал
Ўрганилаётган намуналарнинг ёнувчанлик параметрларини аниқлаш натижалари

Намуна №	Антипирен таркиби, масса улуши	Чиқувчи газларнинг максималҳарорати, °С	Чиқувчи газларининг максимал ҳароратга етиш вақти, с	Алангаланишнинг кечикиш вақти, с
1	0	590	50	36
2	0,05	400	120	93
3	0,10	420	165	67
4	0,25	290	190	100
5	0,50	540	175	45

Алангаланишни кечиктириш вақтининг 36 с (1 учун) дан 100 с гача (4 учун) ортиши ҳам кузатилади. Шуни таъкидлаш керакки, антипирени (ёнишни секинлатувчи қўшимчалар) мавжуд бўлмаган 1-намуна тажриба давомида 95% массасини юқотади ва деярли бутунлай бузилади (йўқ бўлди). Шу билан бирга, 2 ва 3 намуналар ПВХнинг 100 масса улушига 0,5 масса улуши антипирен учун 20% гача массасини ва 0,25 масса улуши антипирен учун 33% гача массасини юқотади. Шу сабабли, фосфор миқдори 0,0003% дан 0,003% гача бўлган антипиреннинг киритилиши ПВХ пластизолнинг ёнувчанлигини пасайишига таъсир қилган деган хулосага келиш мумкин.

Материалнинг алангаланувчанлиги деганда, материалнинг маълум шароитда олов манбасидан алангаланиши ва уни олиб ташлагандан кейин ёнишни давом этиши тушунилади. Алангаланувчанлик моддани қиздирилганда ёнувчи газлар ёки буғларнинг чиқиш тезлиги билан тавсифланади. Полимер материалларнинг алангаланувчанлигини аниқлаш, асосан, чакнаш ҳарорати (нуқтаси) ва алангаланиш ҳароратини аниқлашга келтирилади. Ўрганилаётган пластизолларда кўп миқдорда диоктилфталат бўлганлиги сабабли, парчаланиш маҳсулотлари таркиби ўрганилаётган намуналарнинг ёнувчанлигига сезиларли таъсир кўрсатадиган пластификатор буғлари киради. Тадқиқот давомида аниқланган ДОФнинг $t_{\text{чак}}$ ва $t_{\text{аланг}}$ (137 °С ва 170 °С) бу параметрлар ФБ қўшимчалари бўлмаган

пластизолларнинг ёнувчанлик кўрсаткичларига яқин эканлигини кўрсатади (2-жадвал). Шунинг учун намуналарнинг алангаланувчанлиги пластификатор буғлари мавжудлиги билан белгиланади деб баҳслашиш мумкин

Очиқ тигелда $t_{\text{чак}}$ ва $t_{\text{аланг}}$ учун ўрганилаётган эриган намунанинг ҳарорати олинади, бунда олов манбаи таъсирида биринчи навбатда чакнаш пайдо бўлади, сўнгра ёниш содир бўлганидан намуна ҳарорати тигелни кейинги иситиш ва барқарор ёниш олинмагунча газ горелкасига таъсир қилиш орқали аниқланади. Ҳарорат қиймати намунанинг $t_{\text{аланг}}$ бўлади. $t_{\text{чак}}$ ва $t_{\text{аланг}}$ нинг аниқлаш натижалари 2-жадвалда келтирилган.

2-жадвалда келтирилган маълумотлар 2-5 намуналар учун $t_{\text{чак}}$ ва $t_{\text{аланг}}$ ортди деган хулосага келишимизга имкон беради. 4-намуна учун энг юқори қийматлар $t_{\text{чак}} = 225 \text{ }^\circ\text{C}$ ва $t_{\text{аланг}} = 255 \text{ }^\circ\text{C}$. Бинобарин, пластизоллар таркибига антипиренларни киритилиши материалнинг ёнувчанлигининг пасайишига олиб келади, бу унинг ёнғин хавфининг пасайишини кўрсатади.

Техник моҳиятига кўра энг яқин ва эришилган эффе́кт 100 масса улиши ПВХ учун 33 масса улуши пластификатор (ДОФ), 22 масса улуши трикрезил-фосфат (антипирен), 4 масса улуши стабилизатор (барий ва кадмий стеарати) кўшилган композитсиядир (прототип сифатида $t_{\text{чак}} = 205 \text{ }^\circ\text{C}$ олинган). Ушбу композитсия қурилиш, кабел ва электротехника саноатида ёнувчанлиги паст бўлган маҳсулотларни олиш учун ишлатилади.

Ёниш ва ёниш режимлари учун тутун ҳосил қилиш коэффитсиентини аниқлашда бешта синов натижаларига кўра D_m нинг ўртача арифметик қиймати ишлатилган. Синов бир хил таркибдаги 3-5 та намунада ўтказилди. Натижа сифатида 2-жадвалда олинган кўрсаткичларнинг ўртача арифметик қийматлари келтирилган.

2-жадвал

Ёнғин хавфи параматерларини аниқлаш натижалари

Намуна №	Антипирен таркиби, масса улуши	Чакнаш ҳарорати, $^\circ\text{C}$	Алангаланиш ҳарорати, $^\circ\text{C}$	Тутун ҳосил бўлтш коэффитсиенти (D_m), $\text{м}^2/\text{кг}$
1	0	140	175	2260
2	0,05	160	180	1730
3	0,10	160	195	1680
4	0,25	225	255	1300
5	0,50	185	200	1540

2-жадвалда келтирилган натижаларга кўра антипиреннинг киритилиши 2-5 намуналар учун D_m нинг пасайишига олиб келишини кўриш мумкин. D_m нинг энг катта пасайиши 4-намунага нисбатан кузатилади (мос равишда $1300 \text{ м}^2/\text{кг}$ ва $2260 \text{ м}^2/\text{кг}$). Шунинг учун, ПВХ пластизол таркибига унинг 100 масса улушига 0,05 масса улушидан 0,5

масса улушигача миқдорида антипиреннинг киритилиши материалнинг тутун ҳосил қилиш қобилиятини пасайишига олиб келди.

Экспериментал тадқиқотлар натижасида уларнинг таркибида антипирен бўлган намуналар юзасида ҳимоя плёнка ҳосил бўлиши аниқланди. Алангаланувчанликнинг пасайиши, масса йўқотиш, алангаланишнинг кечикиш вақтининг ошиши ва тутун ҳосил қилиш қобилиятининг пасайиши бу плёнка намуна сиртини пластификаторнинг буғланишидан ва материални ўзининг парчаланишидан ҳимоя қилишини кўрсатади. Худди шундай таъсирга трикресил фосфатни таркибига фосфор миқдори 10,3% ни ташкил этадиган миқдорда киритиш орқали эришилади.

ХУЛОСА:

1. Пластификацияланган ПВХни олиш учун 100 масса улуши эмулсион ПВХ; 65 масса улуши пластификатор (ДОФ); 2 масса улуши стабилизатор – барий ва кадмийстеарати ва янги фосфорорганик полимер антипирен (0,05– 0,5 масса улуши, асосан 0,5 масса улуши) дан иборат янги композиция ишлаб чиқилган.

2. Ўрганилаётган антипиреннинг 100 масса улуши ПВХга 0,05 масса улушидан 0,5 масса улушигача миқдорида киритилиши ёнувчанлик, алангаланувчанлик, тутун ҳосил қилиш қобилиятининг пасайишига олиб келдики, бу полимер материалнинг ёнғин хавфини камайишига ёрдам беради.

3. Визуал текширув вақтида антипирени бўлмаган намуналар ёниш пайтида деярли бутунлай йўқ бўлиб кетганлиги, масса йўқотиши 95% ни ташкил этганлиги аниқланди. Антипиренли намуналарнинг сиртида намунанинг кейинги йўқ қилишдан ҳимоя қилувчи ҳимоя плёнка ҳосил бўлади.

4. Антипирен сифатида ишлатиладиган фосфорорганик полимер бирикмаси [поли[(4-винилбензол)бис(2-фенилэтил)-4-хлорометил]фенилэтил]фосфоний хлорид] ҳар қандай лабораторияда ва ҳар қандай ишлаб чиқаришда осонлик билан қайта тикланадиган усул билан синтезланади ва дастлабки бис (2-фенилэтилфосфин) ишлаб чиқариш арзон қизил фосфордан фойдаланишга асосланган.

5. Антипирен пластификацияланган ПВХни кичик миқдорда (массанинг ўндан бир қисми) олиш учун таркибга киритилади; композитсиялар таркибидаги фосфор миқдори саноатда ишлатиладиган пластиклаштирилган поливинхлорид композитсияларга қараганда юзлаб марта камроқ(мос равишда 0,003% ва 10,3%).

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Нурматова М.М.
Ўзбекистон давлат жахон тиллари университети
ўқитувчи

ЖУРЖИЙ ЗАЙДОННИНГ “ФАРҒОНА КЕЛИНИ” РОМАНИДА ТАРИХИЙ ШАХСЛАРНИ АКС ЭТТИРИЛИШИ

Аннотация. Ушбу мақолада Ж. Зайдоннинг фаолияти унинг тарихий романлари, ва унинг “Фарғона келини” романидаги тарихий шахслар билан боғлиқвоқеалар бадий талқини таҳлил этилган. Ж. Зайдон тарихий романлар асосчисидир. У адабиёт соҳасидагина эмас, балки фан ва маданият бобида ҳуқуқ, география, журналистика соҳасида ҳам анчагина ишлар қилди. Зайдонни адабиёт оламига машҳур қилган унинг романлари бўлди. У араб тарихий романчилигига асос солди, уни юқори поғонага кўтарди. Зайдоннинг 22та тарихий романи бўлиб (буларнинг кўпи ўрта аср тарихига оид), улар чуқур ўрганишга, тадқиқ этишга арзийди. Унинг энг машҳур тарихий асари бу “Фарғона келини”дир. Ушбу асар реал воқеликларга асосланган тарихий асардир. Ушбу асарда бир неча тарихий шахслар акс эттирилган. Фарғона келини” асари IX асрда араб халифалигида бўлиб ўтган воқеаларга бағишланган.

Калит сўзлар: Араб адабиёти, Журжий Зайдон, халифа, Бобак, Маъмун, роман, Хуррабийлар, тарих, Фарғона.

Nurmatova M.M.
Uzbekistan State University of World Languages
teacher

REPRESENTATION OF HISTORICAL PERSONS IN THE NOVEL "THE BRIDE OF FERGANA" BY JURJI ZAYDON

Annotation. This article analyzes the work of Djurjiy Zeydan, his historical, in particular, literary interpretation related to historical figures in the novel “Bride from Fergana”.

J Zaydon is the founder of historical novels. It was his novels that made Zaydon famous in the literary world. He laid the groundwork for Arabian historical romance and took it to the forefront. Zaydon's 22 historical novels (many of them related to medieval history) are well worth exploring. His most famous historical work is the “Bride of Fergana”. This work is a historical work based on realities. This work presents several historical figures.

Keys words: Literature of Arabic, Jurjiy Zeydan, khalifa, Bobak, Mamun, novel, history, Fergana.

Ҳар бир миллий адабиёт қайси тилда ва қайси минтақада яратилган бўлмасин, жаҳон адабиётининг таркибий қисми ҳисобланади. Фақат бундай шарафага эришиш учун бу адабиёт шаклланиш ва ривожланиш йўлини босиб ўтган, бошқа миллий адабиётлар билан ижодий алоқада ҳаракат этаётган бўлиш лозим.

Журжий Зайдон 1861 йил 14 декабрда Байрут (Ливан)да туғилиб 1914 йил 21 августи Қоҳирада вафот этди. У камбағал оилада мустақил кўп ўқишга қурб итмади, пойафзал мойлаб юриб, мустақил равишда китоб мутоласига киришди; адабиёт, тарих уни эрта қизиқтирди. У ўз кучини синаб кўрган соҳаларнинг бирортасида ҳам расмий таълим олмаган. Ҳаммасига шахсий мутолаа билан эришган эди. Журжий Зайдон протестантлар коллежига қисман қатнаб ўқиб, доричи деган гувоҳнома олган холос. Кейин у Мисрга бориб, у ерда “Аз Замон” журнали редакциясига ишга кириб бир бир йилча ишлайди (1982) кейин Ливанга қайтади, сўнгра Байрутда бир йилча олимлар суҳбатида бўлиб, кўп нарса ўрганишга муваффақ бўлади. Унда Лондонга бориб, таъбат соҳасидаги билимларини оширишга уринади, у ерда шарқ адабиёти ва тарихини биладиган олимлар билан танишади, кутубхоналарга қатнайди. Британия музейи кутубхонасида у айниқса кўп мутола қилади. Бундаги араб манбалари унинг ижодига катта туртки бўлди. Сўнгра Зайдон Европа бўйлаб саёҳат қилади, Қоҳирага қайтгач, муаллимлик қилади, айни замонда “ал –Муқтатаф” журналида ишлай бошлайди. Зайдон 1892 йил Мисрда “Ал Ҳилол” журналига асос солади ва умрининг охиригача –йигирма йилдан кўпроқ вақт мобайнида унинг ношири бўлиб қолади. Бу адабий журнал шундан буён ўтган сал кам саксон йил давомида араб адабиёти ва маданияти ривожига катта ҳисса қўшган.

Зайдонни адабиёт оламига машҳур қилган унинг романлари бўлди. У араб тарихий романчилигига асос солди, уни юқори поғонага кўтарди. Зайдоннинг 22та тарихий романи бўлиб (буларнинг кўпи ўрта аср тарихига оид), улар чуқур ўрганишга, тадқиқ этишга арзийди. Унинг энг машҳур тарихий асари бу “Фарғона келини”дир. Ушбу асар реал воқеликларга асосланган тарихий асардир. Ушбу асарда бир неча тарихий шахслар акс эттирилган.

“Фарғона келини” асари IX асрда араб халифалигида бўлиб ўтган воқеаларга бағишланган. Роман воқеасини яхшироқ тасаввур қилмоқ учун тарихий воқеаларни бир лаҳза кўз олдимизга келтирамиз.

Халифалик ҳудудида IX асрда халқ озодлик ҳаракатлари бошланиб, баъзи жойларда авж олиб кетган эди. Халифа ҳукумронлигини дахшатга солган воқеалардан бири Бобак 88 кўзғолони эди.

Бобак Хуррабий Озарбайжон, Арманистон ва Шимолий –Ғарбий эронда бошланган хуррабийлар ҳаракатига бош бўлиб, йигирма йилдан

88 Бобак- Хуррабийлар ҳаракатига бошчилик қилган ва араб босқинчиларига қарши кураш олиб борган.

ортиқ курашади. Ҳатто халифа Маъмуннинг⁸⁹ ҳам бу қўзғолонни бостиришга қурби етмайди. Шу билан бир вақтда Мисрда (829-832) қўзғолон кўтарилиб, уни бостириш учун халифанинг ўзи бош бўлиб Мисрга боради, қўзғолончиларни қаттиқ жазолайди. Бу орада ички зиддиятлар ва тахт учун курашиш зўраяди. Халифаликда хатто араб қўшинларига ҳам тўлиқ ишонч қолмайди, уларнинг турини ўзгартиришга киришилади. Бағдод аёнлари ва қўмондонларининг домий фитналаридан хавфсираган халифа, аввало Ўрта Осиёдаги халқлардан қўшин тўплаб, ўз тахтига таянч қилиб олади. Дастлаб бу аскарлар чегара тўқнашувларда асир тушган ҳамда ўша даврда кул бозорларидан сотиб олиб келинган куллардан, кейинчалик махсус тузилган қўшинлардан иборат бўлди. Булар Халифа даргоҳида туриб, пойтахтдаги араб исёнкорларига қарши курашда, уларнинг қўзғолонларини бостиришда хизмат қилган. Бу аскарлар маҳаллий араб аҳолиси билан алоқада бўлмас, хатто уларга уйланиш ҳам тақиқланган эди. Шу боисдан ҳам улар учун Ўрта Осиёдан турк чўрилари сотиб келтирилиб, бир қисмини уйлантириб қўйишарди. (Бу ҳолат романда ҳам акс эттирилган) Халифа булар хизматидан яхши манфаатдор бўлгани учун уларга етарли маош ва мукофотлар бериб турган. Турк аскарларидан тузилган гвардияга кейинчалик шу халқдан саркардалар тайинланган. Сўнгра ички низолардан қўрққан халифа Муътасим (813-845) янги шаҳар Сомуррони⁹⁰ бунёд этиб, турк гвардиясига ўша ерни қароргоҳ қилиб белгилайди, сўнгра пойтахтни ҳам унга кўчиради. Лекин халифа Сомуррода ҳам бора-бора турк қўшинлари ва лашкарбошларидан хавфсирай бошлади. Чунки бу гвардия бошлиқлари тож-тахт учун ўзаро курашларга ҳам аралашиб, ўз манфаатларига хизмат қиладиган номзодни қўллашга ҳаракат қила бошлади.

Араб халифалигига кирган бошқа халқлар, ҳокимликлар халифалик тахтини сақлаб қолишга уринишган. Чунончи, Ушрусана ҳокими Афшин халифаликнинг энг йирик саркардаси бўлган. Шу Афшин ёрдамида Муътасим⁹¹ акаси Маъмун ҳам бостиролмаган Бобак қўзғолонини бостиради ва Бобакни Сомуррога келтириб ўлдиради. Афшиннинг ўсиб бораётган нуфузидан қўрққан халифа унинг Бобакни тутиб берганини ҳам хисобга олмайди, хиёнатда айблаб ўлдиради.

Тарихни яхши билган Зайдон тарихий асарлар ёзиш билан қаноат хосил қилмаган. У одамларга тарихни бадиий асарлар орқали тарғиб қилишни, уларни тарихдан ўрнак олишга даъват этишни маъқул кўрган. Шу сабабдан роман жанрини танлаган. Бундаги барча қаҳрамонлар тарихий шахслар бўлиб, баъзилари эса муаллифнинг ижодий маҳсулидир. Ёзувчининг ўзи шундай дейди: “Одамларнинг тарих ўқишига ва ундан фойдаланишига энг яхши восита тарихни роман шаклида оммалаштириш

89 Маъмун – аббосийлар халифаси (813-833)

90 Сурра Ман рао-“ Кўрган киши севинади”демақдир. Буни қисқартириб “Сомурро” ҳам аталади.

91 Муътасим – аббосийлар халифаси (833-841)

эканлигини тажрибада кўрдик. Бунда, хусусан, баъзи бир Европа ёзувчиларида кўрганмиздек, роман тарихдан устун турмаслиги керак, балки тарих романдан устун туриши ва романи бошқариш керак. Унинг “Фағона келини” асари кўпгина араб давлатларида тарқалиб, бир нечта тилларга таржима қилинган.

Хулоса қилиб айтадиган бўлсак Ж.Зайдоннинг тарихий романларини ўқиган ҳар бир ўқувчи, албатта ўзига маънавий озуқа олади. Унинг тарихий шахслар ҳақида фикрлари кенгайди. XXI аср ёшлари келажакдаги ютуқлари учун албатта ўз ўтмишларини билишлари зарурдир. “Ўтмишсиз келажак йўқдир”.

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*Нуруллаев О.У.
старший преподаватель
кафедра электротехники
ДПИ*

УМЕНЬШЕНИЕ РАСХОДА СЕРЕБРЯНОЙ ПАСТЫ ДЛЯ НАНЕСЕНИЯ ОБОГРЕВАТЕЛЬНОЙ ЦЕПИ АВТОМОБИЛЬНЫХ СТЕКЛ С ПРИМЕНЕНИЕМ МЕТОДА ПРЕДВАРИТЕЛЬНОГО ИЗМЕРЕНИЯ ПРОВОДИМОСТИ СМЕСИ

Аннотация: применяемые для трафаретной печати аппараты, машины и устройства включают как обычные приспособления и установки, используемые в кустарном производстве, так и большие машины для массового производства.

Ключевые слова: обогреватель, серебряная паста, техника, производство, фотополимерный, разъяснение, измерение электропроводности.

*Nurullaev O.U.
senior lecturer
Department of Electrical Engineering
DPI*

REDUCING THE CONSUMPTION OF SILVER PASTE FOR APPLYING THE HEATING CIRCUIT OF CAR GLASSES USING THE METHOD OF PRELIMINARY MEASUREMENT OF THE CONDUCTIVITY OF THE MIXTURE

Annotation: the devices, machines and devices used for screen printing include both conventional fixtures and installations used in handicraft production, as well as large machines for mass production.

Key words: heater, silver paste, technology, production, photopolymer, explanation, electrical conductivity measurement.

Краткая информация о функции обогревательной цепи автомобильного стекла. Получения обогревательной цепи автомобильного стекла производится нанесением серебряной пасты на стекла путем шелкографической печатью с последующей термообработкой. Краски характеризуются большим разнообразием. Применяются специальные краски для самых разнообразных областей.

Для нанесения обогревательной цепи задних стекол автомобиля применяются, серебряная паста с содержанием серебра в смеси 55% и 82%.

Применяемые для трафаретной печати аппараты, машины и устройства включают как обычные приспособления и установки, используемые в кустарном производстве, так и большие машины для массового производства [1].

Техника нанесения изображения и принцип работы шелкографической печати независимо от формы организации производства одинаковые.

Для упрощения анализа, расчета и синтеза цепей различной физической природы удобно использовать единый математический аппарат, использующий принцип прямой аналогии [2,3].

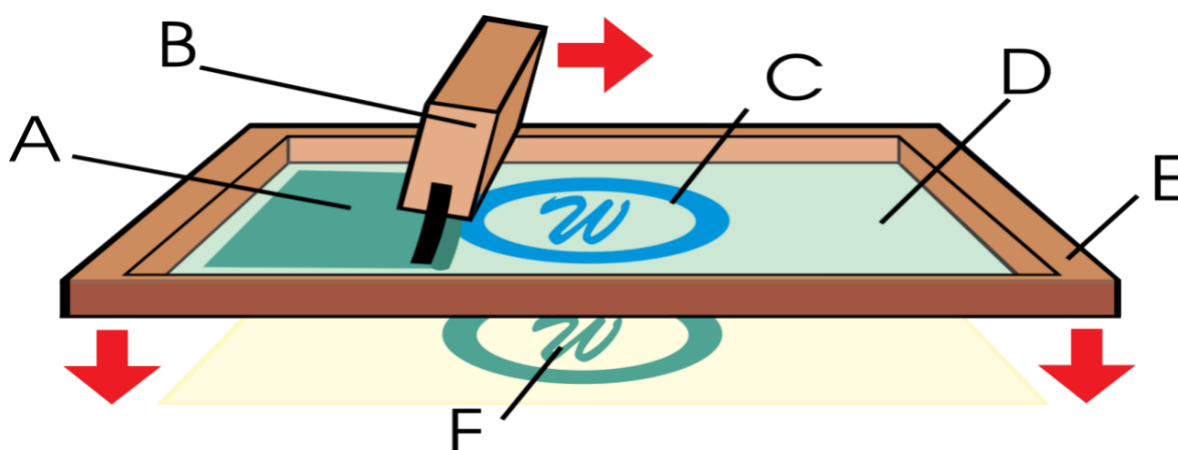


Рис. 1. Техника нанесения изображения методом шелкографии.

где: А- участок трафарета с нанесённым слоем краски; В - ракель; С- незащищённый фотополимерной эмульсией участок трафарета; D- участок трафарета без краски; Е- рама крепления трафарета; F- нанесённый рисунок.

Непосредственно само нанесение краски производят специальным инструментом, называемым ракель, при этом ракель проводят по верхней (ракельной) стороне сетки (трафарета), протягивая валик густой краски вдоль всего трафарета. Таким образом, краска дозированно проходит через ячейки сетки в тех местах, где незакрыта фотополимерной эмульсией. [4].

После шелкографической печати обогривательной цепи стекло незамедлительно подвергается термической обработке. Стекло в печи на вращающихся керамических валах конвейера постепенно передвигается, набирая в себе тепла до температуры 650°C. В печи под воздействием температуры серебряная паста проникает внутри стекла, что после того не смывается и не стирается. Перед выходом из печи стекло под воздействием тепла становится мягким, (пластичным). И попадает под пресс для придания геометрических форм, после чего подвергается закалке сжатым воздухом. Обогривательная цепь, подключенная к источнику электрического питания, нагревает стекло. При этом оттаивает снег и лед в зимнем времени, а также высушивает осадки пара в пасмурных погодных условиях. Это

явления улучшает видимость на заднем стекле автомобиля. (Кроме того, как уже мы сказали серебрянная паста широко применяется в электронике для изготовления электронной платы).

Подготовка серебрянной пасты к применению. Перед разъяснением подготовка серебрянной пасты к применению, сообщаем что электропроводимость и дизайн обогревательной цепи отдельного модели автомобиля разные. Требования к обогревательной цепи автомобильного стекла зависит от площади и наклона стекла на кузове, а также дополнительные технические требования. Например, наличие полоски антенны в цепи или отсутствие ее. Поэтому, в зависимости от электропроводимости и дизайна концентрация серебра в массе приготавливается по-разному. Производитель обычно отпускает пасты концентрацией серебра 55% и 80% в массе.

Проблемы возникающие при подготовке смеси, при хранения и при применения остатки смеси одного модели на другой модель:

1) Концентрация смеси серебрянной пасты должно быть количественно как можно точно в подготовки из серебрянной пасты 55% и 80%. Это не всегда удается из-за относительно большой вязкости серебрянной пасты. Поэтому часто концентрация смеси уточняется пробным путем после выпуска стекла измерением электропроводимости обогревательной цепи готовой продукции.

2) Невозможность определения концентрация остаточной смеси в случаях пропажи бирка на контейнере (на сосуде).

3) Остатки смеси определенного модели храниться до следующего выпуска такое же стекла. Обычно это срок около месяц. Это нарушает принцип оптимизации хранения сырья и материалов.

4) В случае применения остатки смеси одного модели на другой модель проводится пробным путем. То есть, добавления серебрянной пасты в смесь с нужным процентным содержанием производится по частям.

Решения проблемы планируем в трёх этапах:

1-этап. Проектирования и изготовления прибора (установка) для определения электропроводимости смеси серебрянной пасты. Для измерения проводимости смесей используем конструкции ориентированной к мостовому схеме. R1, R2, R3 подгоночные сопротивление. Подбирая сопротивление настроим выходные значение напряжение. В проектирования прибора основывались теорию электропроводности жидкостей под воздействием электрического тока. Известно, что электрический ток проходящий через жидкости ионизирует молекул на отрицательную (ионы) и положительную (катионы).

При этом отрицательно заряженные ионы движутся на сторону положительно заряженным ионам. Скорость движения ионов зависит от плотности носителей заряженных частиц в жидкости. То есть, плотность

тока можно выразить через заряд электрона e , количество зарядов n и дрейфовую скорость [5]:

$$\vec{j} = en\vec{v}$$

Из этого следует понимать, что скорость движения ионов определяют количества электрического тока в жидкости.

Значит в наших случаях:

- если в смеси содержания серебра больше, скорость движения ионов высокая и, следовательно, количества электрического тока больше;
- или наоборот.

Это объясняется тем что, связующий элемент из органического вещества пасты препятствует к движению ионов. Связующий элемент в пасте с одержанием серебра 55% больше чем пасте с содержанием серебра 82%. Из этого следует, что электропроводность пасты с содержанием серебра 82% выше чем, пасты с содержанием серебра 55%. Значит, заключительная информации о содержании серебра в смеси можно получить, измерив электропроводности смеси. Внизу показано схема измерения электропроводности смеси серебряной пасты [6,7].

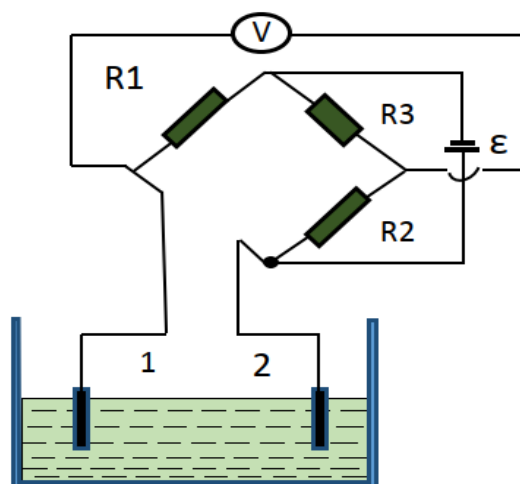


Рис. 2. Электрическая цепь, состоящая из источника ЭДС и сопротивления R_1 , R_2 , R_3 , 1,2-электроды.

2-этап. Благодаря, измерением электропроводности смеси разьяснённого на 1-этапе, появляется возможности заранее получить данные о концентрации смеси.

Эти данные дают:

- возможность над управлением подготовки смеси по определенному Расчету;
- составления алгоритма расчета количества смеси с учетом концентрации и веса остаточной смеси любого модели автостекла в электронном виде.

3-этап. Целью, высвобождения время операторов линии затрачиваемые на расчет концентрации смеси и упрощения подготовки

смеси составляется справочные данные для определения количества изготовления смеси с учетом партии выпуска изделия, охватывающий все возможные варианты приготовления [8].

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*Нусратова З.Б.
ассистент
Университет экономики и педагогики
Хайитов Ш.
студент
экономический факультет
Университет экономики и педагогики*

ИННОВАЦИИ КАК КЛЮЧ К УСПЕХУ В СОВРЕМЕННОМ ПРЕДПРИНИМАТЕЛЬСТВЕ

Аннотация. В данной статье рассмотрены теоретические основы инновационного развития предпринимательства и мнения о его необходимости. Представлены мнения мировых и отечественных экономистов по данному вопросу.

Ключевые слова: инновации, предпринимательство, теория, технологии, наука и техника, продукт, рынок, эффективность, производство, услуга, занятость, маркетинг.

*Nusratova Z.B.
assistant
University of Economics and Pedagogy
Khaitov Sh.
student
Faculty of Economics
University of Economics and Pedagogy*

INNOVATION AS THE KEY TO SUCCESS IN MODERN ENTREPRENEURSHIP

Annotation. This article discusses the theoretical foundations of innovative development of entrepreneurship and opinions on its necessity. The opinions of world and domestic economists on this issue are presented.

Key words: innovation, entrepreneurship, theory, technology, science and technology, product, market, efficiency, production, service, employment, marketing.

Процесс производства товаров и оказания услуг в мировой экономике соответствует доле 75-80% от общего объема международных экономических отношений, что зависит от создания предпринимательства и бизнес-среды, основанной на инновационном развитии.

Внешняя торговля является одной из традиционных и наиболее развитых форм международных экономических отношений в ходе мирового развития. Развитие внешней торговли и международной торговли в каждой стране осуществляется на основе законов. В этом процессе одним из актуальных вопросов является тот факт, что инновационное развитие набирает обороты во всех развитых странах мира.

Экономические реформы в Узбекистане напрямую связаны с институциональными изменениями во всех отраслях экономики. Объявление 2024 года «Год молодежи и поддержки бизнеса» в нашей стране доказало улучшение благосостояния нашего народа, увеличение занятости молодежи, создание широких возможностей для развития предпринимательства. В настоящее время в условиях мировой интеграции и глобализации необходимо привлекать инновации к развитию предпринимательства в стране.

Анализ состояния теории инноваций и условий организации управления инновационными процессами на предприятиях показывает, что эффективность инновационной деятельности зависит от того, насколько хорошо она организована. Организация процессов инновационной деятельности на конкретном предприятии становится одной из серьезных проблем. В настоящее время разработано множество моделей организации инновационного процесса, каждая из которых может использоваться полностью или частично в зависимости от уровня развития предприятия.

Теоретико-методологические основы инновационной деятельности тщательно изучены экономистами, ими высказаны различные мнения. Русский учёный Н.Д. Кондратьев впервые выразил идеи, полученные в результате его исследований, в работе «Теория длинных волн»⁹² в области развития теории инноваций. Американский экономист Дж. Брайт⁹³ - Он выдвинул идеи, что инновационный процесс – это экономическая деятельность, направленная на коммерциализацию инноваций, сочетающая в себе науку и технику, предпринимательство и менеджмент. По его словам, процесс инноваций включает в себя все этапы от зарождения идеи до процесса коммерческой реализации. Другой российский учёный Б.А.Макаренко⁹⁴ Сущность инноваций полно и всесторонне объяснена в их работах. По тарифу он дал:

Содержание и сущность инновации:

- выделение средств в экономику в целях обеспечения генерационного обмена оборудованием и технологиями;
- эффективное использование новой техники и технологий, обеспечивающих научно-техническое развитие;

92 Н.Д. Кондратьев Теория «длинных волн».

93 Ж.Брайт

94 Б.А.Макаренко

- разработка новых идей, синтез, создание новых теорий и моделей и их реализация.

Все мы знаем, что инновационное развитие предприятий является необходимым условием обеспечения конкурентоспособности на внутреннем и внешнем рынках. В связи с этим необходимо обратить особое внимание на следующее мнение П. Друкера. По его мнению, “поскольку основной целью бизнеса является привлечение клиентов, у предприятия есть две основные функции: действующий маркетинг и инновационная”⁹⁵.

Конечно, темпы и подходы мировых экономистов к инновациям одинаковы, и мы видим оригинальность в их исследованиях. В развитии инновационной деятельности и инновационных технологий наряду с мировыми учёными учёные-экономисты нашей страны провели ряд исследований. По мнению М.Саидова, «инновационная деятельность характеризуется эффективностью инвестиций в развитие экономики, она представляет собой процесс замены техники и технологий предыдущего поколения в производстве более эффективными, экологически чистыми и ресурсосберегающими средствами». производства. «Этот процесс включает деятельность от возникновения идеи, определения и реализации ее цели до организации производства, выпуска продукции, ее реализации и получения экономической выгоды».⁹⁶ В связи с большим количеством подходов к определению основных категорий инновационной деятельности необходимо сформировать единый подход к трактовке терминов инновационного менеджмента. Исходя из этого, уместно высказать следующее мнение, принимая во внимание различные мнения, высказываемые по поводу теории инновационной деятельности.

Инновации - это результат фундаментальных и прикладных исследований, разработок и экспериментов в сфере деятельности, направленных на повышение эффективности. Новости могут быть в следующих формах: открытия; товарные знаки; рационализаторские предложения; новая улучшенная документация по продукту или технологии; секрет производства; научные подходы или различные принципы; результаты маркетинговых исследований и т.д.

Основная цель - превратить ее в форму инновации, т. е. в процесс завершения инновационной деятельности и регулярного продолжения распространения инноваций с положительным результатом. Инновационная деятельность – это результат внедрения инноваций с целью изменения объекта управления и повышения эффективности в экономическом, социальном, экологическом, научно-техническом и других направлениях.

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Необходимо подчеркнуть некоторые различия в теории и практике объяснения понятия инновационной деятельности в науке. Основная причина этого заключается в том, что в современных условиях инновационная деятельность является одним из основных элементов системы управления инновациями. Поэтому оно оказывает большое влияние на его структуру, функции, методы и инструменты управления, цели деятельности. Однако для формирования полного представления об инновационной деятельности как объекте инноваций необходимо детально изучить следующие моменты:

- во-первых, это процесс взаимозависимого развития науки и техники, основанный на объективных экономических законах. Это процесс, направленный на решение проблем социально-экономического развития общества путем создания, распространения и применения новых научных знаний в экономической практике, и предполагает коренное обновление производственной базы;

- во-вторых, это использование совокупности элементов, составляющих инновационный потенциал производства. Рассмотрены процессы и мероприятия в сфере эксплуатации высококвалифицированных научных и производственных кадров, а также организационная, социальная, экологическая и правовая деятельность, стимулирующая заинтересованность работников в результатах инновационной деятельности предприятия.

Таким образом, в целом основой инновационной деятельности являются фундаментальные теоретические исследования. Результатом таких исследований является научное открытие ранее неизвестных законов, объективно существующих явлений и процессов. В дальнейшем в результате изучения возможностей применения новых знаний на практике разрабатываются методы и формы их материализации. В этих процессах после принятия решения о распространении инновации она выходит на новый уровень качества и становится инновацией. Процесс вывода инновационных разработок на рынок будет состоять из деятельности по непосредственной коммерциализации. Временной интервал между появлением инновации и ее превращением в инновацию на практике называется инновационным лагом.

Инновационная деятельность направлена на применение научных, научно-технических результатов и интеллектуального потенциала с целью получения нового или улучшенного продукта (услуги). В рыночных условиях основными компонентами инновационной деятельности являются идеи, инновации и присвоенные инвестиции, составляющие поле инновационной деятельности. На большинстве предприятий реального сектора экономики управление инновационной деятельностью направлено на достижение будущих результатов непосредственно посредством инновационного процесса.

Инновационный процесс – очень широкое понятие, и его уместно трактовать по-разному с разных точек зрения. Прежде всего, это осуществление научных исследований, инновационной производственной и маркетинговой деятельности на основе установленных требований. Во-вторых, уровень новизны можно рассматривать как временные этапы жизненного цикла. В-третьих, разработка и распространение новых видов продукции или услуг будет состоять из финансовых и инвестиционных процессов. В данном случае он позиционирует себя как инновационный проект. Под основой инновационной деятельности мы понимаем процесс превращения научных знаний в инновации, то есть последовательность событий, в которых инновационная деятельность включает в себя процессы превращения идеи в конечный продукт.

Инновационный процесс не заканчивается только внедрением инновации, а с внедрением инновации в практику получаемая продукция совершенствуется и, как следствие, приводит к повышению ее эффективности. Инновационную деятельность можно определить на основе следующих структур. Фундаментам – это потребность в исследованиях, прикладных исследованиях, опыте, строительных работах, первичном приобретении, распространении, использовании инноваций, совершенствовании инноваций и новых фундаментальных результатах. Каждый этап имеет свои особенности, определяющие необходимость использования разных форм и методов управления. Но только интеграция этих этапов обеспечит успех инновационных процессов. Следует также учитывать, что совершенствование механизма управления на отдельном этапе может не служить повышению эффективности результата всей инновационной деятельности.

Основные результаты на одних этапах теряют свою ценность на других и могут не служить улучшению всего производственного процесса. Вот почему важно уделять внимание формированию взаимной связи этапов, обеспечивающей непрерывность, гибкость и динамику всех процессов. Проведение первичных маркетинговых исследований и анализа рынка являются очень важными факторами повышения эффективности инновационной деятельности.

В управлении инновационными процессами оно включает все этапы (циклы управления) от формирования научно-технических идей до их коммерческой реализации. В результате период времени от создания каждой инновационной идеи до ее реализации называется инновационным циклом.

Эффективность реализации инновационных процессов зависит от многих факторов. То есть, к их числу относятся обеспечение качества управления, взаимной совместимости работы каждого отдельного звена системы управления, информационно-методическое обеспечение. Когда все вышеперечисленные элементы будут сформированы и согласованы,

система управления инновационной деятельностью будет иметь определенные научно-технические результаты и сократит период их развития. Организация инновационной деятельности объединяет все элементы процесса управления в единую систему и формирует сам инновационный процесс создания и реализации инноваций. Возможность создания и развития эффективных систем управления инновационной деятельностью на предприятии зависит от многих факторов, таких как степень сформированности производственных процессов, состояние систем и механизмов управления, типы и направленность организационной структуры управления, экономические тенденции инновационной политики и другие.

В заключение следует отметить, что сущность инновационного процесса проявляется в том, что он представляет собой цепочку целенаправленных действий по инициированию инноваций, разработке новых продуктов и операций, их реализации и распространению на рынке. Инновационный процесс включает в себя семь элементов, объединение которых в цепочку в единой последовательности и составляет структуру инновационного процесса. Лучше поддерживать временную монопольную прибыль. Эффект отрицания избыточности заставляет фирмы принимать агрессивные инвестиционные решения. Потому что ожидаемый доход на самом деле будет выше. Из-за этого эффекта избыточности распространение знаний ускоряется благодаря программным технологиям и увеличению прямых инвестиций со стороны транснациональных компаний.

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*Пакирдинов А.Б.
Пулатов Б.Т.
кафедра дерматовенерологии
Андижанский государственный медицинский институт
Узбекистан, Андижан*

ВЛИЯНИЕ ЛАЗЕРНОЙ ТЕРАПИИ С УЧЁТОМ КЛИНИЧЕСКОЙ КАРТИНЫ У БОЛЬНЫХ ВУЛЬГАРНЫМ ПСОРИАЗОМ

Аннотация. В результате проведенных исследований было выявлено, что у всех больных в период обострения вульгарной формы псориаза фолликулиновая фаза менструального цикла характеризуется низким содержанием в крови ЛГ, эстрадиола, лютеиновая - низкой концентрацией ЛГ.

Ключевые слова: вульгарный псориаз, магнито - инфракрасная свето - лазерная терапия, лютеинизирующий гормон, фолликулостимулирующий гормон, эстрадиол.

*Pakirdinov A.B., doctor of medical sciences
professor
head of the department of dermatovenereology
Pulatov B.T.
Andijan State Medical Institute
Uzbekistan, Andijan*

THE AFFECT OF LASER THERAPY TAKING INTO ACCOUNT THE CLINICAL PICTURE IN PATIENTS WITH VULGAR PSORIASI

Annotation. As a result of the studies, it was revealed that in all patients during the period of exacerbation of the vulgar form of psoriasis, the follicular phase of the menstrual cycle is characterized by a low content of LH and estradiol in the blood, and the luteal phase is characterized by a low concentration.

Keyword: vulgar psoriasis, laser therapy, luteinizing hormone, follicle – stimulating hormone, estradiolum.

Введение

Проблема псориаза приобретает все большее значение в современной медицине. Рост заболеваемости в последнее десятилетие. Хроническое, с частыми рецидивами, течение, недостаточная эффективность существующих методов лечения и профилактики сегодня ставят это заболевание в ряд наиболее актуальных проблем медицины. В связи с этим понятен большой интерес, который проявляется к не медикаментозным

методам терапии [1, 2, 3, 4, 5, 6, 7, 11, 12, 13, 14, 16, 18]. Одним из таких методов лечения является – магнито - инфракрасная свето - лазерная терапия.

Важную роль в регуляции иммунобиологических и аллергических процессов играют нейроэндокринные механизмы, в том числе и гипофизарно - гонадная система, посредством которой реализуются многие защитно-приспособительные механизмы в условиях действия на организм различных аллергенов. В современной литературе практически отсутствуют сведения о состоянии репродуктивной эндокринной системы при вульгарной формы псориаза у женщин, хотя связь заболевания с функциональным состоянием желез внутренней секреции не вызывает сомнений [9, 10]. Эта связь подтверждается как зависимостью течения заболевания от функционального состояния гипофизарно-яичниковой системы (пубертатный возраст, менструации, беременность, роды и пр.).

Учитывая недостаточную эффективность многих современных методов лечения вульгарной формы псориаза, актуальным является изыскание новых, патогенетические направленные методы терапии этого заболевания. Магнито - инфракрасная свето - лазерная терапия, в основе лечебного действия которой лежат нейрорефлекторные механизмы, оказывает нормализующее влияние на центральную нервную систему и её вегетативное звено, на аллергические и иммунологические процессы [14, 17], однако работ об использовании этого метода у больных вульгарной формы псориаза мало.

Цель исследования - является изучение функционального состояния гипофизарно-яичниковой системы на фоне магнито - инфракрасной свето - лазерной терапии у больных вульгарной формы псориаза.

Материалы и методы исследования. В разработку было включено 42 больных вульгарной формы псориаза, в возрасте от 15 до 40 лет. О функциональном состоянии гипофизарно-яичниковой системы судили по содержанию в плазме крови в обеих фазах менструального цикла гипофизарных гормонов - лютеинизирующий гормон (ЛГ), фолликулостимулирующий гормон (ФСГ), а также половых стероидных гормонов эстрадиола.

Определение содержания гонадотропных и женских половых стероидных гормонов – ФСГ, ЛГ и эстрадиола в плазме крови проводили иммунологическим методом количественного определения гормонов - одним из наиболее чувствительных, специфических и универсальных. Чувствительность этого метода позволяет определить содержание гонадотропинов до 0,2 нг/мл. Этот метод предложен в 1960 г. R.S.Valow, S.A.Berson.

Задачей лазерной терапии при лечении вульгарной формы псориаза реализуется следующее направление: уменьшение возбудимости чувствительных рецепторов в зоне поражения, активация регенераторных и

противовоспалительных процессов, устранение явлений эндогенной интоксикации, восстановление иммунной активности.

В план лечебных мероприятий входит воздействие непосредственно на область поражения, облучение зон сегментарной иннервации в соответствии с локализацией патологического очага. Зоны сегментарной иннервации отдельных частей тела облучение области печени, легких в проекции полей Кренига (область верхушек легких). Режимы облучения лечебных зон при лечении вульгарной формы псориаза проекционных зон почек.

Процедуры магнито - инфракрасной свето - лазерной терапии проводили аппаратом - «МИЛТА – Ф - 01» (рис. 1).



Рис. № 1.

Проведение процедуры магнито - инфракрасной свето - лазерной терапии больным вульгарной формы псориаза представлены в таблице № 1.

Проведение процедуры магнито-инфракрасной свето-лазерной терапии больным вульгарной формы псориаза

Таблица № 1.

Зона облучения	Частота, Гц	Мощность светодиодов, Вт	Экспозиция, мин.
Проекция почек	600	30	2
Позвоночник, область сегментарной иннервации	150	30	2
Верхушки легких	150	30	2

Параметры воздействия: частота 150 - 600 Гц, мощность светодиодов 30 Вт, экспозиция на каждую зону – по 2 минуты, на курс – 10 - 15 процедур (одна процедура в день в первой половине дня).

Дополнительно больные вульгарной формы псориаза получали: витаминотерапию группы «В» (В-1, В-6, В-12), антигистаминные и мочегонные препараты, препарат Глицерон, наружно – крем – бальзам «Облепиха с мумиё». Мазь наносилась на пораженную поверхность 2 раза в

день на протяжении всего периода проведения магнито - инфракрасной свето - лазерной терапии.

Результаты их обсуждения.

В процессе комплексного лечения с использованием лазерной терапии уже после 6 - 8 процедур отмечалось купирование прогрессирования процесса, рассасывание папулезных элементов, а также отмечалось уменьшение зуда кожи. После 10-15 процедуры комплексного лечения с использованием магнито - инфракрасной свето - лазерной терапии отмечалось полное купирование прогрессирования процесса, регресс папулезных высыпаний, практически прекратился зуд кожи.

В период настоящего обследования все больные вульгарной формы псориаза в динамике находились под наблюдением врача - гинеколога. Несмотря на выявленную зависимость течения вульгарной формы псориаза от функционального состояния репродуктивной системы лишь у 12 (28,5%) женщин при клиническом обследовании была обнаружена дисфункция яичников.

Для более объективной оценки функционального состояния гипоталамико-яичниковой системы при вульгарной форме псориаза, мы сочли необходимым отдельно проанализировать результаты содержания в крови гонадотропных и половых гормонов у 12 больных с клиническими проявлениями дисфункции яичников. В таблице 1 - 3 приведены результаты определения в плазме крови в обеих фазах менструального цикла ЛГ, ФСГ и эстрадиола у 30 женщин, страдающих вульгарной формы псориаза и у 12 больных вульгарной формы псориаза с клиническими проявлениями дисфункции яичников в зависимости от периода заболевания.

1. Лютеинизирующий гормон гипофиза (ЛГ). У всех больных в период обострения заболевания концентрация лютеинизирующего гормона гипофиза в плазме крови была достоверно снижена как в фолликулиновой ($P < 0,05$), так и в лютеиновой ($P < 0,05$) фазе менструального цикла (таблица № 2). Степень снижения уровня ЛГ в плазме крови в обеих фазах менструального цикла у всех больных вульгарной формы псориаза была примерно одинаковой.

Таблица № 2.

Концентрация лютеинизирующего гормона гипофиза (нМЕ/мл) в плазме крови у больных вульгарной формы псориаза ($M \pm m$)

Больные	Фаза менструального цикла			
	Фолликулиновая		Лютеиновая	
	обострение	ремиссия	обострение	ремиссия
Вульгарная форма псориаза	$5,8 \pm 0,60$ $P < 0,001$	$9,9 \pm 0,43$ $P < 0,001$	$5,6 \pm 0,36$ $P < 0,01$	$8,2 \pm 0,61$ $P < 0,01$
Норма	$16,0 \pm 0,22$		$12,8 \pm 0,48$	

Примечание: P- достоверность различий между показателями периода обострения и ремиссии вульгарной формы псориаза.

2. Фолликулостимулирующий гормон гипофиза (ФСГ).

Концентрация ФСГ в фолликулиновой фазе менструального цикла при обострении вульгарной формы псориаза у всех больных достоверно не отличалось от нормы. В период ремиссии наблюдалось увеличение концентрации ФСГ ($P < 0,05$) по отношению к периоду обострения, однако его количество не выходило за пределы нормальных значений. В лютеиновой фазе уровень ФСГ в период обострения вульгарной формы псориаза достоверно превышал норму, а в период ремиссии его концентрация ещё более возрастала ($P < 0,001$). При этом существенной разницы в содержании ФСГ у больных обнаружено не было (таблица № 3).

Таблица № 3.

Концентрация фолликулостимулирующего гормона (нМЕ/мл) в плазме крови у больных вульгарной формы псориаза ($M \pm m$)

Больные	Фаза менструального цикла			
	Фолликулиновая		Лютеиновая	
	Обострение	ремиссия	Обострение	ремиссия
Вульгарная форма псориаза	18,0±0,70 $P < 0,05$	21,8±0,69 $P < 0,05$	11,3±0,71 $P > 0,05$	13,07±0,97 $P > 0,05$
Норма	14,3±0,29		7,5±0,63	

Примечание: P- достоверность различий между показателями периода обострения и ремиссии вульгарной формы псориаза.

3. Эстрадиол. Содержание эстрадиола в плазме крови у всех больных вульгарной формы псориаза была значительно снижена в обеих фазах менструального цикла. Наибольшая степень его снижения отмечалось при обострении заболевания. При этом наименьшее содержание эстрадиола - в фолликулиновой и лютеиновой фазах - наблюдалось у женщин с сопутствующей дисфункцией яичников. В период ремиссии заболевания у всех больных недостоверно возрастала концентрация эстрадиола по сравнению с данными в период обострения (таблица № 4).

Таблица № 4.

Концентрация эстрадиола (нмоль/л) в плазме крови у больных вульгарной формы псориаза ($M \pm m$)

Больные	Фаза менструального цикла			
	Фолликулиновая		Лютеиновая	
	обострение	ремиссия	обострение	ремиссия
Вульгарная форма псориаза	6,4±0,09 $P < 0,05$	8,4±0,23 $P < 0,05$	9,2±0,54 $P < 0,05$	7,6±0,67 $P < 0,05$
Норма	0,32±0,001		0,62±0,02	

Примечание: P- достоверность различий между показателями периода обострения и ремиссии вульгарной формы псориаза.

Вывод. В результате проведенных исследований было выявлено, что у всех больных в период обострения вульгарной формы псориаза фолликулиновая фаза менструального цикла характеризуется низким

содержанием в крови ЛГ, эстрадиола, лютеиновая - низкой концентрацией ЛГ. В период ремиссии заболевания у всех больных в фолликулиновой фазе менструального цикла сохранялась выраженная гипоэстрогения.

Полученные данные свидетельствуют о наличии у больных вульгарной формы псориаза дисфункции гипофизарно-яичниковой системы, проявляющиеся недостаточностью фолликулярного аппарата яичников, а также лютеиновой их недостаточностью. В обеих фазах менструального цикла отмечена недостаточность регулярных механизмах стероидогенеза.

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*Равшанов А.Д., к.э.н.
доцент
кафедра «Инновационная экономика»
КарИЭИ*

ПУТИ УСТОЙЧИВОГО РАЗВИТИЯ СЕЛЬСКОГО ХОЗЯЙСТВА НА ОСНОВЕ "ЗЕЛЕННОЙ ЭКОНОМИКИ"

Аннотация. В этой статье сельское хозяйство базируется на способах обеспечения продовольственной безопасности населения страны посредством устойчивого развития зеленой экономики.

Ключевые слова: сельское хозяйство, экономика, инновации, инновационная деятельность, производство, продовольствие, конкуренция, конкурентоспособность, конкурентоспособность.

*Ravshanov A.D., Ph.D.
associate professor
Department of Innovative Economics
KarIEI*

WAYS FOR SUSTAINABLE DEVELOPMENT OF AGRICULTURE BASED ON THE "GREEN ECONOMY"

Abstract. This article reveals ways to ensure food security of the country's population through sustainable development of agriculture and green economy.

Key words. Agriculture, green economy, innovation, innovative activity, production, food, competition, competitiveness.

В условиях модернизации и диверсификации экономики, развития сельского хозяйства на основе «зеленых технологий», максимального сбережения природного капитала, рационального использования земельных и водных ресурсов, что позволяет быстро адаптироваться к изменениям климата, резко увеличить объема производства экологически чистых продуктов питания, в настоящее время являются актуальными.

В развивающихся странах сельское хозяйство является основным источником занятости и единственным источником дохода для бедных слоев населения. «Зеленое» сельское хозяйство играет важную роль в снижении уровня бедности в мире. Использование «зеленых» методов ведения сельского хозяйства помогает совместно решать проблемы деградации окружающей среды и бедности.

Цель 2 Целей устойчивого развития ООН — «Ликвидация голода, обеспечение продовольственной безопасности, улучшение потребления и содействие устойчивому сельскому хозяйству», и сельское хозяйство играет

важную роль в достижении этой цели. Более 815 миллионов человек в мире недоедают, большинство из них живут в развивающихся странах и составляют 12,9% населения.⁹⁷

За последние годы в результате комплекса мер по усилению продовольственной безопасности в нашей стране Узбекистану удалось укрепить свои позиции в мире и постепенно улучшить свои позиции в мировых рейтингах. В 2019 году Республика Узбекистан заняла 49-е место среди 119 стран мира по Глобальному индексу голода, достигнув «умеренного» уровня с индексом 10,798.

ПФ-60 Президента Республики Узбекистан от 28 января 2022 года «О Стратегии развития нового Узбекистана на 2022-2026 годы»⁹⁹ и ПФ-158 от 11 сентября 2023 года «О Стратегии Узбекистана до 2030 года»¹⁰⁰ и особое внимание уделено в Указе № ПФ-6159 от 3 февраля 2021 г. «О дальнейшем развитии системы знаний и инноваций в сельском хозяйстве и предоставлении современных услуг»¹⁰¹.

В условиях цифровой экономики инновационная деятельность является основным фактором устойчивого развития сельского хозяйства. Максимальное использование этого фактора – единственный способ обеспечить устойчивое развитие агропромышленного комплекса нашей страны. В условиях ускорения социально-экономических изменений и усиления глобализации мировой экономики нашей стране необходимо в краткосрочной перспективе осуществить быстрый переход на инновационный путь развития сельского хозяйства, развивать эту стратегически важную отрасль экономики на качественно новой технической и технологической базе, отвечающая требованиям времени. В противном случае агропромышленный комплекс отстанет в развитии и не сможет обеспечить свою конкурентоспособность.

В настоящее время основной проблемой, вызывающей споры в научных кругах, является не увеличение объема сельскохозяйственной продукции, а проблема того, как его увеличить:

- «озеленение» сельского хозяйства, в свою очередь, устойчивое развитие сельских территорий;
- повысить уровень и качество жизни сельского населения;
- модернизация сельскохозяйственной технологической базы;
- стимулировать инновационное развитие агрозонального комплекса;

⁹⁷ <https://www.un.org/sustainabledevelopment/ru/hunger/>

⁹⁸ Вахабов А. В., Хаджибакиев Ш. Х. Зеленая экономика: Учебник. Ташкент.: «Университет», 2020. -262 с.

⁹⁹ Указ Президента Республики Узбекистан от 28 января 2022 года № ПФ-60 «О Стратегии развития нового Узбекистана на 2022-2026 годы».

¹⁰⁰ Указ Президента Республики Узбекистан от 11 сентября 2023 года «О Стратегии Узбекистана до 2030 года» № ПФ-158.

¹⁰¹ Указ Президента Республики Узбекистан от 3 февраля 2021 года № ПФ-6159 «О дальнейшем развитии системы знаний и инноваций в сельском хозяйстве и предоставлении современных услуг»

- повышение конкурентоспособности сельскохозяйственной продукции;

- внедрение методов сертификации сельскохозяйственной продукции на уровне международных требований;

- создание новых рынков экологически чистой продукции;

- экспорт органических продуктов питания.

За последние годы в Республике Узбекистан была проведена значительная работа по ускоренному развитию сельского хозяйства и углублению экономических реформ в отрасли.

Среди них Указом Президента Республики Узбекистан №ПФ-5853 от 23 октября 2019 года принята «Стратегия развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» и в ней укрепление продовольственной базы страны. безопасности, развития современных систем государственного управления в сетевом, аграрном секторе, был определен ряд задач, таких как постепенная диверсификация государственных расходов, направленных на поддержку¹⁰².

Одним из приоритетов, определенных в «Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы», является «...рациональное использование природных ресурсов, включающее рациональное использование земельных и водных ресурсов, лесного фонда, и совершенствование системы охраны окружающей среды». В этой стратегии до 2030 года поставлены такие задачи, как сокращение количества выбросов парниковых газов в сельском хозяйстве на 50% от уровня 2016 года, расширение площади орошаемых сельскохозяйственных угодий водосберегающими технологиями на 32%, а также охваченной площади. лесами на 30%¹⁰³ (табл. 1).

1-таблица

Целевые индикаторы реализации Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы¹⁰⁴[8]

Индикаторы	Основа 2018 год	2021 г.	2025 г.	2030 г.
Процент недоедающих среди населения, %	6,3	5,0	3,0	0,0
Сокращение выбросов парниковых газов в сельском хозяйстве, в процентах к 2016 г.	15 740 гигаграмм* (2016 г.)	10	30	50
Увеличение количества фермеров, использующих передовые методы ведения сельского хозяйства и охраны	2	5	10	15

¹⁰² Указ Президента Республики Узбекистан от 23 октября 2019 года «Стратегия развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» №ПФ-5853.

¹⁰³ Указ Президента Республики Узбекистан от 23 октября 2019 года «Стратегия развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» №ПФ-5853.

¹⁰⁴ Указ Президента Республики Узбекистан от 23 октября 2019 года «Стратегия развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» №ПФ-5853.

окружающей среды и внедряющих международную систему управления качеством, %				
Расширение площадей орошаемых сельскохозяйственных угодий, на которых внедрены водосберегающие технологии, %	1,7	10	20	32
Сокращение доли сильнозасоленных земель, %	45	43	41	37
Увеличение лесных площадей, в процентном отношении по сравнению с 2018 годом	3,2 млн.га	20	25	30
Расширение площадей орехов (фисташки, грецкие, миндаль) в процентах по сравнению с 2018 годом.	11 634 га	10	15	18
Увеличение расходов государственного бюджета на сельскохозяйственные исследования (в процентах от валовой продукции сельского хозяйства)	0,02	0,05	0,5	1,0

* Гигаграмм (англ. gigagram — Гг) — единица веса, равная 10⁹ г; используется в научных исследованиях, например, при измерении количества выбросов, выбрасываемых в атмосферу.

Согласно стратегии перехода к «зеленой экономике» Республики Узбекистан, в аграрном секторе к 2030 году будут решены следующие задачи: реализация определена¹⁰⁵

- восстановление пастбищ из производственного цикла и внедрение механизмов устойчивого управления пастбищами;
- внедрение органических методов ведения сельского хозяйства;
- пересадка посевов с целью обеспечения постоянного покрытия поверхности пахотных земель;
- диверсификация состава посевов (расширение посадок многолетних деревьев и многолетних трав);
- привлечение инвестиций в производство и переработку, а также создание цепочки добавленной стоимости сельскохозяйственной и пищевой продукции;
- надлежащее хранение/переработка органических отходов животноводства;
- предотвращение загрязнения водных источников сельскохозяйственными отходами;
- Выращивание высокопродуктивных видов (сортов) скота и растений, устойчивых к засолению, засухе и другим опасным явлениям и

¹⁰⁵ Указ Президента Республики Узбекистан от 23 октября 2019 года «Стратегия развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» №ПФ-5853.

рискам, сохранение генофонда местных видов скота и сортов растений, а также генофонда диких предков культурных растений..

За счет «зеленой экономики» сельского хозяйства формируются конкурентные преимущества сельскохозяйственных предприятий, а главное, повышается гибкость и возможности оперативно реагировать на все изменения рынка:

➤ результаты сравнения различных вариантов современных технологий в агропромышленном комплексе показывают, что наименьшая обработка почвы;

➤ экономия текущих и инвестиционных затрат;

➤ позволяет производить продукцию с гораздо меньшими затратами и получать больший доход с одного гектара земли под каждую культуру при том же уровне цен;

➤ смена инновационных технологий в сельском хозяйстве;

➤ эффективное использование знаний в технологической системе предприятия при переходе на новые ресурсосберегающие технологии;

➤ необходимо разработать алгоритмы процессов внедрения технологических и организационно-экономических инноваций на сельскохозяйственных предприятиях.

Использованные источники:

1. <https://www.un.org/sustainabledevelopment/ru/hunger/>

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*Рамазонов Ш.У.
стажер-преподаватель
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт
Рамазонов З.У.
аспирант
Международный азиатский университет*

СОЦИАЛЬНО-ЭКОНОМИЧЕСКАЯ СУЩНОСТЬ ПОНЯТИЯ БЕДНОСТИ И ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ЕЕ КЛАССИФИКАЦИИ

Аннотация. Основной целью проводимых в Республике Узбекистан экономических реформ является достижение стабильности и положительных темпов экономического развития. Следует отметить, что все стороны социально-трудовых отношений оказывают непосредственное влияние на образ жизни и доходы населения, на появление нуждающихся в социальной защите богатых, бедных и бедных.

Ключевые слова: уровень жизни, благосостояние, социальная защита, потребление, бедность.

*Ramazonov Sh.U.
intern-teacher
Department of "Innovative Economics"
Karshi Engineering and Economic Institute
Ramazonov Z.U.
graduate student
Asia International University*

THE SOCIO-ECONOMIC ESSENCE OF THE CONCEPT OF POVERTY AND THE THEORETICAL BASIS OF ITS CLASSIFICATION

Abstract. The main goal of the economic reforms carried out in the Republic of Uzbekistan is to achieve stability and positive rates of economic development. It should be noted that all aspects of social and labor relations have a direct impact on the lifestyle and income of the population, on the emergence of those in need of social protection, the rich, the poor and the poor.

Key words: standard of living of the population, well-being, social protection, consumption, poverty.

Входитъ. С социальной точки зрения государство проводит социальную политику, направленную на создание условий, обеспечивающих достойную жизнь и свободное развитие человека. Одним

из основных направлений этой политики является поощрение трудовой и предпринимательской активности, обеспечение своим трудом экономического благополучия семьи каждого трудоспособного человека, создание возможностей для обеспечения формирования сбережений и их эффективного инвестирования. а уровень жизни и качество населения будет повышаться. Социально-трудовые отношения, связанные с трудовой деятельностью и ее результатами, оказывают непосредственное влияние на формирование заработной платы и доходов. Развитие трудовых отношений приводит к появлению новых форм социального партнерства, развитию социальной защиты, повышению удовлетворенности трудом. На этапе углубления рыночных отношений центральной проблемой станет уровень жизни населения и расслоение доходов. От их решения во многом будут зависеть направление и темп дальнейших фундаментальных изменений и, как следствие, политическая стабильность в обществе. В свою очередь, решение этих проблем требует четко разработанной политики доходов.

Поскольку теоретическое изучение таких понятий, как бедность и нищета, в первую очередь определяется уровнем жизни населения, потребляемыми им деликатесами и уровнем жизни в целом, в этой первой главе мы будем изучать также уровень жизни населения. населения, мы сочли допустимым изучать.

Уровень жизни населения – сложное и многогранное понятие, характеризующееся совокупностью существующих социально-экономических условий жизни и деятельности людей. Исследование уровня жизни населения актуально для всех стран, независимо от уровня социально-экономического развития общества, особенно для межстрановых сопоставлений.

Существуют разные составляющие уровня жизни населения (табл. 1.1).

Таблица 1.1.

Компоненты уровня жизни населения

Концепция ООН	Шведская модель
Здоровье	Работа и условия труда
Принимать пищу	Экономические возможности
Образование	Политическая возможность
Занятость и условия труда	Школьное образование
Условия проживания	От здоровья и медицинской помощи использовать
Социальное обеспечение	Социальные возможности (семья и семейный формирование отношений)
Одежда	Размещение

Отдых и свободное время	Принимать пищу
Права человека	Свободное время и его проведение

Важнейшими аспектами изучения уровня жизни населения являются:

- оценка основных качественных характеристик человека, который считается участником экономической деятельности (способность вести здоровый образ жизни с целью достижения высокого уровня продолжения; возможности для получения образования, наличие достаточных средств для достойной жизни и приобретения высокой профессиональной квалификации). качества);

- оценка номинальных и реальных доходов;
- изучить особенности обеспечения населения жильем и товарами народного потребления, предназначенными для длительного пользования.

Уровень жизни населения – совокупность условий и показателей, характеризующих уровень благосостояния населения, уровень потребления товаров и услуг, уровень удовлетворения основных жизненных потребностей людей.

Другими словами, уровень жизни складывается из уровня развития и удовлетворения потребностей человека, живущего в обществе, и определяется потреблением различных благ или уровнем полезности полученных для потребления.

Одним из важных вопросов оценки уровня и качества жизни является определение и составление перечня показателей, раскрывающих структуру и содержание данного понятия. Такие понятия, как «уровень жизни», «благосостояние населения», «образ жизни», «качество жизни» используются для описания благосостояния населения, описывая историю развития определений, данных уровню и качеству жизни (рис. 1.1).

Вышегородцев М.М. и ряд других экономистов определяли понятие «благополучие» следующим образом: благополучие — это обеспечение населения необходимыми для жизни материальными, социальными, культурными и духовными ресурсами, то есть элементами, услугами и условиями, удовлетворяющими потребности человека.

Для описания благосостояния населения с учетом социального расслоения, среднедушевых доходов, потребления и обеспеченности основными фондами домохозяйств, расслоения населения по доходам и потреблению, прожиточного минимума, уровня бедности и ряда понятий такие как уровень жизни.

Уровень жизни населения считается важнейшим критерием оценки эффективности социально-экономической политики страны, а его реализация – основной целью развития общества. Прежде всего, уровень жизни характеризуется сочетанием и взаимозависимостью двух составляющих: обеспеченности материальными и нематериальными ресурсами населения и уровня их потребления.

Несмотря на то, что понятие «уровень жизни» кажется понятным, определения, данные ему экспертами, различны. Некоторые экономисты определяли понятие «уровень жизни» как уровень удовлетворения материальных, духовных и социальных потребностей. Хотя уровень жизни считается динамическим процессом, изменяющимся под влиянием множества факторов, данное определение описывает скорее статистику уровня жизни.

С одной стороны, уровень жизни определяется структурой и величиной потребностей в различных активах, которые регулярно меняются, а с другой стороны, он ограничен возможностью удовлетворения потребностей исходя из состояния товаров и услуг, доходы населения и заработная плата наемных работников. Однако как размер заработной платы, так и уровень жизни определяются производством, масштабами и эффективностью научно-технического развития, культурным и образовательным уровнем населения и его составом, национальными особенностями и политической властью.

Заключение. Уровень жизни населения, прежде всего, служит основным источником удовлетворения личных потребностей в товарах и услугах. Неизбежное неравенство в доходах и богатстве сопровождается соответствующим расслоением населения по уровню жизни и социально-имущественным слоям. Политика регулирования доходов населения направлена на создание достойного уровня жизни для всех слоев населения.

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*Рамазонов Ш.У.
стажер-преподаватель
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт*

АНАЛИЗ УРОВНЯ ЭФФЕКТИВНОСТИ МЕР СОКРАЩЕНИЯ БЕДНОСТИ В РЕГИОНАХ

Аннотация. В данной статье описаны меры и направления по снижению бедности в регионах Узбекистана. Освещены идеи по созданию новой методологии, охватывающей понятие бедности, критерии ее определения и методы оценки.

Ключевые слова: Бедность, уровень жизни, сокращение бедности, уровень жизни населения.

*Ramazonov Sh.U.
intern-teacher
Department of "Innovative Economics"
Karshi Engineering and Economic Institute*

ANALYSIS OF THE LEVEL OF EFFICIENCY OF POVERTY REDUCTION MEASURES IN THE REGIONS

Abstract. This article describes measures and directions for reducing poverty in the regions of Uzbekistan. Ideas on creating a new methodology covering the concept of poverty, its definition criteria and assessment methods are highlighted.

Key words: Poverty, standard of living, reduction of poverty, standard of living of the population.

Сокращение бедности является одним из основных направлений государственной политики. Для этого необходимо реализовать системные меры по таким направлениям, как увеличение доли малого бизнеса и частного предпринимательства в валовом внутреннем продукте и обеспечении занятости, совершенствование технологической структуры, удовлетворение потребности в кредитных ресурсах, создание благоприятной деловой среды. Поиск путей сокращения бедности путем развития предпринимательства с использованием теории невидимой руки А. Смита является одной из актуальных задач современности.

В результате проводимых реформ по поддержке предпринимательства к концу 2023 года доля малого бизнеса и частного предпринимательства в ВВП составит 65,9%, в объёме промышленной продукции 40,6%, в объёме сельскохозяйственной продукции 98,4%. в

объеме инвестиций в основной капитал достиг 35,8 процента. Также в этой отрасли работает 77,9% занятого населения. Снизить уровень бедности, усовершенствовать механизмы развития малого бизнеса и предпринимательства, повысить эффективность этих процессов, создать благоприятную среду для работы малого бизнеса, эффективно использовать денежно-кредитные механизмы регулирования, усилить его участие во внешнеэкономической деятельности. создать новые рабочие места и увеличить доходы населения. Полное использование его потенциала по сокращению, внедрению инновационных идей и технологий является важным фактором снижения бедности.

Для этого создана правовая основа в Республике Узбекистан, в том числе Постановлением Президента Республики Узбекистан от 26 марта 2020 года «Об организации деятельности Министерства экономического развития и сокращения бедности Республики Узбекистан и его системные организации» и 3 декабря 2021 года были приняты «Развитие предпринимательства в микрорайоне, обеспечение занятости населения и Решения о мерах по организации деятельности помощников мэра по вопросам сокращения бедности». Согласно этому решению с 1 января С 2022 года в каждом городе, селе, селе, а также в каждом микрорайоне, по вопросам развития предпринимательства, обеспечения занятости населения и сокращения бедности учреждена должность помощника акима района (города). Введение системы помощников мэра вносит резкий поворот в политику борьбы с бедностью в нашей стране.

- Для сокращения бедности, прежде всего, необходимо проанализировать структуру рационального питания и найти пути его обеспечения. Основой рационального питания является правильная организация ежедневного рациона питания. При создании регламента: информация о потреблении продуктов питания по профессиональным группам;

- химический состав пищевых продуктов, степени восстановления веществ в продуктах при термической обработке;
- средние антропометрические показатели населения;
- навыки приема пищи;
- Заявлено, что варианты поставки предлагаемых норм учтены. Рациональное питание для «черты бедности» определяется как менее 2100 ккал.

таблица.

Информация о доходах населения Республики Узбекистан

№	Название индикатора	годы					Разница между
		2019	2020	2021	2022	2023	В процентах к 2019 году

1.	Совокупные доходы населения, млрд сўм	236893,1	300842,7	365735,6	420338,3	521005,1	119.24
	по сравнению с прошлым годом, в %	119,7	127,0	121,6	114,9	123,9	2.5
2.	Общий доход на душу населения, тыс.сўм	7314,1	9128,6	10891,3	12279,1	14733,1	110.2
	по сравнению с прошлым годом, в %	117,7	124,8	119,3	112,7	120	1.8
3.	Совокупные реальные доходы населения, млрд сўм	216400,1	255971,0	319336,1	372211,4	410213,1	101
	по сравнению с прошлым годом, в %	109,3	108,1	106,1	101,8	110,2	1.2
4.	Реальный совокупный доход на душу населения, тыс.сўм	6681,4	7767,0	9509,6	10873,2	11435,5	95.6
	по сравнению с прошлым годом, в %	107,5	106,2	104,2	99,8	105,2	107.5

Для рационального питания необходимо проанализировать доходы населения. В приведенной таблице содержатся сведения о доходах населения Узбекистана, согласно которым общий доход в 2023 году составляет 521 005,1 млрд сумов, в 2022 году - 420 338,3 млрд сумов, в 2019 году - 365 735,6 млрд сумов, в 2020 году - 300 842,7 млрд сумов., в 2021 году – 236 893. Это составило 1 млрд сумов. Общий доход на душу населения составил 14733,1 тысячи сум в 2020 году, 12279 тысяч сук в 2020 году, 10891 тысячи сук в 2021 году, 9128,6 тысяч сук в 2022 году, 7314,1 тысячи сук в 2023 году., совокупный доход на душу населения составил 110,2 процента, реальный совокупный доход населения - 101 процент, реальный совокупный доход на душу населения - 95,6 процента.

Реализованы краткосрочные и долгосрочные стратегические меры по сокращению бедности в республике. Это показано на картинке ниже:

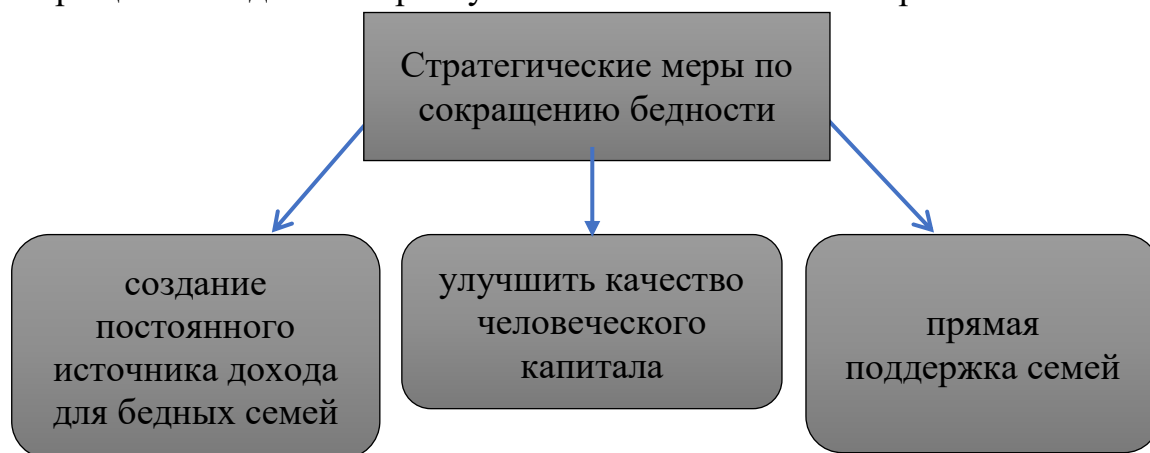


Рисунок. Стратегические меры по сокращению бедности в Узбекистане

В последние годы в нашей стране внедрена совершенно новая система адресной помощи государства женщинам и молодежи, нуждающимся в социальной защите, тяжелых жилищных условиях, безработным и неквалифицированным гражданам, нуждающимся в правовой и морально-психологической поддержке. В частности, принято Постановление Кабинета Министров Республики Узбекистан от 28 апреля 2021 года № 250 «О дополнительных мерах по финансовой помощи и социальной поддержке семей, женщин и молодежи, нуждающихся в помощи». По его словам, в Узбекистане создана совершенно новая система материальной поддержки и семей, нуждающихся в поддержке, с такими адресами, как «Железная книга», «Женская книга», «Молодежная книга», которая организует регулярную работу с каждым человеком индивидуально. и систематически.

В заключение можно сказать, что необходимо выявить слои населения, нуждающиеся в социальной защите и страдающие от бедности, разработать стратегию, дорожную карту и соответствующие программы помощи им. в том числе, прежде всего, проведение опросов, определение численности малообеспеченных семей, изучение возможностей использования продовольственных пайков, доступа к медицинским услугам, определение уровня охвата семейных детей организациями дошкольного образования, доступа к образовательным услугам, обеспечение чистой питьевой водой, бытовыми услугами, жилищным фондом и необходимо реализовать такие меры, как выделение льготных кредитов и микрофинансирование в различных сферах предпринимательства.

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*Расулмухамедова Д.Т., кандидат филологических наук
доцент
Ташкентский государственный юридический университет
ORCID: 0000-0002-0558-7328*

ОСОБЕННОСТИ УЗБЕКСКОГО ЯЗЫКА И УСТНОЙ РЕЧИ

Аннотация: в данной статье рассматриваются особенности языка и речи, а также вопросы развития устной и письменной речи учащихся путем работы с текстом. В статье представлены задания и примеры, побуждающие учащихся к пониманию грамматики узбекского языка путем работы с текстами устно и письменно, а также аспекты, на которые следует обращать внимание при их составлении.

Ключевые слова: язык, дискурс, текст, устная и письменная речь, общение, специальность «юриспруденция» и юридические термины.

*Rasulmukhamedova D.T., candidate of philological sciences
associate professor
Tashkent State Law University
ORCID: 0000-0002-0558-7328*

FEATURES OF THE UZBEK LANGUAGE AND ORAL SPEECH

Abstract: this article discusses the features of language and speech, as well as the development of students' oral and written speech through working with text. The article presents tasks and examples that encourage students to understand the grammar of the Uzbek language by working with texts orally and in writing, as well as aspects that should be paid attention to when composing them.

Key words: language, discourse, text, oral and written speech, communication, specialty, jurisprudence and legal terms.

Язык является признаком культуры. В нашей многонациональной республике государственным языком является узбекский, и сейчас важно учить другой язык. Потому что в то время, когда существует большой спрос и интерес к изучению многих иностранных языков, таких как английский, французский, немецкий, японский и китайский, преподавание нашего государственного языка - узбекского требует большой ответственности от наших учителей. В частности, русские группы юридических вузов учат студентов использовать узбекский язык на основе правовых материалов, совершенствовать устную и письменную речь, развивать свои навыки в области политических и общественных наук и юридических текстов, а также разрабатывать юридические тексты в конкретных речевых ситуациях.

Основная задача это ускорить процесс изучения узбекского языка. Для этого необходимо реформировать принципы, содержание и методику преподавания узбекского как второго языка. Лучше всего использовать как простые, так и эффективные методы обучения и преподавания русского языка студентам. Чтобы достичь этого, каждый преподаватель должен обладать необходимым уровнем знаний и навыков, исходя из требований времени.

Цели изучения языка различны. В то время как некоторые учащиеся должны использовать и понимать готовые фразы только в течение коротких периодов времени, некоторым требуется формальное общение, в то время как другим нужны языковые навыки. Независимо от того, какой метод изучения языка используется, важно, чтобы с каждым учеником обращались индивидуально. Каждый ученик отличается по своим способностям, способностям, усердию и трудолюбию. Опытный учитель должен своевременно выявлять эти качества и учитывать их при обучении языку и выполнении заданий. Некоторые ученики хорошо слышат и могут использовать слова и фразы, которые они слышат правильно и на своем месте. У некоторых учеников развитое зрение, поэтому они могут запоминать слова и фразы и создавать новые предложения. Некоторые могут выучить грамматику сначала, а затем формировать предложения и фразы. Если они плохо разбираются в грамматических правилах, им может быть сложно переводить или писать. Некоторые учащиеся имеют возможность изучать язык независимо от книги или компьютера, а учитель только дает им указания. Другие учащиеся изучают каждое слово и каждую фразу на основе грамматических правил. По этой причине целесообразно разработать план обучения с учетом личности учащегося. Студенты русского языка номинальных групп должны общаться с другими людьми. Это потому, что существует необходимость в таких действиях, чтобы речь могла произойти. Например, ребенок, который занимается бизнесом, может заниматься речевой деятельностью, чтобы получить совет от окружающих или определить что-то конкретное. В естественной речи жизненно важным фактором, который производит речевую деятельность.

На уроках узбекского языка необходимо создавать такую потребность в первую очередь для разговорной деятельности русскоязычных студентов. Однако наши наблюдения показывают, что многие учителя уделяют мало внимания этому фактору. Общеизвестно, что речевая деятельность ученика, возникающая в этих условиях, определяется задачей учителя, которая не связана с его или ее внутренними потребностями. Ситуация, возникающая при выполнении такой задачи, не ориентирована непосредственно на процесс общения.

В русских группах грамматику узбекского языка необходимо объяснять устными и письменными текстами, а не текстами и примерами из узбекской грамматики и теоретических знаний. Поскольку учащиеся легче

воспринимают текст, они учатся работать со словарем, определяя значение сложных слов в тексте. Учащийся, работающий со словарем, расширяет спектр идей, расширяет свой словарный запас и свободно переводит заданную тему или задание. Используя словарь, студент может легко отличить слова, характерные для литературного языка, от слов, которые встречаются только в разговорной речи. При работе с текстом студент сможет создать словарь сложных слов в тексте.

В процессе изучения языка устная речь является наиболее важной. В основе языковой речи студента, то есть в процессе общения, он или она развивает способность говорить свободно и четко на узбекском языке. В каждом процессе самый важный способ развития таких навыков - это задавать вопросы. Различные текстовые вопросы и устные упражнения помогают учащимся расширить свой словарный запас.

Еще одна проблема с развитием устной речи студентов - правильная организация процесса обучения тому, как общаться с грамматическими правилами. Если студент намеренно осваивает теоретический материал, отражающий языковые особенности, он или она будет развивать свои речевые навыки и способности, но в большинстве случаев студенты, которые хорошо понимают грамматические правила, не смогут применять или применять эти правила в живой речи. Часто это происходит потому, что разработка грамматических правил в ходе урока и развитие соответствующих навыков речи обычно не связаны с живым общением. Один из лучших способов организовать эту работу - общение. Этот метод также широко используется при обучении иностранным языкам. Конечно, существует большая разница между обучением узбекскому языку и русскому языку. Тем не менее, есть одна общая основа, которая связывает эти две дисциплины, одной из которых является эффективность общения. Еще один способ вовлечь студентов в практическую речь - это вовлечь студентов в обсуждение вопроса или темы, которая имеет отношение к их текущей общественной жизни. Например, живое телевизионное шоу, чемпионат по теннису или футболу, интересные дебаты в прессе и мероприятие могут стать основой для обсуждения. Первоначальное слово, использованное в ходе обсуждения, состоит в том, чтобы привлечь внимание учащихся к содержанию предложения и показать, что у каждого учащегося есть свои собственные рассуждения по этому предмету с логическими и обоснованными рассуждениями. Награждение такой студенческой речи - хороший результат.

Поэтому основная цель обучения узбекскому языку в русскоязычных группах - это говорить четко, свободно, выражать свои мысли в устной и письменной форме, знать конкретный словарный запас и использовать их в своей речевой деятельности. Студент должен уметь представлять текст лексического и грамматического материала, который он выучил в течение года, понимать речь учителя, задания и вопросы, а также уметь задавать

вопросы окружающим. Эффективное выполнение этой задачи зависит от уровня знаний, педагогических навыков, готовности и воли учителя, их способностей и ответственности. Учитель может выполнить эти требования в основном в течение урока. Обучение является частью учебного процесса, который проводится в определенное время. Преподаватель должен полагаться на содержание и характер учебного материала при выборе наиболее эффективного способа представления материала темы студентам в ходе обучения.

Таким образом, основная цель обучения узбекскому языку в русскоязычных группах состоит в том, чтобы говорить четко, свободно, выражать свои мысли в устной и письменной форме, знать конкретный словарный запас и использовать их в своей речевой деятельности. Студент должен уметь представлять текст лексического и грамматического материала, который он выучил в течение года, понимать речь учителя, задания и вопросы, а также уметь задавать вопросы окружающим.

Общеизвестно, что на уроках узбекского языка в русских группах высших учебных заведений изучаются тексты специальностей студентов по направлениям их специализации. Целью таких текстов является развитие у студентов умения общаться не только на узбекском языке, но и общаться в своей области. В конце концов, вы должны использовать несколько методов для организации таких уроков одновременно. Например, перевод текстов, анализ терминов, создание вопросов, ведение бесед и диалогов и многое другое. Кроме того, желательно использовать разнообразные специальные игры во время курса. Комплексное использование этих методов в классе помогает учащемуся самостоятельно мыслить и выражать свои мысли точно и в речи. Работая над конкретными текстами в течение курса, учитель должен учитывать следующее:

- выбранная тема должна быть интересной, актуальной и основанной на специальности;
- Термины в текстах должны быть тщательно изучены;
- вопросы должны быть последовательно построены;
- внимательно выслушивать ответы студентов;
- создать условия для их свободного общения;
- вовлечь всех учеников в класс;
- Интерпретация мнений студентов.

При освоении юридических терминов учащиеся используют тексты, непосредственно связанные с их учебной работой, при изучении государственного языка. Изучает, как использовать слова по специальности, юридическим терминам, их значениям, глаголам и фразам, а также выявляет ключевые слова, которые часто встречаются в правовом поле. Перевод текстов и составление словарного запаса также включает в себя формирование и развитие устной и письменной речи у русскоязычных студентов.

Используя юридические тексты, студенты изучают юридическую терминологию и пытаются найти альтернативы на узбекском и русском языках. В настоящее время ряд юридических терминов были найдены на родном языке. Это, конечно, положительно. Например: *гражданский кодекс - фуқаролик кодекси, вещественное доказательство - ашёвий далил, мировой суд - мураса суди, ордалие –қийноқ усули, частное право – хусусий ҳуқуқ* и т. д. Однако некоторые юридические термины стали широко использоваться широкой общественностью и широко используются в общей практике. Нужно ли переводить эти термины на узбекский? Примеры включают *транспорт, декларации, прокуроры, адвокаты, амнистию* и многое другое. Такие слова популярны среди широкой публики и не нуждаются в переводе. Очевидно, что юриспруденция требует лингвистики, а будущие профессора права должны овладеть как филологическими, так и юридическими науками.

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*Расулов Ш.Ш.
Иқтисодиёт ва менежмент
кафедраси катта ўқитувчиси
ЖизПИ*

МЕҲНАТ РЕСУРСЛАРИНИ ИШ ЎРИНЛАРИ БИЛАН ТАЪМИНЛАШ ДАРАЖАСИНИ ОШИРИШ ЙЎЛЛАРИ

Аннотация. Мақолада республикамызда сўнги йилларда аҳолининг иш билан бандлиги бўйича ҳозирги кун таҳлили, аҳолини иш билан таъминлашнинг мамлакат иқтисодиётини ривожлантиришидаги ўрни, аҳоли бандлигини таъминлаш бўйича амалга оширилаётган ислохотлар ёритилган.

Калит сўзлар: аҳоли, бандлик, меҳнат бозори, иқтисодиёт, диверсификация, иқтисодий фаол аҳоли, иқтисодий нофаол аҳоли, меҳнат ресурслари, кадрлар.

*Rasulov Sh.Sh.
senior lecturer
Department of Economics and Management
JizPI*

WAYS TO INCREASE THE LEVEL OF PROVISION OF LABOR RESOURCES WITH JOBS

Annotation: the article covers the current analysis of employment of the population in recent years in our republic, the role of employment of the population in the development of the country's economy, the reforms carried out to ensure employment of the population.

Keywords: population, employment, labor market, economy, diversification, economically active population, economic inactive population, labor resources, personnel.

Мамлакатимиз томонидан мамлакатда сиёсий, иқтисодий, маънавий ислохотлар амалга ошириш учун, аҳоли бандлигини йўлга қўйишнинг назарий ва амалий механизмларини ишлаб чиқилмоқда. Бу борада Ўзбекистон Республикасида минтақалар бўйича меҳнат бозорини шакллантиришда самарали сиёсатни амалга ошириш, аҳолини ўсиши омилларини, иқтисодиёт тармоқларини ривожлантириш ва таркибий қайта ташкил этишнинг истиқбол йўналишларини эътиборга олган ҳолда бандликнинг янги шакллари кенг тадбиқ этиш орқали аҳоли бандлигининг ўсишини таъминлаш каби вазифаларни бажарилишига алоҳида эътибор қаратилган.

Ўзбекистон Республикаси Президентининг 2017 йил 24 майдаги “Бандлик соҳасида давлат сиёсатини янада такомиллаштириш ва меҳнат органлари фаолияти самарадорлигини тубдан ошириш чора-тадбирлари тўғрисида” ги фармони, бандлик соҳасида давлат сиёсатини амалга оширишда янгича ёндашувларни жорий этиш, жумладан, давлат ва хусусий бизнес ўртасидаги ҳамкорликка асосланган ҳолда меҳнат бозори инфратузилмасини ривожлантириш, ишсиз аҳолини, айниқса, ёшларни ишга жойлаштиришда самарали чора-тадбирларни амалга оширишга қаратилган.

Статистик маълумотларга кўра, Ўзбекистонда меҳнат ресурслари сони 2022 йил январ-июн ойларда жами 19,4 млн кишини ташкил этган.

Республика иқтисодиётида бозор муносабатларининг шаклланиши ва ривожланиши бевосита меҳнат бозорининг самарали фаолиятига, унинг таркибий-миқдорий ва сифат кўрсаткичларига таъсир этмоқда. Маълумотларни таҳлил қилиш натижасида шу маълум бўладики, 2022 йилга келиб аҳоли мутлақ миқдорининг ўсиши 2000 йилга нисбатан 25,1%га кўпайгани ҳолда, шу давр мобайнида иқтисодиёт тармоқларида бандлар сони 79,3 %га ортган. Мустақиллик даврида меҳнат ресурслари миқдорининг ўсиши (75,9 %) иқтисодиётда бандлик даражасининг ўсишидан юқори бўлди. Юқоридаги маълумотлар асосида шуни айтиш мумкинки меҳнат ресурслари сони 2022 йил 2000 йилга нисбатан 391,4 яни 75,9 %; меҳнат ресурслари жами аҳоли сонига нисбатан 2022 йил 116,8 яни 16,8 %; иқтисодиётда бандлар сони эса 77,3 %; иқтисодиётда бандлар сони жами аҳоли сонига нисбатан 2022 йилда 14,3 % ошганлигини, фақатгина 2022 йил иқтисодиётда бандлар жами меҳнат ресурслари 2000 йилги сонига нисбатан 0,5 % пасайганини кўришимиз мумкин бўлади.

Кузатув натижасига кўра аҳоли бандлиги масалалари борасида қуйидаги ҳолатлар ва муаммолар аниқланди:

✚ муносиб ҳақ тўланадиган доимий иш ўринларининг етишмаслиги, ёшларни жумладан, олий маълумот ёки иш стажига эга бўлмаган ёш кадрларни ишга жойлаштиришларидаги қийинчиликлар;

✚ давлат рўйхатидан ўтмасдан норасмий равишда тадбиркорлик фаолият турлари (озик-овқат маҳсулотларини тайёрлаш, ширинликлар ва миллий таомлар, мева ва сабзавотларни консервация қилиш, уйда нон ёпиш ва ноозик-овқат товарлари билан савдо қилиш, мебелларни таъмирлаш, дераза ва эшик ромларини тайёрлаш, қурилиш ишлари, хизматлар амалга оширувчилар, жумладан: хонадонларда чакана савдо, автомобиллар, сантехника ва бошқа турли маиший хизмат техникаларини таъмирлаш, косибчилик, бичиш-тикиш каби хизматлари ва бошқалар) билан шуғулланиши кузатилди;

✚ қишлоқ жойларда яхши ҳақ тўланадиган доимий иш ўринларининг мавжуд бўлмаганлиги сабабли ёшларнинг хорижга меҳнат қилиш учун чиқиб кетишлари.

✚ Аҳоли бандлигини ва иш ўринларини ташкил этиш бўйича қуйидаги таклиф ва тавсиялар ишлаб чиқилди:

✚ Ишлаб чиқариш корхоналарида малакали кадрларга эҳтиёж юқорилигини инобатга олган ҳолда долзарб касблар (пайвандчи, электромонтёр, турли станокларни ишлатиш бўйича мутахассислар, хизмат кўрсатиш соҳасидаги мутахассислар ва ҳоказо)га тайёрлаш бўйича қисқа муддатли курслар ташкил этиш, шунингдек олий ва ўрта махсус таълим тизимидаги ўқув юртларининг мутахассислик тайёрлаш тизимини қайта кўриб чиқиш, уларни бугунги кунда энг долзарб мутахассис ва кадрлар етказиб беришига йўналтириш. Рақамли ва инновацион иқтисодиётга ўтишда яратилаётган иш ўринларининг сифатига (юқори технологик соҳаларга) ҳам эътибор бериш ва ишчи кучини расмий экспортини кенгайтиришнинг мақсадли йўналтирилган қўшимча чора-тадбирларини ишлаб чиқиш;

✚ Республикада олиб борилаётган норасмий сектор объектларини легаллаштириш жараёнини давом эттириш баробарида ушбу расмий секторга ўтказилган хўжалик субъектларига расмийлаштиришда дуч келадиган муаммоларни бартараф этиш бўйича ҳудудий меҳнат органларида малакали мутахассислардан иборат маслаҳатхоналар тузиш ва бу жараёнларни мониторинг қилиш;

✚ Ёшлар тадбиркорлигини ривожлантириш учун қулай бозор шароитларини яратиш шунингдек, кўпроқ ишсизлик даражаси ортиқ бўлган ҳудудларда янги иш ўринларини ташкил қилиш ва ёшларнинг ўзини-ўзи иш билан таъминлашининг ҳар қандай кўринишини (албатта қонун доирасида) ҳар томонлама қўллаб-қувватлаш. Тадбиркорликни бошлашни режалаштираётган ёшлар учун пухта ишланган бизнес режалар ишлаб чиқишда Савдо-саноат палатасининг ахборот-маслаҳат марказлари ва бошқа консалтинг хизматларини фаоллаштириш;

✚ Ўрганишлар натижасига кўра иш билан банд бўлмаган аҳоли орасида касб-ҳунар коллежларини битирган ёшларнинг ўз мутахассислиги бўйича ишга жойлашмаслигининг асосий сабаби - ушбу касбларни (ихтисосликларни) битирган ёшларнинг билими меҳнат бозори талабларига жавоб бермаслиги яъни билим ва кўникманинг етарли эмаслиги билан боғлиқдир. Шулардан келиб чиқиб ихтисосликларни ўзлаштирилиши мураккаблигини эътиборга олган ҳолда дифференциаллашган, турли муддатли (3, 6 ва 12 ойлик) касб-ҳунарга тайёрлаш ўқув курсларини ташкил этиш (хусусан аҳолининг ижтимоий заиф қатламларига мансуб ёшларни касб-ҳунарга ўқитишда ижтимоий контракт тизимини татбиқ этиш);

✚ Қўшимча иш ўринларини таъминлаш шунингдек аҳоли турмуш даражаси ва сифатини ошириш мақсадида қишлоқ жойларда кўрсатиладиган хизматларни ривожлантириш, қишлоқ хўжалиги маҳсулотларини сақлаш, қуритиш ва қайта ишлаш корхоналарини ташкил этиш;

✚ Уюшган миграция тизимини яхшилаш борасида: туманлар миқёсида меҳнат мигрантлари учун ўқув семинарларини ташкил этиш, уларни миграцияга доир қонун ҳужжатлари билан таништириш; меҳнат мигрантларига патент олиш (чет элда ишга жойлашишлари учун рухсат берувчи зарурий ҳужжатларни расмийлаштиришларида) амалий ёрдам кўрсатиш (шу жумладан мигрант кетадиган давлат қонунчилиги доирасида зарурий ҳужжатларни масофавий тарзда рўйхатдан ўтказиш, мигрант кетадиган давлатда дархол иш бошлашига, ҳамда шу давлатнинг қонунини бузилиши ҳолатларини олдини олишга хизмат қиладиган рухсатноманинг дастлабки вариантини олиш);

Иш билан банд аҳолининг асосий қисми қишлоқ, ўрмон ва балиқчилик хўжалиги ҳиссасига тўғри келаётганлиги, аҳоли орасида бандликнинг таркибий тузилишини такомиллаштиришда катта заҳиралар мавжудлигини кўрсатади. Бундан ташқари аҳоли орасида бандликни таъминлаш бўйича юқори ўсиш суръатлари хизмат кўрсатиш соҳасида, яъни ташиш ва сақлаш, молия ва суғурта фаолияти, қурилиш ва савдо соҳаларида кузатилаётган бўлиб, катта маблағ талаб қилмайдиган, арзон ишчи ўринлари яратишда беқиёс имкониятларга эга ушбу соҳаларни ривожлантириш, иқтисодий-ижтимоий жиҳатдан ривожланишда орқада қолаётган минтақаларда бандлик даражасини ошириш учун кенг имкониятларни яратади. Бу эса ҳар бир минтақада, иш ўринларини ташкил этиш ва аҳоли бандлигини таъминлаш дастурларини ишлаб чиқишда юқорида келтирилган жиҳатларни ҳисобга олиш зарурлигини кўрсатмоқда.

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*Расулова Ш.Ф.
Иқтисодиёт ва менежмент кафедраси доценти
ЖизПИ*

ЎЗБЕКИСТОН РЕСПУБЛИКАСИДА КОРПОРАТИВ МОЛИЯВИЙ БОШҚАРУВНИ ТАКОМИЛЛАШТИРИШДА ДИВИДЕНД СИЁСАТИ ВА БУНДА АХБОРОТЛАРНИНГ АҲАМИЯТИ

Аннотация. Мақолада Ўзбекистон республикасида корпоратив молиявий бошқарувни такомиллаштиришда дивиденд сиёсати ва бунда ахборотларнинг аҳамияти ёритилган.

Калит сўзлар: корпоратив, дивидент, ахборот, молиявий, менежмент, бошқарув, инвестор, компаниялар.

*Rasulova Sh.G'.
associate professor
Department of Economics and Management
JizPI*

DIVIDEND POLICY AND THE IMPORTANCE OF INFORMATION IN IMPROVING CORPORATE FINANCIAL MANAGEMENT IN THE REPUBLIC OF UZBEKISTAN

Annotation. The article covers dividend policy and the importance of information in improving corporate financial management in the Republic of Uzbekistan.

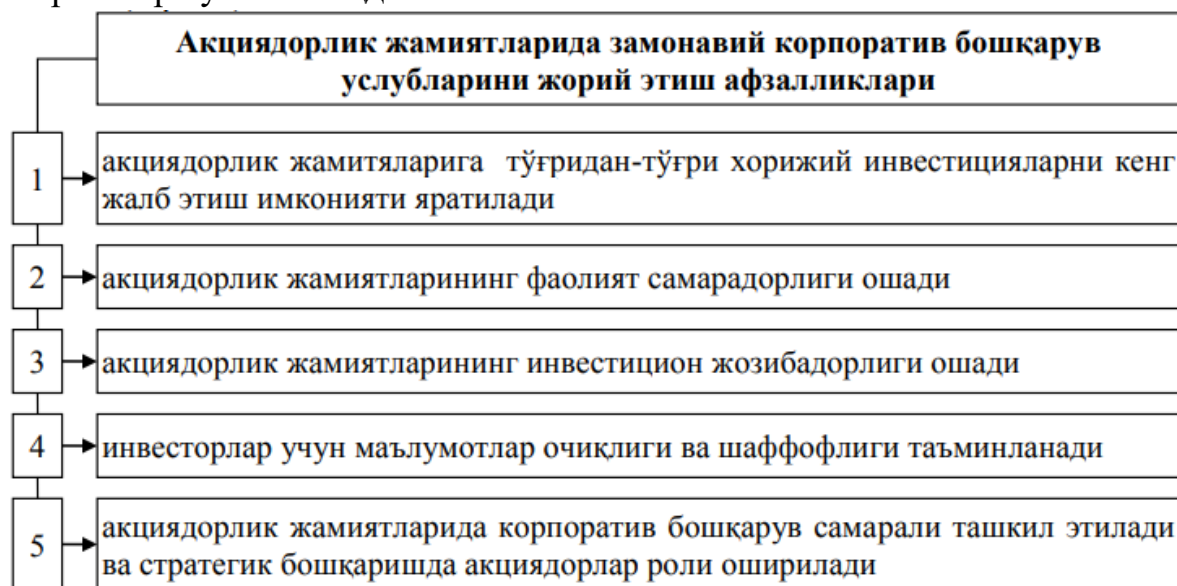
Keywords: corporate, dividend, information, Financial, Management, Management, investor, companies.

Мамлакатимизда иқтисодиётнинг ривожланиши билан корпоратив муносабатлар маданияти - акциядорлар, менежмент, кадрлар ва жамиятнинг ўзаро муносабати масалаларига алоҳида эътибор қаратилмоқда.

Корпоратив бошқарувни такомиллаштириш иқтисодиётнинг барча соҳаларига, ҳам маҳаллий, ҳам хорижий сармоядорлар томонидан инвестициялар оқимини кўпайтириш учун зарур бўлган муҳим чора ҳисобланади. Бу эса акциядорлар билан муносабатларни бошқариш тизимини такомиллаштириш механизмни талаб қилади. Ушбу йўналишни амалга оширишнинг асосий вазифаси мамлакатнинг ижтимоий-иқтисодий ривожланишининг устувор йўналишларидан бири сифатида акциядорларнинг ҳуқуқларини ҳимоя қилишдир.

Маълумки, акциядорлик жамиятлари миллий ва халқаро бозорлар учун рақобатбардош маҳсулотлар ишлаб чиқариши, ушбу бозорларда ўз ўрнига эга бўлиши ва белгиланган мақсадларга изчиллик билан эришиши

учун уларда замонавий корпоратив бошқарувни самарали ташкил этиш ҳамда миллий ва хорижий инвестицияларни жалб этиш муҳим аҳамият касб этади. Шу сабабдан мамлакатимизда сўнгги йилларда амалга оширилаётган иқтисодий ислохотларда акциядорлик жамиятларига хорижий инвестицияларни жалб қилиш ҳамда замонавий корпоратив бошқарувни ташкил этишга кенг эътибор қаратилмоқда. Ушбу иқтисодий ислохотлар натижасида бугунги кунда акциядорлик жамиятлари фаолиятида турли ўзгаришлар кузатилмоқда.



1-расм. Акциядорлик жамиятларида замонавий корпоратив бошқарув услубларини жорий этишнинг афзалликлари¹⁰⁶

Акциядорлик жамиятларида замонавий корпоратив бошқарувни ташкил этилиши, ўз навбатида, акциядорлик жамиятларига тўғридан-тўғри хорижий инвестицияларни кенг жалб этиш, акциядорлик жамиятларининг фаолият самарадорлигини ошириш, акциядорлик жамиятларининг инвестицион жозибадорлигини ошириш, инвесторлар учун маълумотлар очиклиги ва шаффофлигини таъминлаш, акциядорлик жамиятларида корпоратив бошқарувни самарали ташкил этиш ва самарали бошқаришда акциядорлар ролини ошириш каби имкониятларни яратади. Бундай иқтисодий ислохотлар мамлакатимизда келгуси йилларда халқаро молия бозорларида рақобатлаша оладиган акциядорлик жамиятларини ташкил этишга ҳамда уларни қўллаб-қувватлашга замин яратади. Шунингдек, акциядорлик жамиятлари акцияларининг бозор баҳоси ҳамда уларнинг инвестицион жозибадорлиги ошади.

Мамлакатимиздаги ҳар бир акциядорлик жамиятининг инвестицион жозибадорлиги юқори даражада бўлиши ва исталган вақтда хорижий инвестицияларни жалб қила оладиган даражага чиқиши лозим. Келгусида

¹⁰⁶Акрамов С.А. Мамлакатимизда акциядорлик жамиятларининг инвестицион жозибадорлигини ошириш йўллари. “Иқтисодиёт ва инновацион технологиялар” илмий электрон журнали. №2, март-апрел, 2017 йил.

бундай акциядорлик жамиятлари сонининг ортиши мамлакатимиз иқтисодий барқарорлигини таъминлашда ҳамда аҳолини иш билан банд қилиш орқали уларнинг турмуш фаровонлигини оширишда муҳим рол ўйнайди. Бошқа томондан қараганда эса, акциядорлик жамиятларига хорижий инвестицияларни мажбуран жалб қилишни ташкил этиш ва хорижий инвестицияларни жалб қилмаган акциядорлик жамиятларини бошқа мулкчилик шаклидаги хўжалик юритувчи субъектларга айлантириш бозор иқтисодиёти шароитида акциядорлик жамиятларининг эркин фаолият юритиши ва юксак мақсадларига эришишига тўсқинлик қилади¹⁰⁷.

Шу ўринда алоҳида таъкидлаб ўтишимиз керакки, ўз навбатида корпоратив тузилмаларнинг инвестицион жозибadorлиги дивиденд сиёсатида ҳам намоён бўлиб, акциядорлик жамиятларида фойдани тақсимлаш масаласи корпоратив бошқарув олдидаги жиддий масалалардан бири ҳисобланади. Чунки ҳар бир акциядор киритган улушидан келиб чиққан ҳолда фойданинг тегишли қисмини олишга интилади. Бошқа томондан акциядорлик жамиятининг ҳисобот даврини фойда билан яқунлашини таъминлаган бошқарувчилар ҳам фойданинг маълум бир қисмини мукофот тарзидида олишни хоҳлайди. Шунингдек акциядорлар олдида акциядорлик жамияти фаолиятини янада ривожлантириш мақсадида эришилган фойдани реинвестициялаш масаласи ҳам туради.

Фойдани тақсимлашда ҳар бир жиҳат инобатга олиниши шарт. Акс ҳолда томонлар ўртасида манфаатлар тўқнашуви, натижада эса корпоратив низолар юзага келишига сабаб бўлиши мумкин. Бундан ташқари фойданинг акциядорлар ўртасида тақсимланишида фаолиятни кенгайтириш мақсадида қўшимча ресурслар жалб қилиш имкониятларини ҳам ҳисобга олиш керак¹⁰⁸.

Зеро, фойдани тақсимлаш бўйича қарорлар қабул қилишда акциядорлик жамиятлари бир қатор ташқи ва ички омилларни ҳисобга олиши лозим бўлади. Дивиденд сиёсатини самарали юритилиши акциядорлик жамиятлари, инвесторлар, акциядорлар учун муҳим ҳисобланади, шу билан биргаликда ушбу жараёнда компаниялар томонидан дивиденд тўловларини эълон қилинишига бозорнинг реакциясини аниқлаш муҳим аҳамиятга эга.

Маълумки, замонавий акциядорлик жамиятлари агрессив ахборот муҳитида фаолият юритади. Бир компания бозорга кириши билан дарҳол турли ахборотлар майдонига тушади ва ўзи ҳам ахборот манбаига айланади. Компанияларда юзага келаётган маълум бир ўзгаришлар ёки янгиликлар уларнинг акциялари нархига таъсир қилиши мумкин. Дивиденд сиёсати эса компания қиймати ва акциядорларнинг фаровонлигига таъсир этувчи

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омиллардан биридир. Кўп йиллар давомида тадқиқотчилар ушбу жараёнларга изоҳ топишга ҳаракат қилиб келишмоқда.

Мазкур йўналишдаги аксарият эмпирик тадқиқотлар асосан ривожланган бозорлар (АҚШ, Буюк Британия, Германия ва бошқалар)ни ўрганишга бағишланган. Ушбу тадқиқотлар натижасида эълон қилинган мақолаларни ўрганиш натижаларига хулоса қиладиган бўлсак, уларнинг катта қисми дивиденд тўловлари ҳажмининг оширилиши акциялар қийматининг ортишига сабаб бўлишини, тескараси яъни, дивиденд тўловлари ҳажмининг камайиши эса ўз навбатида акциялар қийматининг пасайишига олиб келишини исбот қилишган. Бироқ, ушбу натижаларни инкор этувчи тадқиқотлар ҳам мавжуд бўлиб, уларнинг таъкидлашича, дивиденд тўловлари ҳажмининг ортиши акция қийматининг пасайишига олиб келиб, акциялар қийматининг ошиши эса дивиденд тўловларининг камайиши билан боғлиқ ахборотлар сабабли бўлиши мумкинлигини кўрсатади. Бинобарин, тадқиқотларда дивиденд сиёсати компаниялар раҳбарияти томонидан инвесторларга маълумот юбориш воситаси эканлигини олимлар алоҳида таъкидлайди.

Ривожланаётган молия бозорларидаги ҳолатга назар ташласак, компаниялар томонидан дивиденд тўловларини бозор иштирокчиларига компания ҳақида сигнал беришлилик жиҳатига кам эътибор қаратилишини кузатишимиз мумкин.

Фикримизча, ушбу бозорларда акциядорларнинг бойликларини максимал даражада ошириш учун ҳам компаниялар томонидан дивидендларни тўлаш тўғрисидаги ахборотларга фонд бозорларининг муносабатини ҳисобга олиш лозим, чунки дивиденд тўловларининг ўзгариши ҳақидаги ахборотлар акциялар даромадлилигини сезиларли даражада ўзгаришларига сабаб бўлиши мумкин. Бу эса, пировард натижада, акциядорлар молиявий ҳолатини у ёки бу томонга ўзгартиради.

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*Расулова Ш.Ф.
Иқтисодиёт ва менежмент кафедраси доценти
ЖизПИ
Файзуллаева М.А.
МКК йўналиши 4 босқич талабаси
ЖизПИ*

МАМЛАКАТИМИЗ ТАРАҚҚИЙ ЭТИШИДА ИНВЕСТИЦИОН СИЁСАТ ВА ИНВЕСТИЦИОН ФАОЛИЯТНИ МОЛИЯЛАШТИРИШНИНГ ЎРНИ

Аннотация. Мақолада мамлакатимиз тараққий этишида инвестицион сиёсат ва инвестицион фаолиятни молиялаштиришнинг ўрни ва аҳамияти ёритилган.

Калит сўзлар: инвестиция, ижтимоий-иқтисодий сиёсат, инвестор-корхоналар, молиявий, менежмент, бошқарув, инвестор.

*Rasulova Sh.G'.
associate professor
Department of Economics and Management
JizPI
Faizullaeva M.A.
4th stage student of MKK course
JizPI*

THE ROLE OF INVESTMENT POLICY AND INVESTMENT ACTIVITY FINANCING IN THE DEVELOPMENT OF OUR COUNTRY

Annotation. The article highlights the role and importance of Investiture policy and investiture activity financing in the development of our country.

Keywords: investment, socio-economic policy, investor-enterprises, financial, management, management, investor.

Инвестицион фаолиятни молиялаштиришни такомиллаштиришда эътиборга олиниши лозим бўлган ва принципиал аҳамиятга молик бўлган масалалардан яна бири, бизнингча, инвестицион сиёсат ҳисобланади. Инвестицион сиёсат давлат ижтимоий-иқтисодий сиёсатининг кўринишлари (таркибий қисмлари)дан бири бўлиб, у ўзида давлатнинг инвестицион фаолиятга нисбатан муносабатини мужассам этади. Унда инвестицион фаолиятга нисбатан давлат сиёсатининг мақсади, йўналиши ва инвестицион фаолиятни давлат томонидан бошқаришнинг шакллари ўз аксини топади. Ҳозирги пайтда қуйидагиларни давлат инвестиция сиёсатининг мақсадлари сифатида кўрсатиш мумкин:

- инвестицион фаолиятни амалга ошириш учун молиявий ресурсларни мобилизация (жалб) қилиш;
- инвестицион фаолият пасайиб (сусайиб) кетишининг олдини олиш;
- қурилиш борасида давлатнинг мақсадли махсус дастурларини амалга ошириш;
- инвестицияларнинг таркибий ўзгаришларини таъминлаш ва самарадор-лигини ошириш ва б.

Инвестицион сиёсат давлат, хўжалик юритувчи субъектлар, жумладан, хусусий инвесторларнинг инвестицияларини қамраб олади.

Бозор муносабатлари ўзига хос тарзда ривожланаётган Ўзбекистонда инвестицион сиёсатнинг замонавий йўналишлари таркибига қуйидагилар киради:

- инвестицион фаолиятдаги устуворликларни аниқлаш. Ҳозирги шароитда давлатнинг мақсадли дастурлари, ижтимоий объектлар ва амал (ҳаракат)даги ишлаб чиқаришлардаги асосий фондларни кенгайтириш ва модернизация қилишга йўналтирилган инвестицияларга кўпроқ ва аксинча, янгидан бошланадиган қурилиш объектларига камроқ устуворлик бериш алоҳида аҳамият касб этади;

- иқтисодиётдаги ҳақиқий (реал) аҳволни ҳисобга олган ҳолда давлат дастурларига инвестиция харажатларини оптималлаштириш. Бунда миллий иқтисодиётнинг ҳаётий зарур тармоқларига бюджетдан субсидия ажратиш муҳим аҳамият касб этади;

- фойда ва амортизация ажратмалари ҳисобидан маблағларни инвестициялаштиришда инвестор-корхоналарнинг ҳуқуқларини кенгайтириш;

- инвестицияларни бюджетдан молиялаштиришни қисқартириш ва шунга мос равишда, нодавлат инвестициялаштириш соҳасини кенгайтириш. Бунда инвестицион дастурларни молиялаштиришда давлат ва нодавлат секторлари иштирокининг схемасини (масалан, 1 сўмга: 4 сўм ёки бошқа нисбатларда) аниқлаш, давлат буюртмасидан фойдаланиш муҳим аҳамиятга эга;

- инвестицияларнинг самарадорлигини ошириш ва инвестицион харажат-ларнинг қопланиш муддатларини қисқартириш, биринчи навбатда, юқори самара берадиган ва тез қопланадиган объектларга инвестицияларни жойлаштириш. Бу ерда вазифа инвестицион мақсадлар учун сарфланаётган ҳар бир сўмлик маблағга маҳсулот ва миллий даромаднинг энг юқори суратларда ўсишига эришиш тарзида қўйилиши керак.

Инвестицион фаолиятни молиялаштиришни такомиллаштиришдаги фундаментал масалалардан бири, бу аввало, “инвестицион фаолиятни молиялаштириш”нинг ўзига нисбатан аниқ бир ёндашувни шакллантириш ҳисобланади.

“Инвестицион фаолиятни молиялаштириш”нинг ўзидан кўриниб турибдики, унинг маъно-мазмунини ёки моҳиятини, энг аввало,

“инвестиция”, “инвестицион фаолият” ва “молиялаштириш”лар белгилаб беради. Биз бу ўринда фақат “молиялаштириш”га нисбатан ўз позициямизни шакллантириш билан чекланамиз, холос.

Дастлаб шуни афсус билан қайд этиш керакки, “Ўзбек тилининг изоҳли луғати”да “молия”, “молиявий” ва “молият” деган сўзларга изоҳ берилган бўлса-да, негадир бу масалада “молиялаштириш” сўзи эътибордан четда қолган. Ҳолбуки, бу сўзнинг эквивалент варианты дунё бошқа халқларининг тилларида мавжуд. Хусусан, “молиялаштириш”нинг рус тилидаги эквивалент варианты “финансирование” бўлиб, у ўзбек тилида, энг аввало, “маблағ чиқариш (ажратиш), маблағ билан таъминлаш” маъноларини англатади.

“Молиялаштириш”нинг мазмун-моҳиятига нисбатан худди шундай фикрлар бошқа манбаларда ҳам учрайди.

Демак, юқоридаги мулоҳазаларимиздан “инвестицион фаолиятни молия-лаштириш” деганда, энг аввало, шу фаолиятни амалга ошириш учун зарур бўлган молиявий ресурслар (маблағлар) билан таъминлаш тушунилади, деган мантиқий хулоса келиб чиқади.

Бир вақтнинг ўзида, бу ерда инвестицион фаолиятни молиялаштириш жараёни ўз ичига нималарни қамраб олиши мумкинлиги ҳам эътибордан четда қолмаслиги лозим. Шу муносабат билан таъкидлаш лозимки, кўпчилик ҳолларда эътироф этилганлар инobatга олинадиган бўлса, у ҳолда инвестицион фаолиятни молиялаштириш жараёни ўз ичига а) амалдаги тартиб қоидаларга мувофиқ молиялаштиришни очиш; б) кредит тақсимловчиларга ресурсларни бериш; в) пул маблағларининг мақсадли ва иқтисод қилиб самарали сарфланиши устидан назоратни амалга оширишни қамраб олади. Уни молиялаштириш ҳажми эса кўзда тутилаётган (мўлжалланаётган) харажатлар ва уларни таъминлаш манбалари асосида аниқланади, дейишимиз мумкин.

Юқорида баён қилинганларни эътиборга олган ҳолда, бизнинг фикримизча, инвестицион фаолиятни молиялаштиришга қуйидагича таъриф бериш мумкин: *инвестицион фаолиятни амалга ошириш мақсадида амалдаги тартиб қоидаларга мувофиқ молиялаштиришни очиш, кредит тақсимловчиларга ресурсларни бериш, пул маблағларининг мақсадли ва иқтисод қилиб самарали сарфланиши устидан назоратни амалга оширишга инвестицион фаолиятни молиялаштириш дейилади.*

Энг умумий тарзда, хўжалик юритувчи субъектлар доирасида инвестицион фаолиятни молиялаштириш манбалари сифатида қуйидагиларни кўрсатиш мумкин:

- хўжалик юритувчи субъектларнинг ўз маблағлари;
- қарзий маблағлар ва жалб қилинган маблағлар.

Ўз навбатида, бундай мақсадлар учун фойдаланилаётган хўжалик юритувчи субъектларнинг ўз маблағлари таркибига қуйидагилар киради:

- фойда;

- амортизация ажратмалари;
- йўқотмаларни қоплаш кўринишида суғурта ташкилотлари томонидан тўланадиган маблағлар;

Инвестицион фаолиятни молиялаштиришда хўжалик юритувчи субъектларнинг ўз маблағлари етмаганда бундай мақсадлар учун қарзий маблағлар ва жалб қилинган маблағлардан фойдаланиш мумкин. Уларнинг таркибига тижорат банклари ва инвестицион фондларнинг кредитлари ҳамда бошқа хўжалик юритувчи субъектларнинг қарз маблағлари киради. Ўз навбатида, улардан инвестицион фаолиятни молиялаштириш манбалари сифатида фойдаланиш хўжалик юритувчи субъектларнинг бу маблағлардан самарали ва иқтисод қилиб сарфлашдан моддий жавобгарлигини оширади. Шу муносабат билан таъкидлаш лозимки, кейинги йилларда амалиётда молиялаштириш манбалари бўйича асосий капиталга йўналтирилган инвестицияларнинг ўртача 45,0% хўжалик юритувчи субъектларнинг ўз маблағлари ҳисобидан молиялаштирилаётган бўлса, унинг қолган қисми, яъни 55,0% қарзий маблағлар ёки жалб қилинган маблағларга тўғри келмоқда.

Шундай қилиб, ушбу мақоламиз доирасида биз инвестицион фаолиятни молиялаштиришни такомиллаштиришда фундаменталь аҳамиятга эга бўлган ва албатта, ўз таъсирини кўрсатадиган масалалар, яъни инвестицион сиёсат ва инвестицион фаолиятни молиялаштириш хусусида ўз позицияларимизни шакллантиришга муваффақ бўлдик.

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*Рахманова У.Х.
Хакимов Ш.К.
Тошбоев Ш.О.
Холматова Н.О.*
*Андижанский государственный медицинский институт
Узбекистан, Андижан*

СОСТОЯНИЕ ЛАКТАЦИИ У КОРМЯЩИХ МАТЕРЕЙ, СТРАДАЮЩИХ РАЗЛИЧНОЙ СТЕПЕНИ ТЯЖЕСТИ АНЕМИЕЙ

Введение: процесс лактации у человека является недостаточно изученной областью, причем проблемы грудного вскармливания тесно связаны с анемией у кормящих матерей.

Цель: оценить лактацию у анемичных кормящих матерей.

Методы: было наблюдаено 241 кормящих женщин с различной степенью анемии, а также 30 здоровых контрольных лиц. Объем и качество грудного молока были проанализированы.

Результаты: объем лактации уменьшался с увеличением степени анемии, проявляя значимые различия при анемии II и III степени.

Заключение: объем лактации у анемичных матерей коррелирует с тяжестью анемии, особенно заметно при анемии II и III степени.

Ключевые слова: грудное молоко, анемия, суточный объем, лактация.

*Rakhmanova U.Kh.
Khakimov Sh.K.
Toshboyev Sh.O.
Kholmatova N.O.*
*Andijan state medical institute
Uzbekistan, Andijan*

THE CONDITION OF LACTATION IN BREASTFEEDING MOTHERS SUFFERING FROM VARIOUS DEGREES OF ANEMIA

Introduction: The lactation process in humans is understudied, with breastfeeding issues closely tied to anemia in lactating mothers.

Aim: To assess lactation in anemic lactating mothers.

Methods: 241 lactating women with varying anemia severity were observed alongside 30 healthy controls. Breast milk volume and quality were analyzed.

Results: Lactation volume decreased with increasing anemia severity, showing significant differences in grades II and III anemia.

Conclusion: Lactation volume in anemic mothers correlates with anemia severity, particularly notable in grades II and III.

Keywords: breast milk, anemia, daily volume, lactation.

Процесс лактации у человека является относительно неизученной областью знаний [1]. В литературе достаточно освещены анатомия и физиология развития грудных желез и молокообразования [2, 3]. Галактопоз – накопление секретированного молока, поддерживается равновесием двух процессов: опорожнением ацинусов и актом сосания [4, 5]. Проблемы первичной и вторичной гипогалактии у кормящих матерей тесно взаимосвязаны с вопросами грудного вскармливания детей первого года жизни [6, 7]. Дефицит Fe – распространенное состояние при беременности и лактации, особенно в среднеазиатском регионе, где эта патология отнесена к разряду красных. Большая частота железодефицитных состояний при беременности и лактационном периоде обусловлена частыми родами и качеством питания, характерными для женщин этого географического региона [8].

В связи с этим, мы поставили перед собой **цель и задачи исследования:** изучить состояние лактации у кормящих матерей, страдающих с различной степени тяжести анемии. Под нашим наблюдением находилось 241 женщин, страдающих с различной степени тяжести анемии. Контрольную группу составили 30 здоровых кормящих женщин аналогичного возраста. Количественный (объем суточных и разовых лактаций) и качественный состав (макро- и микроскопия) зрелого грудного молока (не менее чем через 3 недели после родов) изучался после сбора их в стерильную посуду (молокоотсос), соблюдая принципы антисептики.

Степень анемии нами устанавливалась согласно рекомендации экспертов ВОЗ [333]; первая степень – I (Hb до 90 г/л), II степень (Hb до 70 г/л), III степень (Hb <70 г/л).

Анализ лактации у кормящих матерей с разными степенями анемии показал (табл.1), что у женщин с различной тяжести анемии выявляется неуклонное снижение суточного объема лактации в зависимости от тяжести анемии ($P < 0,001$). Напряжение выделение молока (мл/мин, $P < 0,001$) и число прикладываний детей к груди ($P < 0,01-0,001$), сниженный объем высосанного молока при одном кормлении (контрольное взвешивание) статистическая разница обнаруживались лишь при I, II и III степени тяжести анемии соответственно ($r = +0,562 \pm 0,05$, $P < 0,01$; $r = +0,34 \pm 0,05$, $P < 0,01$; $r = +0,614 \pm 0,13$, $P < 0,01$).

Нами при корреляционном анализе объема суточной лактации с показателями красной крови у женщин с анемией I ($r = +0,286 \pm 0,08$, $P > 0,05$; $r = +0,304 \pm 0,08$, $P < 0,05$), II ($r = +0,312 \pm 0,10$, $P > 0,05$; $r = +0,324 \pm 0,11$, $P < 0,05$) и III степени ($r = +0,336 \pm 0,05$; $r = +0,362 \pm 0,18$, $P < 0,05$) выявлялись слабые связи с количеством эритроцитов, а с содержанием гемоглобина связь отсутствовала вообще.

Нами выявилась достаточная положительная связь с уровнем железа в сыворотке крови, особенно с коэффициентом ОЖСС и объемом суточной лактации соответственно при I ($r = +0,386 \pm 0,08$, $P < 0,01$; $r = +0,442 \pm 0,07$,

$P < 0,01$), II ($r = +0,456 \pm 0,09$, $P < 0,05$; $r = +0,514 \pm 0,08$, $P < 0,01$) III ($r = +0,534 \pm 0,14$, $P < 0,01$; $r = +0,612 \pm 0,09$, $P < 0,01$).

Таблица -1., литература – 8.

Состояния лактации у здоровых и больных женщин анемией (M+m)

№	Контингент обследованных	Суточный объём (СО) мл/сут	Объём молока при одном кормлении (РО мл)	Выделения объём молока мл/мин	Число прикладываний к груди
1.	Здоровые	663,0+ 9,17	97,2+2,63	0,464+0,008	6.70+0.14
2.	Анемия I ст (п-132)	490,2+11,9	90,2+2,13	0,340+0,007	5,52+0,08
	P ₁₋₂	<0.001	<0.05	<0.001	<0.05
3.	Анемия II ст (п-84)	4,58+9,59	98,6+1,78	0,318+0,006	4,56+0,04
	P ₁₋₃	<0,001	<0,05	<0,001	<0,001
	P ₂₋₃	<0,05	<0,001	<0,05	<0,001
4.	Анемия III ст (п-25)	380,7+15,1	87,6+3,43	0,254+0,01	4,34+0,10
	P ₁₋₄	<0,001	<0,05	<0,001	<0,001
	P ₂₋₄	<0,001	<0,05	<0,001	<0,001
	P ₃₋₄	<0,001	<0,01	<0,001	<0,01

Таким образом, объем суточной лактации (объем суточного молока) у кормящих матерей, страдающих с различной степени тяжести анемии во многом зависит от степени тяжести анемии. Так при I степени патологии существенных различий таковых от здоровых кормящих женщин не обнаруживаются. При II и III степенями патологии отмечается существенное снижения уровня суточной лактации. Также имеются категории женщин у которых период лактации более шести месяцев, паритетом родов три и более, в возрасте <20 и >30 лет, у которых также наблюдается значительное уменьшение суточного объема молока.

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*Рустамов У.Р.
Ташкентский экономический и педагогический институт
Усмонов Ш.Ф.
Ташкентский экономический и педагогический институт
Кадиров Р.Р.
Ташкентский экономический и педагогический институт*

ПРИМЕНЕНИЯ РЕЗУЛЬТАТОВ ИССЛЕДОВАНИЯ НЕКОТОРЫХ ФИЗИЧЕСКИХ СВОЙСТВ МАГНИТНЫХ НАНОМАТЕРИАЛОВ В ЭКОНОМИКЕ И СОЦИАЛЬНОЙ СФЕРЕ

Аннотация. Данная статья посвящена изучению применения результатов исследования физических свойств магнитных наноразмерных материалов в экономике и социальной сфере.

Ключевые слова: ферромагнит-полупроводник, оптика, магнитооптика, феррит-гранат, наноразмерные пленки, диэлектрические подложки, спинтроника, оптоэлектроника.

*Rustamov U.R.
Tashkent Economic and Pedagogical Institute
Usmonov Sh.F.
Tashkent Economic and Pedagogical Institute
Qodirov R.R.
Tashkent Economic and Pedagogical Institute*

APPLICATION OF THE RESULTS OF RESEARCH ON SOME PHYSICAL PROPERTIES OF MAGNETIC NANOMATERIALS IN THE ECONOMY AND SOCIAL SPHERE

Annotation. The article is devoted to studying the application of the research results of the physical properties of magnetic nano-sized materials in the economy and social sphere.

Keywords: ferromagnet - semiconductor, optics, magnetooptics, ferrite garnet, nano-sized films, dielectric substrates, spintronics, optoelectronics.

Хорошо известно, что передача, запись и хранение информации и элементной базы телекоммуникационных систем создается, в основном, на основе магнитных материалов. Перечисленные выше устройства работают на основе магнитооптических эффектов. Их качества определяются магнитооптической добротностью и величина магнитооптической добротности прямо пропорциональна удвоенному магнитооптическому эффекту Фарадея и обратно пропорциональна величине поглощения света[1]. Однако, в настоящее время величина магнитооптической

добротности достигла своего предельного значения, появилась необходимость разработки новых материалов. Благодаря развитию нанотехнологии, открылись новые возможности в создании совершенно новых материалов с наилучшими характеристиками.

Новые требования к быстродействию, емкости, энергоэффективности и надежности телекоммуникационных и вычислительных систем являются главным стимулом к разработке и созданию базы новых видов перспективных материалов, всестороннему исследованию их физических свойств. В последнее время актуальной является задача разработки материалов для новой области спиновой электроники-магноники [1]. Эксперименты по возбуждению и распространению спиновых волн в магнитных пленках ранее были ограничены только структурами на основе ферромагнитных металлов [2]. Между тем, использование высококачественных пленок железиттриевого граната $Y_3Fe_5O_{12}$ (YIG, ЖИГ) для таких задач оказалось более перспективным. Во многом это связано с очень малыми значениями ширины линии ферромагнитного резонанса в бытовой полосе частот 2.18 ГГц (~ 0.1 Э) и параметра затухания Гильберта, который для монокристалла ЖИГ составляет 5×10^{-5} [3]. Это открывает широкие возможности использования таких структур при создании энергонезависимой памяти, спиновых транзисторов, спиновой логики, датчиков магнитных полей и управляемых СВЧ-устройств [4].

Другим направлением использования ферритов является их интеграция с сегнетоэлектриками для формирования элементной базы стрейнтроники [5] и создания приборов на её основе. Синтез ферритовой пленки на сегнетоэлектрических подложках позволяет в едином объёме сочетать спин-волновые и упругие свойства и предоставляет значительные преимущества в миниатюризации, скорости обработки информации и стоимости производства СВЧ интегральных схем.

Предлагаемые тонкопленочные гетероструктуры типа ферромагнетик-полупроводник и ферромагнетик-диэлектрик, где в качестве ферромагнетика могут выступать 3d-металлы (Cr, Fe, Co, Ni) или наноразмерные пленки феррит-гранатов ($Y_3Fe_5O_{12}$, $Bi_3Fe_5O_{12}$) на подложках диэлектриков ($Gd_3Ga_5O_{12}$, и $LiNbO_3$) и полупроводников (Si, SiO_2) открывают новые возможности создания нового оборудования для передачи, записи и хранения информации и элементной базы средств связи.

Данные материалы будут представлять собой метаматериалы с сильной локализацией спин-поляризованных носителей заряда в интерфейсных областях. В настоящее время будет решаться фундаментальная проблема взаимодействия света с системами с сильной локализацией носителей заряда со спиновой поляризацией в интерфейсных областях, поиск усиленных такой локализацией электрических и магнитных явлений. В многослойных системах с пониженной симметрией возможно появление новых электромагнитных явлений, усиление нелинейных

оптических явлений, возникновение эффективного воздействия сверхкоротких световых импульсов на состояние намагниченности. В многослойных наноструктурах ферромагнетик-полупроводников можно ожидать как прямое, так и опосредованное через электронные, фононные и орбитальные возбуждения взаимодействие света с спиновой системой.

Результаты проведенных исследований внесут новый вклад в фундаментальную информацию по свойствам тонкопленочных гибридных структур типа ферромагнетик-полупроводник, это определяет научную новизну исследований. Использование этой важной информации позволит создавать современные устройства интегральной спинтроники и оптоэлектроники, способные удовлетворять возрастающие требования к быстродействию телекоммуникационных и вычислительных систем, что указывает на актуальность запланированных исследований в науке.

Важнейшими задачами настоящего времени являются проводящиеся комплексные исследования магнитных материалов, имеющих фундаментальное и прикладное значение в области телекоммуникаций, а также, создание и оптимизация архитектуры хранения, передачи информации. В этом направлении имеют важное значение большие магнитооптические эффекты в видимой и ближней инфракрасной областях спектра, а также создание новых ферродиелектриков с большим электросопротивлением. В частности, в Германии, Франции, России, Японии и других развитых странах особое внимание уделяется записи–хранению–считыванию информации на магнитных N- слойных структурах, излучение от которых испытывает многократное преломление и отражение.

Мировые разработки устройств для объемной записи информации, при условии принятия в качестве основы бита информации, дают возможность многократного увеличения плотности записи информации в точке пересечения блоховских линий. Ведение целенаправленного исследования по разработке методов записи информации на несколько сот слоёв на основе двухфотонной технологии на двустороннем диске дает возможность легкого изменения информации в толще материал в точке бита. В этом смысле, разработка новых принципов памяти на основе полупроводниковых интегральных схем, цилиндрических магнитных доменов, зарядных устройств связи, изучение спинтроники, оптических явлений (термооптика, электрооптика, другие типы записи, в том числе голография), а также усовершенствование устройств на основе наноструктур, находятся в фокусе внимания современных фундаментальных и прикладных исследований.

Многослойные наноразмерные структуры, состоящие из чередующихся слоёв магнитных и немагнитных материалов, представляют большой интерес, как для фундаментальной физики, так и для различных технологических применений. Например, многослойные наноструктуры, состоящие из чередующихся слоев магнитного и немагнитного вещества,

находят применение в качестве сред для записи информации со сверхвысокой плотностью, сенсоров магнитных полей с высокой чувствительностью, магниторезистивной памяти с произвольной выборкой. В силу слоистости структуры ожидается сильная анизотропия оптических, магнитных и магнитооптических свойств, в том числе для фотоиндуцированных эффектов.

Фактически сейчас сформировалось целое новое научное направление в физике - нано размерный магнетизм, изучающее электрофизические, структурные, магнитные и оптические свойства тонкопленочных материалов, различных композитов на основе наночастиц, плазмонных структур. Также, большой прогресс достигнут в области фемтомагнетизма наноразмерных структур. В будущем будут созданы новые магнитные и полупроводниковые наноструктуры. Будет проведено комплексное исследование магнитных, оптических и электрофизических свойств, полученных наноструктур. Можно ожидать, что именно в таких структурах, благодаря особым электронным и спиновым состояниям на интерфейсах, а также размерным эффектам, электрофизические, магнитные и оптические свойства, будут существенно отличаться от известных для объемных материалов. Ожидается, что в созданных метаматериалах на основе магнитных и полупроводниковых наноструктур будет получено необходимое усиление оптических и магнитооптических свойств, а также модификация электрофизических свойств, поэтому такие структуры в перспективе могут быть использованы в качестве материалов для интегральных устройств спинтроники (логические элементы, ячейки памяти) и фотоники (фарадеевские затворы, фазовращатели, модуляторы). Это является важным для практического использования запланированных результатов науки в экономической и социальной сферах.

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*Садикова Д.И., к.м.н.
доцент
кафедра урологии
АГМИ
Узбекистан, Андижан
Зайнобитдинова Ф.
студент 2 курса магистратуры
кафедра урологии
АГМИ
Узбекистан, Андижан*

ОЖИРЕНИЕ – НЕИНФЕКЦИОННАЯ «ЭПИДЕМИЯ» У ЖЕНЩИН С НЕДЕРЖАНИЕМ МОЧИ (ОБЗОР ЛИТЕРАТУРЫ)

Аннотация. Состояние ожирения у женщин с недержанием мочи необходимо рассматривать с позиции клинической вегетологии, отражением которых являются нейрогуморальные, вегето-висцеральные нарушения на уровне целостного организма.

Ключевые слова: заболевание, ожирение, недержание мочи, нейрогуморальный фактор.

*Sadikova D.I., Ph.D
associate professor
Department of Urology
ASMI
Uzbekistan, Andijan
Zainobitdinova F.
2nd year Master
Department of Urology
ASMI
Uzbekistan, Andijan*

OBESITY IS A NON-INFECTIOUS “EPIDEMIC” IN WOMEN WITH URINARY INCONTINENCE (LITERATURE REVIEW)

Annotation. The state of obesity in women with urinary incontinence must be considered from the perspective of clinical vegetology, which is reflected in neurohumoral, vegetative-visceral disorders at the level of the whole organism.

Key words: disease, obesity, urinary incontinence, neurohumoral factor.

Актуальность. Современная статистика свидетельствует о неуклонном увеличении различных вариантов нейроэндокринных нарушений у женщин с преобладанием изменений липидного обмена в

форме ожирения. Признание ВОЗ ожирения новой неинфекционной «эпидемией» XXI века требует активного внимания к этой проблеме [1, 3, 4, 5, 8, 11]. Ожирение - хроническое многофакторное заболевание, развивающееся под влиянием физиологических и генетических факторов, а также факторов внешней среды. [2, 3, 6, 8, 10].

В активном репродуктивном возрасте у женщин с высокой частотой после патологических родов развивается послеродовое ожирение в преобладающем большинстве случаев связанное с эндокринными факторами [1, 8, 1].

Чрезмерное отложение жировой ткани на передней брюшной стенке с образованием кожно-жирового фартука, кроме причинения эстетических неудобств является причиной возникновения функциональных нарушений со стороны желудочно-кишечного тракта, сердечно-сосудистой системы, органов дыхания, возникновения болей в спине и появлению недержания мочи [2, 3, 7, 11]. Все эти изменения приводят к ограничению трудоспособности пациенток, что позволяет рассматривать пластику передней брюшной стенки как операцию, направленную на коррекцию не только эстетических деформаций, но и функциональных нарушений [1, 4, 5].

Факторами риска развития недержания мочи считаются: роды [7, 8, 9] (особенно патологические или многократные), тяжелая физическая работа, ожирение, варикозная болезнь, спланхноптоз, соматическая патология, сопровождающаяся повышением внутрибрюшного давления (хронический кашель, запоры и т.д.), предшествующие хирургические вмешательства на органах малого таза, неврологическая патология. Недержание мочи в 40% случаев имеет характер стрессового и проявляется при повышении внутрибрюшного давления, примерно в 25% наблюдается ургентное недержание вследствие императивного позыва, и в 25% случаев имеет место смешанная инконтиненция [3, 6, 8, 10].

К настоящему времени сложилось представление о роли дисфункции в системе вегетативной регуляции висцеральных органов и желез внутренней секреции и их гормональной перестройки [8, 11]. Дефицит эстрогенов в климактерии - важнейший фактор, влияющий на состав соединительной ткани и ее биохимические характеристики. Исследования последних лет, учитывающие и данные результатов биопсии парауретральной ткани, убедительно показали, что соединительная ткань у женщин, удерживающих мочу, значительно отличается от таковой у женщин с истинным недержанием мочи при напряжении как по общему количеству коллагена, так и по его качеству. Возможно, что у женщин с генетически дефектной соединительной тканью (это определяется и ролью наследственности в развитии стрессового недержания мочи) эстрогенный дефицит при старении вызывает ускоренные дегенеративные процессы в соединительной ткани, что влияет на механизм уретральной поддержки и

может способствовать развитию в климактерии стрессового недержания мочи [5, 6, 9, 10, 12].

Заключение: Основываясь на современных положениях общей патологии состояние ожирения у женщин с недержанием мочи необходимо рассматривать с позиции клинической вегетологии, отражением которых являются нейрогуморальные, вегето-висцеральные нарушения на уровне целостного организма.

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ВОПРОСЫ РАЗВИТИЯ СОЦИАЛЬНОЙ ИНФРАСТРУКТУРЫ В ПОВЫШЕНИИ БЛАГОСОСТОЯНИЯ НАСЕЛЕНИЯ

Аннотация. В данной статье речь идёт о вопросах развития социальной инфраструктуры, которые служат повышению благосостояния населения. В статье также освещены реформы государственной социальной политики, и это служит развитию механизмов эффективного решения проблем сельского населения. Например, проблемы в сфере образовательной политики, жилищного обеспечения, бытового обслуживания и здравоохранения. В статье описываются социальное обеспечение, социальное страхование, социальная солидарность и социальная помощь.

Ключевые слова: социальная защита, социальное обеспечение, социальная значимость, социальная инфраструктура, благосостояние населения.

Samieva G.T.
associate professor

Department of “Innovative Economics”
Karshi Engineering and Economic Institute

ISSUES OF DEVELOPMENT OF SOCIAL INFRASTRUCTURE IN INCREASING THE WELL-BEING OF THE POPULATION

Annotation. This article deals with issues of development of social infrastructure that serve to improve the well-being of the population. The article also highlights the reforms of state social policy, and this serves to develop mechanisms for effectively solving the problems of the rural population. For example, problems in the field of educational policy, housing, consumer services and health care. The article describes social security, social insurance, social solidarity and social assistance.

Key words: social protection, social security, social significance, social infrastructure, welfare of the population.

Развитие социальной инфраструктуры в мире служит повышению благосостояния населения, для этого государство отвечает за решение актуальных задач. 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;
- Здоровохранение;
- 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.

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 жизнедеятельность человека, материальные и духовные блага.

Деятельностью, которая не позволяет обеспечить благосостояние населения, является именно разнообразие социальной инфраструктуры и качественных услуг в регионах. Поскольку сельское население имеет право на качественный доступ к услугам социальной инфраструктуры, равенство реформ является для него первостепенным вопросом.

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Саттаров Т.Т.
ассистент
кафедра «Учет и аудит»
СамИСИ

ТЕОРЕТИЧЕСКИЕ ОСНОВЫ УЧЕТА ГОТОВЫХ ЛЕКАРСТВЕННЫХ СРЕДСТВ: МЕЖДУНАРОДНЫЙ И НАЦИОНАЛЬНЫЙ АСПЕКТЫ

Аннотация. В данной статье на основе особенностей производства готовых лекарственных средств, их теоретической основы, сходных и различных аспектов, основанных на международных и национальных стандартах, обсуждаются недостатки в их производстве и их устранение с целью увеличения экономической эффективности предприятий, работающих в данной сфере, представлены рекомендации.

Ключевые слова: Фармацевтика, фармацевтические препараты, готовая продукция, международные стандарты, национальные стандарты, запасы товарного сырья, запасы.

Sattarov T.T.
assistant
Department of Accounting and Audit
SamISI

THEORETICAL BASIS FOR ACCOUNTING FINISHED MEDICINAL PRODUCTS: INTERNATIONAL AND NATIONAL ASPECTS

Annotation. In this article, based on the features of the production of finished medicinal products, their theoretical basis, similar and different aspects based on international and national standards, shortcomings in their production and their elimination in order to increase the economic efficiency of enterprises operating in this area are discussed, recommendations are presented.

Key words: Pharmaceuticals, pharmaceuticals, finished products, international standards, national standards, stocks of commercial raw materials, stocks.

Введение. Постановление Президента Республики Узбекистан «О мерах по обеспечению выполнения Закона Республики Узбекистан «О Государственном бюджете Республики Узбекистан на 2022 год»» «2022 – 2024 годы» в целевых показателях бюджетных расходов и программ развития распределителей бюджетных средств первого уровня на годы" "реформировать фармацевтическую отрасль, в частности, совершенствовать систему государственного управления в сфере, широко

внедрять рыночные отношения, производителя, переработчика и продавца сельскохозяйственной продукции, стратегическую цель укрепления правовой базы отношений между субъектами, привлечения инвестиций в отрасль, внедрения ресурсосберегающих технологий и обеспечения производителей фармацевтической продукции современной техникой.

Анализ литературы по теме. В условиях цифровой экономики происходят важные изменения в направлении экономического и социального развития. Это, в свою очередь, приводит к созданию инноваций в области эффективного использования ИКТ в сфере образования, как на предприятиях. В связи с этим ряд узбекских ученых, в том числе И.Т.Абдукаримов, Э.А.Акрамов, О.Бободжонов, А.В.Вахобов, Э.Ф.Гадоев, М.М.Толаходжаева, Д.Кудбиев, Р.Д.Достмуродов, М.Э.Полатов, М.Г.Пардаев, К.Б.Уразов, Р.А.Абдуллаев, Х.Н. Мусаев, А.И.Аликулов, С.Н.Ташназаров, Д.Р.Рафеев, Д.Ж. Пашаходжаева, У.А.Ширинов, Б.Ф.Боронов, З.У.Мухаммадиев и другие.

Также зарубежные ученые Адаменко А.А., Башкатов В.В., Голкина Г.Е., Кузина А.Ф., Р.Робертсон, Додж, П.И.Камышанов, Хермансон, Роджер Х., Джеймс Дон Эдвардс, Пиззи, В.Ф.Палий и другие в своих работах и готовых продуктах. Тех, кто широко занимался отчетностью и аудитом деятельности, можно найти в опубликованных ими учебниках, учебных пособиях и статьях.

Решение столь актуальных проблем и задач на предприятиях нашей страны сегодня требует совершенствования не только практических, но и теоретических вопросов учета готовой продукции.

Международный стандарт бухгалтерского учета «Запасы» № 2 (IAS) определяет термин «запасы» следующим образом:

«Запасы – это активы в виде сырья и материалов, которые предназначены для продажи в ходе обычной деятельности, находятся в процессе производства для такой продажи или предназначены для использования в производственном процессе или при оказании услуг»..»

Проведенное исследование потребовало изучения мнений и комментариев ряда зарубежных ученых и их определений.

Русский ученый С. Н. Поленова говорила: «Готовой продукцией называется продукция, процесс производства которой полностью завершен на предприятии, соответствует требованиям стандарта и техническим условиям, принята службой технического контроля, оформлена приемочно-сдаточными документами и сдана на склад готовой продукции».

В национальном стандарте бухгалтерского учета Республики Узбекистан №4 даны следующие определения:

Запасы – материальные ценности, которые хранятся с целью последующей реализации в процессе эксплуатации и находятся в процессе производства, а также используются в процессе производства продукции, выполнения работ или оказания услуг, либо для осуществления

управленческих и социокультурные задачи. Готовая продукция, подготовленная в организации (актив, переработка (доработка) которого завершена и который предназначен для реализации и соответствует техническим и качественным характеристикам, предусмотренным договором или в случаях, предусмотренных законодательством).

При проведении исследований продукции, в том числе готовой продукции, необходимо учитывать научные исследования ученых нашей страны.

По мнению экономистов К.С.Исмаилова и А.Б.Утемуратова, «Готовая продукция – это результат производственного процесса. На производственных предприятиях к продукту труда относится вся изготовленная готовая продукция.

Следующие определения этих категорий приведены в отраслевых словарях в интернет-источниках:

Продукт – это результат экономической деятельности, воплощенный в товарах и услугах. Его материальная форма имеет вид материального продукта.

Готовая продукция представляет собой категорию запасов, специфичную для производственных предприятий. Это продукты, которые завершили производственный процесс, но еще не были проданы или проданы розничным торговцам.

Готовая продукция – это конечный продукт производственного процесса на предприятии. Товаром считается продукция, прошедшая все стадии технологической обработки, соответствующая утвержденным стандартам и техническим условиям (обеспеченная сертификатом или иным документом, подтверждающим ее качество), принятая отделом технического контроля и доставленная на склад или отгруженная покупателю. готовый продукт.

Готовая продукция – это продукция или товары, которые были произведены в течение полного цикла производства или приобретены в готовом состоянии, но еще не реализованы покупателям.

Готовая продукция – продукция, полностью готовая к переработке, соответствующая действующим стандартам и техническим условиям, принятая на склад организации и заказчика (покупателя), и полуфабрикаты.

Готовая продукция (ТМ) – это продукция, которая производится предприятием для дальнейшей реализации.

Таким образом, в результате проведенных исследований, на основании приведенных в литературе определений и описаний, можно сделать вывод, что готовая продукция – это продукция, самостоятельно производимая и комплектуемая предприятием, полностью отвечающая требованиям, предъявляемым государством и уже готов на складе для продажи покупателям. Это незаменимый товар. Этот актив, представляющий собой готовую продукцию для компании-производителя,

предназначен для процесса повторного производства для компании-покупателя и представляет собой приобретенные запасы.

Приведенные выше определения, данные зарубежными и отечественными учеными и приведенные в международных и национальных стандартах, а также источниках информации, приобретают важное научное и практическое значение и раскрывают важные аспекты готовой продукции. Однако, как видно из этих определений, не существует единого определения готовой продукции, в том числе готовых лекарственных средств, включающего все ее признаки. У них есть продукты и они готовы

Нельзя сказать, что описания отражают все аспекты продукции.

Итак, каковы задачи учета готовой продукции сегодня? Что отражено в нашем нынешнем национальном стандарте в отношении активов этого предприятия и каковы проблемы? А в международных стандартах финансовой отчетности, каковы подходы и каковы потребности в совершенствовании нашего национального стандарта? На что следует обратить внимание для совершенствования теоретических основ учета готовой продукции?

Поиск ответов на перечисленные и другие актуальные вопросы учета готовой продукции является одной из важных задач, стоящих перед международной и национальной доктриной бухгалтерского учета.

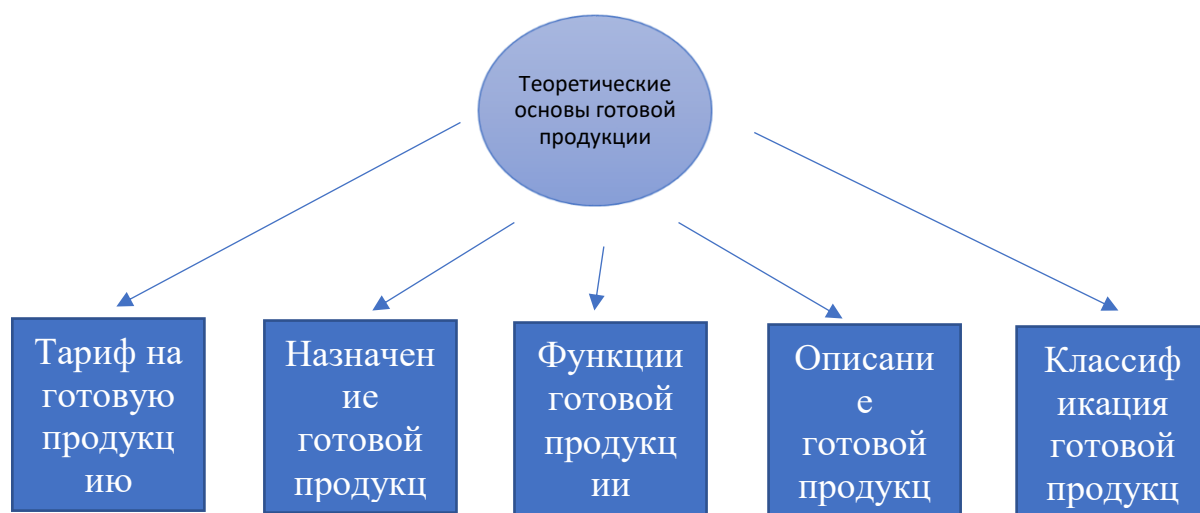


Рисунок 1. Компоненты теоретической основы готовой продукции

Целью готовой продукции как неотъемлемого объекта учета является определение себестоимости готовой продукции на предприятиях, установление контроля за доходами и расходами, учитываемыми в результате ее реализации, удовлетворение потребностей внутренних пользователей информации. Правильный учет этих процессов – это

предоставление достоверной информации, отвечающей потребностям пользователей внутренней информации по учету готовой продукции на предприятиях, а также возможность принимать правильные и своевременные управленческие решения. Поэтому для полного достижения цели учета готовой продукции на фармацевтических предприятиях, прежде всего, необходимо правильно определить показатели, влияющие на себестоимость этого актива, своевременно и Мы считаем, что управленческий персонал должен принимать правильные решения относительно презентации и установления продажной цены готовой продукции.

В ходе исследований при изучении международных и национальных стандартов бухгалтерского учета выяснилось, что хотя конкретного стандарта на готовую продукцию, четко раскрывающего ее общие характеристики до учета, не существует, тем не менее, стандарты ее учета разработаны. В ходе исследования были изучены и сравнены эти стандарты (табл. 1):

Таблица 1

Таблица сравнения международных стандартов финансовой отчетности, разработанных для готовой продукции, с национальными стандартами бухгалтерского учета.

Международные стандарты финансовой отчетности	Национальные стандарты бухгалтерского учета
Концептуальные основы финансовой отчетности	Концептуальные основы финансовой отчетности и представления
МСФО № 1 «Представление финансовой отчетности»	БГМС №1 «Учетная политика и финансовая отчетность»
МСФО № 2 «Запасы»	БГМС № 4 «Инвентаризация»
МСФО № 8 «Учетная политика, изменения в бухгалтерских оценках и ошибки»	БГМС №1 «Учетная политика и финансовая отчетность»
МСФО № 12 «Налог на прибыль»	
МСБУ № 21 «Влияние изменения валютных курсов»	БГМС № 22 «Учет активов и обязательств, выраженных в иностранной валюте»
МСФО № 23 «Долговые расходы»	БГМС № 24 «Учет расходов по долгам»
МСФО № 29 «Финансовая отчетность в условиях гиперинфляции»	
МСФО № 34 «Промежуточная финансовая отчетность»	БГМС №3 «Отчет о финансовых результатах»
МСФО № 37 «Резервы, условные обязательства и условные активы»	
МСФО № 41 «Сельское хозяйство»	
Международные стандарты финансовой отчетности №1 (МСФО) «Первое применение международных стандартов финансовой отчетности»	
	БХМС №15 «Бухгалтерский баланс»

	БГМС №19 «Организация и передача инвентаря»
	БХМС № 21 «План финансово-хозяйственной бухгалтерской отчетности хозяйствующих субъектов и инструкции по его применению»
МСФО № 13 «Оценка справедливой стоимости»	
МСФО № 15 «Поступления по договорам с покупателями»	БГМС №2 «Доходы от основной экономической деятельности»

Из таблицы видно, что между международными и национальными стандартами имеются сходства и различия, и важно применять их в деятельности предприятий, производящих фармацевтическую продукцию.

По результатам проведенного исследования из приведенных выше определений и описаний можно сделать следующие выводы:

Выводы и предложения. Реальная ситуация на экономическом рынке предъявляет такие требования к руководству организации, согласно которым каждая компания должна строго выбирать новые технологии эффективного учета и постоянное совершенствование существующих систем учета.

Во-первых, в доктрине и практике международного бухгалтерского учета готовая продукция признается важным видом активов предприятия, соответственно, важным объектом учета и отчетности.

Во-вторых, несмотря на то, что готовая продукция является объектом учета, не существует комплексных определений, четко и всесторонне выражающих ее содержание.

В-третьих, мы считаем, что комплексная система критериев классификации готовой продукции не разработана и эта комплексная система не закреплена международными стандартами.

«Готовая продукция – быстроликвидное имущество, прошедшее все этапы производственно-технологических процессов на предприятии, доставленное на основной склад, полностью соответствующее нормам и техническим условиям, установленным государством, и предназначенное для реализации».

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*Сафронов О.Е.
аспирант*

*Федеральное государственное унитарное предприятие
«Всероссийский научно-исследовательский институт «Центр»
Россия, г.Москва*

ЭКОНОМИЧЕСКИ ОБОСНОВАННЫЕ РЕШЕНИЯ В РАЗРАБОТКЕ СИСТЕМ ИДЕНТИФИКАЦИИ ТОВАРОВ В ИННОВАЦИОННОЙ СРЕДЕ

Аннотация. Данная статья посвящена проблеме принятия экономически обоснованных решений в контексте внедрения систем идентификации товаров на инновационно-ориентированных предприятиях. Рассмотрены основные факторы, влияющие на принятие решений в данной области, а также предложены стратегии и подходы к их решению. Анализируются факторы неопределенности, информационной асимметрии, сложности оценки экономических выгод и привлечения финансирования, которые затрудняют принятие решений в области внедрения систем идентификации товаров. Обсуждаются возможные подходы к решению данных проблем и перспективы развития данного направления.

Ключевые слова: повышение эффективности, системы идентификации товаров, инновации, принятие решений, экономически обоснованные решения, финансирование.

Safronov O.E.

postgraduate student

*Federal State Unitary Enterprise "All-Russian Scientific Research Institute
"Center"
Russia, Moscow*

ECONOMICALLY JUSTIFIED DECISIONS IN THE DEVELOPMENT OF PRODUCT IDENTIFICATION SYSTEMS IN AN INNOVATIVE ENVIRONMENT

Abstract. This article is devoted to the issues of the problem of making economically justified decisions in the context of implementing product identification systems in innovation-oriented enterprises. The main factors influencing decision-making in this area are considered, and strategies and approaches to their solution are proposed. Factors of uncertainty, information asymmetry, difficulty in assessing economic benefits, and attracting financing, which hinder decision-making in the field of implementing product identification

systems, are analyzed. Possible approaches to solving these problems and the prospects for the development of this direction are discussed.

Keywords: efficiency improvement, product identification systems, innovations, decision-making, economically justified decisions, financing.

Введение.

В современном динамичном мире, где конкуренция на рынке постоянно возрастает, инновационные ориентированные предприятия сталкиваются с множеством сложностей при внедрении новых технологий и систем, включая системы идентификации товаров. Одной из существенных проблем, с которой они сталкиваются, является сложность принятия экономически обоснованных решений в этой области.

Экономическая обоснованность принимаемых решений играет ключевую роль в успешном внедрении и использовании систем идентификации товаров. Эти системы могут включать в себя различные технологии, такие как RFID (Radio-Frequency Identification), QR-кодирование, лазерная гравировка и нанотехнологии, и их внедрение может потребовать значительных инвестиций со стороны предприятий.

Однако, принятие экономически обоснованных решений в этой области осложняется рядом факторов. Во-первых, существует неопределенность относительно будущих экономических выгод от внедрения систем идентификации товаров. Многие из этих систем могут иметь долгосрочные выгоды, которые сложно оценить заранее, а также могут включать в себя как прямые, так и косвенные экономические выгоды.

Кроме того, внедрение систем идентификации товаров может столкнуться с сопутствующими проблемами, такими как информационная асимметрия между участниками рынка, значительные сроки окупаемости проектов и сложность привлечения финансирования от заинтересованных сторон.

Для успешного преодоления этих проблем и принятия экономически обоснованных решений в области внедрения систем идентификации товаров необходимо провести комплексное исследование текущего состояния, выявить основные проблемы и факторы, влияющие на принятие решений, а также разработать стратегии и рекомендации для их преодоления.

В данной статье будет представлен анализ проблемы принятия экономически обоснованных решений в области внедрения систем идентификации товаров на инновационно-ориентированных предприятиях. Будут рассмотрены основные факторы, влияющие на принятие решений, а также предложены рекомендации для их устранения и повышения эффективности процесса принятия решений.

Методы и исследования.

Методы исследования в данном исследовании были разработаны с целью систематического анализа сложности принятия экономически обоснованных решений при внедрении систем идентификации товаров. Для достижения этой цели был использован комплекс методов, включающий в себя аналитический анализ, обзор литературных источников, статистические данные и экспертные оценки.

Аналитический анализ предполагал детальное изучение текущего состояния проблемы, идентификацию ключевых факторов, влияющих на процесс принятия решений, а также выявление основных тенденций и закономерностей. Для этого были проанализированы научные статьи, отчеты о проектах, статистические данные и экспертные мнения, а также проведены интервью с профессионалами в области экономики, управления и инноваций.

Обзор литературных источников включал в себя анализ академических публикаций, книг, научных статей и отчетов о проектах, связанных с внедрением систем идентификации товаров. Целью этого этапа было ознакомление с существующими теориями, концепциями, методами и практиками в данной области, а также выявление пробелов в существующих исследованиях и возможных направлений для дальнейшего исследования.

Статистические данные использовались для анализа текущего состояния рынка и определения ключевых тенденций в развитии сектора, связанного с внедрением систем идентификации товаров. Для этого были использованы данные статистических организаций, отчеты о рыночных исследованиях и другие источники информации.

Экспертные оценки представляли собой мнения и оценки специалистов и практиков, работающих в области экономики, управления и инноваций. Для сбора этих данных были проведены полевые исследования, включающие интервью, фокус-группы и анкетирование. Экспертные оценки использовались для проверки достоверности и актуальности полученных результатов, а также для выявления дополнительных аспектов проблемы, которые могли быть упущены при анализе литературных источников и статистических данных.

В результате использования указанных методов была получена комплексная картина сложности принятия экономически обоснованных решений при внедрении систем идентификации товаров. Полученные данные и аналитические выводы были использованы в последующем для разработки рекомендаций по преодолению этих сложностей и повышению эффективности процесса принятия решений на инновационно-ориентированных предприятиях.

Результаты оригинального авторского исследования и обсуждение.

В данном разделе рассмотрим основные аспекты проблемы принятия экономически обоснованных решений в области внедрения систем

идентификации товаров на инновационно-ориентированных предприятиях. Обсудим факторы, влияющие на принятие решений, и рассмотрим возможные стратегии и подходы к их решению.

Одной из основных проблем, с которой сталкиваются предприятия при принятии решений о внедрении систем идентификации товаров, является неопределенность относительно будущих экономических выгод от таких инвестиций. Внедрение новых технологий и систем может быть связано с рядом неизвестных факторов, включая изменение потребительских предпочтений, технологические изменения на рынке и изменение конкурентной среды. В таких условиях прогнозирование будущих выгод может быть крайне сложной задачей.

Для преодоления этой проблемы необходимо проводить тщательный анализ рынка и потенциальных рисков и выгод от внедрения систем идентификации товаров. Это включает в себя изучение тенденций развития рынка, анализ конкурентов, оценку технических и экономических характеристик предлагаемых технологий, а также проведение статистических и экономических моделирований для прогнозирования результатов внедрения.

Еще одним значимым фактором, влияющим на принятие решений в области внедрения систем идентификации товаров, является информационная асимметрия между участниками рынка. Как правило, предприятия, разрабатывающие и внедряющие инновационные технологии, обладают более полной информацией о своих продуктах и услугах, чем их потенциальные клиенты и партнеры.

Это создает неравные условия для принятия решений, поскольку потенциальные клиенты могут не иметь достаточной информации о технологиях и их экономических выгодах. В результате, предприятия могут столкнуться с трудностями при привлечении клиентов и инвесторов, что затрудняет процесс внедрения систем идентификации товаров.

Для решения этой проблемы необходимо активно информировать потенциальных клиентов и партнеров о преимуществах и экономических выгодах от внедрения систем идентификации товаров. Это может включать в себя проведение информационных кампаний, участие в выставках и конференциях, публикацию научных исследований и кейсов успешного внедрения.

Очередным фактором, затрудняющим принятие решений в области внедрения систем идентификации товаров, является сложность оценки экономических выгод от таких инвестиций. Многие из этих систем могут иметь как прямые, так и косвенные экономические выгоды, которые могут быть сложно измерить и количественно оценить.

Прямые экономические выгоды от внедрения систем идентификации товаров могут включать в себя снижение затрат на складирование и логистику, увеличение эффективности производства и сокращение потерь

от контрафактной продукции. Однако косвенные выгоды, такие как улучшение имиджа компании и повышение лояльности потребителей, могут быть более сложными для оценки.

Для решения этой проблемы необходимо разработать методики оценки экономических выгод от внедрения систем идентификации товаров, которые учитывали бы как прямые, так и косвенные выгоды. Это может включать в себя проведение анализа затрат и выгод, оценку влияния на бренд и репутацию компании, а также измерение уровня удовлетворенности потребителей и партнеров.

Еще одной существенной проблемой, с которой сталкиваются инновационно-ориентированные предприятия, является сложность привлечения финансирования на внедрение систем идентификации товаров. Внедрение новых технологий и систем часто требует значительных инвестиций, которые могут быть недоступны для небольших и средних предприятий.

Однако, вложения в разработку и внедрение систем идентификации товаров могут иметь долгосрочные экономические выгоды, такие как увеличение конкурентоспособности и расширение рынков сбыта. Поэтому одним из важных аспектов решения этой проблемы является разработка убедительных бизнес-планов и презентаций для привлечения инвестиций от заинтересованных сторон.

Кроме того, предприятия могут использовать различные инструменты финансирования, такие как государственные субсидии, кредиты и инвестиции от частных инвесторов, для обеспечения финансовой устойчивости и успешного внедрения систем идентификации товаров.

Заключение.

В ходе данного исследования была рассмотрена проблема принятия экономически обоснованных решений в контексте внедрения систем идентификации товаров на инновационно-ориентированных предприятиях. Рассмотрены основные факторы, влияющие на принятие решений в данной области, а также предложены стратегии и подходы к их решению.

Одной из основных проблем, выявленных в ходе исследования, является неопределенность относительно будущих экономических выгод от внедрения систем идентификации товаров. Внедрение новых технологий и систем может быть связано с рядом неизвестных факторов, что затрудняет прогнозирование будущих выгод от таких инвестиций. Для решения этой проблемы необходимо проводить тщательный анализ рынка и потенциальных рисков и выгод от внедрения систем идентификации товаров.

Еще одной существенной проблемой является информационная асимметрия между участниками рынка. Предприятия, разрабатывающие и внедряющие инновационные технологии, обладают более полной информацией о своих продуктах и услугах, что создает неравные условия

для принятия решений. Для решения этой проблемы необходимо активно информировать потенциальных клиентов и партнеров о преимуществах и экономических выгодах от внедрения систем идентификации товаров.

Сложность оценки экономических выгод от внедрения систем идентификации товаров также является существенным фактором, затрудняющим принятие решений в данной области. Многие из этих систем могут иметь как прямые, так и косвенные экономические выгоды, которые могут быть сложно измерить и количественно оценить. Для решения этой проблемы необходимо разработать методики оценки экономических выгод от внедрения систем идентификации товаров, которые учитывали бы как прямые, так и косвенные выгоды.

Еще одной существенной проблемой является сложность привлечения финансирования на внедрение систем идентификации товаров. Внедрение новых технологий и систем часто требует значительных инвестиций, что может быть недоступно для небольших и средних предприятий. Однако, с помощью различных инструментов финансирования и разработки убедительных бизнес-планов, эта проблема может быть успешно преодолена.

В целом, принятие экономически обоснованных решений в области внедрения систем идентификации товаров на инновационно-ориентированных предприятиях представляет собой сложную задачу, требующую системного подхода и учета различных факторов. Однако, с помощью тщательного анализа, разработки стратегий и привлечения соответствующих ресурсов, эти проблемы могут быть успешно преодолены, что позволит предприятиям достичь высоких результатов в области внедрения инновационных технологий и систем.

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*Серопол Д.И.
студент
юридический факультет
Кубанский государственный аграрный
университет имени И.Т. Трубилина
Россия, г.Краснодар*

НЕКОТОРЫЕ ПРОБЛЕМЫ УСЫНОВЛЕНИЯ В РАМКАХ ГРАЖДАНСКОГО СУДОПРОИЗВОДСТВА

Аннотация. Автором исследуется проблематика вопроса возможности усыновления посредством рассмотрения заявлений усыновителей судами. Определено, что законом предусматривается существенный перечень требований, предъявляемый к кандидату на роль усыновителя. Рассмотрены примеры из судебной практики. В качестве выявленных проблем мы обозначили отсутствие регламентирования в ГПК РФ обязанности предупреждения лиц об уголовной ответственности за разглашение тайны, а также их перечень, который необходимо отразить в ст. 237 ГПК РФ.

Ключевые слова: усыновление, усыновитель, гражданское судопроизводство, особое производство, органы опеки и попечительства.

*Seropol D.I.
student
Faculty of Law Kuban
State Agrarian University named after I.T. Trubilin
Russia, Krasnodar*

SOME PROBLEMS OF ADOPTION IN CIVIL PROCEEDINGS

Annotation. The author explores the problematic of the issue of the possibility of adoption through the consideration of adoptive parents' applications by the courts. It is determined that the law provides for a substantial list of requirements for a candidate for the role of an adoptive parent. Examples from judicial practice are considered. As identified problems, we identified the lack of regulation in the Civil Procedure Code of the Russian Federation of the obligation to warn persons of criminal liability for disclosure of secrets, as well as their list, which must be reflected in Article 237 of the Civil Procedure Code of the Russian Federation.

Keywords: adoption, adoptive parent, civil proceedings, special proceedings, guardianship and guardianship authorities.

Проблема усыновления в России всегда являлась актуальной, поскольку проведение социальной политики в данном направлении является одной из важных целей государства. Суть усыновления заключается в том, что между ребенком, который лишен родительской опеки, и усыновителем возникают правоотношения, целью которых является семейное воспитание ребенка [1].

Возможность усыновления рассматривается Семейным кодексом Российской Федерации (далее – СК РФ) в главе 19. В данном нормативно-правовом акте законодателем регламентирован порядок усыновления ребенка, правовые последствия усыновления, а также иные вопросы, вытекающие из данной процедуры.

С процессуальной точки зрения усыновление происходит в рамках гражданского процесса. Порядок его проведения регламентируется правилами, относящимися к особому виду гражданского судопроизводства [2]. Важно отметить, что данная процедура является крайне серьезной для судьбы ребенка, в связи с чем со стороны суда и иных участников гражданского судопроизводства должно быть повышенное внимание к требованиям материального и процессуального права, которые касаются производства данной процедуры.

Так, в соответствии со ст. 269 Гражданского-процессуального кодекса Российской Федерации (далее – ГПК РФ) заявление об усыновлении имеет право подать гражданин Российской Федерации. Суд, в которой будет направлено данное заявления, определяется исходя из места жительства ребенка. Так, например, Ленинским районным судом г. Владивостока гражданское дело по заявлению Баранова И.А. было передано в Первомайский суд г. Владивостока по той причине, что заявитель нарушил требования ч. 1 ст. 269 ГПК РФ, регламентирующей подсудность по категории гражданских дел об усыновлении [3].

К заявлению должен быть приложен ряд документов, которые по большей части являются подтверждением соответствия усыновителя требованиям норм семейного права. Интересно отметить, что с 2011 года в обязательном порядке производится подготовка усыновителей, документ о прохождении которой также прикладывается к заявлению, направляемому в суд.

Следующим этапом является подготовка к судебному заседанию. В рамках данного процессуального этапа суд запрашивает у органов опеки и попечительства все необходимые документы, которые обосновывают возможность осуществления усыновления, его обоснованность, а также соответствие интересам ребенка. Так, например, органы опеки и попечительства должны убедиться о наличии нормальных условий для проживания усыновленного ребенка. Стоит отметить, что для усыновителей действует ряд социальных программ по улучшению их жилищных условий.

Стоит отметить, что при наличии положительного заключения органов опеки и попечительства суд практически в абсолютном большинстве случаев удовлетворяет заявление об усыновлении. Тем не менее в судебной практике встречаются случаи, когда заключение органов опеки и попечительства о невозможности быть кандидатом в усыновители признается судом незаконным и вследствие чего отменяется.

Фрунзенским районным судом г. Санкт-Петербурга было отменено заключение органов опеки и попечительства о невозможности стать усыновителями Михайловой А.В. и Михайлова Е.П. В обоснование принятого решения органами опеки и попечительства приведено, что кандидат в усыновители – Михайлов Е.П. скрыл факт опекунства своего племянника на период в 4 месяца. Кроме того, был сделан вывод о низкой готовности к приемному родительству вследствие ненадлежащих условий проживания. В ходе судебного заседания было установлено, что об удовлетворительности условий проживания ранее составлялся акт, не отмененный и не измененный, а сокрытие факта опекунства вовсе не влияет на принятие решения о готовности кандидатов стать усыновителями [4].

Одной из проблем судебного разбирательства по заявлению об усыновлении является предупреждение об уголовной ответственности лиц за разглашение тайны усыновления. Так, на практике данное предупреждение осуществляется устно и фиксируется в протоколе судебного заседания. На наш взгляд, существенным недостатком ГПК РФ является отсутствие перечня лиц, предупреждение об уголовной ответственности обязательно. Считаем, что наиболее уместно данное положение определить в ст. 273 ГПК РФ, которая регламентирует порядок рассмотрения заявления об усыновлении, состав лиц, имеющих право участвовать в закрытом судебном заседании.

Отметим, что законодателем предусмотрена и возможность отмены усыновления. Согласно п. 19 постановления Пленума Верховного Суда Российской Федерации от 20.04.2006 № 8 [5] причинами, по которым может быть отменено усыновление, могут являться отсутствие взаимопонимания между усыновителем и усыновленным, что «сказывается» на авторитете родителя, выявление умственной неполноценности усыновленного, что может препятствовать его воспитанию.

Правом требовать отмену усыновления обладают его родители, усыновители, сам усыновленный ребенок в возрасте от 14 лет, орган опеки и попечительства, прокурор. Считаем необходимым дополнить данный перечень «иными заинтересованными лицами». Так, на наш взгляд, правом требовать отмену усыновления должны обладать бабушки и дедушки (родители биологических родителей ребенка) поскольку им ввиду их общения со внуками будет более понятна «атмосфера» в приемной семье.

Таким образом, нами были рассмотрены некоторые особенности процедуры усыновления в гражданском процессе. В качестве выявленных

проблем мы обозначали отсутствие регламентирования в ГПК РФ обязательности предупреждения лиц об уголовной ответственности за разглашение тайны, а также их перечень, который необходимо отразить в ст. 237 ГПК РФ. Помимо этого, нами предложено расширить субъектный состав лиц, имеющих право требовать отмену усыновления. Разрешение выявленных проблем явно повысит уровень гарантий прав усыновляемого.

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*Суворов С.А.
студент
АВТ РУТ(МИИТ)
Кузьмин З.А.
студент
АВТ РУТ(МИИТ)
Научный руководитель:
Алфёров В.В., старший преподаватель
АВТ РУТ(МИИТ)*

ПЕРСПЕКТИВЫ РАЗВИТИЯ И ВОЗМОЖНОСТИ ПРИМЕНЕНИЯ ЭКРАНОПЛАНОВ В УСЛОВИЯХ АРКТИКИ

В статье рассмотрены перспективное направление развития транспорта – экранопланы. Их история, современные разработки, эксплуатационные характеристики, достоинства и недостатки, даны предложения их использования.

Ключевые слова: водный транспорт, экранопланы, Арктика.

*Suvorov S.A.
student
AVT RUT(MIIT)
Kuzmin Z.A.
student
AVT RUT(MIIT)
Scientific adviser: Alferov V.V.
senior lecturer
AVT RUT(MIIT)*

PROSPECTS FOR THE DEVELOPMENT AND POSSIBILITIES OF USING EKRANOPLANS IN THE ARCTIC

The article discusses a promising direction in the development of transport - ekranoplanes. Their history, modern developments, operational characteristics, advantages and disadvantages, suggestions for their use are given.

Key words: water transport, ekranoplanes, Arctic.

Введение

Экраноплан передвигается, благодаря «экранному эффекту», экраноплан находится в близости от поверхности и создается подъемный эффект и, в связи с этим, он может развивать колоссальную скорость для морского судна. Его скорость достигает до 250 узлов (460 километров в час), чем он сильно выигрывает в сравнении с обычными судами. В сравнении же

с авиацией, экраноплан более крепок, и имеет большую грузоподъемность, а также, в связи с полетом на низкой высоте, существенно экономится топливо.

Экраноплан – это перспективный вид транспорта, развитие которого было приостановлено в связи с развалом СССР, и последующими проблемами. В данный момент, не единожды говорится о необходимости возрождения экранопланостроения. Для нашей же страны, как правопреемника Советского Союза – это выгодное направления развития, так как наработки по данному направлению уже есть.

Для воздушного транспорта имеются ограничения в погодных условиях и необходимо инфраструктуре, автодороги – недоступны для крайнего Севера, как и ЖД пути. А водный транспорт – это медленная доставка грузов. А экранопланы позволят существенно сэкономить деньги, время, при большой эффективности.

Цель статьи заключается в проведении анализа экранопланов, их достоинств и недостатков, для оценки их потенциального использования в условиях Арктики.

Для этого в статье решаются следующие задачи:

1. Рассмотреть историю экранопланов.
2. Выполнить анализ современных моделей экранопланов.
3. Дать оценку возможности использования экранопланов в условиях Арктики.

Основная часть

Экранопланы берут свое начало еще в далеких 20-ых годах прошлого века. Сам по себе «экранный эффект» был вреден для авиации, но, увидев перспективы, то, в чем видели вред авиастроители, судостроители нашли существенную выгоду. Так, в 1932 году, в Финляндии создали первый экраноплан, на буксире аэросаней. Дальше данную идею подхватили в США, Швеции. Но успеха дальнейшие разработки не имели, и все наработки закрыли, в связи с началом войны. В период с 50-ых годов по 80-ые, было построено множество опытных экранопланов, в разных частях света, с самыми разными характеристиками и схемами устройства.

В 1966 году, ЦКБ «Алексеева» создало и испытало экраноплан «КМ» - Корабль макет. В связи с географией испытаний, позже прозванный «Каспийский Монстр» западом [2]. Это был первый в мире полет экраноплана.

Его характеристики были следующие [2]:

Таблица 1 – Технические характеристики экраноплана «КМ»

Скорость	500 км/ч
Мореходность	1500 км
Дальность	3 балла (Слабое волнение, Высота волн до 1,5м)

Лидером в разработках был СССР. В 80-ые годы, у него уже было 25 опытных образцов, и на их основе началось серийное производство.

После этого, в 1973 году был создан экраноплан «Орленок», в том же конструкторском бюро «Алексеева». Это была, в первую очередь, военная техника.

Основу она получила от «КМ». Благодаря чему у нее схожие характеристики [2]:

Таблица 2 – Технические характеристики экраноплана «Орлёнок»

Скорость	500 км/ч
Мореходность	1500 км
Дальность	5 баллов (Бурное волнение, Высота волн 4м)
Высота полёта	До 3000 м

Так же, она получила возможность посадку не только на воду, но и на сушу. Из-за чего это была незаменимая десантная машина.

В итоге, после государственных испытаний машины, в 1979 году она была принята на вооружение. По итогу, 1 машина потерпела серьезную аварию в 1975 году, в ходе которого затонул корма с килем.

Так же, что примечательно, на основе именно «Орленка» были попытки строительства пассажирских судов, подобного типа. К сожалению, на фоне аварии 1975 года, направление пассажирского экранопланостроения было свернуто, хотя в ходе аварии не было ни одной жертвы, и машина в глиссирующем режиме успешно дошла до берега, и, таким образом, показала удивительную живучесть, несмотря на затопление кормы. И, в связи с этим, корпус машины дополнительно укрепили.

В 1986 году был спущен на воду ударный экраноплан – ракетоносец «Лунь», по классификации НАТО «Утка» (Приложение 5 и 6). Он был построен в единичном экземпляре, на верфи, специально построенной для него.

Его характеристики, следующие [2]:

Таблица 3 – Технические характеристики экраноплана «Лунь»

Скорость	500 км/ч
Мореходность	6 баллов (Очень бурное волнение, Высота волн до 6 м)
Дальность	2000 м

Тем не менее, из-за близившегося развала СССР, и ярких финансовых проблем, на этом фоне, проблем, из 8, изначально планирующихся машин, построили лишь 2. Что примечательно, второе судно позже было переоборудовано под специализированный поисково-спасательный вариант «Спаситель» [2]. Он должен был иметь специальные спасательные средства, а также, даже госпиталь на 150 пострадавших. В критической ситуации, он принимал до 500 человек. Но в связи с недостатком финансирования, в 90-ых годах, его постройка была остановлена на 75% готовности судна.

В 2019 году, председатель совета директоров АО «Центральное конструкторское бюро по судам на подводных крыльях им. Р. Е. Алексеева» Георгий Анцев заявлял, что «работы над «Спасателем» активно ведутся и это будет машина массой около 500—700 тонн, одной из основных задач которой станет тушение лесных пожаров. Грузоподъемность воды должна составить 200 тонн. Местом базирования нового экраноплана предполагают сделать крупные реки Сибири и Байкал» [6]. Но на данный момент ничего об этом неизвестно.

Перспективным направлением развития экранопланов в современное время можно считать Арктику.

26 октября 2020 года Президент РФ Владимир Путин утвердил Стратегию развития Арктической зоны Российской Федерации и обеспечения национальной безопасности на период до 2035 года. В ней четко описана необходимость в развитии наземной и воздушной техники в условиях Арктики. На данный момент Арктика – это зона, где работают морской, воздушный и сухопутный транспорт, но это крайне малоэффективно, в природно-климатических условиях Арктики. Основная проблема кроется в том, что корабли, несомненно, могут перевезти большое количество груза, но их оперативность оставляет желать лучшего. В ожидании подготовки, загрузки, отправки, это занимает не малое количество времени. Авиация решает проблемы времени, но появляются проблемы грузоподъемности. Даже тяжелые транспортные самолеты, по типу АН-124 «Руслан», не поднимут больше 120 тонн. И это лишь часть проблемы авиации, в условиях Арктики. Их, так же, очень дорого содержать, и она сильно зависит от метеоусловий, которые быстро меняются в данном регионе. На постройку одного лишь аэродрома, на том же острове Темп, ушло 5 млрд рублей [8]. И это при условии, что строили аэродром на протяжении 6 лет и было множество других проблем, помимо финансовых затрат и срыва всех сроков.

И не нужно забывать про то, что в условиях крайнего Севера построить автомобильную или железную дорогу, это практически невозможно, из-за вечной мерзлоты. Теоретически проект возможен, при строительстве свай, защиты, в виде камня и прочего, но их содержание будет обходиться в колоссальные траты, при рисках вреда окружающей среде [9].

Ледоколы, в свою же очередь, в Арктике дорогой в постройке транспорт, стоимость одного ледокола «Лидер» составляет 111,5 млрд рублей [10]. В связи с этим, кардинально новый вид транспорта – экранопланы, были бы эффективным, выгодным и перспективным направлением развития транспорта в Арктике. О их возможном применении в Арктике всё чаще можно услышать. Как например, отметил бывший заместитель губернатора Красноярского Края:

«Вложение в создание больших и среднетоннажных грузовых, а потом и пассажирских экранопланов помогло бы решить, как многие из проблем с перемещением по СМП традиционных судов, так и развило бы саму отрасль экранопланов, которым, по сути, нет замены в ближайшей перспективе на транспортных путях со сложными условиями» - отмечает бывший заместитель губернатора Красноярского края, экономист Константин Утолин [9]

Летом 2020 года в Совете Федерации прошло заседание на тему «Состояние и перспективы развития арктической (полярной) авиации», на которой замглавы Минвостокразвития России Александр Крутиков сообщил, что его ведомство уже ведет разработку экраноплана, для работы в северных широтах [11].

«Хочу вас проинформировать о том, что по поручению правительства министерство <...> сегодня ведёт работу по созданию головного образца экраноплана для использования как раз в северных широтах. Буквально на следующей неделе регистрируем компанию в Комсомольске-на-Амуре, которая будет заниматься производством. Выделили необходимые деньги на производство, по сути, нового типа техники. Мы считаем его весьма перспективным» - сказал Александр Крутиков на заседании.

ВМФ России, в свою же очередь, планирует создать 600-тонный экраноплан для поисково-спасательных работ в Арктике, и снабжения отдельных гарнизонов. Его разработку начнет ЦКБ Алексеева, ранее известной по «Каспийскому Монстру», в связи с чем, машину уже заранее прозвали «Арктический Монстр» [12]

Заключение / Выводы

Таким образом, можно сказать, что в условиях Арктики, где традиционные виды транспорта, в виде: автомобилей, поездов, авиации, кораблей, малоэффективны, альтернатива, в лице экранопланов, несет в себе большие возможности и перспективы.

Автомобили, наряду с поездами, нерациональны, в виду климатозэкологических условий Крайнего Севера, и вреда почве. Связано это с тем, что при проезде происходит нагрузка и нагрев вечной мерзлоты, крайне нестабильного грунта. Авиация и флот, временно решают проблемы с обеспечением Арктики на данный момент, но их недостатки, в виде скорости и оперативности, у флота и грузоподъемности, стоимости, метеозависимости у авиации, слишком критичны на долгосрочный период, и, при дальнейшем развитии регионов Крайнего Севера, что гражданской, что военной тенденции, в будущем, приведет к значительным проблемам.

Именно в Арктике, в сложных условиях, экранопланы могут себе найти вторую жизнь, после застоя, в связи с развалом СССР. И это перспективная отрасль, в связи с тем, что мы, как правопреемники СССР, имеем огромные наработки в области их развития, обгоняя в свое время все другие страны.

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*Сун Вэньпин
студент магистратуры
Московский педагогический государственный университет*

АУТСОРСИНГОВОЕ РАЗВИТИЕ БИЗНЕСА НА КИТАЙСКОМ РЫНКЕ

Аннотация. В этой статье в основном представлены характеристики китайского рынка и его привлекательность для аутсорсинга, а также рассматриваются преимущества и недостатки аутсорсинга бизнеса.

Ключевые слова: аутсорсинг производства, китайский рынок, преимущества аутсорсинга, минусы аутсорсинга, Китай.

*Song Wenping
master's student
Moscow Pedagogical State University*

OUTSOURCING BUSINESS DEVELOPMENT IN THE CHINESE MARKET

Abstract. This article mainly introduces the characteristics of the Chinese market and its attractiveness for outsourcing, and also discusses the advantages and disadvantages of business outsourcing.

Key words: Production outsourcing, Chinese market, Advantages of outsourcing, Disadvantages of outsourcing, China.

Аутсорсинг означает делегирование определенных бизнес-процессов или функций внешним исполнителям, которые специализируются в соответствующей сфере. Существует множество критериев классификации аутсорсинга, например, по типу деятельности, по географическому местоположению, по уровню интеграции и т.д. Аутсорсинг может приносить бизнесу различные выгоды, такие как экономия ресурсов, повышение качества, увеличение гибкости, доступ к новым рынкам и технологиям и т.д. Однако аутсорсинг также несет в себе определенные недостатки и риски, такие как потеря контроля, зависимость от поставщиков, утечка конфиденциальной информации, культурные и юридические различия и т.д.

Тема аутсорсингового развития бизнеса на китайском рынке является актуальной и новаторской, так как Китай представляет собой один из самых больших и динамичных рынков в мире, а также один из лидеров в области аутсорсинга. Исследование этой темы может способствовать расширению

знаний о современных тенденциях и перспективах аутсорсинга, а также помочь бизнесу принимать более обоснованные решения об аутсорсинге в Китае.

Китайский рынок представляет собой огромную и динамичную сферу для аутсорсинга разных бизнес-процессов. К нему привлекает ряд факторов, таких как: обширный и квалифицированный трудовой ресурс, высокий уровень развития и инноваций, разнообразный и богатый рынок потребления, а также государственная поддержка и стимулы для иностранных инвесторов и аутсорсинговых компаний. Однако, вход на китайский рынок также связан с рядом сложностей и особенностей, которые требуют тщательного изучения и планирования. Среди них: культурные и языковые барьеры, юридические и регуляторные риски, а также жесткая и насыщенная конкуренция. Поэтому, аутсорсинговые компании должны стремиться к дифференциации и добавлению ценности к своим услугам, чтобы привлечь и удержать клиентов на китайском рынке.

Есть много компаний, которые преуспели в развитии аутсорсингового бизнеса в Китае, такие как:

1) Shanghai Jahwa: это ведущая компания в повседневной химической промышленности Китая, владеющая такими известными брендами, как Liushen, Maxam и Herborist. Компания увеличила влияние своего бренда и долю рынка за счет аутсорсинга своих производственных линий и сосредоточения внимания на дизайне продукции и инновациях.

2) I Love Solution Network: это профессиональная платформа обслуживания решений, которая предоставляет различные решения для производителей терминалов, включая интеллектуальное оборудование, Интернет вещей, облачные вычисления и т. д. Рекомендую производителям терминалов серию успешных решений, платформа ускоряет инновационный процесс производителей оборудования и систем Интернета вещей, а также стимулирует заказы от поставщиков решений.

3) Huawei: это ведущий мировой поставщик решений в области информационных и коммуникационных технологий с сильными возможностями исследований и разработок и глобальным присутствием. Компания повышает качество и эффективность программного обеспечения, а также снижает затраты и риски за счет аутсорсинга некоторых услуг по разработке, тестированию, эксплуатации и обслуживанию программного обеспечения³

Развитие индустрии аутсорсинга в Китае также сталкивается со многими проблемами и рисками, такими как неадекватное управление безопасностью цепочки поставок. В последнее время у поставщиков аутсорсинговых услуг произошел ряд инцидентов, связанных с угрозой безопасности, что привело к серьезным последствиям, таким как утечка данных и перерывы в работе банковских и страховых учреждений. Регулирующие органы требуют, чтобы банковские и страховые учреждения

расследовали скрытые опасности, вносили практические исправления и укрепляли возможности управления безопасностью и технической защиты поставщиков аутсорсинговых услуг; конкуренция на международном рынке и проблемы с рисками растут. С одной стороны, конкуренция в глобальной индустрии аутсорсинга услуг усилилась. Развивающиеся экономики сделали аутсорсинг услуг стратегическим направлением и присоединились к конкуренции на мировом рынке услуг. С другой стороны, многочисленные факторы, такие как протекционизм, реформа многосторонней торговой системы и новые международные экономические и торговые правила, переплетаются и накладываются друг на друга, что оказывает серьезное негативное влияние на мировую торговлю и инвестиции и вносит большую неопределенность в сотрудничество на глобальном рынке услуг; Трансформация и модернизация аутсорсинга услуг. Недостатки: С углублением нового витка научно-технической революции и промышленной трансформации спрос на рынке аутсорсинга услуг меняется в сторону цифровизации, высоких технологий и интеллекта. Однако в индустрии аутсорсинга услуг моей страны по-прежнему доминирует ИТО, доля КПО составляет незначительную, а ситуация как со спросом, так и с предложением цифровых услуг еще не сформировалась. Компаниям, занимающимся аутсорсингом услуг, необходимо укреплять инновации в области исследований и разработок, улучшать свою способность владеть независимыми правами интеллектуальной собственности, улучшать свои возможности цифровой доставки и становиться надежными партнерами в цифровой трансформации различных отраслей.

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Сун Вэньпин
студент магистратуры
Московский педагогический государственный университет

РАЗВИТИЕ СЕРВИСНОГО АУТСОРСИНГА

Аннотация. Основываясь на развитии индустрии аутсорсинга услуг в последние годы, опираясь на результаты исследований всемирно известных институтов и на основе полевых исследований, мы проанализировали последние тенденции развития глобального аутсорсинга услуг и его общие ожидания с четырех аспектов, а именно: распределение мест аутсорсинга, отраслевые сектора, способы обслуживания и рыночные факторы.

Ключевые слова: Аутсорсинг производства, Китайский рынок, Отрасль сервисного аутсорсинга, отрасли промышленности, методы обслуживания, рыночные факторы.

Song Wenping
master's student
Moscow Pedagogical State University

DEVELOPMENT OF SERVICE OUTSOURCING

Abstract. Based on the development of the service outsourcing industry in recent years, and with reference to the research results of internationally renowned institutions and on the basis of field research, we analyze the latest development trend of global service outsourcing and the overall expectation in four aspects, namely, the distribution of outsourcing places, industry sectors, service modes and market factors.

Key words: Manufacturing outsourcing, Chinese market, Service outsourcing industry, industries, service methods, market factors.

Под аутсорсингом услуг понимается передача определенного бизнеса или процессов предприятия сторонним профессиональным организациям. В настоящее время спрос на мировом рынке аутсорсинга услуг в основном исходит от развитых стран и регионов, таких как США, Европа и Япония, на долю которых приходится более 80% мирового рынка. Предприятия в этих странах и регионах обычно передают аутсорсинговые услуги развивающимся странам и регионам, образуя схему «центр-периферия». Однако в последние годы на эту модель повлиял ряд факторов, в том числе:

Экономический спад в развитых странах и регионах заставил компании уделять больше внимания снижению затрат, одновременно сжимая цены и масштабы аутсорсинговых услуг.

Высокий уровень безработицы в развитых странах и регионах побудил правительства принять меры по защите внутренней занятости и поощрению компаний к местному аутсорсингу, тем самым снижая спрос на аутсорсинг в развивающихся странах и регионах. Например, на выборах 2023 года в США прозвучало много голосов, призывающих к возвращению офшорного аутсорсингового бизнеса в местный регион.

Кризис суверенного долга Европы оказал влияние на европейский рынок аутсорсинга услуг, в результате чего спрос на аутсорсинг в Европе и темпы роста снизились.

Экономический спад в Японии и землетрясение повлияли на инвестиции японских компаний в ИТ, в результате чего японская индустрия аутсорсинга услуг испытывает отрицательный рост в течение трех лет подряд.

Эти факторы вызвали определенные проблемы со спросом на аутсорсинг со стороны развитых стран и регионов в краткосрочной перспективе, но они по-прежнему сохраняют доминирующее положение на рынке. В долгосрочной перспективе, по мере восстановления экономики, спрос на аутсорсинг в развитых странах и регионах будет продолжать расти. В то же время стоит отметить, что страны с развивающейся экономикой также продемонстрировали сильную динамику на международном рынке аутсорсинга, и их спрос и доля аутсорсинга постепенно расширяются. К таким странам относятся Индия, Китай и др., которые являются не только получателями аутсорсингового бизнеса, но и инициаторами аутсорсингового бизнеса. Согласно статистике, ежегодные темпы роста отечественных офшорных центров самостоятельного строительства в Индии превышают 20%, в то время как рынок аутсорсинга Китая приблизился к 100 миллиардам долларов США и, как ожидается, продолжит расти в будущем. Снижение спроса на аутсорсинг в этих странах с формирующимся рынком будет способствовать трансформации рынка аутсорсинга в глобальную модель обслуживания «многие ко многим».

Спрос на рынок аутсорсинга услуг исходит не только из разных стран и регионов, но также из разных отраслей и областей. В настоящее время аутсорсинг информационных технологий (ИТО) является важнейшим компонентом аутсорсинга услуг, на его долю приходится от 60% до 70% мирового рынка. Однако с развитием аутсорсинга процессов знаний (КРО) и аутсорсинга бизнес-процессов (ВРО) некоторые ключевые направления деятельности в верхней части цепочки создания стоимости предприятия, такие как управление рисками, финансовый анализ, исследования и разработки и т. д., постепенно включен в сферу аутсорсинга. Это будет способствовать развитию аутсорсингового бизнеса на верхнем этапе цепочки создания стоимости. Кроме того, в дополнение к традиционным областям аутсорсинга, таким как производство, банковское дело, финансовые услуги и страхование (BFSI), связь и средства массовой

информации, также быстро развиваются некоторые новые области аутсорсинга, такие как здравоохранение, коммунальные услуги, аутсорсинг юридических процессов (LPO), аутсорсинг биомедицины (CRO) и телекоммуникации в развивающихся странах и т. д. Потребности в аутсорсинге в этих областях станут новой горячей точкой конкуренции. В то же время тенденция сегментации аутсорсинга услуг также даст компаниям с вертикальным отраслевым опытом более конкурентное преимущество.

Спрос на рынке аутсорсинга услуг влияет не только на содержание и масштабы аутсорсингового бизнеса, но также влияет на метод и модель аутсорсингового бизнеса. Чтобы адаптироваться к более высоким требованиям клиентов, транснациональные аутсорсинговые компании при выборе места доставки аутсорсинговых услуг учитывают не только затраты и таланты, но и такие факторы, как возможности резервного копирования и реагирования на стихийные бедствия, безопасность данных и бесперебойную доставку. Они, как правило, создают офисы в нескольких регионах для достижения глобальных возможностей доставки и распределения рисков. Это стало новой тенденцией в получении посылок. В то же время чистая модель оффшорного аутсорсинга постепенно заменяется гибридными моделями оншорного, прибрежного и оффшорного аутсорсинга, многоуровневыми моделями и моделями оптимальной доставки. Эти модели могут лучше удовлетворять различные потребности клиентов. Все больше поставщиков услуг начинают предоставлять клиентам «пакетные» комплексные услуги и внедряют более гибкие бизнес-модели с точки зрения ценообразования, учета рабочего времени, сотрудничества и т. д.

С развитием стран с развивающейся рыночной экономикой и зрелостью индустрии аутсорсинга услуг внимание к рынку оншорного аутсорсинга постепенно возрастает. Оншорный аутсорсинг подразумевает аутсорсинговые операции, проводимые в стране или регионе базирования, которые могут лучше удовлетворить потребности местных потребителей и правовые нормы. Правительства некоторых стран и регионов также активно способствуют развитию рынка оншорного аутсорсинга. -правительство и продвижение применения технологий среди правительственных ведомств, а также модернизация для поддержки роста рынка аутсорсинга.

По мере развития рынка подрядных услуг предприятия-заключители контрактов предъявляют все более высокие требования к договаривающимся сторонам. Предоставлять комплексные услуги, превращаясь тем самым из поставщика услуг в стратегического партнера. В этом случае идея «стратегического партнерства» станет доминирующей идеей сотрудничества между двумя сторонами. Многие компании сформировали стратегическое партнерство для расширения сферы услуг и улучшения качества обслуживания.

Развитие рынка аутсорсинга услуг также привело к реконфигурации промышленных факторов и глобальной интеграции ресурсов. Экономическая глобализация и корректировка промышленной структуры вызвали реорганизацию и поток элементов отрасли аутсорсинга услуг, а интеграция, слияния и поглощения стали эффективным способом достижения этой цели. Многие компании, занимающиеся аутсорсингом услуг, приобретают малые и средние предприятия с независимыми правами интеллектуальной собственности или рыночными каналами посредством слияний и поглощений с целью усовершенствования технологий, расширения зарубежных рынков и реализации резервов талантов. В то же время финансовые трудности европейских и американских компаний также дали многим специалистам возможность заново выбрать место работы, создав условия для гармонизации стран и регионов, испытывающих узкие места в талантах, внедрения талантов и внедрения Ресурсы перераспределяются по всему миру.

Чтобы удовлетворить потребности потребителей в разных регионах, транснациональные компании также начали рассредоточивать свои научно-исследовательские учреждения из своих штаб-квартир в различные части мира.. Эти самостоятельно построенные центры не только обеспечивают экономическую эффективность и привлечение талантов, но также способствуют инновациям в бизнес-процессах и доступу к развивающимся рынкам. Таким образом, ожидается, что зарубежные операционные центры ИТ-ВРО, построенные собственными силами, будут развиваться и дальше, и быстро, став символом глобальной экспансии.

Подводя итог, можно сказать, что текущая ситуация и тенденции мирового рынка аутсорсинга услуг сложны и изменчивы, на них влияют экономические, политические, технологические, правовые и другие факторы. Реорганизация и поток элементов отрасли аутсорсинга услуг, расширение содержания и объема бизнеса аутсорсинга услуг, а также инновации методов и моделей аутсорсинга услуг - все это важные особенности развития рынка аутсорсинга услуг. Конкуренция на рынке аутсорсинга услуг также становится все более жесткой.

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Тимербаев Л.Р.

студент

Научный руководитель: Мухаметшина Г.Р., к.с.н.

доцент

ФГБОУ ВО «Уфимский университет науки и технологий»

СТИМУЛИРОВАНИЕ ПЕРСОНАЛА КАК ОСНОВА ЭФФЕКТИВНОЙ ДЕЯТЕЛЬНОСТИ ОРГАНИЗАЦИИ

Аннотация. В статье рассмотрены понятие стимулирование персонала и его влияние на деятельность организации. Автором рассмотрены особенности материального и нематериального стимулирования персонала организации. Представлены основные результаты грамотного стимулирования персонала.

Ключевые слова: персонал, мотивация, стимулирование труда, производительность труда.

Timerbaev L.R.

student

Scientific supervisor: Mukhametshina G.R.

Ufa University of Science and Technology

STAFF STIMULATION AS THE BASIS FOR EFFECTIVE ORGANIZATION ACTIVITIES

Abstract. The article discusses the concept of staff stimulation and its impact on the organization's activities. The author considers the features of material and non-material incentives for the organization's personnel. The main results of competent staff incentives are presented.

Keywords: personnel, motivation, labor stimulation, labor productivity.

Персонал является главным ресурсом предприятия. Следовательно, на эффективность деятельности организации напрямую влияет персонал.

Стимулирование труда на предприятии является важной составляющей обеспечения эффективности деятельности организации.

По предмету потребности, с помощью которого субъект управления воздействует на поведение объекта управления, используя его в качестве стимула, принято выделять две группы способов стимулирования труда:

- моральные, нематериальные (неэкономические);
- материальные (экономические) – денежные и неденежные.

Рассмотрим каждую из вышеназванных групп более подробно.

Моральное стимулирование – это разновидность стимулирования, регулирующая поведение объекта управления на основе использования предметов и явлений, специально предназначенных для выражения общественного признания и способствующих повышению или же снижению его престижа (благодарности, грамоты, доски и книги почета, различные звания, медали, ордена, замечания, выговоры и т.д.).

Можно выделить три основные проблемы морального стимулирования, которые напрямую влияют на эффективность применения данного вида стимулирования:

- недостатки в регламентации процедур стимулирования;
- недостаточная информированность работников о системе стимулирования;
- проблема девальвации моральных стимулов, т.е. снижение их стимулирующей силы.

Материальное стимулирование включает все виды денежных выплат, которые применяются в организации, и все формы материального неденежного стимулирования.

Сущность материального неденежного стимулирования наемных работников заключается в следующем:

- предоставление работнику тех благ, получение и использование которых затруднено по каким-либо причинам;
- предоставление уникальных услуг, характерных только для данной компании;
- при нестабильной ситуации на рынке материальное неденежное стимулирование обретает большую ценность, так как гарантирует получение блага;
- при организации материального неденежного стимулирования нужно помнить, что чем реже материальный предмет, услуга или льгота предоставляется в организации (а также и в других организациях), тем выше ее престиж [4].

Создать универсальную систему стимулирования очень сложно. Создавая систему для каждой конкретной организации, необходимо учитывать минимальный перечень факторов, включающий в себя:

- цели, которые организация ставит перед собой;
- состав сотрудников по возрасту, полу, степени образованности и т. д.;
- особенности корпоративной культуры и управленческой системы предприятия;
- уже действующую на момент оценки систему стимулирования.

Цели организации обладают первостепенной важностью, ведь именно в зависимости от них определяется то, какое трудовое поведение сотрудников заслуживает поощрения. К примеру, если организация ставит

перед собой цель по завоеванию рынка – тогда среди сотрудников стоит поощрять амбициозность, креативный подход, настойчивость и активность.

Нужно рассматривать возрастные различия работников, сотрудники старшего возраста больше беспокоятся и стремятся к уверенности в будущем и стабильности и выше ценят, например, наличие страхования в организации, чем молодые специалисты, которые в свою очередь могут оценить хорошо организованный досуг у компании.

Сотрудники с высшим образованием наиболее заинтересованы в различных курсах и обучении в целях повышения квалификации, которые способствуют профессиональному росту и повышению возможности продвижения по карьерной лестнице.

Если компания не является только что созданной – внутри нее уже функционирует своя система стимулов, возможно, сложившаяся стихийно. И существование определенного порядка осложняет внедрение любых изменений. Поэтому перед тем, как внедрять любые инновации в систему мотивирования, необходимо тщательным образом анализировать все сильные и слабые стороны той системы, которая уже существует, а затем, уже в процессе преобразования, сопровождать все изменения подробными разъяснениями, так как они, прежде всего, затрагивают интересы самих сотрудников. Рассматривая трудовую мотивацию сотрудников, можно воспользоваться такими методами, как наблюдение, тестирование, анкетирование, опрос. С одной стороны, нужно выяснить рабочую среду в компании, то есть условия и систему оплаты труда, кадровую политику, социальный пакет и взаимоотношения в коллективе. С другой стороны, не менее важны потребности, установки и ценности работников, а также их удовлетворенность своим трудом и самой рабочей атмосферой организации.

Таким образом, объединив информацию, которая была получена с помощью разнообразных подходов, и, проработав ее, можно спланировать базу для создаваемой системы стимулирования, либо для корректировки уже имеющейся. В итоге, даже если создание уникальной системы стимулирования окажется трудным и весьма медленным процессом, наградой для руководства станет команда максимально эффективных работников, обладающей по-настоящему сильной мотивацией к труду, и такой результат, несомненно, будет стоить всех затраченных усилий [1].

«Основные мотиваторы жизненно важны для удовлетворения потребностей человека в силу того, что описывают образцы поведения. В теории мотивации преобладают три типа мотивационных потребностей: потребность в достижении, потребность в принадлежности и потребность во власти. Людям присуща либо одна из этих потребностей, либо их комбинация, что мотивирует к определенному образу поведения» [3, с. 90].

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Тишабаева Л.
преподаватель
кафедра «Общественные науки и спорт»
ФерПИ
Узбекистан, Фергана

СОЦИАЛЬНЫЕ ХАРАКТЕРИСТИКИ НАЦИОНАЛЬНЫХ ЦЕННОСТЕЙ

Аннотация. В статье рассматриваются злободневные вопросы развития современного общества. В частности, обращается в ней внимание на проблемы специфики идеологического полигона, состояние которого сильно изменяется в результате угроз разных идей деструктивных сил. Исходя из такого подхода автор статьи сосредотачивает свое внимание на негативное влияние таких угроз на национальное самосознание того или иного народа и рассуждает аспекты сохранения его самобытности, что является одним из важных факторов социального развития.

Ключевые слова: общество, общественное развитие, деструктивные угрозы, национальное самосознание, национальная идеология, национальная самобытность, сохранение национальной самобытности.

Tishabaeva L.
teacher
Department of Social Sciences and Sports
FerPI
Uzbekistan, Fergana

SOCIAL CHARACTERISTICS OF NATIONAL VALUES

Annotation. The article discusses topical issues of the development of modern society. In particular, it draws attention to the problems of the specifics of the ideological testing ground, the state of which changes greatly as a result of the threats of various ideas of destructive forces. Based on this approach, the author of the article focuses his attention on the negative impact of such threats on the national identity of a particular people and discusses aspects of preserving its identity, which is one of the important factors of social development.

Key words: society, social development, destructive threats, national identity, national ideology, national identity, preservation of national identity.

Общеизвестно, что всякие деструктивные идеи осуществляются на определенных идеологических полигонах. Специфика идеологического полигона заключается в изменчивости взаимоотношений по существованию

к определенному моменту времени, ради всех событий, формированию осознания социальной реальности и критерию оценок агентов и контрагентов. Идеологический процесс – это пространственное положение идеологического полигона во времени и очередность событий, т.е. изменения, вытекающие из его степени и параметров. Они являются принципами внутренней динамики идеологического полигона. В нем осуществляются сегментация (разделение), аккумуляция (накопление), сегрегация (отделение) взглядов, идей и идеологий.

Это также можно назвать разрушительной деятельностью людей для обоснования «своего пути», чтобы решить политические, социально-экономические проблемы.

Изменчивый характер деструктивных идей также можно наблюдать в столкновении систем идей. Так, согласно мнению немецкого философа Ф.Ницше, существует закономерность: обычно часто отрицаемое всякое явление каждый раз движется с новой, более мощной силой. Такое явление очень часто случалось с философией, религией, искусством, моралью и свободной волей. Теперь такое явление происходит в идеологии.

Широкий масштаб и глубина концепции национального самосознания заключается в том, что оно является и для человека, и для нации главной высшей целью, и оно охватывает все остальные важные и великие идеи, в том числе и содержание программы построения демократического государства. Вместе с тем следует отметить, что по мнению первого Президента Республики Узбекистан И.Каримова «еще одно важное условие национальной идеологии — это самосознание. Когда я говорю о самосознании, я понимаю под ним восстановление исторической памяти, осознание своей родословной, чьими потомками мы являемся, исходя из этого – создание своеобразного, соответствующего нам самим общества»¹⁰⁹.

Сегодня в мировом масштабе опасность духовно-идеологических процессов проявляется в возникновении духовно-идеологических вакуумов, адаптации социального сознания к такой ситуации, усилении индивидуализма, росте культурной вестернизации общества. Особенно это наблюдается в негативном влиянии глобальных концепций на национальные традиции, формировании социально-духовного отчуждения у молодежи в результате идеологических угроз, росте маргинальных слоев как следствия выхода из-под контроля этнической причастности.

В условиях духовного кризиса и идеологической борьбы можно достичь успеха, если опираться на национально-духовные и народные интересы на основе формирования идеологии общества и ее составной части – национального самосознания. Только через понимание традиционных культурных критериев можно предсказать положительное

¹⁰⁹Каримов И. А. Озод ва обод Ватан, эркин ва фаровон хаёт — пировард мақсадимиз. Т. 8. – Ташкент – С. 452-453.

влияние какой-либо идеологии на общество. Попытка искусственного игнорирования национальных традиций всегда заканчивается безуспешно.

А это говорит об актуальности отношений между общечеловеческими и национальными особенностями, без чего невозможно представить стабильность в обществе. Историческая созидательность не деградирует, а создает почву для великих преобразований в пути решения проблем цивилизованного выбора в социальном развитии. Раньше в организационной парадигме такой проблемы не существовало: т.е. считалось, что судьба всех народов одинакова, степень прогресса предначертана всем.

Сегодня ускоряется не только процесс смешения отрасли промышленности и видов деятельности, а вместе с ними культурных традиций и их приведения к каким-либо общим стандартам. Такие изменения создают угрозу существующим традициям и обычаям, религиозным убеждениям, образу жизни и социальным стереотипам. «Судьба закрытых цивилизаций будет зависеть от ожидаемых глобальных столкновений – это во многом политические столкновения по причине этно-конфессиональных, этнических и религиозных» факторов»¹¹⁰.

Здесь существенное значение имеет осознание нацией своих интересов и целей, которые способствуют сравнению своей нации с другими общественными группами. Его сущность неразрывно связана с традиционными ценностями нации: коллективизмом, верой, национальностью, патриотизмом, приоритетности долга от потребительства и эгоизма, любви и справедливости от прав сильного человека к служению общим целям, приверженности истине, священным идеям.

В настоящее время необходимо особо выделить три составные части национального самосознания: религиозность, коллективизм и государственность. Путем определения новых проблем национального самосознания можно провести глубокий анализ диалогизма в национальном самосознании.

В условиях идеологической борьбы каждое суверенное государство, в том числе и Узбекистан, для того чтобы сохранить себя хозяином определенной цивилизации, должно создать систему постоянного мониторинга развития разрушительных идеологий и осуществить конкретные меры социального, идеологического, политического и организационного характера, ограничивающие их широкое распространение. В этой сфере надо усилить факторы влияния национального самосознания на социальную жизнь. Данный процесс происходит через конкретные социально-политические программы национального развития, целенаправленную деятельность граждан, обращенные на их социальную активность, требующие целевой

¹¹⁰Хантингтон С. The Clash of Civilizations // Полис, 1994, №1. - С.33-48.

организационно-мобилизующей работы в сферы привлечения для их выполнения добровольным образом. В то же время необходимо формировать слои общества с высокой духовностью, национальным сознанием, способных стоять выше своих узких, эгоистических интересов, отражать достойно коренные интересы народа и сплотить общество. Сегодня глубокая, системная научная разработка социально-духовных основ национального самовыражения является одной из важнейших задач предметов обществоведения.

На сегодняшний день во многих обществах кризисных ситуаций и процесс формирования новых проблем связаны с некоординированностью основных духовно-идеологических концепций в этой сфере. Наличие противоречий на смыслообразующем поле мешает духовно-идеологическому объединению современного общества.

Национальное самосознание, так же как идеология, выполняя объединяющую функцию, оказывает влияние на формы и методы социализации личности, на развитие связей между нациями. Так для решения объединения на простом психологическом уровне пригодятся исторически разработанные, но сохранившие до сих пор свое действие старые национально-этнические стереотипы. В идеологической борьбе возможности осознания национального самосознания исходят из его функций. В частности, у неё есть функции оценки и призыва, нормативной координации, адаптации, защиты, самоконтроля и влияния ответственности.

Здесь проявляются возможности исторической памяти, общего языка, общенациональной культуры, общей истории, которые являются важными элементами национального самосознания. Духовно-социальные аспекты национального самосознания рассматриваются в качестве основной системы отношений оценки и рациональных национальных воображений, необходимые для определения человеком своего пути.

Во всех эпохах прогресса принцип «мы», будучи фактором усиления общности, еще более сплотил в единую нацию национальные общности из круга племени и показал путь для того, чтобы они осознали себя как единая целостность. Такие факторы, вобравшие в себя ассимиляцию, внешнюю угрозу, порабощение, колонизацию, имеющие угрозу культурного или полного физического уничтожения национальных общностей, были стимулирующими национальное самосознание и ускоряющими катализаторами. Фактор национального самосознания является мощной силой при защите национальных интересов.

Президент нашей страны Ш. Мирзиёев, останавливаясь на задачах, связанных с усилением идеологического иммунитета в сердцах и сознании молодежи подчеркивает: «С учетом того, что более половины населения страны составляет молодежь, еще более проявляется, что это очень серьезный вопрос. Мы никогда не должны забывать, что каждый из нас

ответственен за защиту молодежи - прежде всего от различных угроз, приходящих в виде «массовой культуры», наркомании, религиозного экстремизма, миссионерства. В этом мы опираемся на национальные традиции, богатое духовное наследие предков, сформированное веками»¹¹¹.

Поэтому выполнение сложных задач обычно требует совместной деятельности системы факторов и средств, формирующих идейное воспитание. Если в этом семья, махалля и система образования составляют основной фрагмент, то СМИ становятся важнейшим средством идейного воспитания. Данные идеи внушаются в сознание и психологию посредством деятельности идейного воспитания. Когда эти идеи занимают сознание множества, они превращаются в действующую силу, направляющую к цели.

В настоящее время недоразумения в понимании деструктивных идей в основном становятся фактором достижения геополитических целей, усиления передачи политической окраски деструктивным идеям осложняет проблемы в этой сфере. Поэтому изучение явления деструктивных идей в качестве глобальной проблемы современной цивилизации является важнейшей задачей современной науки с точки зрения фундаментальных проблем человека.

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Тураева Г.К.
независимый исследователь
Гулистанский государственный университет

АКТУАЛЬНОСТЬ ОБЕСПЕЧЕНИЯ СТАБИЛЬНОСТИ ПРОИЗВОДСТВА ЗЕРНА В НАЦИОНАЛЬНОЙ ЭКОНОМИКЕ

Аннотация. Роль и значение аграрного сектора в обеспечении продовольственной безопасности населения в глобальном масштабе возрастает с каждым днем. В частности, пшеница является одной из самых распространенных зерновых культур. Пшеничный хлеб высоко ценится за его вкус, сытность и усвояемость, использование имеющихся в нашей стране ресурсов и возможностей для обеспечения гарантированного снабжения населения сельскохозяйственной продукцией, дальнейшего повышения продуктивности и интереса к внедрению научных достижений и современных подходов в Поле — актуальная проблема.

Ключевые слова: зерно и зернопродукты, производство зерна, урожайность, эффективность, зерновая независимость, агротехнология.

Turayeva G.Q.
independent researcher
Gulistan State University

THE RELEVANCE OF ENSURING THE STABILITY OF GRAIN PRODUCTION IN THE NATIONAL ECONOMY

The role and importance of the agricultural sector in ensuring the food security of the population on a global scale is increasing every day. In particular, wheat is one of the most common cereal crops. Wheat bread is highly valued for its taste, satiety and digestibility, the use of resources and opportunities available in our country to ensure a guaranteed supply of agricultural products to the population, further increase productivity and interest in the introduction of scientific achievements and modern approaches in the field is an urgent problem.

Key words: grain and grain products, grain production, productivity, efficiency, grain independence, agricultural technology.

Введение

Хотя изучению процессов сельскохозяйственного производства и различных аспектов благосостояния населения в экономике уделяется достаточное внимание, эти проблемы до сих пор остаются дискуссионными. Узбекистан с первых лет независимости разрабатывает комплексные меры по полному удовлетворению потребности населения нашей страны в зерне

и зернопродуктах, достижению зерновой независимости и обеспечению ее стабильности.

Пшеница – одна из самых распространенных зерновых культур. Пшеничный хлеб высоко ценится за вкус, питательную ценность и усвояемость. Содержание белка в зерне пшеницы от 11,0% до 18-19% в зависимости от его сорта и условий посева. Усвояемость белка пшеничного хлеба составляет 95%. Кроме того, из зерен пшеницы делают крупу, а ее муку используют в макаронной и кондитерской промышленности. Качество зерна пшеницы, то есть количество в нем белка и клейковины, варьирует в зависимости от сорта пшеницы и почвенно-климатических условий региона, где оно выращивается. Спирт, крахмал, глютен, декстрин, клей и различные другие продукты получают из зерна пшеницы в технике. Более половины населения земного шара употребляет в пищу пшеничный хлеб. В пшеничном хлебе много белка и крахмала, а его белковая составляющая в основном состоит из глютена, поэтому из него выпекают качественный хлеб.

В Стратегии действий Республики Узбекистан на 2017-2021 годы «...внедрить интенсивные методы в сферу сельскохозяйственного производства, в первую очередь, создать новые селекционные сорта сельскохозяйственных культур, адаптированные к местным почвенно-климатическим и экологическим условиям. Особое внимание уделялось внедрению на полях современных агротехнологий, особенно развитию зернового производства» [1]. По международным статистическим данным, общий объем продукции из пшеницы, произведенной в странах мира, составляет 772 млн тонн. В первую десятку стран, выращивающих пшеницу, входят следующие страны: Китай, Индия, Россия, США, Франция, Канада, Пакистан, Украина, Австралия и Германия. Урожайность зерна была выше ц/га, а общая урожайность составила 6,5- 7,8 млн тонн.

Анализ литературы по теме (Обзор литературы)

Экономисты и эксперты высказали свои взгляды и мнения о необходимости обеспечения стабильности производства зерна и его выгодных аспектах в своих исследованиях и на международных конференциях. Они показали опыт увеличения производства зерновых продуктов натуральным и интенсивным путем, роль зерновых продуктов в экономике страны и их положительные стороны в соответствии с существующими условиями своего времени.

Атабаева Х.Н., Худайкулов Ж.Б. пшеница считается одной из самых распространенных основных зерновых культур. Более половины людей в мире употребляют в пищу пшеничный хлеб. В пшеничном хлебе много белка и крахмала, а так как белковые молекулы в основном содержатся в клейковине, то из его муки выпекают качественный хлеб. Пшеничный хлеб высоко ценится за вкус, питательную ценность и усвояемость. Содержание

белка в зерне пшеницы от 11,0% до 18-19% в зависимости от его сорта и сроков посева. [2]

З. М. Ильина предлагает использовать следующие подходы для анализа устойчивости рынка продовольствия в сельском хозяйстве [3]: статический (определение границ развития рынка); динамический (изучение вибрации ряда динамик); адаптивная (факторная оценка степени адаптации пищевой системы к изменению внешних условий).

В нашей статье на тему «Анализ торговой ситуации сельскохозяйственной продукцией Товарной биржи Республики Узбекистан» мы проанализировали ряд экономических показателей и проанализировали устойчивое развитие продовольственной системы, в частности, работу обменного механизма в торговле зерновыми продуктами в сельском хозяйстве со стабильностью зерна мы обнаружили прямую связь [4].

В работах зарубежных ученых в области сельского хозяйства: Е. Ф. Заворотин [5, с. 300], В. З. Мазлоев [6, с. 15]

«Потребительская корзина» и связанные с ней понятия используются в качестве экономического термина рядом зарубежных и узбекских ученых. Среди них Л. Лозовский, Б. Рызберг, Е. По Стародубцевой, «потребительская корзина» — это рассчитанный набор товаров, характеризующий обычный уровень и структуру месячного (годового) потребления человека или семьи. Он используется для расчета минимального бюджета потребления (на душу населения) исходя из стоимости потребительской корзины в текущих ценах. Утверждается, что она определяется с учетом демографического и национального состава различных социальных и других слоев населения, а также их территориального расположения [7].

Методология исследования

Изучение существующих научных исследований по созданию перспектив устойчивости производства зерна, сравнительное сопоставление тарифо-ценообразования, изучение статистических данных и экономическое сопоставление и анализ, логическое мышление, научная абстракция, методы анализа и синтеза информации, группировка широко используются определение относительных и гармонических средних.

Анализ и результаты

В Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы определено повышение средней урожайности зерновых колосовых до 70 ц/га к 2025 г. и до 75 ц/га к 2030 г. [8]. В связи с этим применение интенсивных агротехнологий при возделывании сортов озимой пшеницы с высокой продуктивностью, эффективное использование орошаемых земель наряду с повышением урожайности зерна, улучшение технологических показателей качества зерна являются одними из наиболее актуальных задач. Размещение сортов дой с учетом их биологических

особенностей, подготовка земли и семян к посадке, способ посадки, нормы и сроки, подкормка органическими и минеральными удобрениями, полив, борьба с сорняками, болезнями и вредителями в целях борьбы с ними, к внедрять инновационные технологии, обеспечивающие эффективное использование водных и земельных ресурсов, а также для повышения урожайности зерна зимой пшеницы необходимо правильно подобрать сорта, засеять отборными качественными семенами. территориальное расположение и районы провинции о Здесь уникальные почвенно-климатические условия. Кроме того, будет разработан комплекс новых агротехнологических мероприятий, применяемых для новых перспективных сортов, исходя из природных условий данной местности и рекомендованный хлеборобам, который будет высокоэффективен в ближайшем будущем [9].

Изучение научных работ отечественных и зарубежных ученых о природе «потребительской корзины» подтверждает, что это понятие сложное и многогранное. Количество и количество товаров, входящих в «Потребительскую корзину», должно соответствовать вышеуказанным требованиям. Например, каждый трудоспособный человек потребляет 126,5 кг хлебопродуктов (мука, манка, макаронные изделия из бобовых), 100,4 кг картофеля, 114,6 кг овощей и фруктов, различных фруктов 60 кг, сахара 23,8 кг и кондитерских изделий, мяса и мясных продуктов 58,6 кг, рыбы 18,5 кг, молока и молочных продуктов 290 кг, яиц 201, масложировой продукции 11 кг, 4,9 кг (соль, чай, специи). расход определяется. Также предусмотрено, что цена на непродовольственные товары и услуги должна быть равна 50 процентам цены на продукты питания для всех слоев населения.

Поэтому наличие многосторонних связей между зерновым производством и отраслями экономики позволяет подчеркнуть, что стабильное зерновое производство является основой обеспечения стабильности всего сельскохозяйственного производства и товарного рынка. Устойчивое производство зерна имеет значительный потенциал для развития значительной части экономической системы страны.

Следует отметить, что в настоящее время в зерновой отрасли наблюдается нестабильная деятельность, в связи с чем решение данной проблемы связано с управлением производственно-экономическим потенциалом аграриев и созданием эффективных средств их рационального использования, оптимизацией их основной и вспомогательной деятельности. При этом возможности сельскохозяйственного производства формируются под влиянием технологических особенностей возделывания, в том числе зерновых культур и использования различных ресурсов: природных, материальных, трудовых, финансовых.

В условиях ограниченности ресурсов их рациональное использование, а также их оптимальное соотношение является важным фактором снижения себестоимости продукции и построения бизнес-

процессов. Чрезмерное потребление или недоиспользование производственных ресурсов приводит к снижению эффективности сельскохозяйственных товаропроизводителей, что в дальнейшем выражается в невозможности расширения производства и стагнации зерновой отрасли. Поэтому в научных работах отечественных и зарубежных исследователей рассматривались вопросы некоторых аспектов обеспечения экономической эффективности и устойчивости зернового хозяйства. При этом, рассматривая вопросы определения научной категории «Устойчивость производства зерна», особенностей структуры производственно-экономического потенциала производства зерна, циклов экономического развития производства зерна, влияния изменения погоды и климата условия выпущены Развитие климатических условий и долгосрочные сценарии обеспечения устойчивости производства зерна остаются недостаточно изученными, в то же время быстро меняющиеся экономические и технологические условия земледелия, нестабильность производства зерна требуют дальнейшего развития теоретических методов. Экономический рост в зерновой отрасли выражается ростом валовой продукции зерна, как в натуральном выражении, так и на душу населения, который в динамике стабилен [10].

Учитывая уникальные характеристики отрасли, рост этого показателя должен быть тенденцией, а не единственным доминирующим показателем роста производительности благодаря благоприятным условиям.

Сегодня в нашей республике всего будет произведено 2 550 000 тонн пшеницы урожая 2022 года, в среднем по 2,5 тонны с гектара орошаемых площадей.

- 1 783 500 тонн товарной пшеницы в качестве государственного ресурса и 266 500 тонн на семена будут закуплены за счет средств Фонда государственной поддержки сельского хозяйства;

- 500 000 тонн будут приняты фермерскими хозяйствами и другими производителями зерна на временное хранение у коммерческого представителя Фонда для последующей реализации на биржах.

Пшеница урожая 2022 года, полученная от производителей пшеницы на временное хранение у торгового представителя, будет реализована в июле-августе 2022 года через биржи. Зерновые продукты делятся на 2 вида:

1. Зерновые (пшеница, ячмень, овес, рис)
2. Просо (сорго, кукуруза, бобы и т. д.) [11]

Также не будет преувеличением сказать, что наша соседняя Республика Казахстан нашла свое место в Центральной Азии, а также на мировом рынке, в посеве и реализации зерновых продуктов. Мы знаем, что Казахстан для нас соседняя страна, но почему мы сегодня не слышали о марке узбекская пшеница или узбекское зерно? Потому что сами фермеры имеют право сажать и продавать свое зерно при посадке и закупке зерна, важна доставка зерновых продуктов.



[1] Составлено автором на основе данных STAT.uz

Фигура 1. Анализ производства пшеницы в агрохолдингах Республики Узбекистан за 2000-2022 годы (тыс. тонн)

В связи с этим в целях обеспечения населения пшеницей и мучными изделиями в 2022 году в республике засеяно 1 млн 27 тыс. га земли пшеницей. Эта цифра на 1 млн тонн больше, чем в предыдущем году, мы видим, что эффективность производства дой-продукта увеличивается.



[2] Составлено автором на основе данных STAT.uz.

Фигура 2. Параметры гармонической волны производства пшеницы в агрохолдингах Республики Узбекистан за 2000-2022 годы (тыс. тонн)

Определены периоды экономического развития зернового производства, уточнены характеристики и продолжительность соответствующих фаз роста и спада, определены параметры гармонической волны зернового производства.

Заключение и рекомендации.

Зерно – одна из самых распространенных злаковых культур. Наличие многосторонних связей между зерновым производством и отраслями экономики позволяет подчеркнуть, что устойчивое производство зерна

является основой обеспечения стабильности всего сельскохозяйственного производства и товарного рынка. Устойчивое производство зерна имеет значительный потенциал для развития значительной части экономической системы страны. Более половины населения земного шара использует в пищу пшеничный хлеб, и этот продукт стоит на первом месте в «потребительской корзине». Поэтому в экономической ситуации, когда доля спроса на хлеб и хлебобулочные изделия растет, обеспечение стабильности производства зерна очень важно для продовольственной безопасности страны.

Что для этого нужно сделать?

- расширение перечня реализуемой зерновой продукции,
- Необходимо внедрение новых торговых инструментов, обеспечивающих динамику биржевой торговли.

Конечно, для этого спроса также требуется достаточное предложение:

Для обеспечения устойчивости производства зерна я рекомендую следующие дополнительные предложения.

- увеличение количества мельниц,
- обмен опытом по методологии направлений зернового производства,
- увеличить площадь и урожайность в области выращивания зерна,
- покрыть расходы на поставку муки и мучных изделий в отдаленные села, создать систему покрытия транспортных расходов,
- недопущение дефицита за счет завоза мучной продукции из других регионов страны, - обеспечение ценовой стабильности.

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Уврайимов С.Т.
старший преподаватель
кафедра общепрофессиональных наук
факультет туризма
«Alfraganus University»

ПОНЯТИЕ, СВОЙСТВА И ВОЗМОЖНОСТИ КАРТОИДОВ

Аннотация. В статье приведены общие сведения о типе научных картоидов, их свойствах, сути использования, а также о научных исследованиях, проводимых по этой тематике. Кроме того, указаны названия научных картоидов и указано приблизительное количество геокартоидов.

Ключевые слова: география, картография, карта, картоид, геокарта, масштаб.

Uvrayimov S.T.
senior lecturer
department general professional sciences
Faculty of Tourism
"Alfraganus University"

CONCEPT, PROPERTIES AND POSSIBILITIES OF CARDOIDS

Annotation. The article provides general information about the type of scientific cartoid, their properties, the essence of use, as well as scientific research conducted on this topic. In addition, the names of scientific cartoids are indicated and the approximate number of geocartoids is indicated.

Keywords: geography, cartography, map, cartoid, geomap, scale.

Картоиды относят к наиболее древнему типу познавательных географических моделей, о чём свидетельствуют археологические находки картоподобных изображений местности, окружающей древнего человека эпохи верхнего палеолита (20-30 тыс. лет до н.э.).

Впервые понятие «картоид» употребил российский географ Б.Б.Родоман в 70-х гг. прошлого века для обозначения научных картографических моделей, изредка применявшихся и ранее [4]. Им же были предложены правила их картоидов. По определению, данному Б.Б.Родоманом, картоиды географические – это упрощённые изображения реальной или вымышленной территории без обязательного соблюдения всех правил классической картографии [4].

Обычная геокарта изображает или стремится изображать Землю на первом уровне, метрическом. Неизбежные искажения углов и размеров,

вызванные проекцией и генерализацией, воспринимаются как вынужденный недостаток, на довольно малых площадях практически исчезающий, или компромисс между задачами наглядного изображения различных объектов.

От обычных карт картоиды отличаются по таким критериям: карты отображают и метрику, и топологию изображаемых объектов, а картоиды – только топологию, поэтому на картоиде можно определить взаимное расположение объектов, но нельзя измерить расстояние между ними. Типологические картоиды с научным содержанием эпизодически появляются на протяжении полутора столетий, но как особый жанр осознаны лишь в наши дни.

У картоида больше, чем у карты, объем (множество) объектов, могущих обозначаться данной фигурой (условным знаком); меньше степень подобия знака объекту и уже круг людей, «обученных» условному языку; ослаблены или усилены те или иные нормальные свойства, присущие классической геокарте.

Итак, географический картоид (геокартоид) – это чертеж, выполняющий ту же задачу, что и геокарта, и пользующийся теми же изобразительными средствами, но отличающийся от геокарты хотя бы одним из следующих признаков:

1) он изображает конкретную, реальную территорию частично или полностью неметрически, с искажениями очертаний, не поддающимися одному правилу;

2) показывает воображаемый объект, соединяющий в себе черты многих реальных объектов (территорий).

Картоиды первого рода можно назвать индивидуальными, а второго рода – типологическими, как и районы [4].

К числу индивидуальных геокартоидов относятся:

1) составленные традиционными способами, но чрезмерно генерализованные, грубо искаженные и слабо нагруженные геокарты, обычно называемые картосхемами;

2) художественные картографические изображения на плакатах, обложках книг, значках, эмблемах и т.п.;

3) неметрические изображения, целенаправленно показывающие территориальную структуру без затемняющих ее деталей.

С учетом вышесказанного, к основным свойствам и возможностям картоидов можно отнести следующие.

1. Пространственное подобие картоида. Нет той точности отражения реальности, как на классической карте; нет математического преобразования метрики реальности в ее отражение на поверхности карты в строго определенном масштабе, однако имеет место пространственное подобие на уровне мысленного образа определенной территории.

2. Сопоставимость картоида как модели с картой как более точным

отражением реальности при соблюдении масштаба помогает при аналитической работе.

3. Возможность отражения динамики явлений в ее наиболее существенных и генерализированных чертах: эволюция явления может быть отражена более четко и характерно, чем в случае использования карт. Использование картоидов дает возможность весьма корректно ввести время в пространственную географическую модель.

4. Содержательное соответствие картоида отображаемым явлениям. Картоид узнаваем при анализе соответствующей информации об отображаемом явлении. Он не является фантазией и исключает спекулятивные добавления информации.

5. Абстрактность картоида позволяет отобрать наиболее типические и важные характеристики явления. Итогом становится пространственная динамическая модель, в которой отмечается все несущественное.

6. Избирательность информации для отображения на картоиде. Из гигантского массива информации можно отбирать только ту, что реально необходима для конкретного исследования.

7. Синтетичность информации, содержащейся на картоиде. То, что в природе не существует вместе, может быть сопоставлено на картоиде.

8. Возможность последовательного отображения идеальных явлений.

9. Возможность отображения теоретических объектов. Теоретические объекты моделируются из различных компонентов реальности. Они являются результатом научного абстрагирования, как, например, понятие социокультурной системы. На классической карте такого рода объекты отразить чрезвычайно сложно, а картоид позволяет это сделать.

10. Однозначность пространственная. Существует жесткая корреляция между тем, что изображается на картоиде, и тем, что можно увидеть в реальности и на карте. По факту, сопоставление осуществляется не столько с реальностью, сколько с картой.

11. Однозначность знаковая. В этом отношении картоид ничем не отличается от карты. Для составления картоида вводится определенная система знаков (условных обозначений), на основе которой и ведется отражение описываемой реальности. Отличие заключается лишь в более широких возможностях использования знаковых символов при составлении картоидов.

Таким образом, картоиды – это абстрактные графические изображения, при построении которых бывают не важны конкретные пространственные отношения, но показываются некоторые содержательные характеристики – основная сущность явлений и закономерности в развитии явлений и причин, их определяющих. Картоиды обладают многими свойствами и возможностями карт. Отличия картоидов от классических картографических изображений состоят в отсутствии масштаба, отсутствии

учета системы географических координат, существовании строго определенных уровня и стандарта генерализации, задаваемых изначально. Картоид базируется на системе понятных условных обозначений, читаемых совершенно однозначно.

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*Умаралиева И.Ж.
студент 1 курса магистратуры
Каршинский инженерно-экономический институт*

НЕОБХОДИМОСТЬ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ В СФЕРЕ УСЛУГ

Аннотация. В данной статье рассматривается важность инновационной деятельности в сфере услуг, выполнения требований, изучения зарубежного опыта, применения новых идей с учетом населения и потребностей.

Ключевые слова: услуга, производство, инновации, инвестиции, инфраструктура, потребность, благосостояние населения, качество, эффективность.

*Umaralieva I.Zh.
1st year master's student
Karshi Engineering and Economic Institute*

THE NEED FOR INNOVATION ACTIVITIES IN THE SERVICE SECTOR

Annotation. This article discusses the importance of innovation in the service sector, meeting requirements, studying foreign experience, applying new ideas taking into account the population and needs.

Key words: service, production, innovation, investment, infrastructure, need, welfare of the population, quality, efficiency.

Рост мирового населения и потребностей, развитие сферы услуг на основе особых подходов с учетом особенностей каждой страны и региона, использование инновационной деятельности, обеспечение субъектов предпринимательства финансовыми ресурсами и инфраструктурой, а также поддержка государства. Нужна поддержка и поощрение. В настоящее время развитие мировой экономики, основанное на опыте развитых стран, увеличение спроса на услуги во всех сферах требует обратить внимание на использование опыта и применение современных технологий.

Развитие сферы услуг в Узбекистане и система государственной поддержки этой сферы реализуются в целях повышения благосостояния населения и укрепления экономики страны. На основе градостроительных проектов полностью реконструируются сферы обслуживания, модернизируется наружное освещение, ирригационные и дренажные системы, строятся пешеходные и велосипедные дорожки, продаются,

обслуживаются многолюдные улицы, уделяется внимание развитию парков и улиц развлечений, развитие всех видов сфер обслуживания.

В условиях инновационного развития экономики большое значение имеет организационно-экономическое правильное формирование сферы услуг. Поскольку развитие этого сектора организационно оптимально и гибко по отношению к условиям рынка услуг, тем выше качество и эффективность обслуживания. Правильная организация работы в сфере услуг приведет к устранению ряда социальных и экономических проблем в масштабах народного хозяйства. Сегодня в нашей республике «бурное развитие сферы услуг, повышение роли и доли услуг в формировании валового внутреннего продукта, коренное изменение состава предоставляемых услуг, прежде всего, за счет их современного высокотехнологичные типы» является актуальной проблемой.

Сложность и многообразие составляющих производственно-сервисного процесса в сфере услуг, самостоятельный выбор, расчет, проектирование и координация мероприятий по их реализации, возможности применения инноваций вносят важные изменения в содержание работы. Для обеспечения максимально эффективной работы работников предприятий сферы услуг необходимо изучить и усовершенствовать процессы обслуживания, разработать комплексные нормы обслуживания и определить возможность повышения производительности труда на основе эффективного использования рабочего времени. Однако существуют факторы, которые замедляют и останавливают рост производительности труда даже в современных условиях развития рыночных отношений. Потому что сервисные компании не сокращают постоянно затраты, увеличивая объемы производства и услуг, а используют дефицит и дефицитность производимой ими продукции или предоставляемых услуг и в обмен на повышение своих цен добиваются запланированного объема дохода. Такая ситуация, в свою очередь, не только усиливает дальнейшее развитие неконтролируемого инфляционного процесса, но и не позволяет снизить затраты на организацию и управление процессом обслуживания за счет широкого внедрения комплексных норм научного обслуживания.

Организационную структуру сферы услуг зарубежных стран можно классифицировать следующим образом:

- о механизмах реализации (посредничество финансовое, информационно-технологическое, юридическое, маркетинговое);
- по форме собственности (частная, кооперативная (общинная), государственная, общественная, иностранная);
- по объему предоставляемых услуг (международные, национальные, межрегиональные, региональные, местные);
- по видам и направлениям предоставляемых услуг: деловые услуги (финансовые, страховые, кредитные услуги), распределительные услуги

(торговля, общественное питание), социальные услуги (образование, здравоохранение, физическая культура, юридические услуги).

Многие зарубежные экономисты предлагают классифицировать структурную структуру сферы услуг с точки зрения ее отраслевых особенностей и развития. На наш взгляд, уместно классифицировать эту сферу с организационно-экономической точки зрения. В этом случае необходимо выделить следующее:

- информационно-коммерческая инфраструктура (маркетинговые центры, рекламные агентства, центры сбора и обработки информации и т.д.);
- экономическая и правовая инфраструктура (суды, юридические консультационные центры, адвокатские и нотариальные конторы и т.д.);
- финансово-кредитная инфраструктура (коммерческие банки, кредитные, страховые и гарантийные организации);
- торговая, посредническая инфраструктура (ярмарки, биржи, торговые дома, торговые центры и т.д.)

Вышеупомянутые классификации имеют важное значение для обеспечения эффективности сферы услуг. Однако реформы, направленные на повышение значимости услуг в экономической политике нашей страны, требуют дальнейшего развития этих сфер услуг. Например, торговые дома, организации, ярмарки как вид услуг положительно влияют на реализацию продовольственных и непродовольственных товаров и эффективную работу их производителей. Услуги как особый товар требуют соблюдения особых требований от тех, кто их предоставляет. В подтверждение этого мнения в качестве примера можно привести место и роль ярмарок. В последнее время в мировом опыте их роль как торгово-посреднической структурной структуры сферы услуг несколько снижается. В рамках рынка услуг необходимо собирать и обрабатывать информацию о состоянии этого рынка, о производителях и потребителях услуг.

В целях постепенного увеличения доли цифровых услуг осуществляется обеспечение необходимой инфраструктуры и покрытия качественными услугами связи и Интернета, а также резкое расширение использования услуг системы «Электронное правительство».

В районах с численностью населения менее 300 000 человек в Республике Узбекистан, отдавая приоритет организации услуг торговли, гостиничного хозяйства, общественного питания и логистики, а также объектов технического обслуживания и развлечений, в районах, где промышленность и сфера услуг развиваются на уровне высокой темп, Развитие туристических услуг на основе готовых проектов и улучшение автодорог, электро- и питьевого водоснабжения и другой инфраструктуры в районах с высоким потенциалом рекреационного туризма, развитие туристических услуг, расположенных в приграничных районах и с территории международных автомобильные и железные дороги.

Актуальными считаются вопросы специализации этих районов в обеспечении торговли, туризма, логистики и придорожного сервиса. Также планируется развивать современные сельскохозяйственные услуги в районах с высокой долей сельского хозяйства.

В соответствии с Законом Президента Республики Узбекистан «Об инновационной деятельности» №ОРҚ-630 от 24 июля 2020 года инновации включаются в гражданский оборот или используются для личных нужд, использование которых требует достижения больших социально-экономические результаты на практике – это новая разработка, обеспечивающая.

Инновационная деятельность – это деятельность по организации новых разработок, а также обеспечению их передачи и внедрения в сфере услуг.

В экономике страны важно использовать инновационную деятельность и государственную поддержку в сфере услуг, использовать инновационную деятельность, использовать зарубежный опыт, внедрять стимулы.

В заключение подчеркнем, что организационное обеспечение деятельности работников предприятий сферы услуг остается задачей первого уровня с точки зрения их эффективного управления. Также возрастает спрос на менеджеров и специалистов, хорошо владеющих методами достижения высокого качества и повышения производительности труда в процессе оказания услуг. Общие результаты труда сотрудников компании зависят от личных результатов труда каждого сотрудника. Поэтому необходимо поддерживать определенный порядок их совместной работы, начала и окончания работы, соблюдения перерывов. Также необходим четкий механизм поддержания трудовой дисциплины. В настоящее время роль информации на рынке услуг серьезно возрастает. Высокая потребность в информации и быстрое развитие информационных процессов с целью повышения эффективности оказания услуг выдвигают на первый план создание ее организационных подразделений на предприятиях. Фактически спрос на услуги таких информационных систем будет расширяться и охватывать региональный рынок услуг. По нашему мнению, информационные отделы на предприятиях должны включать в себя следующие компоненты: - сбор исходной информации о спросе и предложении услуг на рынке услуг; - разработка программного обеспечения для обработки данных; - создание базы данных на основе существующей собранной и собранной информации.

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РОЛЬ РАЗВИТИЯ ИННОВАЦИОННОЙ ДЕЯТЕЛЬНОСТИ ПЕРСОНАЛА В ПОВЫШЕНИИ КАЧЕСТВА ПРОДУКЦИИ

Аннотация: в статье рассмотрены основные факторы развития инновационной деятельности персонала в повышении качества сельскохозяйственной продукции, где повышение качества продукции определяется выживаемостью предприятия в условиях рыночных преобразований и инновационной экономики в республике.

Ключевые слова: предприятие, экономика, качество продукции, управление качеством.

Ungarov Zh.
assistant

Jizzakh Polytechnic Institute

THE ROLE OF DEVELOPING INNOVATION ACTIVITIES OF STAFF IN IMPROVING PRODUCT QUALITY

Annotation. The main factors in the development of innovative activities of personnel in improving the quality of agricultural products are considered. Improving product quality is determined by the survival of the enterprise in the conditions of market transformations and the innovative economy of Uzbekistan.

Keywords: enterprise, economy, product quality, quality management.

В последние годы в республике вопросам инновационной активности уделяется большое внимание. В целом экономическое развитие страны осуществляется в соответствии с принципом централизованного регулирования, реализующимся через государственную политику. Значимый элемент этой политики - переход к инновационному типу развития на основе менеджмента качества сельскохозяйственной продукции [1].

В настоящее время информационного века, где ведущими ресурсами устойчивого развития общества становятся именно знания, их производство, передача и усвоение, что требует изменений во всей системе подготовки и переподготовки руководящих кадров. Для того чтобы не отставать от требований времени в системе повышения квалификации, подготовки персонала управления, необходимо интенсифицировать образовательный процесс на основе внедрения в него интерактивных

технологий обучения и организационного развития персонала, создание психологически комфортной среды преподавания [2].

Управленческая и профессиональная деятельность в новых экономических условиях отличается установкой на демократизацию и партнерские отношения, то есть на самоуправление. Персонал управления предприятий в этих условиях все чаще использует инновационную деятельность в деловом партнерстве на основе глубокого анализа повышения качества конкретной сельскохозяйственной продукции [3].

Результатом сравнения потребностей предприятия и имеющихся ресурсов, становятся не только обучение персонала, но и личная ответственность за выполнение обязанностей и качества продукции.

Повышение качества продукции относится к числу важнейших показателей деятельности предприятия, которое зависит также и от подготовки персонала. Повышение качества продукции в значительной мере определяет выживаемость предприятия в условиях рыночных преобразований, темпов научно-технического прогресса, повышение социально-экономической эффективности производства. Оно также является важным условием обеспечения высокой конкурентоспособности продукции на мировом рынке, улучшения структуры экспорта и дальнейшего расширения внешнеэкономических связей. Следовательно, повышение качества продукции становится неременным требованием развития национальной экономики в целом и экономики сельского хозяйства в особенности [4].

В условиях рыночных отношений постоянный выпуск качественной продукции для предприятий означает, прежде всего - это формирование имиджа предприятия, высокий уровень которого означает известность и популярность. Если потребительская стоимость - это полезность товара вообще, то качество продукции - это степень проявления потребительской стоимости в конкретных условиях ее использования.

Успех системы зависит от всех уровней и всех подразделений организации особенно в зависимости от обязательств, взятых на себя высшим руководством. Система организации, ее экологическая политика и экологические цели формирование, достижение соответствия операций этой политике и тому установление процедур для демонстрации соответствия другим (и их оценка эффективности) [5].

Практика свидетельствует, что руководителей, нацеленных на менеджмент качества продукции и на развитие инновационной деятельности персонала, влияющих на повышение качества продукции, в современных условиях не так уж много, особенно в учреждениях с государственным менеджментом [6].

На предприятиях и фирмах с зарубежным менеджментом обучению не просто уделяется большое внимание, но и для достижения этих целей приглашаются профессионалы, владеющие передовыми технологиями

обучения, таких как: игровые занятия, тренинги, кейс стадии, так как обучать реальному сотрудничеству и конструктивной работе с клиентами, продвижения товара и эффективных продаж с помощью вербальных стратегий, как показывает предшествующий опыт обучения, практически невозможно [7].

Таким образом, собственный практический опыт менеджера - это лишь предпосылка для начала поиска новой информации, условие для его анализа и получения иных результатов, диагностика и прогнозирование которых позволяют улучшить уже имеющийся опыт менеджмента качества в сельскохозяйственных предприятиях [8].

Процессы информатизации в современном обществе характеризуются совершенствованием и глобальным распространением информационно-коммуникационные технологии. Особенностью этого процесса является накопление, хранение, использование, передача информации, которая воспроизводится с помощью современных средств вычислительной техники [9].

Внедрение систем управления и автоматизации технологических процессов в современных станках, в том числе при подготовке деталей на конструкциях машин-механизмов и измерительных приборов, является одним из основных направлений технического развития, оно является основным фактором, способствующим повышению эффективности производства, повышению качества продукции, снижению затрат, улучшение условий труда и защита окружающей среды [10].

Каждая составляющая имеет содержательное наполнение и выполняет свою функцию [11]:

- мотивационный компонент играет иницирующую роль;
- когнитивный компонент – информационную;
- деятельностный компонент – технологическую;
- рефлексивный компонент – регулирующую.

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**ЖИЗЗАХ ВИЛОЯТИДА ТУРИСТИК ДЕСТИНАЦИЯЛАР
ШАКЛЛАНИШИ ВА РИВОЖЛАНИШИ ҲАМДА УЛАРНИНГ
ТУРИЗМДАГИ АҲАМИЯТИ**

Аннотация. Мазкур мақолада Жиззах вилоятида жойлашган туристик дестинациялар шаклланиши, ривожланиши ва уларнинг туризмдаги ўрни ҳақидаги маълумотлар бериб ўтилган.

Калит сўзлар: Жиззах вилояти, Буюк Ипак йўли, Эрамиздан аввалги давр, VII-XII асрлар даври, Амир Темур ва темурийлар салтанати даври, чор Россияси даври, советлар даври, мустақиллик даври.

Usmanov M.R., PhD
Jizzakh State Pedagogical University

**FORMATION AND DEVELOPMENT OF TOURISM DESTINATIONS
IN JIZAKH REGION AND THEIR IMPORTANCE IN TOURISM**

Annotation. This article provides information on the formation and development of tourist destinations in Jizzakh region and their role in tourism.

Key words: Jizzakh region, the Great Silk Road, the period before VII-XII centuries BC, the period of Amir Temur and the Temurid Empire, the period of Tsarist Russia, the period of the Soviets, the period of independence.

Кириш. Бутунжаҳон туризм ташкилоти (UNWTO)нинг ҳисоботида туризмни барқарор ривожлантиришнинг 10 та дастури баён этилган бўлиб, унда туризмни ривожлантиришнинг инновацион хусусиятлари ва жиҳатларини очиб бериш вазифалари белгилаб берилган. Шу нуқтаи назардан дунё бўйича туристик дестинацияларга сайёҳлар оқимини янада ошириш, туристик салоҳиятни юксалтириш ва ривожлантириш бўйича тадқиқотлар олиб боришни тақозо этади.

Республикамизда туризмни жадал ривожлантириш учун қулай иқтисодий ва ташкилий-ҳуқуқий шароитларни яратиш, миллий туризм маҳсулотларини жаҳон туристик бозоридаги рақобатбардошлигини таъминлаш, сайёҳлик объектларидан самарали фойдаланиш, кўрсатилаётган хизмат турлари сифатини ошириш, юртимизга ташриф буюраётган сайёҳлар оқимини кўпайтириш бўйича кенг қамровли чоратadbирлар амалга оширилмоқда. Ўзбекистон Республикаси Президентининг 2022 йил 28 январдаги ПФ-60-сон Фармони билан тасдиқланган “2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегияси”нинг

35-мақсадида “Ўзбекистон бўйлаб саёҳат қилинг” дастури доирасида маҳаллий сайёҳлар сонини 12 миллион нафардан ошириш ҳамда республикага ташриф буюрадиган хорижий туристлар сонини 9 миллион нафарга етказиш...” юзасидан муҳим вазифалар белгилаб берилган [1].

Асосий қисм. Жиззах вилоятининг ҳар тамонлама гуллаб яшнаши ва ривожланишида Буюк Ипак йўлининг аҳамияти катта бўлиб, минтақада туризмнинг шаклланиши ва ривожланиши унинг тарихий тараққиётида бевосита тарихий, табиий жараёнлар ҳамда бир қанча омиллар билан боғлиқ бўлган. Минтақадаги тарихий обидалар, жумладан, Жиззах шаҳри ва унинг минтақаларидаги туристик объектлар узоқ тарихий босқичлар давомида шаклланди. Жиззах вилоятида туризмнинг шаклланиши, тарихий, маданий ва бошқа объектларининг ривожланишини эрамиздан аввалги давр, VII-XII асрлар даври, Амир Темури ва темурийлар салтанати даври, Чор Россияси даври, Советлар даври, Мустақиллик йиллари давларига бўлиб ўрганиш мақсадга мувофиқ деб ҳисоблаймиз.

Юнон салномаларида Кириполь ва Газо шаҳарлари алоҳида тилга олинган. Археологлар Газо шаҳарнинг ўрнини аниқ ва асосли тайин этмасаларда, тарихий манбаларда уни Самарқанд ва Тошкент оралиғида жойлашганлигини айтилади. Олимлар Газони қадимги Жиззах деб тахмин қилишади [2. 5 б]. Топономист олим Қ.Ҳакимов Жиззах номини суғд тилидаги “Дизак” (диз-“қалъа”, ак-“ча”) сўзи билан боғлайди. Ўтмишда у Дизак номи билан юритилган бўлиб, Жиззах Ўрта Осиёдан ўтган бир неча карвон йўлининг туташган жойида пайдо бўлган. Ёзма манбаларда илк маротаба араб географ олимлари ва сайёҳчиларидан Ибн Ҳавкал ва Муқаддасийларнинг асарларида ёзилишича Устрошананинг Факнон вилоятидаги шаҳари деб, тилга олинган. Мазкур шаҳар араблар истилосидан олдин ҳам мавжуд бўлганлиги бизга маълум [3. 14 б].

Устрошона алоҳида маъмурий вилоят сифатида таркиб топган даврдаёқ Нужаникас, Катвондиз, Хушуфаг, Дизак, Мирасманда, Хашт, Шовғар, Зомин, Себат каби шаҳар ва шаҳарчалар, Сийракас, Шибли, Минк, Усманд, Кахлобод, Бурнамоз, Бурнамад сингари кўпгина қишлоқлару қўрғонлар мавжуд бўлган [4. 116 б.]. Шу даврлардан бошлаб, Европа ва бошқа хорижий давлатларнинг бу минтақага қизиқиши ортган бўлиши тахмин қилинади.

Эрамиздан аввалги давр. Милоддан олдинги II асрдан эътиборан шарқ ва ғарб ўртасидаги савдо-алоқалари Устрошона орқали ўтганлиги воҳанинг ҳаётига ижобий таъсир этган бўлиб, афсуски, кушонлар, эфталитлар, Турк хоқонлиги даврига оид ёзма манбаларнинг етиб келмаганлигидан Устрошона тарихининг бир неча юз йилликлар қандай кечганлиги ҳозирча бизга маълум эмас. Қутайба бошлиқ араб қўшинларининг воҳани осонликча енга олмаганлиги, устрошоналик султонлар вилоят мустақиллиги йўлида қаъият билан курашганликлари (VIII аср) бизга тарих саҳифаларидан маълум.

Тарихий манбаларда эса Салавкийлар замонида, Юнон-Бақтрия, Қанғ, Кушон давлатлари даврида вилоят ҳудудидаги ижтимоий иқтисодий ҳаётга тегишли маълумотлар жуда кам. Фақат милоддан аввалги III-II асрларда бошланган Буюк Ипак йўли савдо аълоқаси жадаллашгани тилга олинади. Бу халқаро савдо йўли тармоғи вилоят ҳудудидан ўтгани, савдо карвонининг бир кунлик йўли манзилида карвонсаройлар барпо бўлгани, шаҳарларда савдо, хунармандчилик ривожлангани вилоят тарихига ҳам тегишлидир.

Илмий манбаларда ҳукмронлик эфталитлар қўлига ўтгач, ҳудудга кўчманчи турк чорвадорларининг кўчиб келиши билан яйловларнинг катта қисми улар ихтиёрига ўтганлиги, дашт яйловларни ҳам кўчманчи турк чорвадорлари эгаллай бошлаганлигини тасдиқлайди. Эфталит чорвадорларининг ўртоқлашуви туфайли суғорма деҳқончилик учун яроқли ерларни кенгайтириш Сангзор ва Зоминсув, Равотсой ҳудудларида юз беради. Ўша давр зодогон деҳқонлари барпо этган қўрғонлар пойдевори хом гишт ва пахсадан супа қилиниб, иморат деворлари ҳам қалин лойдан ишлаб чиқилгани манбаларда қайд этилган. Бундай иморат-қўрғонлар даврлар ўтиши ва турли босқинчилик ҳаракатлари туфайли тепага айланиб, ҳозирда қадимшунослар Жиззах, Зомин, Бахмал, Ғаллаорол, Фориш туманлари ҳудудларида уларнинг 200 тадан ортиқроғини рўйхатга олинганлиги [4. 84-88 б.] ҳам вилоятимизда ички туризмни ривожланиши учун асос бўлади.

VII-XII асрлар даври. Бизга маълумки, VII-XII асрларда воҳа ҳаёти бир мунча ривожланганлиги, қишлоқ хўжалиги ва хунармандчилик тараққий этиб, Жиззах яқинидаги Мирасманда ҳар ойнинг биринчи куни катта жаҳон савдо бозори бўлган. Жаҳон бозорида Жиззахда тайёрланган жун матолар ва жун либослар, пилла, темир, ва метал буюмлар, Устрошона ферузаси катта мовқега эга бўлиб, минтақада тайёрланган метал буюмлар Хуросан, Боғдод ва Эронда кенг тарқалганлигини алоҳида таъкидлаб ўтиш жоиздир.

Арабларнинг Моварауннахрга бостириб келиши VII асрнинг иккинчи ярмидан бошланган бўлсада, Уструшонани босиб олиш учун юриши VIII асрга тўғри келади. Қутаиба ибн Муслим 713 йил Уструшона, Тошкент, Фарғонага юриш бошлайди. Унинг Уструшонадаги биринчи катта жанги Жиззах яқинидаги Илонўтди сойида Турк хоқонлиги қўшини билан бўлди. Бу жангда ғалабани қўлга киритган Қутайба Минқдаги “қора кийимлилар” (дахлар) билан жанг қилади. Қутайба қўшини зарбига Бурнамад, Зомин, Шағар, Сабат сингари шаҳарлар ҳам дош бера олмади. Араблар босқинчилиги билан бирга ўзининг динини ҳам олиб келишади.

Амир Темур ва темурийлар салтанати даври. Жиззах воҳаси Амир Темур ва Темурийлар даврида ривожланган бўлиб, юртда тинчлик, фарованлик, элда арзончилик барқарор бўлади. Амир Темур даврида Жиззах воҳасида Мўғуллар даврида вайрон бўлган работу карвонсаройлар қайта тикланди. Хонимқўрғон, Бозорхоним, Қизилқўрғон қўрғонлари,

хонақоҳ ва масжидлар барпо қилинди. Пишоғардаги Қўшинтепа, Бахмалдаги Боғимозор, Ш.Рашидов туманидаги Олтиховуз манзиллари бизга Соҳибқиронни эслатиб туради. Бутун сойни эгаллаган ёнғоқ, қартийиб қолган терак ва қарағайлар Амир Темурдан жонли хотира сифатида сайёҳларни ўзига жалб этиб келмоқда ҳамда вилоят туризмни ривожлантиришга катта ҳиссасини кўшмоқда.

Мирзо Улуғбек ҳаётида ҳам Жиззах билан боғлиқ воқеалар анча бўлган. Самарқанд тахтига ўтиргач, 1425 йил жата ва мўғуллар юртига қарши жангга отланиб, жангни ғалаба билан яқунлаб, шу йил июнь ойининг иккинчи ярмида Жиззахда тўхтади. Подшоҳнинг зафарли шарафига байрам ва сайил ташкил қилинади. Турли беллашувлар уюштирилган манзил Сайилжойи аталиб, бутун Жиззах шаҳрида шу номдаги маҳалла ҳам мавжуд [4. 146 б.].

Вилоят тарихида темурийлардан З.М.Бобур билан боғлиқ воқеалар ҳам анчагина бўлиб, отаси Умаршайх вафотидан сўнг Андижон тахтига ўтирган 12 ёшли Мирзо Бобурнинг ўспиринлик йиллари ҳам Самарқанд тахти илинжида не бир долғали, чигал воқеаларда кечди. Бир неча бор Андижондан Самарқандга, Самарқанддан Андижонга отланганида Зомин, Пишағор, Жиззах, Сангзор, Шероз каби шаҳару қишлоқларда, кўпинча Бахмал тумани ва Шароф Рашидов туманининг тоғли ҳудудлари ҳисобланган Ёр яйлоқ туманию кўрғонларида бўлди. Самарқандни Шайбонийга қолдириб, мағлубият алаmidан бош олиб чиққанида Жиззахда роҳат топганлигини “Бобурнома”да ички қониқиш билан шундай хотирлайди: *“Семиз этлар ва майда этмаклар арзон, чучук қовунлар ва яхши узумлар фаровон”* деб таъкидлаб ўтганлар. Амир Темур ва Темурийлар даврида Жиззах яна ҳам ободонлашиб, савдо-сотик ва стратегик аҳамият касб эта бошлаган [4. 154 б.].

Чор Россияси даври. 1866 йил Жиззах тарихида жуда оғир йил бўлди. Тошкентни босиб олган рус армияси Бухоро хонлигига ва биринчи навбатда катта стратегик аҳамиятга эга бўлган Жиззахга қаратди. 12-19 январь кунлари Жиззах томон юриш бошлади. 8 майда генерал Рамановский бошлиқ рус қўшинлари Эржарни босиб олди. 7 июнь куни бўлиб ўтган оғир жангда жиззахликлар ғалаба қозониб, рус қўшинларини чекинишга мажбур қилади. Шундан сўнг рус армияси бутун кучни тўплаб Жиззахни забт этишга қаратиш мақсадида аввал Хўжанд ва Ўратепани босиб олади ва октябрь бошидан Зомин ва Эржар орқали Жиззахга икки томонлама хужумни бошлайди. Жиззах қалъаси 9 палахсали девор билан ўралган ва ўн минг кишидан ортиқ ўз ҳимоячиси бор эди. Ниҳоят 12-18 октябрь кунлари Жиззах учун жуда шиддатли жанглар бўлиб ўтади. Душманнинг ҳарбий устунлиги туфайли жиззахликлар 18 октябрда таслим бўладилар. Жиззах қўзғолони Ватанимиз мустақиллиги йўлидаги кураш тарихида алоҳида ўрин тутди.

Жиззахни Чор Россияси босиб олинши кўплаб туристик объектларга (тарихий обидалар, масжид ва мадрасалар) талофат етказди. Шаҳар ва унинг атрофларидаги тарихий обида ва зиёратгоҳ жойлар вайроналарга айланди. Октябрь тўнтаришигача туристик тарихий объектлар хароба ҳолига келди, қадимий обида ва зиёратгоҳ жойлар эскилик сарқити сифатида қаровсиз ташлаб қўйилди.

Советлар даври. Советлар даврида Жиззах вилояти учун ўзига хос тараққиёт даври, янги шаҳарлар, туманлар барпо бўлиши, кўрик ва бўз ерларни ўзлаштириш, улкан суғориш тизимларини вужудга келтириш, замонавий саноат объектларини яратиш, халқ таълими ва маданиятнинг юксалиш даври бўлди. Бу улкан ишларда вилоятдан етишиб чиққан кўплаб истеъдодли мутахассисларнинг хизмати катта бўлиб, шоир Ҳ.Олимжон, адиб С.Азимов, Ўзбекистон халқ атисти Х.Азимова, 1941-45 йиллар уруш қаҳрамонлари Ж.Тўраев, Е.И.Иванин, Г.М.Губарьков, Меҳнат қаҳрамони Б.Пирматов ва бошқалар етишиб чиққан. Хусусан, Жиззахда туғилиб, йирик давлат арбоби сифатида танилган Шароф Рашидовнинг самарали хизматлари беқиёс каттадир. Бундан ташқари, сайёҳларни овқатлантиришни ва дам олишини яхшилаш мақсадида ўнлаб кишига мўлжалланган ресторан, маданий ҳордиқ чиқариши учун кинотеатр, соғломлаштириш масканлари ва боғлар қуриб ишга туширилди. Бу даврда вилоят туризмнинг моддий техника базаси кенгайди. Аммо туристик фаолиятнинг барча жабҳалари марказ томонидан белгиланиб берилган дастурлар асосида амалга оширилди эди.

Мустақиллик йиллари даври. Мустақиллик йиллари Жиззах вилояти ҳаётида янгича ривожланиш, кўшни ва хорижий давлатлар билан бевосита иқтисодий-савдо ва маданий алоқаларнинг кучайишига кенг имкониятлар яратди. Вилоятда амалга оширилаётган ислохатлар ўзининг дастлабки самарасини бермоқда. Иқтисодий-ижтимоий ҳаётида хорижий фирма ва корхоналар билан тенг ҳуқуқли алоқалар табори кенгаймоқда. Бунда, айниқса, вилоятнинг қулай табиий шароити, катта меҳнат ресурслари, халқ хўжалигининг энг муҳим тармоқлари бўйича маҳсулот ишлаб чиқаришнинг мавжудлиги, ривожланган коммуникацияга эга эканлиги, савдо-молиявий тизимнинг шаклланиши муҳим аҳамиятга эга бўлди.

Республикамиз мустақилликка эришиши натижасида миллий, маънавий ўзлигини англашга, йўқолиб бораётган урф-одатларимизга эътиборни кучайтириш давлат сиёсати даражасига олиб чиқилди. Жумладан, қишлоқлардаги кўпқари, кураш ва бошқа ўйинлари, наврўз байрамлари, қурбон ҳаёитлари, хотира кунларини ўтказиш, шаҳар ва қишлоқларда миллий хунармандчиликка эътиборнинг кучайиши, бевосита этнографик туризмни ташкил этиш ва ривожлантиришга хизмат қилади. Мустақилликдан сўнг яъни туризмнинг ривожланишида ҳам муҳим ўзгаришлар юз берди, туризм соҳасида собиқ иттифоқ даврида амал қилиб

келинган қонунлар ўз кучини йўқотди ва бунинг ўрнига жаҳон андозаларига мос ҳолда замонавий туризмнинг пойдеворини яратишга асос солинди.

Юртимизда 1992 йилда “Ўзбектуризм” миллий компанияси ташкил этилди ҳамда вилоятларда унинг филиаллари очилди. Жиззах вилоятида ҳам “Ўзбектуризм” миллий компанияси вилоят минтақавий бўлими 2017 йил ташкил этилган бўлиб (вилоят туризм ва спорт бошқармаси 2021 йил ташкил топган), ўтган йиллар давомида туризм соҳасида кўпгина амалий ишларнинг бажарилиши туфайли минтақа туризм макроиктисодиётнинг энг асосий соҳаси сифатида тез ўсиб бормоқда. Чунки жаҳон сайёҳларининг бир умрлик орзуси бўлган қадимий шаҳарларни, муқаддас қадамжоларни ва туманлардаги зиёратгоҳ жойларини бориб кўриш имконияти туғилади.

Хулоса. Хулоса қилиб айтадиган бўлсак, Жиззах вилоятида бугунги кунда туризмнинг ривожланиши ва ҳар тамонлама гуллаб яшнаши ҳамда ривожланишида Буёқ Ипак йўлининг аҳамияти алоҳида эга бўлган. Жиззах шаҳри ва унинг ҳудудларидаги туристик объектлар узок тарихий босқичлар давомида шаклланган. Вилоятда туризмнинг шаклланиши, тарихий, маданий ва бошқа объектларининг ривожланишини бир неча даврларга яъни эрамыздан аввалги давр, VII-XII асрлар даври, Амир Темур ва темурийлар салтанати даври, Чор Россияси даври, Советлар даври, Мустақиллик йиллари даврларига бўлиб ўрганиш мақсадга мувофиқ ҳисобланади.

Адабиётлар рўйхати:

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*Файзиева Ш.Ш., к.э.н.
исполняющий обязанности профессора
кафедры «Инновационная экономика»
Каршинский инженерно-экономический институт*

ХОЗЯЙСТВЕННЫЕ МЕХАНИЗМЫ ОРГАНИЗАЦИИ ПЛОДООВОЩНЫХ КООПЕРАТИВОВ

Аннотация. В данной научной статье анализируется важность использования экономических механизмов для организации плодоовощных кооперативов Республики Узбекистан, увеличения объемов плодоовощной продукции, показателей продуктивности в мировом масштабе и в стране, а также повышения эффективности.

Ключевые слова: плодоовощная продукция, кооперация, экономический механизм, продовольственная программа, увеличение объемов продовольственных товаров, экспорт, улучшение сортов сельскохозяйственных культур, создание рабочих мест, развитие социально-экономических возможностей.

*Fayzieva Sh.Sh., Ph.D.
acting professor
Department of Innovative Economics
Karshi Engineering and Economic Institute*

ECONOMIC MECHANISMS OF ORGANIZATION OF FRUITS AND VEGETABLES COOPERATIVES

Annotation. This scientific article analyzes the importance of using economic mechanisms for organizing fruit and vegetable cooperatives in the Republic of Uzbekistan, increasing the volume of fruit and vegetable production, productivity indicators globally and in the country, as well as increasing efficiency.

Key words: fruits and vegetables, cooperation, economic mechanism, food program, increasing the volume of food products, exports, improving crop varieties, creating jobs, developing socio-economic opportunities.

Плодоовощная продукция в сельском хозяйстве в основном выращивается в частном секторе, 75-85 процентов которого принадлежит фермерам и фермерским хозяйствам. Сегодня увеличение количества крупных субъектов предпринимательства в сфере садоводства приводит к усилению конкуренции между частным сектором плодоовощеводства. Анализ опыта развитых стран в выращивании, хранении, переработке и

экспорте плодоовощной продукции показывает, что существует необходимость развития сотрудничества между производителями этой продукции. В этом случае для того, чтобы в конкурсе могли участвовать фермерские хозяйства и хозяйства, имеющие в системе большое количество фруктов и овощей сезонного созревания, разбросанные по территориальному расположению и небольшие по размеру, целесообразно объединить их в кооператив. В развитии сельского хозяйства Узбекистана повышение объемов и конкурентоспособности производства плодоовощной продукции, организация сотрудничества в этой сфере, использование экономических механизмов, вводимых государством, служат, прежде всего, стимулированию производителей.

Наше правительство принимает ряд нормативных документов по развитию и стимулированию сельского хозяйства. В частности, план мероприятий по взаимной интеграции процессов производства, переработки, хранения, обслуживания, реализации и экспорта продукции в области плодоовощной продукции, развитию кооперативной деятельности, обеспечению безопасности пищевых продуктов и увеличению объемов экспорта. разрабатывается.

В частности, указ Президента Республики Узбекистан от 23 октября 2019 года «Об утверждении Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы» №ПФ-5853 и постановление от 14 марта 2019 года. «Фруктовые» - согласно решению ПҚ-4239 «О мерах по развитию сельскохозяйственной кооперации в области производства овощей» на базе фермерских и крестьянских хозяйств, действующих в регионах с развитым плодоовощным производством, организация специализированных кооперативов и повышение его эффективности и удобства. Предназначен для создания деловой среды. Также в целях внедрения передовых технологий в сфере производства, хранения, переработки и реализации плодоовощной продукции и стимулирования развития сотрудничества производителей данной продукции и повышения их эффективности, 11 декабря 2019 года РҚ-4549 приняты решения о дополнительных мерах по развитию, созданию цепочки добавленной стоимости в отрасли». Он служит для реализации задач, определенных в принятых решениях и других нормативных правовых документах, связанных с данной деятельностью.

Плодоовощная отрасль занимает важное место в сельском хозяйстве республики. Сюда входит обеспечение продовольственной безопасности населения, создание благоприятной агробизнес-среды и цепочки добавленной стоимости, рациональное использование природных ресурсов и охрана окружающей среды, постепенная диверсификация государственных расходов, увеличение доходов малообеспеченных жителей сельской местности, регионов. Для развития экономики согласно постановлению Президента «Об утверждении Стратегии развития

сельского хозяйства Республики Узбекистан на 2020-2030 годы» 50 человек, имеющих возможность и желание работать в сельском хозяйстве, объединены в один области создаются кооперативы. Им планируется выделить по 15 га земли, не используемой в сельском хозяйстве, каждому члену кооператива выделяется по 20 га, а участнику кооператива - партнеру-предпринимателю - 5 га земли. В этом случае партнером-предпринимателем является передовой фермер или предприниматель, занимающийся переработкой в данной сфере, и для дальнейшего поощрения ему будет предоставлено 5 га земли. Таким образом, бизнесмен получит возможность покупать и хранить продукцию 50 рабочих. Для поддержки кооперативов в регионах необходимо будет оказать поддержку из местного бюджета в части инфраструктуры, то есть электро-, дорожного и водоснабжения. В настоящее время, основываясь на опыте на территории нашей республики, планируется создать 31 кооператив в 22 районах Ферганской долины с высоким уровнем безработицы и неиспользуемым резервом земель, в частности, в Асаке, Кургантепе, Улугноре, Пахтабаде, Бостоне, Поповые районы. Общая стоимость этих мероприятий составляет 24 миллиона долларов. Из них привлечено 15,5 миллионов долларов средств международных финансовых институтов. Малообеспеченные жители сел становятся членами кооператива на паевой основе. Безработным гражданам, поступающим в нее, из Фонда поддержки занятости будет предоставлено 2,23 миллиона сумов. Или предоставляют льготный кредит в 30 миллионов сумов по программе «Каждая семья – предприниматель». На эти деньги члены входят в уставный фонд, а продвинутый фермер, предприниматель или предприятие по обслуживанию недвижимости, которое будет для них опорой, входит с 500-900 млн. сумов и более. В этом случае передовой фермер, предприниматель или обслуживающая недвижимость организация будет располагать 5 гектарами земли в месте создания инфраструктуры. Если эффективность хорошая, то позже можно будет расширить землю. В результате будут созданы новые рабочие места, улучшится качество сельскохозяйственной продукции, увеличится экспорт.

По данным анализа Института макроэкономических и территориальных исследований, наибольшую стоимостную долю в экспорте плодоовощной продукции занимает сусло - 13,7 процента, изюм - 10,4 процента, чернослив - 7 процентов, помидоры - 6,1 процента, капуста - 5,1 процента, свежесобранный виноград - 4,3 процента, лук - 4,3 процента и гранат - 3,3 процента. В январе-апреле 2023 года доля фруктов и овощей в общем объеме экспорта составила 3,3%. В частности, основными рынками экспорта плодоовощной продукции, выращиваемой в Узбекистане, являются Россия 27,4%, Пакистан 20,6%, Китай 16,3%, Казахстан 13,9%, Афганистан 2,4%, Кыргызстан 2,4%, Беларусь 2,0%, Турция 1,9%, Ирак 1,5% и Иран 1,2%.

Кооперативы, действующие в Республике Узбекистан, научили наших крестьян и фермеров, представителей аграрного сектора работать по-новому, современному. Новый комплекс производства, объединяющий процесс от посева до готовой продукции в единую технологическую систему, открывает широкий путь к быстрому внедрению научных достижений и новых инновационных технологий. Данная система организуется сельскохозяйственными субъектами на основе добровольного объединения имущественных долей в целях удовлетворения своих материальных и иных потребностей в совместной производственной или иной экономической деятельности. Развитие кооперативов приводит к обновлению инфраструктурных объектов страны. Сельское хозяйство будет обогащаться новыми материалами и оборудованием.

Сегодня в республике действуют плодоовощные кооперативы. Они созданы в 5 регионах, всего создано 43 плодоовощных кооператива. В состав кооператива в качестве членов-учредителей вошли 1400 субъектов сельского хозяйства. Из 1400 кооперативов 916 являются фермерскими хозяйствами, располагающими площадью 18,8 тыс. га. Дополнительные члены кооператива включают 18 перерабатывающих предприятий, 15 предприятий-экспортеров, 95 производителей и 358 других сельскохозяйственных предприятий.

Кластеры действуют как форма кооперации в сельском хозяйстве республики. Кластер – это группа фермеров, перерабатывающих предприятий и предприятий-экспортеров, объединяющая всех участников цепочки добавленной стоимости к одной цели, охватывающей процессы от производства сырья до доставки переработанной готовой продукции потребителю. В нашей республике действуют хлопко-текстильный, зерновой и плодоовощной кластеры. Общее количество плодоовощных кластеров по республике: 245. Площадь закрепленных за ними земель: 179,2 тыс. га. 15,3 тыс. фермерских хозяйств обрабатывают 147,9 тыс. га земли на основе фьючерсных контрактов на выращивание плодоовощной продукции. Материально-техническая база включает в себя перерабатывающие предприятия мощностью 956,2 тыс. тонн в 62 кластерах, сортировку и упаковку продукции мощностью 290,5 тыс. тонн в 32 кластерах, сушку продукции мощностью 230,5 тыс. тонн в 23 кластерах, 136 В каждом кластере имеются простые и холодильные склады вместимостью 360 000 тонн. Здесь расположены 24,5 тыс. га местных, 10,8 тыс. га интенсивных садов и 25,6 тыс. га виноградников. К 2022 году стоимость кластеров составит 478 миллиардов долларов. Планируется реализовать 71 проект на сумму 500 сумов.

Плодоовощные кластеры в нашем регионе - это ООО "Агро-Восток" в Камашинском районе, Агрофирма "Шарофат она Кахрамон кизи" в Китабском районе, ООО "Шахрисабз Эстейт сервис" в Китабском районе, "Абдул Ахат Ахмидович" ф/х в Яккабоге. Действуют ООО "Арсенал Нур

Барака” в Яккабогском районе, “Зеленый” в Яккабогском районе, ООО “Виноградники Богизар Варганза” в Шахрисабзском районе, ООО “Мраморная индустрия Китооб” в Чиракчинском районе. (рис.1)

По данным статистики, доля овощной продукции во всех категориях продукции сельского хозяйства и животноводства, произведенной в Кашкадарьинской области в 2020-2022 годах, составила 54%, а наименьший результат - 11% по производству виноградной продукции. Поэтому необходимо развивать конкурентную среду в овощеводстве и направлять ее на экспорт, создавать продуктивные сорта в виноградарстве и расширять производство в сети.

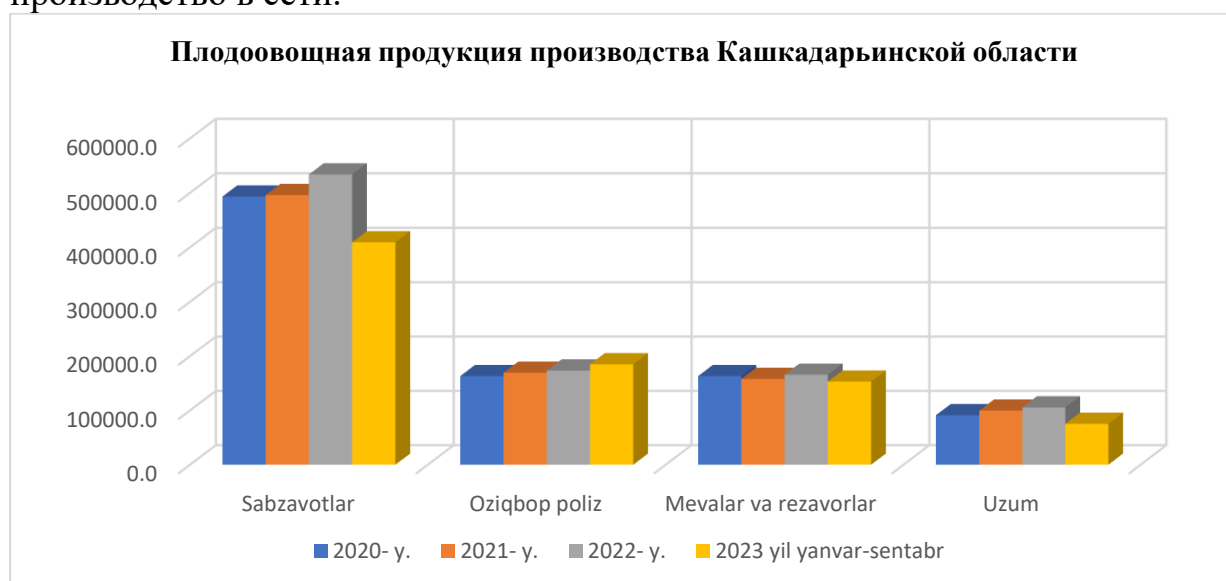


Рисунок 1. Произведено в Кашкадарьинской области в 2020-2023 гг. фруктово-овощная продукция

По результатам анализа необходимо найти решение ряда проблем развития плодоовощной сети в сельском хозяйстве.

1. Обеспечить низкую себестоимость плодоовощной продукции. Это расширит возможности населения приобретать продукцию, повысит уровень его жизни, увеличит прибыли производителей продукции.

2. Увеличить общность рабочей силы в сети. Повышение производительности труда обеспечивает относительно низкую себестоимость продукции и экономию большого количества ресурсов. Опыт развитых стран показывает, что у нас есть большие возможности для повышения производительности труда. Например, в таких развитых странах, как США, Германия и Нидерланды, один работник, занятый в сельском хозяйстве, производит продукции, достаточной для 90-110 населения страны. В нашей стране этот показатель составляет 8-9.

3. Обеспечить развитие сетей соразмерно друг другу. Неуничтожение сельскохозяйственной продукции во многом зависит от наличия сетей и служб по подготовке, переработке, хранению и доставке ее потребителям, их оснащения и работы с достаточной мощностью, а также развития

интеграции в сетях.

Как показывает история мирового сельского хозяйства, во всей отрасли «производство продукции – обслуживание – снабжение – хранение – подготовка – переработка – реализация» взаимосвязаны. Существующие проблемы шаг за шагом успешно решаются путем установления кооперативных отношений. между хозяйствующими субъектами на добровольной и добровольной основе.

Требуется совершенствование методологии оценки устойчивого развития кооперативов, определение основных направлений в ней, учет различных точек зрения и мнений при решении данной проблемы, а также их углубленный анализ и систематизация. Учитывая это, в данной работе проведен сравнительный анализ конкретных подходов разных авторов к имеющимся методам оценки устойчивого развития кооперативов в сельском хозяйстве.

При «продаже» следует учитывать баланс на полях. Разница между этим определением и другими заключается в том, что оно направлено на сохранение баланса и пропорции полей.

На наш взгляд, для устойчивого развития кооператива необходимо реализовать следующие приоритетные задачи:

1. В устойчивом развитии сельскохозяйственного предприятия реализация концепции производственного четырехугольника: экономическое, социальное, финансовое и экологическое направления развития.

3. Классификация внешних факторов устойчивого развития кооператива, включающая новые факторы: циклы развития экономики и аграрной политики, определяющие цели и средства устойчивого развития, развитие основных направлений деятельности кооператива для достижения целей устойчивое развитие.

4. Совершенствовать национальную правовую базу кооперативов по развитию сельского хозяйства и осуществлять вертикальное и горизонтальное развитие кооперативов в целях устойчивого развития.

Таким образом, за счет совершенствования плодоовощного сектора будет достигнуто следующее:

- укрепляются связи между плодоовощной тематикой и происходит крупномасштабное производство;

- безопасность пищевых продуктов в значительной степени обеспечивается за счет местного производства;

- за счет привлечения инвестиций для модернизации техники и технологий на плодоовощных предприятиях будет улучшено финансовое здоровье вредных предприятий.

Использованные источники:

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2. Указ Президента Республики Узбекистан от 23 октября 2019 года № ПФ-5853 «Об утверждении Стратегии развития сельского хозяйства Республики Узбекистан на 2020-2030 годы»

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*Файзиева Ш.Ш., к.э.н.
доцент
кафедра «Инновационная экономика»
КарИЭИ
Бекназарова З.Д.
студент
экономический факультет
Университет экономики и педагогики*

ОСНОВНЫЕ НАПРАВЛЕНИЯ ФОРМИРОВАНИЯ КОНКУРЕНТНОЙ СРЕДЫ В БИЗНЕСЕ

Аннотация. В данной статье рассматриваются комментарии о формировании конкурентной среды в предпринимательской деятельности, влиянии банковских кредитов на эффективность предпринимательства и экспорта товаров.

Ключевые слова. Предпринимательство, конкуренция, бизнес, кредит, импорт, экспорт, внешний кредит, частный бизнес, гарантия

*Fayzieva Sh.Sh., Ph.D.
associate professor
Department of Innovative Economics
KarIEI
Beknazarova Z.D.
student
Faculty of Economics
University of Economics and Pedagogy*

MAIN DIRECTIONS FOR FORMING A COMPETITIVE ENVIRONMENT IN BUSINESS

Annotation. This article discusses comments on the formation of a competitive environment in business, the impact of bank loans on the efficiency of entrepreneurship and the export of goods.

Keywords. Entrepreneurship, competition, business, credit, import, export, external credit, private business, guarantee

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 PQ-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.

Предпринимательство и предпринимательство всегда играли важную роль в жизни нашего народа, сохранялись его уникальные традиции, ценились люди, обладающие такими достоинствами.

Оформление заявок на получение кредитов с учетом современных тенденций инновационного развития, обеспечение доступа к финансовым ресурсам во всех регионах республики, активное внедрение новых механизмов быстрого предоставления кредитов, использование современных подходов к установлению партнерских отношений с клиентами, и является одним из основных задачи банка исключить возможность создания искусственных барьеров и излишней бюрократии за счет обеспечения прозрачности процесса проверки. Настоящая Политика включает направления, методы и подходы, принятые руководством Банка, и предназначена для эффективного управления кредитными и кредитными рисками, а также кредитным портфелем, а также является основным документом Банка, разъясняющим основные принципы деятельности Банка на кредитном рынке и регулирует кредитную практику. При этом Наблюдательный совет и Правление Банка уполномочены вносить в настоящую Политику изменения и дополнения принципиального характера, исходя из действующего законодательства, не противоречащие основным принципам кредитования, направленным на снижение кредитного риска и улучшение качества кредита (лизинг) услуга, предоставляемая клиентам.

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;

- Обеспечить своевременное выделение кредитов для реализации проектов, представленных и профинансированных в ходе визита Президента Республики Узбекистан в регионы;

- 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;

- 2014 год Правления Центрального банка Республики Узбекистан
Согласно требованию решения № 22/1 от 26 июля в кредитных договорах, заключаемых между банком и клиентом, имущество, заложенное под кредиты, должно быть включено в реестр залогов в установленном порядке;

- внедрить в течение года новые, привлекательные виды банковских кредитов, исходя из предложений клиентов и потребностей года;

- Госуслуги созданы в целях расширения сферы оказания банковских услуг субъектам малого бизнеса и частного предпринимательства и создания благоприятных условий. Разработаны меры по дальнейшему

совершенствованию процедур, связанных с осуществлением предпринимательской деятельности и оказанием государственных услуг. Это, в свою очередь, создает широкий спектр возможностей для предпринимателей.

- 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;

- 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;

- 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.

Опираясь на мировой опыт, можно сказать, что положительных результатов можно достичь за счет поддержки малых инновационных предприятий и крупных компаний. 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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*Хамзаев А.И.
старший преподаватель
кафедра «Радиоэлектроника»
Джизакский политехнический институт
Чориев С.
студент
группа 421-20 ЭиП
Джизакский политехнический институт*

ИСПОЛЬЗОВАНИЕ ЭЛЕКТРОННОГО ТЕКСТИЛЯ ДЛЯ СБОРА СОЛНЕЧНОЙ ЭНЕРГИИ: НОВЫЕ ПЕРСПЕКТИВЫ И ВОЗМОЖНОСТИ

Аннотация. Научная статья рассматривает перспективы использования электронного текстиля для сбора солнечной энергии. Преимущества данного подхода включают гибкость и мобильность устройств, их интеграцию в повседневные предметы и создание умной одежды с возможностью управления энергосбережением. Однако, для полной реализации потенциала электронного текстиля необходимо решить ряд технических и технологических задач.

Ключевые слова: Электронный текстиль, солнечная энергия, перспективы, гибкость, интеграция, умная одежда.

*Khamzaev A.I.
senior lecturer
Department of Radio Electronics
Jizzakh Polytechnic Institute
Choriev S.
student
group 421-20 E&P
Jizzakh Polytechnic Institute*

USING ELECTRONIC TEXTILES FOR SOLAR ENERGY COLLECTION: NEW PERSPECTIVES AND OPPORTUNITIES

Abstract. The scientific article explores the prospects of using electronic textiles for harvesting solar energy. The advantages of this approach include the flexibility and mobility of devices, their integration into everyday objects, and the creation of smart clothing with energy management capabilities. However, to fully realize the potential of electronic textiles, several technical and technological challenges need to be addressed.

Keywords: Electronic textiles, solar energy, prospects, flexibility, integration, smart clothing.

Солнечная энергия является одним из наиболее обещающих источников возобновляемой энергии, способной решить проблемы климатических изменений и обеспечить устойчивое энергетическое будущее. Однако, чтобы максимально эффективно использовать этот потенциал, необходимо разработать инновационные технологии, способные интегрироваться в наш повседневный образ жизни [1,2]. В этом контексте электронный текстиль представляет собой важное направление исследований, которое может значительно увеличить доступность и удобство использования солнечной энергии.

Электронный текстиль представляет собой интеграцию электроники и текстильных материалов, что позволяет создавать гибкие, легкие и удобные устройства, способные выполнять различные функции, включая сбор и хранение энергии [3,4]. Применение электронного текстиля для сбора солнечной энергии открывает новые перспективы и возможности в области развития портативных и встроенных энергетических устройств.

Одним из ключевых преимуществ электронного текстиля является его гибкость и мобильность. Благодаря использованию гибких материалов и интеграции солнечных панелей непосредственно в текстильные изделия, такие как одежда, зонты или сумки, возможно создание переносимых устройств, способных генерировать энергию даже в условиях небольшого освещения [5].

Еще одним важным аспектом является интеграция электронного текстиля в повседневные предметы. Например, солнечные занавески, обивка мебели или даже автомобильные сиденья могут быть оборудованы солнечными панелями, которые могут эффективно собирать энергию даже при небольшом количестве солнечного света [6,7].

Кроме того, электронный текстиль может быть использован для создания умной одежды и аксессуаров, способных отслеживать и анализировать потребление энергии, оптимизировать процессы зарядки и управления энергосбережением. Это открывает широкие возможности для создания инновационных решений в области персональной энергетики и управления ресурсами [8].

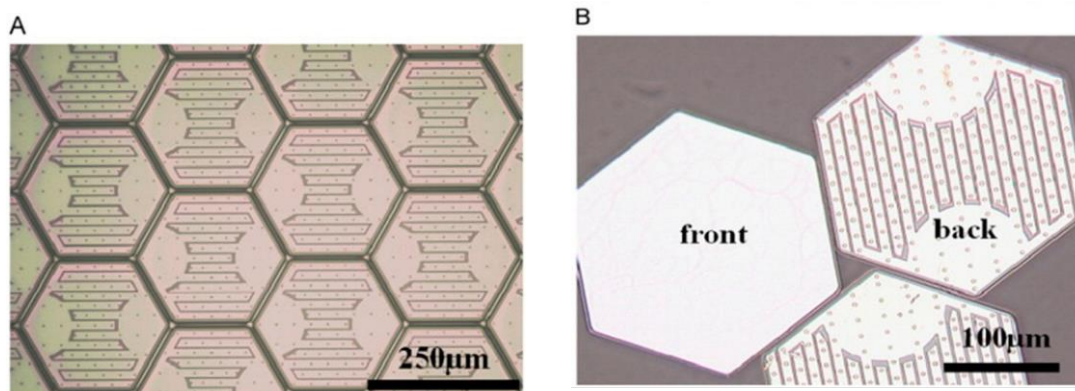


Рисунок 1. микроструктурированный ФВП микроскопическое изображение элементов. (А) ряды клеток, прикрепленных к пластинке (Б) передняя и задняя части клеток.

Однако, несмотря на многообещающие перспективы, использование электронного текстиля для сбора солнечной энергии также сталкивается с некоторыми техническими и технологическими вызовами. Например, необходимо разработать эффективные и устойчивые материалы, способные выдерживать эксплуатационные нагрузки и обеспечивать долговечность устройств [9,10]. Кроме того, важно решить вопросы эффективности преобразования энергии и оптимизации дизайна устройств для максимального сбора солнечного излучения.

В заключение, использование электронного текстиля для сбора солнечной энергии представляет собой важное направление развития возобновляемой энергетики, которое может привести к созданию инновационных и удобных решений для повседневного использования [11,12]. Новые перспективы и возможности в этой области стимулируют дальнейшие исследования и инновации, направленные на создание более эффективных и устойчивых энергетических технологий, способных улучшить качество жизни и сделать нашу планету более экологически устойчивой.

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*Хамидуллаева Г.А.
старший преподаватель
Чирчикский государственный педагогический университет*

СУФФИКСАЦИЯ КАК ОДИН ИЗ ОСНОВНЫХ СПОСОБОВ ОБРАЗОВАНИЯ ЭКСПРЕССИВНЫХ СЛОВ В TELEGRAM- КАНАЛАХ

Аннотация. Статья посвящена вопросу суффиксального словообразования в telegram-каналах. Основной задачей настоящего исследования является выявление лексических единиц разных частей речи, образованных суффиксальным способом, в telegram-каналах и установление степени продуктивности их словообразовательных суффиксов.

Ключевые слова: экспрессивные слова, Telegram-каналы, суффиксация.

*Khamidullaeva G.A.
senior lecturer
Chirchik State Pedagogical University*

SUFFIXATION AS ONE OF THE MAIN WAYS FOR FORMING EXPRESS WORDS IN TELEGRAM CHANNELS

Annotation. The article is devoted to the issue of suffixal word formation in telegram channels. The main objective of this study is to identify lexical units of different parts of speech formed by the suffix method in telegram channels and to establish the degree of productivity of their word-forming suffixes.

Key words: expressive words, Telegram channels, suffixation.

В современном мире язык средств массовых информации ориентирован на повышение выразительности, образности, оценочности текстов, а это в свою очередь отражается на всех уровнях языка (фонетическом, лексическом, морфологическом, синтаксическом).

Словообразовательный уровень русского языка обладает богатейшими ресурсами для экспрессивизации речи, а в средствах массовой информации встречаются различные типы новообразований, которые позволяют назвать не только новое явление, предмет, но и экспрессивно перекодировать его, дать оценку.

При образовании экспрессивных слов в Telegram-каналах реализуются все законы словообразования. Широкое распространение в среде экспрессивного словообразования имеет суффиксация. Рассмотрим слова образованные этим способом:

1) SMMщики ← SMM + щик

(словообразовательный суффикс -щик- образует существительные, которые обозначают лицо по его занятию, роду деятельности, профессии. Такие слова образуются от имен существительных или глагольных основ)

2) Показуха ← показ + ух

(-ух- это словообразовательная единица, выделяющаяся в именах существительных женского рода, которые обозначают предмет, действие или явление, характеризующиеся тем или отношением к тому, что названо словами, от которых соответствующие имена существительные образованы)

3) Рёдановцы ← Рёдан + ов+ц

(-ец- это словообразовательная единица, образующая имена существительные, которые являются названиями лиц мужского пола - носителей признака, заключенного в мотивирующем слове: лицо, характеризующееся отношением к тому, что названо мотивирующим именем существительным)

4) Вайнер ← вайн+ ер

(суффикс действующего лица: выделяется в существительных со значением действующего лица)

5) Фальшивка ← фальшив +к

(суффикс -к- образует существительные, обозначающие «предмет - результат действия»)

6) Валютчик ← валют + чик

(суффикс -чик- образует существительные со значением "лица по роду деятельности"(переводчик)

7) Застройщик ← застрой + щик

(суффикс -щик- образует существительные, которые обозначают лицо по его занятию, роду деятельности, профессии. Такие слова образуются от имен существительных или глагольных основ)

10) Люксовый ← люкс +ов

(суффикс -ов- при добавлении к основе неодушевлённых имен существительных образует прилагательное со значением «имеющий какое-то отношение к предмету, понятию, названному производящим словом»)

11) Пиццатая ← пицца+ат

(суффикс -ат- образует прилагательные, называющих части тела человека или животного, внешних качеств человека, аксессуаров его внешности)

12) Маккофить ← Маккоф + и

(суффикс -и- имеет значение действия)

13) Креативить ← креатив + и

(суффикс -и- имеет значение действия)

14) Бомбические ← бомб + ическ

(суффикс _____ ическ- образует имена прилагательные с общим значением свойственности тому,

характерности для того или связанности с тем, что названо образующими словами, в качестве которых выступают нарицательные имена существительные, обозначающие область науки, искусства, литературы, а также отвлеченные понятия)

15) Порожняк ← порожд + як

(-як- это словообразовательная единица, образующая разговорно-просторечные синонимы мотивирующих имен существительных)

16) Джихадисты ← джихад + ист

(суффикс -ист образует существительные со значением лица по принадлежности к учреждению, профессии, определенному общественному направлению)

17) Хайпануть ← хайп + а + ну

(происходит интерфиксация -а)

(-ну- это глагольный суффикс, наиболее употребительный в разговорной речи, обозначающий однократность действия)

18) Лайковая ← лайк + ов

(суффикс -ов- при добавлении к глаголам образует прилагательное со значением «предназначенный для действия, названного производящим словом, каким-то образом относящийся к нему»)

19) Шантажистка ← шантажист + к

(суффикс -к- образует существительные, обозначающие лиц женского пола)

20) Шумиха ← шум + их

(при добавлении к основе образует существительное женского рода, обозначающее связанный с этим действием предмет, явление или лицо)

21) Фейковый ← фейк + ов

(суффикс -ов- при добавлении к основе неодушевленных имен существительных образует прилагательное со значением «имеющий какое-то отношение к предмету, понятию, названному производящим словом»)

22) Контрабандный ← контрабанда + н

(суффикс -н образует прилагательные со значением: признака или свойства, относящегося к предмету, явлению, действию, месту, времени или

23) Пранкер ← пранк + ер

(суффикс действующего лица: выделяется в существительных со значением действующего лица)

24) Кадыровец ← Кадыров + ец

(-ец- это словообразовательная единица, образующая имена существительные, которые являются названиями лиц мужского пола - носителей признака, заключенного в мотивирующем слове: лицо, характеризующееся отношением к тому, что названо мотивирующим именем существительным)

25) Вагнеровцы ← Вагнеров + ец

(-ец- это словообразовательная единица, образующая имена существительные, которые являются названиями лиц мужского пола - носителей признака, заключенного в мотивирующем слове: лицо, характеризующееся отношением к тому, что названо мотивирующим именем существительным)

2б) Отмазки ← отмаза + к (происходит усечение –а)

(суффикс –к- образует существительные, обозначающие «предмет - результат действия»)

Таким образом, большинство экспрессивных слов, образованных суффиксальным способом, являются именами существительными, которые обозначают:

1) лиц, принадлежащих к какому-нибудь общественно-политическому течению;

2) лиц по занятию, роду деятельности, профессии;

3) действие;

4) предмет-результат действия.

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*Хамраева С.Н., доктор экономических наук
профессор
заведующий кафедрой «Инновационная экономика»
Каршинский инженерно-экономический институт
Маматкулова С.
студент 2 курса
Каршинский инженерно-экономический институт
Узбекистан, г.Карши*

НАУЧНО-ТЕОРЕТИЧЕСКИЕ ОСНОВЫ РАЗВИТИЯ ИННОВАЦИОННЫХ ПРОЦЕССОВ

Аннотация. В XXI веке проблема управления, организации инновационной деятельности, выбора методов и механизмов инновационного развития различных отраслей экономики находится в центре внимания экономистов. Инновация, инновационная деятельность, инновационный процесс и подобные понятия прочно вошли в различные стороны повседневной жизни, предпринимательской деятельности и отраслей экономики. В развитых странах инновации являются одним из важных факторов повышения конкурентоспособности предприятий, укрепления их позиций на рынке и производства потребительской продукции. При осуществлении и реализации инновационной деятельности, прежде всего, необходимо уточнить суть основных терминов и понятий.

Ключевые слова: инновация, инновационная деятельность, инновационный процесс.

*Khamraeva S.N., doctor of economic sciences
professor
Head of the Department of Innovative Economics
Karshi Engineering and Economic Institute
Mamatkulova S.
2th year student
Karshi Engineering-Economic Institute
Uzbekistan, Karshi*

SCIENTIFIC AND THEORETICAL FOUNDATIONS FOR THE DEVELOPMENT OF INNOVATION PROCESSES

Abstract. In the 21st century, the problem of management, organization of innovation activity, choice of methods and mechanisms for innovative development of various sectors of the economy is the focus of attention of economists. Innovation, innovative activity, innovation process and similar

concepts have become firmly established in various aspects of everyday life, business activity and sectors of the economy. In developed countries, innovation is one of the important factors in increasing the competitiveness of enterprises, strengthening their position in the market and producing consumer products. When carrying out and implementing innovative activities, first of all, it is necessary to clarify the essence of the basic terms and concepts.

Key words: innovation, innovative activity, innovation process.

В результате изучения исследований республиканских и зарубежных ученых, занимающихся проблемой инноваций, установлено, что существуют разные подходы к содержанию и сущности инноваций, инновационного процесса и инновационной деятельности. Австралийский ученый-экономист Йозеф Шумпетер отмечен во многих экономической литературе как один из первых ученых, внесших важный вклад в определение и виды инновационных процессов и теорию инновационной деятельности в целом. В то время не было мысли об инновациях, но в развитии экономики использовались такие понятия, как «эффективный метод», «инновация», «эффект», «применение».

С технической или экономической точки зрения производство представляет собой совокупность имеющихся ресурсов и сил. Каждый способ производства означает определенную комбинацию. Различные способы производства могут различаться только по характеру и стилю, т. е. либо по предмету сочетаний, либо по соотношению их количеств. Каждый производственный процесс представляет собой эту комбинацию [15].

В своем исследовании Й. Шумпетер рассмотрел вопросы новых сочетаний в развитии, дал полное определение инновационного процесса и выделил пять образцовых изменений:

- использование в производстве (продаже) нового оборудования, новых технологических процессов или нового рыночного предложения;
- внедрение новой качественной продукции;
- использование нового сырья;
- организация производства и изменения в его материально-техническом обеспечении;
- появление новых рынков сбыта.

В то же время многие экономисты высказали свое мнение по поводу нововведения.

Б. Санто определил инновацию следующим образом: «Инновация — это научно-техничко-экономический процесс, ведущий к созданию лучших по своей природе продуктов и технологий путем практического использования идей и открытий, если он направлен на получение экономических выгод, его появление на рынке, как следствие, появляется возможность получить дополнительный доход» [10].

В своих исследованиях Б.Санто основывал концепцию инновационной цепочки как линейной последовательности определенных этапов инновационного процесса, различных моделей инновационных процессов и моделирования инноваций.

По мнению Л. Водачека, О. Водачковой, инновация – это целенаправленное изменение качества системы в работе предприятия, которое может проявляться в количественных и качественных изменениях в определенной сфере деятельности предприятия [5].

В. Н. Лапин понимал инновацию как совокупность процессов создания новых практических средств (инноваций) с целью полного удовлетворения определенных потребностей людей [8]. На наш взгляд, это не гарантия того, что нововведение принесет пользу обществу, но оно будет экономически эффективным и прибыльным.

По мнению И. Т. Балабанова, инновация – это вложение капитала в новую технику, технологии, новые формы организации производства, труда, обслуживания и управления, включая контроль, учет, методы планирования, анализа и другие новые формы [4].

Р.А.Фатхудинов определяет ее следующим образом: «Инновация – это конечный результат инновации, внедряемой с целью изменения объекта управления и получения экономического, социального, экологического, научно-технического или иного эффекта» [11].

По мнению Р.В.Абдуллаева и К.А.Хасанджанова, «Инновация считается формой научно-технического развития, представляет собой особый вид знаний, результат высокоразвитого труда и становится ведущей областью жизни людей в постиндустриальное общество» [3].

По мнению К.А.Чориева, термины «инновация» и «инновационный процесс» определялись следующим образом: «...в широком смысле инновация включает в себя все аспекты и области, связанные с развитием человеческого капитала в обществе, улучшением условий жизни населения (техника и технологии, товары народного потребления, стратегия социального развития, ее организационные формы и тактика управления, отрасли экономики, социальные институты - наука, образование, медицина, информационные ресурсы, различные системы оказания услуг и т.д.), формирование интеллектуального потенциала, новых научных идей и направлений познания. Его можно определить как процесс ориентации на открытие добавленной стоимости, изменения качества и принципиально улучшенных потребительских товаров (услуг), основанных на создании и применении в жизни (развитии)» [14].

По мнению ряда наших узбекских учёных-экономистов, «инновация – это процесс купли-продажи, внедрения новой или усовершенствованной продукции (работ, услуг), оборудования и технологий, организация и управление научными исследованиями и разработками» [9].

Исходя из представленных выше теоретических воззрений и анализов, по нашему мнению, **инновация** – это использование научных достижений и передового опыта, совершенствование и развитие процессов общественного производства, формирование продукции с новыми потребительскими характеристиками (товаров, продукции, оборудования, технологий и др.), организационные формы и инструменты), внедрение в практику. Представляет собой материализованный конечный результат инвестиционной и творческой деятельности, основанной на инновациях, способствует удовлетворению рыночных и социальных потребностей, экономит затраты и обеспечивает достижение людьми разных результатов в разных сферах жизни и деятельности.

Инновационная инфраструктура – это комплекс организационно-экономических институтов, обеспечивающий условия для реализации прямых инновационных процессов, основанных на принципах экономической эффективности. Управление процессом формирования и развития инновационной инфраструктуры является одной из основных задач проблемы эффективного управления аграрной сетью и состоит из организаций, оказывающих услуги по разработке нового или улучшенного вида продукции, организации реализации нового или усовершенствованного технологического процесса.

С точки зрения рыночных отношений новизна инноваций определяется их технологическими характеристиками. Классификация инноваций означает разделение их на определенные группы по определенным классификационным признакам.

Можно заметить, что многие экономисты выделяют разные классификации инноваций при изучении и исследовании инновационных процессов. В частности, по мнению М. Хучека, классификация инноваций зависит от ряда характеристик, [13]:

- специфика изменений;
- сфера национальной экономики;
- комплексность результата инновационных процессов; выгоды для общества;
- предмет инноваций.

В то же время некоторые экономисты изучали классификацию инноваций на три группы:

- инновации при входе на предприятие;
- инновации на «выходе» предприятия;
- отдельные элементы инноваций и их связи как система.

Х.Б.Дусаев [6], изучив научно-теоретические взгляды других экономистов, предложил классифицировать инновации на три группы:

Первая группа классифицируется по факторам, определяющим содержание инновации, т. е. ее формированию, уровню новизны, характеристикам инновационного процесса и степени его повторяемости.

Последняя классифицируется с учетом факторов и особенностей сферы использования и развития инноваций. Сюда входят предмет инновации и область внедрения, уровень разработки и использования, структурная структура инновации, сфера применения и объем инновации.

К факторам, определяющим результат инноваций, относятся третья группа: эффективность, форма эффективности, механизмы реализации и уровень внедрения инноваций, оригинальность изменений, их вид и форма инноваций, инновационные возможности экономического роста.

К. А. Чориев [14] предложил классифицировать инновации в сфере сельского хозяйства по разным критериям:

- по уровню новизны потенциальной идеи;
- по степени относительности новизны;
- по новизне относительно своего существования;
- по уровню новизны по отношению к рыночному спросу.

По нашему мнению, используя научные труды таких экономистов, как К. А. Чориев, П. Н. Завлин, А. И. Пригожин, Д. М. Степаненко, и учитывая производственные особенности аграрного сектора и его отраслей, можно провести полную классификацию типов инноваций А. Х, упомянутых в научных исследованиях Мухторова, Б.Ф.Султонова, С.Ж.Саиджонова [9].

По мнению этих ученых классифицировать инновации целесообразно следующим образом:

- по инновационному потенциалу и новизне (совершенно новый, улучшенный, относительно новый, новый с точки зрения потребления, новый с точки зрения стоимости и потребления ресурсов);
- по масштабу новизны инноваций (новое в глобальной сети, новое в национальной сети, новое для отраслей народного хозяйства, новое для предприятия и экономики);
- по характеру инноваций (продуктовые инновации, процессные инновации, организационные инновации, экономические инновации, маркетинговые инновации, управленческие инновации, социальные инновации, экологические инновации, информационные инновации);
- по области и месту применения инноваций (материальное производство: сельское хозяйство (земледелие, животноводство, переработка, защита растений, лечение скота и др.), наука, сервис, социальная сфера, экология, природа и климат);
- по месту внедрения и применения инновации (для использования в хозяйстве, для использования на предприятии, предназначенном для реализации, на опытном участке, на выставке);
- по должности в производственном периоде (производитель сырья, поставщик, производитель продукции);
- по ожидаемой доле рынка (локальная, системная стратегическая);

- по виду эффекта, получаемого в результате внедрения инноваций (экономический, экологический, научно-технический, социальный, комбинированный);

- по форме инновации (изобретение, новинка, патент, предложение, ноу-хау; документ, устройство, содержание и методы, описывающие технологию, процессы производства и управления; образец-модель);

- о возврате заявки на инновацию (разовая, возвратная (в сезон или в особых случаях), заменяемая, отрицательная);

- по характеру территориальной направленности;

- по характеру удовлетворения потребностей;

- к моменту выхода на рынок;

- о причинах его возникновения;

- по социальной направленности.

По мнению авторов, классификация инноваций по этим признакам позволяет глубже понять сущность инновации и создает научно-теоретическую основу для определения путей достижения поставленных целей и результатов с наиболее эффективным означает.

Инновации можно классифицировать по разным схемам, способам группировки, способам организации и классификационным символам. Классификация инноваций и инновационной деятельности в приведенном выше порядке позволяет охватить различные их аспекты.

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*Хамраева С.Н., доктор экономических наук
профессор
заведующий кафедрой «Инновационная экономика»
Каршинский инженерно-экономический институт
Маматкулова С.
студент 2 курса
Каршинский инженерно-экономический институт
Узбекистан, г.Карши*

ОСНОВЫ КОНЦЕПЦИИ РАЗВИТИЯ ИНФРАСТРУКТУРЫ

Аннотация. Экономисты, изучавшие инфраструктуру как отдельный объект исследования, изучали ее как целостную сферу, обеспечивающую условия для развития рыночных отношений. В дальнейшем к нему стали подходить дифференцированно, как к комплексу, обслуживающему отдельную отрасль, регион и вид производства. Это можно наблюдать в исследованиях ряда ученых зарубежья и стран СНГ. В данной статье разработан авторский подход к систематизации теоретических представлений, сформировавшихся в ходе развития инфраструктуры как отдельной отрасли.

Ключевые слова: инфраструктура, инфраструктурный комплекс, концепция инфраструктуры.

*Khamraeva S.N., doctor of economic sciences
professor
Head of the Department of Innovative Economics
Karshi Engineering and Economic Institute
Mamatkulova S.
2th year student
Karshi Engineering-Economic Institute
Uzbekistan, Karshi*

BASICS OF THE CONCEPT OF INFRASTRUCTURE DEVELOPMENT

Abstract. Economists who studied infrastructure as a separate object of research studied it as an integral sphere that provides conditions for the development of market relations. Subsequently, they began to approach it differentially, as a complex serving a separate industry, region and type of production. This can be observed in the studies of a number of scientists abroad and CIS countries. This article develops the author's approach to systematizing theoretical concepts that were formed during the development of infrastructure as a separate industry.

Key words: infrastructure, infrastructure complex, infrastructure concept.

В мировом опыте понятие инфраструктуры было впервые введено в начале XX века как совокупность объектов и сооружений, необходимых для полноценного функционирования военных вооруженных сил. К 1940-м годам этапа развития западных стран под инфраструктурой понималась целостная структура сетей и институтов, создающих необходимые условия для деятельности сфер материального производства. В 1970-1980-е годы в экономической литературе бывших союзных республик инфраструктура обычно рассматривалась как совокупность инженерно-технических зданий и сооружений.

По мнению некоторых экономистов инфраструктура – это комплекс, обеспечивающий нормативные условия социально-экономического производства”, а также её определяют как “совокупность уникальных трудовых процессов при создании товаров и услуг, обеспечивающих обмен деятельностью в процессе жизнедеятельности человека и социального развития” [1].

Американские ученые К.Р.Макконелла, С.Л.Брю выделяют инфраструктуру на уровне национальной экономики и определяют её как «основные объекты, предоставляемые государством (дороги, городские транспортные системы, водоочистные сооружения, муниципальное водоснабжение, аэропорт)», а также уточняют, что «инфраструктура – это услуги и устройства, необходимые для производства продукции для предприятия (водоснабжение, электроснабжение, вывоз отходов производства, транспортировка грузов, научно-исследовательские и проектно-строительные работы, финансовые и банковские услуги)” [9]. Они заявили, что создавать их за собственные средства дорого, поэтому их предоставляет государство и другие компании.

Проблемы взаимодействия производственного сектора с предприятиями, предоставляющими его услуги, возникли еще до появления термина «инфраструктура», что можно наблюдать в работах А. Хиршмана, Р.Нурке, П. Розенштейн-Родана, А. Янгсон. [2, 3, 4, 7]

По нашему мнению, с одной стороны, если мы изучаем инфраструктуру как систему, представляющую экономические возможности, то есть обеспечивающую условия для рыночных отношений, с другой стороны, необходимо отдельно изучать как экономические отношения, направленные при формировании товарно-денежных отношений между субъектами рынка.

Таким образом, в тесном взаимодействии с системой экономических отношений в процессе воспроизводства инфраструктурная сеть обеспечивает условия для развития и прогресса всех экономических операторов территории.

При определении инфраструктурного сектора необходимо обратить внимание на несколько его аспектов:

- формирует систему экономических отношений в системе оказания услуг;
- развитие и прогресс инфраструктуры во многих случаях зависит от уровня развития отрасли, которую она обслуживает, и наоборот;
- типы инфраструктуры зависят от обслуживаемого сектора;
- с развитием и прогрессом общества расширяются виды услуг инфраструктурной сети.

В целом инфраструктурный комплекс – это особая отрасль экономики и особая форма экономической деятельности, которая осуществляется на основе государственно-частного сотрудничества и при поддержке государства и используется для создания условий для социально-экономического развития. Экономическое и технологическое развитие на глобальном, национально-региональном и корпоративном уровнях и будет ориентировано на улучшение. Социально-экономическое развитие означает не только рост ВВП, но и, прежде всего, удовлетворение материальных и социально-инновационных потребностей всех слоев общества.

Инфраструктурный комплекс представляет собой динамическую систему, поскольку его структура и виды изменяются в результате углубления общественного разделения труда и изменения системы управления экономикой, а также будут меняться в будущем в связи с появлением новых отраслей и видов деятельности.

В настоящее время в результате научных исследований сформирован ряд теоретических концепций инфраструктуры.[8]:

Концепция накладных расходов. Первые идеи, связанные с этой концепцией, исходили от шведского экономиста К. Векселя. Анализируя место производства в экономической системе, он разделил затраты, необходимые для развития сектора, обслуживающего производственные процессы, на собственно производственные и социальные прибавочные расходы. Эту идею позднее рассмотрел в своей исследовательской работе Дж. Кларк, разделив накладные расходы на микро- и макроуровни.

Распределительная концепция инфраструктуры. Согласно этой концепции, инфраструктура представляет собой систему каналов распределения продукции в сфере обращения. Основы формирования этой концепции можно наблюдать в работах экономиста А. Шоу [5]. Исследуя проблемы рыночного распределения, он определил термин «рыночное распределение» как сферу обращения или торгово-распределительную систему, обеспечивающую связь между производством и потреблением.

Логистическая концепция инфраструктуры. Эта концепция исследует инфраструктуру как систему объектов, транспорта и технических средств, обеспечивающих движение продукции. Проблему распределения и

движения продукции впервые обсуждал А. Шоу, затем Р. Дененхольц, Э. Смайк, Ф. Исследование проведено Моссманом и Р. Снайдером [10].

Маркетинговая концепция инфраструктуры. Уникальность концепции заключается в том, что инфраструктурная сеть исследуется как вид деятельности, способствующий формированию спроса на товары и услуги. Основы этой концепции были изучены в исследованиях американского экономиста А. Шоу.

Институциональная концепция инфраструктуры. Согласно этой концепции, рыночная инфраструктура представляет собой систему взаимодействующих субъектов данной сферы сделок, проявляющуюся в различных организационно-экономических формах и обеспечивающую торгово-экономическую связь между производством и потреблением. Первый институциональный подход к анализу рыночных процессов был предложен Р. Вестерфилдом, изучавшим этот предмет как экономический инструмент развития английской экономики [6].

Чтобы глубже понять природу и содержание инфраструктурной сети, необходимо изучить ее классификационные формы, то есть состав и типы. Необходимость классификации инфраструктурной сети определяется:

во-первых, на основе группировки типов инфраструктуры, определяющей место не только отдельных видов, но и ее сетей в системе общественного воспроизводства;

во-вторых, изучить межотраслевые связи и на основе этого установить оптимальный баланс между основным производством и организациями и предприятиями, оказывающими ему услуги;

в-третьих, позволяет постепенно совершенствовать управление совокупностью взаимосвязанных сетей, обеспечивающих конечный результат.

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Хасанов Ш.Н.
ассистент
кафедры анестезиологии-реаниматологии
и экстренной медицинской помощи
Андижанский государственный медицинский институт

РОЛЬ ЛЕЧЕБНОГО ПЛАЗМОФЕРЕЗА В КОМПЛЕКСНОЙ ТЕРАПИИ РАЗЛИТОГО ПЕРИТОНИТА С ОСЛОЖНЕНИЕМ СЕПСИСОМ В ОТДЕЛЕНИИ АНЕСТЕЗИОЛОГИИ И РЕАНИМАЦИИ РНЦЭМП АФ

Целью нашего исследования. Изучение динамики синдрома внутрибрюшной гипертензии и ишемического реперфузионного синдрома, обуславливающих абдоминальный сепсис у больных с распространённым перитонитом.

Материал и методы. Изучено течение заболевания у 85 больных с распространённым разлитого перитонита осложнением сепсисом. Выделено 4 группы пациентов по уровню внутрибрюшной гипертензии. Ретроспективная оценка тяжести течения инфекции проводилась в соответствии с базовыми позициями «Sepsis-3». Внутрибрюшное давление контролировалось системой Uno Meter Abdo Pressure® Kit. Уровень лактата в периферической крови определялся хроматографическим методом.

Результаты исследования. В 3 и 4 группах (n=74), абдоминальный сепсис был у 40 пациентов, у 14 пациентов был септический шок. Внутрибрюшная гипертензия снижалась у 10 пациентов назоинтестинальной интубацией, у 35 пациентов декомпрессионной лапаростомией. Ишемический реперфузионный синдром развился в 58,6% и в 48,9% случаев соответственно. Динамика уровня лактата крови и органной недостаточности была более продуктивна у больных с лапаростомией. Летальность составила 17,2% и 15,6% соответственно.

Заключение. Тяжесть реперфузионных нарушений при перитоните зависит от степени выраженности внутрибрюшной гипертензии и внутрикишечной гипертензии, сроков их существования, способа и скорости декомпрессии брюшной полости и кишечника. Прогрессирование абдоминального сепсиса и отрицательная динамика синдрома «ишемии-реперфузии» в послеоперационном периоде у больных с распространённым перитонитом увеличивает летальность.

Ключевые слова: *Ключевые слова:* абдоминальный сепсис, распространённый перитонит, плазмофереза абдоминальный компатмент-синдром, ишемический реперфузионный синдром.

Xasanov Sh.N.
assistant
Department of Anesthesiology Reanimatology
and emergency medical care Andijan State Medical Institute

**THE ROLE OF THERAPEUTIC PLASMAPHERESIS IN THE
COMPLEX THERAPY OF DIFFUSE PERITONITIS COMPLICATION
OF SEPSIS IN THE DEPARTMENT OF ANESTHESIOLOGY AND
INTENSIVE CARE CARE OF REPUBLICAN EMERGENCY
MEDICINE SCIENTIFIC CENTER AF**

The purpose of our research: Study of the dynamics of the syndrome of intra-abdominal hypertension and ischemic reperfusion syndrome, causing abdominal sepsis in patients with widespread peritonitis.

Material and methods: The course of the disease was studied in 85 patients with widespread diffuse peritonitis complication of sepsis. There were 4 groups of patients based on the level of intra-abdominal hypertension. A retrospective assessment of the severity of the infection was carried out in accordance with the basic principles of Sepsis-3. Intra-abdominal pressure was monitored by the Uno Meter Abdo Pressure Kit. The level of lactate in peripheral blood was determined by chromatographic method.

Research results: In groups 3 and 4 (n=74), 40 patients had abdominal sepsis, 14 patients had septic shock. Intra-abdominal hypertension was reduced in 10 patients by nasointestinal intubation, in 35 patients by decompression laparostomy. Ischemic reperfusion syndrome developed in 58.6% and 48.9% of cases, respectively. The dynamics of blood lactate levels and organ failure were more productive in patients with laparostomy. Mortality was 28.2% and 15.4%, respectively.

Conclusion: The severity of reperfusion disorders in peritonitis depends on the severity of intra-abdominal hypertension and intrainestinal hypertension, the duration of their existence, the method and speed of decompression of the abdominal cavity and intestines. The progression of abdominal sepsis and the negative dynamics of the ischemia-reperfusion syndrome in the postoperative period in patients with widespread peritonitis increases mortality.

Keywords: abdominal sepsis, widespread peritonitis, plasmapheresis, abdominal compartment syndrome, ischemic reperfusion syndrome.

Введение. Несмотря на появление современных хирургических технологий и успехи фармакотерапии, лечение больных с вторичным распространенным гнойным перитонитом (ВРГП) остается актуальной проблемой анестезиологии и реаниматологии и хирургии [1, 2]. В последнее время большое значение при распространенном перитоните придается абдоминальному компатмент-синдрому (АКС) и его составляющим –

внутрибрюшной (ВБГ) и внутрипросветной кишечной гипертензии (ВПКГ), являющихся предикторами полиорганной дисфункции (ПОД) и развития генерализованной абдоминальной инфекции (АС) [3, 4, 5, 6]. Снижение внутрибрюшного давления (ВБД) способствует регрессии нарушений, но сопровождается ишемическим реперфузионным синдромом (СИР), при котором восстановление микрогемодикуляции в стенке кишки способствует увеличению периода нарушения функции кишечника и транслокации инфекции в общий кровоток [7, 8]. Патогенетический подход к терапии ВРГП подразумевает профилактику и минимизацию органных повреждений при СИР. Тем не менее, недостаточно исследований, посвященных взаимосвязи АКС с выраженностью СИР и развитием АС [9, 10].

Цель исследования: Изучить динамику синдрома внутрибрюшной гипертензии и ишемического реперфузионного синдрома как патофизиологических процессов, обуславливающих детерминированный абдоминальный сепсис у больных с вторичным распространённым гнойным перитонитом.

Материалы и методы. В исследование включены 85 больных, у которых изучено течение ВРГП. Средний возраст пациентов составил $46,9 \pm 6,7$ года. Ретроспективная оценка тяжести течения инфекции у пациентов с ВРГП проводилась в соответствии с базовыми позициями «Sepsis-3» [11], а именно: 1) шкала qSOFA (изменение сознания, систолическое АД ≤ 100 мм Hg, частота дыхания > 22 /мин.) – возможно (Sp.) сепсис; 2) органная дисфункция (ПОД) – острое изменение в общем количестве баллов по шкале SOFA ≥ 2 вследствие инфекции; 3) септический шок (сепсис + ПОД) на фоне сохраняющейся гипотензии, требующей введения вазопрессоров для поддержания АД ср. ≥ 65 мм Hg, уровня лактата $> 0,249$ мг/л (индикатор тяжести течения инфекции), на фоне адекватной инфузионной терапии. Оценка состояния пациентов и изменчивости течения интраабдоминальной инфекции проводилась по Мангеймскому индексу перитонита (МИП) и шкале APACHE II. Степень тяжести ПОД и эффективность её лечения в интервале, оценивались по интегральным показателям шкалы SOFA. Динамика показателей ВБД определялась опосредовано с помощью системы Uno Meter Abdo Pressure® Kit (мм Hg). В качестве маркера развития СИР и АС использовали показатели концентрации лактата (ЛКТ) в плазме периферической крови, которые определяли методом высокоточной капельной хроматографии с применением системы капиллярного электрофореза «Капель 104 РТ». Для сравнения результатов определена концентрация ЛКТ в плазме периферической крови у 10 здоровых добровольцев, которая составила $0,12 \pm 0,03$ мг/мл (норма).

Для статистической обработки данных исследования использовались методы вариационной статистики. Характер распределения определялся на

основании критерия нормальности Шапиро-Уилкса относительно уровня значимости $\alpha=0,05$. Для количественных параметров установлено нормальное распределение исследуемых величин. Определяли среднюю арифметическую величину (M), величину средней ошибки (m). Статистическую значимость выявленных отличий в группах (p) по данным параметрам вычисляли с использованием критерия Стьюдента. Для параметров, измеренных в номинальной шкале статистическую значимость выявленных отличий в группах (p) вычисляли с применением двустороннего точного критерия Фишера. Статистическая обработка данных проведена с использованием программы Statistica 10 (Statsoft).

Результаты и обсуждение. В структуре этиологии ВРГП, преобладали прободная язва двенадцатиперстной кишки – 32 (23,5%) пациента и острая кишечная непроходимость – 27 (19,9%) больных (рис. 1).

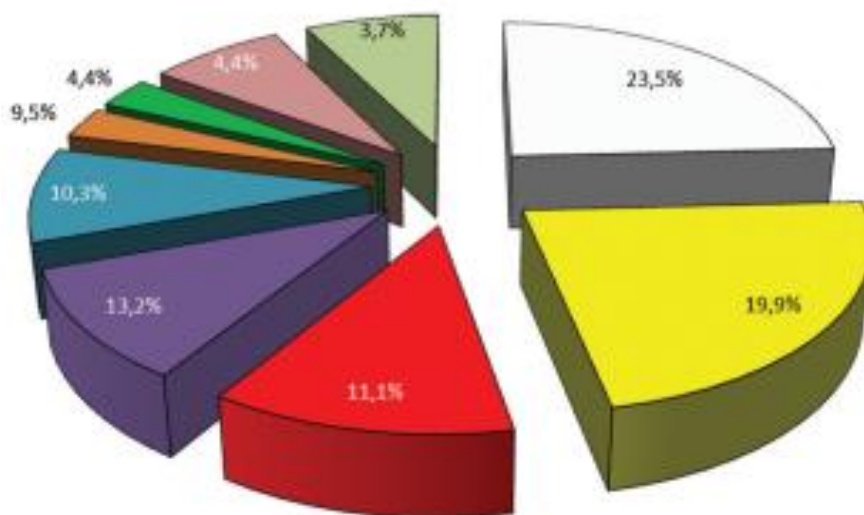


Рис. 1. Этиология перитонита у обследованных больных (n=136). Стратификация в тексте.

Fig. 1. The etiology of peritonitis in patients (n=136). Stratification in the text.

Вентральные грыжи с ущемлением внутренних органов, панкреонекроз и перфорации толстой кишки явились причинами ВРГП соответственно в 15 (11,1%), 18 (13,2%) и 14 (10,3%) наблюдениях. Более редкими причинами ВРГП явились острый аппендицит – 13 (9,5%), абдоминальная травма – 6 (4,4%), тромбоз мезентериальных сосудов – 6 (4,4%) и перфорации тонкой кишки 5 (3,7%) наблюдений. Повышение показателей ВБД на момент операции выявлено у всех пациентов, которые были разделены на группы по степени выраженности ВБГ (табл. 1), согласно классификации Всемирного общества по синдрому абдоминальной гипертензии (WSACS).

Распределение пациентов в группах представлено следующим образом: первая группа 23 (16,9%) пациента с 1 степенью ВБГ и легкой степенью СИР, вторая группа 39 (28,7%) больных со степенью ВБГ и средней степенью СИР, третья группа 47 (34,6%) пациентов с 3 степенью ВБГ и тяжелой степенью СИР, четвертая группа с 4 степенью ВБГ и крайне тяжелой степенью СИР – 27 (19,8%) больных. По мере нарастания ВБГ прогрессировали висцеральные нарушения кровообращения, что связано с последующим восстановлением перфузии внутренних органов и тяжелыми изменениями метаболизма, от легкой до крайне тяжелой степени СИР. Во второй группе пациентов, показатели шкалы qSOFA указывали на присутствие генерализованного инфекционного процесса, однако это не означало перспективы констатации сепсиса после операции (табл. 2). Показатели интегральных шкал APACHE II, SOFA, МИП отражали четкую зависимость между тяжестью течения интраабдоминальной инфекции и степенью выраженности ВБГ. АКС был выраженным в случаях тонкокишечной непроходимости, толстокишечных перфораций, панкреонекроза и мезентериального тромбоза.

Показатели концентрации ЛКТ в плазме крови имели тенденцию к росту, параллельно прогрессированию ВБГ. При ВБГ первых двух степеней

Сопоставление степеней выраженности внутрибрюшной гипертензии, проявлений интраабдоминальной инфекции и степени тяжести синдрома ишемии-реперфузии

A comparison of the degree of severity of intra-abdominal hypertension, intra-abdominal manifestations of infection and the severity of the ischemic reperfusion syndrome

Показатель	Степени внутрибрюшной гипертензии (WSACS) (n=136)			
	I (n=23)	II (n=39)	III (n=47)	IV (n=27)
		<i>Sp. сепсис qSOFA</i>	<i>Сепсис SOFA</i>	<i>Септический шок</i>
<i>Внутрибрюшное давление (mm Hg)</i>	11,2±0,4	18,6±0,6	27,6±1,4	37,9±1,2
<i>Степень синдрома ишемии-реперфузии</i>	лёгкая	средняя	тяжёлая	крайне тяжёлая

Показатели интегральных шкал и концентрация лактата плазмы крови в зависимости от степени внутрибрюшной гипертензии до операции

Indicators of integral scales and the lactate concentration in plasma of the blood depending on the extent of intra-abdominal hypertension before surgery

Показатели	Степени внутрибрюшной гипертензии (WSACS) (n=136)			
	I (n=23)	II (n=39)	III (n=47)	IV (n=27)
			Сепсис	Септический шок
APACHE II (баллы)	12,8±0,4	13,6±0,4	16,3±0,4*	18,9±0,6*
Мангеймский индекс перитонита (баллы)	9,7±0,3	21,1±0,3	25,2±0,8*	26,4±0,7*
SOFA (баллы)	3,2±0,1	3,2±0,1	3,8±0,2*	4,3±0,1*
Внутрибрюшное давление (mm Hg)	11,2±0,4	18,6±0,6	27,6±1,4*	37,9±1,2*
Лактат плазмы крови (мг/л)	0,246±0,05	0,249±0,04	0,363±0,06*	0,423±0,07*

Примечание: * – различия показателей между группами $p < 0,05$

комплекс декомпрессионных процедур имел поливалентную структуру, направленную на сдерживание прогрессирования СИР легкой и средней степени. С этой целью в лечебный комплекс были включены длительный эпидуральный блок (симпатическая медикаментозная «денервация» и преобладание парасимпатического тонуса), продлённая искусственная вентиляция легких (адекватная оксигенация мезентериального русла), средства борьбы с оксидативным стрессом клеток слизистой оболочки кишки (поддержка эффективной микроциркуляции), декомпрессия брюшной полости ограничивалась назогастральным дренированием. В первой и второй группах больных до и после операции различия показателей уровня ЛКТ в плазме крови не достоверны. Ближайший послеоперационный период сопровождался повышением ВБД до 30% от исходного, что объяснялось воспалительными изменениями париетальной и висцеральной брюшины, дисфункцией кишечника и ВКГ. В последующем показатели ВБД, к шестым суткам после операции, равномерно убывали до нормы. Пиковое повышение концентрации ЛКТ плазмы, максимально до $0,36 \pm 0,03$ мг/л, соответствовало вторым суткам после операции и сопровождалось проявлениями эндотоксикоза (рис. 2).

Интегральная оценка показателей тяжести состояния больных показала по шкале APACHE II и шкале SOFA максимально $14,7 \pm 0,4$ баллов и $3,4 \pm 0,2$ балла соответственно. В первых двух группах больных ВРГП не имелось прямых указаний о присутствии АКС и ПОД, но по показателям шкал APACHE II и SOFA вероятность развития АС в последующем становилась вполне реальной. Только у трёх пациентов на фоне длительной кишечной дисфункции и ВПКГ имели место проявления органной недостаточности.

В третьей и четвёртой группах пациентов операции завершались процедурами, направленными на декомпрессию брюшной полости и кишечника.

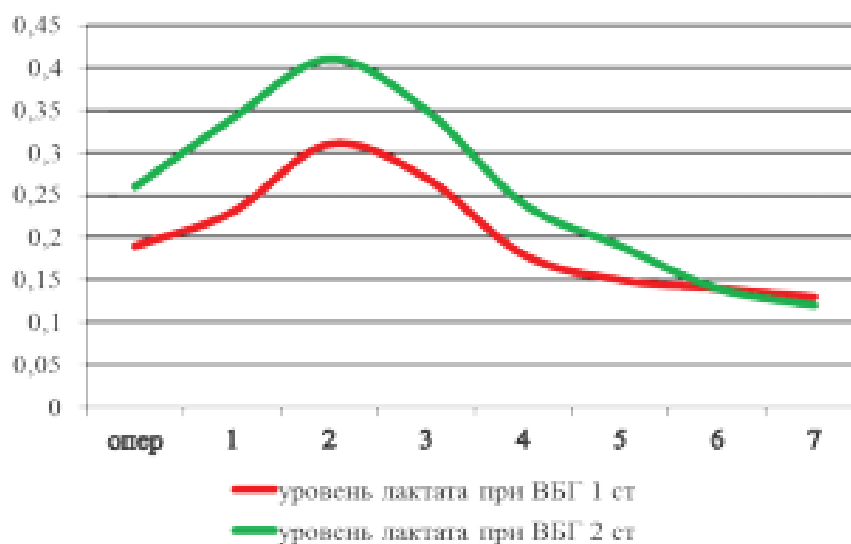


Рис. 2. Динамика уровня лактата плазмы крови у больных с 1-2 степенью внутрибрюшной гипертензии.

Fig. 2. Dynamics of lactate level in blood plasma in patients with 1-2 degree of intra-abdominal hypertension.

В 29 случаях во время операции и/или реоперации производилась назоинтестинальная интубация (НИИ), а у 45 больных выполнялось временное закрытие операционной раны кожными швами. Показанием для выполнения декомпрессионной лапаростомии считали наличие показателя МИП ≥ 19 (рис. 3).

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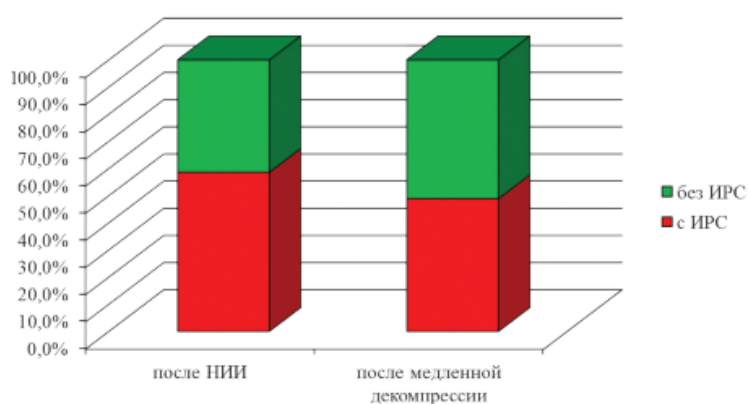


Рис. 3. Частота развития синдрома ишемии-реперфузии в группах пациентов после назоинтестинальной интубации и после медленной декомпрессии брюшной полости (лапаростомия).

Fig. 3. The incidence of the ischemic reperfusion syndrome in groups of patients after nasointestinal intubation, and after a slow decompression of the abdominal cavity (laparostomy)

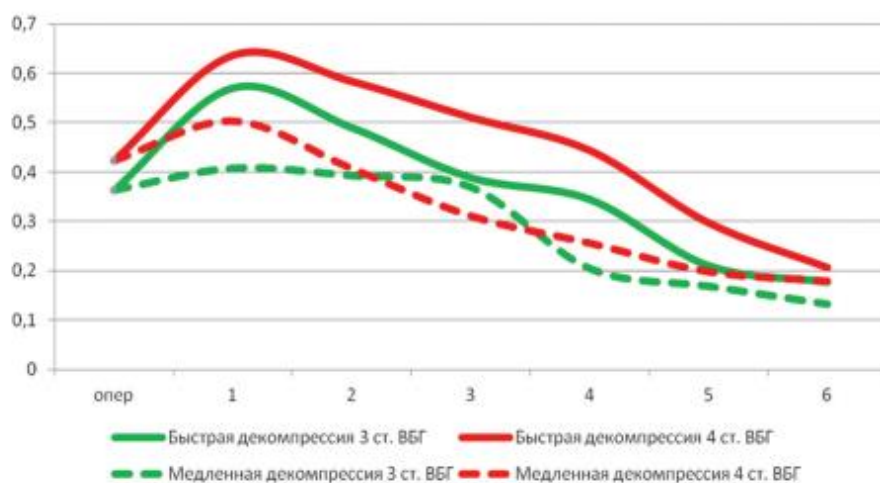


Рис. 4. Динамика концентрации лактата плазмы крови (мг/л) при разных способах декомпрессии у больных с 3 и 4 степенями внутрибрюшной гипертензии.

Fig. 4. Dynamics of lactate concentration in blood plasma (mg/l) with the different methods of decompression in patients with 3 and 4 degrees of intra-abdominal hypertension.

(n=29) с НИИ интенсивность снижения ВБД сопровождалась сравнительно высоким уровнем ЛКТ плазмы крови. Связано это с травматичностью самой манипуляции НИИ для кишечной стенки, что делает её более лояльной для транслокации кишечной микрофлоры и токсинов в общий кровоток. С другой стороны, это же обстоятельство пролонгирует ишемическую фазу СИР, что, в конечном счёте, способствует нарастанию тяжести СИР и появлению признаков АС. Быстрая декомпрессия брюшной полости при третьей и четвёртой степенях ВБГ обеспечивала резкое возрастание уровня ЛКТ плазмы крови и манифестацию ПОД во всех случаях (рис. 4).

В третьей группе наблюдений с тяжёлым СИР (n=47) для снижения ВПКГ и ВБГ применялась НИИ (n=12) и декомпрессионная лапаростомия (n=18). В четвёртой группе больных ВРГП с крайне тяжёлым СИР (n=27) декомпрессионная лапаростомия применена во всех случаях, в сочетании с НИИ (n=17). В 17 случаях с НИИ в четвёртой группе пациентов течение септического шока сопровождалось крайне тяжёлым СИР, летальность составила 17,2% (5 из 29 пациентов). Септический шок явился следствием крайне тяжёлого СИР и у 27 пациентов с декомпрессионной лапаростомией четвёртой группы, с летальностью 15,6% (7 из 45 больных).

Заключение. У больных с вторичным распространенным гнойным перитонитом и абдоминальным компартмент-синдромом, по мере снижения внутрибрюшной гипертензии, возникают проявления синдрома «ишемии-реперфузии». Тяжесть реперфузионных повреждений зависит от степени выраженности внутрибрюшной гипертензии и внутрипросветной кишечной гипертензии, сроков их существования, способа и скорости декомпрессии брюшной полости и кишечника. Констатирована зависимость между повышением уровня лактата плазмы периферической крови и видом декомпрессии брюшной полости. Быстрое снижение внутрибрюшного давления, при использовании назо-интестинальной интубации, приводит к выраженному нарастанию пикового уровня лактата периферической крови и сопровождается появлением признаков полиорганной дисфункции и септического шока во всех случаях. При максимально выраженной внутрибрюшной гипертензии и внутрипросветной кишечной гипертензии, консервативные мероприятия, дополненные декомпрессионной лапаростомией между программными санациями брюшной полости или экстренной релапаротомией, способствовали плавной декомпрессии брюшной полости в течение 2-3 суток после операции и сопровождались более пологим плато снижения внутрибрюшного давления и уровня лактата плазмы. Подобный подход к комплексному лечению крайне тяжёлого синдрома «ишемии-реперфузии» позволяет снизить летальность при абдоминальном сепсисе и септическом шоке до 15,6%

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*Хасанова Н.И.
студент 2 курса магистратуры
специальность “Экономика”
КарИЭИ*

НЕОБХОДИМОСТЬ ЧАСТНОЙ ПРЕДПРИНИМАТЕЛЬСКОЙ ДЕЯТЕЛЬНОСТИ В ОБЕСПЕЧЕНИИ ЗАНЯТОСТЬЮ

Аннотация. В данной статье рассматривается необходимость частного предпринимательства для обеспечения занятости в стране, возможности сокращения бедности и создаваемые возможности.

Ключевые слова: занятость, частное предпринимательство, сокращение бедности, инновационное развитие, моноцентр, доходы населения, инвестиции, кредит.

*Khasanova N.I.
2nd year master's student
specialty “Economics”
KarIEI*

THE NEED OF PRIVATE BUSINESS ACTIVITIES TO PROVIDE EMPLOYMENT

Abstract. This article examines the need for private entrepreneurship to provide employment in the country, opportunities for poverty reduction and the opportunities created.

Key words: employment, private entrepreneurship, poverty reduction, innovative development, monocenter, personal income, investment, credit.

Особое значение имеет место и роль малого бизнеса в развитии частного предпринимательства, с помощью которого можно наполнить рынок потребительскими товарами и покончить с территориальными монополиями, создать и расширить конкурентную среду, внедрить научные и технические результаты в производство и произойдут процессы положительного влияния на рост экспортного потенциала.

Еще одной особенностью малого бизнеса в предпринимательстве является создание новых рабочих мест при относительно небольших затратах, что способствует решению проблемы занятости. В то же время малый бизнес способствует сокращению различий между доходами разных социальных групп, направлению материальных, трудовых и финансовых ресурсов в сферы с высоким уровнем инвестиций, улучшению экономических связей между различными отраслями экономики. Важны и

социальные задачи малого бизнеса. Оно обеспечивает занятость социально уязвимых групп населения: женщин, инвалидов, пенсионеров и т.д., широко использует их труд. Создает условия для повышения производственного опыта молодых специалистов. Малый бизнес создает благоприятные условия для проявления предпринимательского, делового и творческого потенциала людей. В нем, в отличие от крупных предприятий, отчетливо видна связь между результатами производства и интересами работников.

Частное предпринимательство нуждается в постоянной поддержке со стороны государства. Он придает гибкость экономике, мобилизует крупные финансовые и производственные ресурсы населения, вносит мощный антимонопольный платеж, служит серьезным фактором структурной перестройки и главным образом решает проблему занятости. На наш взгляд, основными проблемами, стоящими сегодня перед частным предпринимательством, являются:

- нестабильность и незавершенность правовой базы хозяйствующих субъектов;
- сильное налоговое давление и сложность налоговой системы;
- отсутствие первоначального и оборотного капитала;
- трудности с получением банковских кредитов;
- давление со стороны органов исполнительной власти и контроля;
- трудности с высокой арендной платой;
- ограниченные возможности лизинговых услуг.

Сегодня социальная ответственность предпринимателя не ограничивается инвестированием в благотворительность и социальные проекты. От них ждут понимания проблем и перспектив страны, понимания ее уникального образа жизни, внесения вклада в развитие своего региона.

Приоритетные направления обеспечения субъектов частного предпринимательства финансовыми ресурсами введены в региональную программу путем реализации следующих мер: расширение масштабов реализации проектов финансирования и страхования, совершенствование механизма широкого применения гарантийно-лизингового метода; льготное кредитование и микрокредитование за счет внебюджетных фондов; предоставление средств на приобретение машин и оборудования субъектам малого предпринимательства на условиях лизинга; расширение производства и пополнение оборотного капитала коммерческими банками; привлечение иностранных кредитных линий за счет локализации, а также широкое использование мини-оборудования, производящего готовую продукцию за счет средств в национальной валюте и т.д.

В процессе перехода экономики из одной формы в другую большое значение имеет развитие малого бизнеса и частного предпринимательства. Развитие частного предпринимательства в обеспечении занятости населения имеет множество приоритетов. Они проявляются, в частности, в:

Во-первых, это увеличивает долю экономически активного населения; поощрение и продвижение активных и предприимчивых лиц на более высокие должности;

Во-вторых, тратя относительно мало денег и создавая рабочие места;

В-третьих, в создании и внедрении технических и технологических инноваций;

В-четвертых, в создании среды свободной конкуренции;

В-пятых, в мобилизации финансовых ресурсов, их более эффективном использовании;

В-шестых, в совершенствовании взаимодействия между различными секторами экономики.

Кроме того, частное предпринимательство является важным источником роста валового внутреннего продукта и занятости населения. Комплексные меры по дальнейшему улучшению деловой среды в республике позволяют динамично развивать малый бизнес и частное предпринимательство, обеспечить стабильный экономический рост. Необходимо провести системный анализ экономического и социального развития частного предпринимательства.

Социальные аспекты частного предпринимательства отражены в следующем.

1. Решает проблему занятости населения на крупнейшем рынке труда с низкими затратами;

2. Служит для уменьшения расслоения;

3. Источник дохода и залог процветания общества;

4. Важный фактор формирования среднедоходного класса.

Технологические аспекты частного предпринимательства отражены в следующем.

1. Рост специализации на основе углубления разделения труда;

2. Внедрение ресурсосберегающей, высокопроизводительной мини-техники и технологий;

3. Использование научных основ и рекомендаций при внедрении технологий;

4. Направление ресурсов в высокоэффективные направления деятельности.

5. Экономические аспекты частного предпринимательства проявляются в следующем. *Raqobatning vujudga kelishi va uni rivojlanishi uchun shart-sharoitlarning mavjudligi;*

6. Укрепление экономических связей и ускорение отношений между сетями;

7. Удовлетворение потребностей населения и стимулирование экспорта;

8. Развитие рынка товаров и услуг и удовлетворение потребностей потребителей.

Проблемы (недостаточное развитие технологий, инвестиционный риск), препятствующие эффективному использованию существующих возможностей развития частного предпринимательства в нашей республике (повышение занятости населения за счет создания новых рабочих мест, наполнения рынков, получения доходов и расширения экономических связей) межотраслевой баланс Развитие регионов на разных уровнях проявляется в развитии частного предпринимательства.

Современный этап реализуемых в Узбекистане экономических реформ характеризуется развитием частного предпринимательства, предоставляющего ему широкие экономические свободы. Предоставление самостоятельности субъектам частного предпринимательства еще больше повысит чувство ответственности за конечные результаты их деятельности. В условиях Узбекистана предпринимательская деятельность налаживается преимущественно на основе развития частного предпринимательства, и этот процесс является одним из важнейших приоритетов реализуемых в республике экономических реформ.

Учитывая возможности частного предпринимательства в решении проблемы занятости в стране, обеспечении изобилия рынка и повышении конкурентоспособности экономики, особое внимание уделяется развитию этого сектора.

На наш взгляд, такое внимание обусловлено следующими особенностями частного предпринимательства. То есть:

- способность быстро адаптироваться к рыночному спросу и производить качественную продукцию;
- способны удовлетворить спрос на товары и услуги, необходимые для нужд населения, в относительно короткий период времени;
- тот факт, что первоначальный объем инвестиций относительно невелик;
- возможность создания новых рабочих мест в ближайшее время и содействие решению проблемы занятости;
- непосредственное участие владельца бизнеса (предпринимателя) в реализации его задач.

На данный момент эта отрасль занимает лидирующие позиции не только в ускорении роста экономики, но и в решении вопросов занятости и увеличения доходов населения, которые чрезвычайно важны для нашей страны. Во многом это достигается за счет того, что серьезное внимание уделяется вопросам укрепления законодательной базы, создания системы стабильных льгот, льгот и кредитов для этого сектора экономики. Современный этап экономических реформ, реализуемых в Узбекистане, характеризуется развитием малого бизнеса, предоставлением ему широкой экономической свободы.

Становление частного предпринимательства в нашей республике показывает наличие ряда проблем и препятствий, которые тормозят развитие этого сектора.

Прежде всего, заметно медленное развитие темы малого предпринимательства. Доля малого бизнеса в общем количестве малых предприятий составляет 10,7 процента, доля микрофирм – 78,3 процента.

Во-вторых, существует несогласованность структуры сети малого бизнеса. Большинство предприятий малого бизнеса сосредоточено в основном в сельском хозяйстве (43 процента), торговле и общественном питании (25,6 процента). Развитие малого бизнеса в промышленности, строительстве и сфере услуг происходит относительно медленно. Это, в свою очередь, ограничивает возможности малого бизнеса по наполнению потребительских рынков продукцией в относительно короткие сроки.

В-третьих, развитие малого бизнеса в регионах республики различно. Предприятия малого бизнеса более развиты в городе Ташкенте (10,6 процента), Самаркандской (10,3 процента) и Андижанской (9,5 процента) областях.

В-четвертых, участие малого бизнеса в процессе экспорта продукции находится не на должном уровне.

В заключение, для эффективного решения данных проблем в сфере развития частного предпринимательства необходимо разработать и реализовать стратегические программы правительства республики, направленные на поддержку данного сектора. В основу такой концепции должны быть положены структурные изменения, позволяющие устранить дисбалансы и более эффективно использовать экономический потенциал регионов. Частное предпринимательство является важным фактором развития экономики, повышения занятости и доходов населения.

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**РУССКАЯ НАРОДНАЯ СКАЗКА КАК СРЕДСТВО
ФОРМИРОВАНИЯ ЛИЧНОСТИ И РАЗВИТИЯ УСТНОЙ РЕЧИ
СТУДЕНТОВ В ИНОЯЗЫЧНЫХ ГРУППАХ**

Аннотация. В статье рассматривается проблема применения русских народных сказок как средства развития и формирования устной речи студентов в иноязычных группах. Особое внимание автор уделяет подробному анализу особенности влияния сказок на речь учащихся и способам организации работы с ней на занятиях. В частности, рассматриваются речевые компетенции, которые будут формироваться с помощью применения данного фольклорного жанра. Описываются и анализируются этапы работы, которые включают в себя комплекс мероприятий по развитию устной речи у студентов средствами народных сказок, а также формы занятий, которые будут в большей мере способствовать формированию просодической стороны устной речи.

Ключевые слова: русские народные сказки, устная речь, младшие школьники, речевые компетенции.

*Khodzhibekova M.A.
intern – assistant*

Andijan Institute of Agriculture and Agricultural Technologies

**RUSSIAN FOLK TALE AS A MEANS OF PERSONALITY
FORMATION AND DEVELOPMENT OF ORAL SPEECH OF
STUDENTS IN FOREIGN LANGUAGE GROUPS**

Annotation. The article examines the problem of using Russian folk tales as a means of developing and shaping the oral speech of students in foreign language groups. The author pays special attention to a detailed analysis of the peculiarities of the influence of fairy tales on students' speech and ways of organizing work with it in the classroom. In particular, speech competencies that will be formed through the use of this folklore genre are considered. The stages of work are described and analyzed, which include a set of activities for the development of oral speech in students through folk tales, as well as forms of classes that will largely contribute to the formation of the prosodic side of oral speech.

Keywords: russian folk tales, oral speech, primary school students, speech skills.

Совместное чтение помогает учителям и студентам сблизиться, лучше понять друг друга, доставляет удовольствие от общения. Подбирает сказки, нужно учитывать возраст студента и особенности его психологического развития. Детство каждого человека ассоциируется со сказками. Сказка берет свое начало еще из глубины веков – той поры, когда существовало устное народное творчество.

Русская народная сказка представляет собой устно-поэтический рассказ, который в определенной степени содержит фантастический вымысел. Русская народная сказка – это, прежде всего, произведение искусства; живое, красочное, увлекательное, яркое, стирающее границы между реальностью и игрой, чем особенно импонирует детям и соответствует их возрастным психологическим особенностям.

Фольклор особенно притче для студентов – это не просто фантазия, это особая реальность мира чувств. Слушая сказки, студенты глубоко сочувствуют персонажам.



В дошкольном возрасте восприятие сказки становится специфической деятельностью ребенка (помимо игры и изобразительной деятельности), обладающей невероятно притягательной силой, позволяющей ему свободно мечтать и фантазировать. Сказки являлись своеобразным инструментом обучения и целительства, средством народной психиатрии задолго до того, психотерапия получила свой статус.

В сказках и притчах в образной форме показывается, как человек может помочь себе преодолеть различные невзгоды и трудности, сделать свою жизнь полноценной, оставаясь при этом самим собой. Сказки оказывают большое влияние на формирование личности человека. Писатель Виктор Кротов дает такое определение сказки: «Сказка – это честная выдумка, честный вымысел. Удивительно то, что это не уменьшает ее способности отражать жизнь, а скорее увеличивает его».

Действительно, сказка покоряет богатством вымысла, своими образами, удивительным переплетением фантастического и реального. Герои сказок летают на коврах – самолетах, за одну ночь осушают болота, строят дворцы, побеждают чудовищ и в то же время ничем не отличаются от обычных людей. Это удивительное сочетание правды и вымысла.

Применение сказок для развития устной речи будет также создавать такие речевые компетенции, как:

- расширение словарного запаса;
- пополнение грамматического строя;
- развитие диалогической и монологической сторон речи;
- совершенствование звукового речевого компонента.

Народная сказка является одним из эффективных методов развития речи студента, в особенности это касается связности речевых высказываний. Результатом использования этно-педагогических материалов, которые заложены в текстах сказок, студенты могут учиться и тренировать способность к речевым высказываниям, совместно с выработкой и построением тонального ряда собственных высказываний и просодики.

Использование на уроке новых интерактивных методов с различными играми по сказкам играет важную роль не только в развитии устной речи учащихся, но и в формировании личности.

Вот несколько примеров таких интерактивных методов:

«Звукорежиссеры»

Игра направлена на развитие на развитие устной связной речи, помогает лучше запоминать последовательность действий сказки и ее сюжет.

После прочтения сказки, рассмотрите иллюстрации к ней. Остановитесь на понравившейся. Предложите своему малышу «озвучить» картинку. Пусть он вспомнит, что говорили герои в данный момент, какие действия выполняли. Также для этой игры можно использовать и фрагменты мультфильмов по одноименным сказкам. Выключите звук, и пусть слушатели озвучивают ход событий.

«Пропущенный кадр»

Цель игры: научить составлять рассказ по серии сюжетных картинок, помочь ребенку запомнить последовательность событий сказки. По порядку разложите перед ребенком картинки из сказки. Одна картина специально убирается. Перед малышом ставится задача вспомнить, какой сюжет пропущен. Если он затрудняется найти ответ, можно положить перевернутую картинку в том месте, где она должно лежать, не нарушая последовательности.

«Встречи героев»

Игра помогает развивать устную диалогическую речь, лучше запоминать последовательность действий сказки. После прочтения ему предлагаются изображения двух героев из сказки. Задача ребенка состоит в том, что ему нужно вспомнить, что говорили герои друг другу и озвучит диалог.

Американский психолог и психиатр Бруно Беттель Хаим написал: «Детям нужны сказки» (так называется его монография), развития личности.

Устный народный творчество в жизни каждого человека имеет колоссальное значение. Она становится средством развития и воспитания буквально с первого дня жизни крохи.

Сказка пробуждает все доброе, что есть в душе каждого человека, формирует нравственные ценности и любовь к чтению, учит правильному общению, развивает эмоциональную сферу и речь.

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*Холмирзаев Ж.Э.
Жиззах давлат педагогика университети
“География ва иқтисодий билимлар асослари”
кафедраси ўқитувчиси*

**СУВ РЕСУРСЛАРИНИНГ ЛАНДШАФТЛАРГА ТАЪСИРИНИ
БАХОЛАШНИНГ САМАРАЛИ МЕТОДЛАРИ (ЖИЗЗАХ ВИЛОЯТИ
МИСОЛИДА)**

Аннотация. Жиззах вилоятининг умумий табиий шароитини ҳисобга олган ҳолда, кўплаб табиий ва антропоген гидрографик ҳавзалар томонидан таъкил топган ушбу объектларни ўрганишида самарали методологик ёндашувлар тавсия этилади.

Калит сўзлар: Жиззах вилоятининг ички сувлари, табиий шароити, гидрографик объектлари, услубий ёндашувлар ва тадқиқот усуллари.

*Kholmirzaev J.E.
teacher
"Basics of Geography and Economic Knowledge" department
Jizzakh State Pedagogical University*

**EFFECTIVE METHODS OF ASSESSING THE IMPACT OF WATER
RESOURCES ON LANDSCAPES (EXAMPLE OF JIZZAK REGION)**

Abstract: taking into account the general natural conditions of the Jizzakh region, effective methodological approaches are recommended for the study of these objects, which are formed by many natural and anthropogenic hydrographic basins.

Key words: internal waters of Jizzakh region, natural conditions, hydrographic objects, methodological approaches and research methods.

Ҳар қандай воқеа, ҳодиса ва қонуниятни ўрганишнинг ўзига ҳос ўрганиш методи мавжуд. Ўрганилаётган объектнинг умумий хусусиятидан келиб чиқиб керакли метод танлаб олинади. Бу эса ҳодиса ва жараёни, объектни осонроқ ва тезроқ тадқиқ қилишга ёрдам беради. Метод (юн. "методос"- билиш ёки тадқиқот ёки, назария, таълимот) - воқеаликни амалий ва назарий эгаллаш, ўзлаштириш, ўрганиш, билиш учун йўл йўриқлар, усуллар мажмуаси, фалсафий билимларни яратиш ва асослаш усули ҳисобланади.

Методиканинг келиб чиқиш тарихи кишиларнинг амалий фаолиятига бориб тақалади. Бирор ишни бажариш методикани эгаллаган киши шу ишни бошқаларга нисбатан осон, тез ва соз бажара олади. Методикалар ҳақидаги

таълимот фанда методология деб аталади. Инсон дастлаб атрофдаги нарса ва ходисаларни кузатиш, уларни бир-бирига таққослаш, ўхшатиш, фарқ қилиш асосида воқеалик ҳақида билимларини тўплаб борган.

Чунончи Жиззах вилоятининг табиий географик шароити ва сув ресурсларидан келиб чиқиб тадқиқ этишнинг ўзига хос бир қанча методологик усуллари тавсия этилади. Хусусан, **қиёсий-тавсифловчи, геокимёвий, стационар, экспедиция, комплекслилик, картографик ва аерокосмик, гидроландшафтли назарий таҳлил (ёндашув) усули**, географик прогнозлаш ва моделлаштириш методлари шулар жумласидандир. Ушбу методлар энг асосийлари ундан ташқари бир қанча олимлар ва географларнинг илмий назариялари, қарашлари, таклифлари ҳам ўз ўрнига қараб инобатга олиб ўрганилади. Жумладан Докучаев, Б.Б.Полинов, Н.А.Солнцев, Д.А.Арманд, Исаченко каби олимларнинг асарларида сув ресурсларининг ландшафтларга таъсир этишнинг бир қанча ўзгариш структураларини, қонуниятларини илгари сурадилар. Ўз қарашларида шундай дейди: - Ландшафтнинг сув компоненти ҳам ҳаво компоненти сингари ҳаракатчан ва аралашувчан компонент ҳисобланади. У нафақат компонентлараро, балки ландшафтлараро ҳам модда ва энергия алмашилиш жараёнида уларни бир жойдан иккинчи жойга ташувчи восита ҳисобланади.

Жиззах вилояти сув ресурсларига дарё, кўл, сув омбор ва каналларни киритиш мумкин. Бундай гидрографик тўр эса ўз-ўзидан ҳосил бўлмаган. Уларни ҳосил бўлиши учун кўплаб табиий географик факторлар керак бўлади.

Қиёсий-тавсифловчи усул ёрдамида объект тадқиқ этилаётганда камида бешта саволга жавоб берилади. Хусусан уларга: нима, қаерда, қачон, қандай ҳолатда, қандай муносабатларда? "Қачон" - бу вақтни, ўрганилаётган объектга тарихий ёндашувни, "қандай ҳолатда" - замонавий динамикани, объектнинг ривожланиш тенденцияларини, "қандай ўзаро муносабатларда" - объектнинг яқин атроф -муҳитга ва тесқари таъсирини ўрганади.

Қиёсий метод орқали вилоятдаги ҳар бир гидрографик объектни дарё, кўл, ер ости сувлари, сув омбор, каналларнинг олдин, бугун, эртага нима бўлиши ҳақида батафсил ўрганишга яқиндан ёрдам беради. Кўпроқ гидрографик объектнинг атрофидаги ландшафт ҳолати турли вақт, ҳолат келажакдаги ривожланиш тенденциялар ўзаро мувофиқлаштирилиб ўрганилади. Геокимёвий усул - бу ландшафтларни ўрганишда умумий кимё қонунларини қўллашдир. Ушбу усулдан кўпроқ рус тадқиқотчиси тупроқшунос, географи Г.Г. Полиновнинг геокимёвий тадқиқот усулларида фойдаландик. Бу эса Жиззах вилояти сув ресурсларининг геокимёвий тарқалиш динамикасига мос келади. Чунки вилоят сув ресурсларининг ҳосил бўлиши ва геокимёвий таркиби ҳам жанубдаги Туркистон-Молғузар тоғ тизмаларидан шимолга Мирзачўл текислиги томон оқиб ўзгариб келади. Биз Туркистон-Молғузар тоғ тизмаларидан Мирзачў

воҳаси Айдар шўр ботиғига қадар олинган сувдаги таҳлилларда айнан мана шундай минераллашув таркиб ўзгариб шўрлик ва қаттиқлик ортиб борганини кузатдик.

Стационар усулда сув объектлари (дарёлар, кўллар, ер ости сувлари)нинг гидрологик режими элементлари кўп йиллар давомида куннинг маълум белгиланган соатларида мунтазам равишда кузатиб борилади. Маълумки, гидрологик режим табиий-географик омиллар, биринчи навбатда иқлим таъсирида бўлиб, сув сатхи, сув сарфи, сув харорати, музлаш хоодисалари, эриган моддалар ҳамда лойқа оқизиклар оқими ва бошқа элементларнинг кунлик, мавсумий, йиллик ва кўп йиллик ўзгаришларида номоён бўлади. Экспедиция – Бу усулда мақсадга қараб, режада кўзда тутилган аниқ дастур асосида тўғридан-тўғри дала шароитида тадқиқотлар олиб борилади. Айниқса, биз экспедиция орқали Жиззах вилоятидаги табиий ва сунъий гидрографик объектларнинг гидрологик режими, ўсимликлари, тупроқлари, геологик таркиби, метеорологик маълумотлардан таҳлиллар олиб солиштириш ва умумлаштириш орқали ландшафт компонентларида қандай ўзгаришлар содир бўлганлигини экспедиция орқали кўриб ўтдик. Жиззах вилояти ички сувларидаги нисбатан кам ўрганилган ёки умуман ўрганилмаган сув объектлари, туғридан-тўғри дала шароитида, умумий тарзда ёки аниқ бир йуналишдаги мақсадни кўзлаб тадқиқ этдик. Комплекслилик методи Жиззах вилояти сув ресурслари таъсир доирасидаги ландшафтларнинг табиий шароити ва уларни карталаштиришда комплекс ўзгариши ва ривожланиши эътиборга олинган ҳолда ушбу методдан фойдаланди. Барча компонентлар узвийликда, мужассамликда, ўзаро алоқадорликда ривожланади. Компонентлар ва ҳодисалар ўзаро бир-бирлари билан боғланиб, бир бутун табиий комплексни ҳосил қилади.

Картографик ва аерокосмик методи-Бугунги кунда кўплаб олиб борилаётган илмий изланишларда энг кўп қўлланилаётган тадқиқот методларидан ҳисобланади. Шундай экан Жиззах вилояти ички сувларининг ландшафтларга таъсирини баҳолашда барча воқеа ва ҳодисалар аерокосмик сурат орқали дешифровка қилиниб албатта харитага туширилиши шарт. Ана шунда бу ҳудуддаги ландшафт ўзгаришларининг даражлари қандай ҳолатда эканлиги ўз вақтида аниқ хулосалар чиқариш имконияти туғилади ва чора тадбирлар ишлаб чиқилади.

Гидроландшафтли назарий таҳлил (ёндашув) усули. Бу усулда албатта гидрографик объект (дарё, кўл, сув омбор) бўлиши шарт. Ундан сўнг сув ресурслари таъсир доирасидаги атроф ландшафт компонентлари (сув, иқлим, рельеф, тупроқ, ўсимлик, антропоген) дан намуналар олинади. Ундан сўнг йиғилган маълумотлар асосида камерал усулда назарий таҳлил қилинади. Тайёр бўлган маълумот умумлаштирилиб карталаштириш, баҳоланиш, режалаштириш, ёки башорат қилиниши мумкин. Масалан, Сангзор дарёсининг ландшафт бирликларини ажратишда юқоридан қуйига

томон ландшафт бирликлари ажратилди. Таҳлилларга қарайдиган бўлсак: 1) типик корбонатли жигарранг тупроқли ландшафтлар 2) Тўқ тусли бўз тупроқли ландшафтлар 3) Типик бўз тупроқли ландшафтлар 4) лаълми типик бўз тупроқли ландшафтлар 5) Лалми тўқ тусли бўз тупроқли ландшафтлар 6) Тўқ тусли бўз тупроқлар 7) Лалми типик бўз тупроқлар 8) Бўз-ўтлоқи, ўтлоқи-бўз тупроқли ландшафтлар 9) Типик бўз тупроқли ландшафтлар 10) Лаълми типик бўз тупроқли ландшафтлар 11) Типик бўз тупроқли ландшафтлар 12) Типик бўз тупроқли ландшафтлар 13) Оч тусли бўз тупроқли ландшафтлар 14) Бўз-отлоқи, отлоқи-бўз тупроқли ландшафтлар 15) Ўтлоқи соз тупроқли ландшафтлар 16) Ўтлоқи аллювиаль ландшафтлар 17) Бўз ўтлоқи тупроқли ландшафтлар (Жиззах вилояти ўлкашунослик атласи Т:-2016, 22-б).

Географик прогнозлаш ва моделлаштириш методи. - Геосистеманинг ҳозирда ва келажакда бўлиши мумкин бўлган ҳолати ҳақида тасаввурга эга бўлишга имкон беради. Бу усул доирасида келажакда геосистемаларнинг мумкин бўлган ҳолати моделлари ишлаб чиқилади;

Жиззах вилояти ички сувларининг гидрологик шароити ва бошқа табиий омиллар билан узвий боғлиқлиги, алоқадорликда ривожланиш қонуниятларини ўрганиш орқали келажакда кутиладиган ходиса ва жараёнлар аниқ ўрганилган маълумотлар асосида башорат қилинади шунга мос бўлган модели ишлаб чиқилади. Бу эса келажакда содир бўлиши мумкин бўлган муаммоларни олдини олдиндан олишга амалий ёрдам беради. Бу эса халқ хўжалигида ўзининг қимматбаҳо қиймати билан баҳоланади.

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*Хомидов И.И., кандидат химических наук
доцент
Андижанский государственный медицинский институт
Узбекистан, г.Андижан
Аскарлов И.Р., доктор химических наук
профессор
Андижанский государственный университет
Заслуженный изобретатель Узбекистана
Председатель Академии народной медицины Узбекистана
Узбекистан, г.Андижан*

АНТИОКСИДАНТНЫЕ СВОЙСТВА ПЛОДОВ *PRUNUS ARMENIACA*

Аннотация. В статье представлены антиоксидантные свойства косточек абрикоса, его лечебные свойства, а также приводятся сведения о том, что антиоксидантные вещества в растениях обеспечивают сладкий вкус плодов растений и предотвращают развитие различных дегенеративных заболеваний.

*Ключевые слова: абрикос, косточки абрикоса, *Prunus armeniaca*, антиоксидантность, токоферолы, фенольные соединения, каротиноиды.*

*Khamidov I., PhD of Chemistry
Andijan Region State Medical Institute
Uzbekistan, Andijan
Asqarov I., doctor of chemical sciences
professor
Andijan State University
Uzbekistan, Andijan*

ANTIOXIDANT PROPERTIES OF FRUITS *PRUNUS ARMENIACA*

Abstract. The article presents the antioxidant properties of apricot kernels, its medicinal properties, and also provides information that antioxidant substances in plants provide the sweet taste of plant fruits and prevent the development of various degenerative diseases.

*Keywords: apricot, apricot bones, *Prunus armeniaca*, antioxidant properties, tocopherols, phenolic compounds, carotenoids.*

Введение. Абрикос, *Prunus Armeniaca L.* – принадлежит к семейству Розовые, его плоды и мякоть являются источником многих физиологически активных веществ. О его применении в народной медицине имеется много сведений с древних времен. [1,2]

В последние годы возрастает интерес к количеству антиоксидантных веществ и их распределению во фруктах и овощах. В частности, повышают интерес к ним из-за двух свойств антиоксидантных веществ растительного мира: каротиноидов и фенолов. Во-первых, антиоксидантные вещества, содержащиеся в растениях, обеспечивают сладкий вкус плодов растений. Во-вторых, они предотвращают развитие различных дегенеративных заболеваний [3].



Рисунок 1. Плоды и мякоти *Prunus armeniaca* L.

Высокая биологическая активность продуктов свободно-радикального окисления определяет два противоположных типа их действия в организме. Первичные продукты этого процесса, концентрация которых в норме невысока, оказывают позитивное действие. А вот, вторичные продукты имеющие, помимо карбоксильной, альдегидные и кето группы, оказывают повреждающее действие на структурно-функциональное состояние биомембран.

В настоящее время исследования показали, что свободные радикалы образуются в организме человека различными путями в процессе метаболизма. Они, в свою очередь, приводят к окислению липидов, белков и нуклеиновых кислот по необычному радикальному механизму. В результате возникают такие заболевания, как рак, атеросклероз и хроническая гипертония. Поэтому антиоксидантные вещества природного происхождения имеют большое значение в профилактике и лечении таких заболеваний [4].

Антиоксиданты - это вещества, ответственные за борьбу с опасными веществами - свободными радикалами. Антиоксиданты крайне важны для организма. К основным антиоксидантам относят: витамины Е, С, А, РР и В₂, минералы: цинк, медь, железо, кальций, селен, □□аминокислоты глицин, цистин, глутаминовая кислота и полиненасыщенные жирные кислоты. А плоды *Prunus Armeniaca* L. очень богат этими веществами [5].

По данным, представленным в литературе, не только экстракт измельченных косточек абрикоса, но и масло, извлеченное из косточек, жидкости, отжатые из кожуры и листьев, обладают свойствами поглощать

и нейтрализовать свободные радикалы *in vitro*, а также являются сильными антиоксидантами. Следует отметить, что антиоксидантные свойства плодов значительно снижаются при сушке плодов при высоких температурах. Учеными также установлено, что жареные косточки абрикоса сильно ингибируют свойство поглощать и восстанавливать радикалы, а необжаренный образец косточек сильно ингибирует свойство устойчивости к перекисному окислению липидов [6].

Тем не менее, основная часть исследований, проводимых с абрикосами, посвящена изучению его плодов и мякоти. Потому что косточки абрикоса содержат большое количество насыщенных и ненасыщенных жирных кислот, белков, углеводов, фенольных соединений, минералов и витаминов. В результате, помимо того, что он является важным источником питания и восстановления здоровья, он также является широко используемым средством в медицине и косметике [7].

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*Хусанова Д.
преподаватель
Средняя школа № 23 Кашкадарьинской области
Шахрисабзского района
Мамадова Д.
преподаватель
Средняя школа № 26 Кашкадарьинской области
Шахрисабзского района*

ВОЗМОЖНОСТИ РЕШЕНИЯ МАТЕМАТИЧЕСКИХ ОПЕРАЦИЙ НА БАЗЕ ПРОГРАММЫ MATLAB

Аннотация. В статье описывается математический программный комплекс Matlab, его применение для решения задач по математике. Данный компьютерный комплекс также подходит для вычисления визуализации и построения графиков функций.

Ключевые слова: инновационные технологии, математика, MatLab, программный комплекс, обучение.

*Khusanova D.
teacher
Secondary School No. 23, Kashkadarya region, Shakhrisabz district
Mamadova D.
teacher
Secondary School No. 26, Kashkadarya region, Shakhrisabz district*

POSSIBILITIES FOR SOLVING MATHEMATICAL OPERATIONS BASED ON THE MATLAB PROGRAM

Annotation. The article describes the mathematical software package Matlab and its use for solving problems in mathematics. This computer complex is also suitable for computing visualization and plotting function graphs.

Key words: innovative technologies, mathematics, MatLab, software package, training.

Инновационные технологии невозможны без применения новых информационных технологий в преподавании математики, которые предполагают обеспечение обучающихся методическими и учебными материалами нового типа — компьютерными учебниками и программами, а также компьютеризированными задачками.

В настоящее время активно разрабатываются технологии обучения, в которых важную роль играет принцип наглядности. Считается, что именно наглядное обучение позволяет обеспечить разностороннее и полное

формирование математических знаний, поддерживает интерес и мотивацию обучения, приводит к более высокому уровню развития математического мышления.

Сегодня для решения сложных проблем и задач в мире науки и техники используются различные языки программирования и инструменты. В вычислительных процессах ряд постоянно повторяющихся стандартных процессов включены в специальные программы, называемые отдельными пакетами. Программный комплекс, в свою очередь, создает объектную модель. Практические задачи разделены на несколько пакетов и включены в несколько пакетов программ, называемых компьютерной алгеброй. К ним относятся такие программы, как Matcad и Matlab. Каждая из этих программ достойна изучения отдельно со своими недостатками и достижениями.

Программа Matlab была создана Молером в конце 1970-х годов для выполнения простых вычислений. В основном он был разработан для работы с ЭВМ 3-го поколения.

К середине 1980-х годов сотрудник Little Mathworks разработал версию Matlab для ПК для ЭВМ 4-го поколения. Эта версия имеет много общего с предыдущей версией, и отличается от предыдущей версии лишь несколькими математическими пакетами.

Сегодня Matlab версий 4, 5, 6 и 7 можно встретить на современных компьютерах. Версия 4 Matlab сохраняет функции предыдущих версий. Впервые графическое окружение рабочего стола было создано в составе 5-й версии. При этом в Matlab версии 5 включена возможность работы с 16-битными и 24-битными цветами RGB, работать с матрицами высокой размерности, рисовать пространственные фигуры, причем не только с числами, но и с математическими формулами.

Matlab версии 6 является одной из важнейших вех в развитии этой программы. Помимо версии 5 в качестве дополнений включены процессы, которые сложно экспортировать и импортировать в другие языки программирования, работать с математическими моделями с графикой и быть совместимыми с другими программами компьютерной алгебры.

Рабочее окно после запуска системы Matlab:

1. Командное окно (Командное окно);
2. Рабочая часть браузера (Workspace Browser);
3. Редактор массивов (Редактор массивов);
4. Окно истории команд (Command History);
5. Браузер текущего каталога (Обозреватель текущего каталога);
6. Кнопка «Пуск» (Пуск);
7. Анкета браузера (Help Browser);
8. Редактор (Редактор/Отладчик);
9. Рецензент (Профилировщик).

Главное командное окно — это окно, в котором объявляются все пакеты команд и библиотеки в MATLAB.

Функции и особенности системы MATLAB. Матлаб — одна из старейших, давно разработанных и апробированных автоматизированных систем выполнения математических и научно-технических расчетов, построенная на расширенной интерпретации матриц и матричных операций. Это понятие отражено в его названии, т.е. MATLAB – matrix Laboratory – матричная лаборатория. Известно, что многие программы и операции над ними выполняются посредством циклов. Это замедляет работу программы и затрудняет выполнение некоторых операций в многомерных, особенно двумерных, т. е. матричных, языках программирования. Использование матриц в качестве ключевых объектов в Matlab значительно сокращает количество циклов.

Одной из основных целей при создании системы Matlab является создание языка программирования, ориентированного на технические и математические расчеты, удобного для пользователя и превосходящего возможности традиционных языков программирования, используемых для реализации численных методов. При создании этой системы большое внимание было уделено повышению скорости вычислений и гибкости системы для решения различных задач.

Система Matlab реализует три основные концепции программирования:

а) процедурное модульное программирование, основанное на создании модулей, то есть процедур и функций;

б) объектно-ориентированное программирование (особенно важность внедрения графических средств системы);

в) визуально-ориентированное программирование, предназначенное для создания графического интерфейса пользователя (GUI-Graphics User Interface).

В целом язык программирования Matlab относится к классу интерпретаторов. Итак, из этого следует, что каждая команда системы идентифицируется по имени и немедленно выполняется. Это облегчает поэтапное тестирование дополнительного программного кода.

Одним из главных преимуществ системы является ее открытость и расширяемость.

Многие команды и функции системы доступны в виде m-файлов (расширение.m) и файлов C/C++ в текстовом формате, причем все файлы можно модифицировать.

Известно, что переменные занимают определенное место в памяти компьютера, то есть в рабочей области. Для очистки рабочей области от ненужных переменных используются разные версии функции очистки, например:

- очистить — удалить все определенные переменные;
- очистить x — удалить определенную переменную x;
- очистить a, b, c — удалить несколько определенных переменных.

Система MATLAB спроектирована таким образом, что расчеты можно выполнять непосредственно без подготовки пользовательской программы. В этом случае Matlab выступает в роли суперкалькулятора и работает в режиме командной строки. Например, `>>2+3, ans=5; >>2*3, ans=6` и так далее.

Работа в системе имеет диалоговое описание и осуществляется по правилу «задал вопрос – получил ответ». То есть пользователь вводит вычисляемое выражение с помощью клавиатуры, редактирует (при необходимости) и завершает ввод нажатием клавиши ENTER.

В целом ввод данных и расчеты выполняются следующим образом:

- Символ `>>` используется для обозначения первоначального ввода данных;
- Данные вводятся с помощью простого редактирования текста;
- Чтобы заблокировать результат вычисления выражения, после этого выражения `-;` (точка с запятой) ставится;
- Если переменная, указывающая результат вычислений, не определена, то система Matlab предполагает, что это именно такая переменная;
- В качестве практики освоения, как и во многих языках программирования, берется не знак `=`, а простой `=` в самой математике;
- Настраиваемые функции (например, `sin`) пишутся заглавными буквами, а их аргументы — в простых круглых скобках;
- Результат вычислений отображается в новой строке без знака `>>`;
- Общение происходит в форме «Вопрос задан – ответ получен».

Барча математик тизимларнинг марказий тушунчаси бу математик ифодалардир. Маълумки, улар устида амаллар бажарилаётганда, асосан уларнинг сонли қийматларидан фойдаланилади (кам ҳолатларда белги кўринишларидан ҳам фойдаланилади).

Matlab можно применять для быстрого нахождения определителей и обратных матриц, при решении систем линейных алгебраических уравнений, вычисление матричных экспоненциалов, построения графиков функций и изображения поверхностей в аналитической геометрии и математическом анализе, приближенного решения алгебраических и дифференциальных уравнений, нахождения определённых интегралов и др. Таким образом, программа MATLAB существенно упростит освоение курса математики для студентов в вузах, а также в других образовательных учреждениях.

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Цзяо Ян
студент магистратуры
Московский педагогический государственный университет

МЕЖДУНАРОДНЫЙ ФРАНЧАЙЗИНГ: СТРАТЕГИЯ УСПЕШНОЙ МЕЖДУНАРОДНОЙ ЭКСПАНСИИ

Аннотация. Статья рассматривает международный франчайзинг как эффективную стратегию расширения бизнеса за пределы родной страны. Освещаются ключевые аспекты международного франчайзинга, такие как адаптация культурных и юридических особенностей различных стран, управление финансами и рисками, поддержание стандартов качества и имиджа компании. Авторы обсуждают вызовы и возможности, сопутствующие международной экспансии франчайзинговой сети, и предлагают рекомендации для успешного освоения новых рынков.

Ключевые слова. международный франчайзинг, международная экспансия, культурные особенности, управление рисками, стандарты качества.

Jiao Yang
graduate student
Moscow Pedagogical State University

INTERNATIONAL FRANCHISING: STRATEGY FOR SUCCESSFUL INTERNATIONAL EXPANSION

Abstract. The article explores international franchising as an effective strategy for business expansion beyond the home country. Key aspects of international franchising are highlighted, including adaptation to cultural and legal differences in various countries, financial and risk management, and maintaining company standards of quality and image. The authors discuss challenges and opportunities associated with international franchising expansion and offer recommendations for successful entry into new markets.

Keywords. international franchising, international expansion, cultural differences, risk management, quality standards.

Актуальность темы франчайзинга обусловлена не только его широким развитием в мировой экономике в качестве одного из наиболее популярных способов организации бизнеса. Для России, находящейся в сложной экономической ситуации, система франчайзинга представляет собой особенно привлекательный механизм. Стабилизация и оживление российской экономики напрямую зависят от положения малого и среднего

бизнеса, улучшение которого становится одним из ключевых приоритетов экономической политики страны. Развитие и устойчивость малых и средних предприятий являются неотъемлемыми условиями для прогресса и стабильности всей экономической системы Российской Федерации. Франчайзинг, в качестве эффективной формы хозяйствования, выделяется как потенциальное решение данной проблемы.

В современной России, франчайзинг, происходящий от французского слова «franchise» - льгота, привилегия, представляет собой относительно новое явление. Сначала производные термины, такие как «franchising», «franchiser», «franchisee», были созданы для описания понятий, связанных с этим новым явлением предпринимательской деятельности. В настоящее время, множество определений франчайзинга существует, однако Международная Ассоциация Франчайзинга определяет его как метод расширения бизнеса и распространения товаров и услуг на основе лицензионных отношений. Согласно Российской Ассоциации Франчайзинга, франчайзинг представляет собой способ организации бизнес-отношений между независимыми компаниями и/или физическими лицами. В этом контексте, одна сторона (франчайзи) получает официальное разрешение от другой стороны (франчайзера) на использование знака обслуживания, фирменного стиля, деловой репутации, ноу-хау и готовой бизнес-модели за определенную плату, называемую роялти. В российском законодательстве термин «франчайзинг» заменяется понятием «коммерческая концессия» и регулируется главой 54 Гражданского Кодекса Российской Федерации, но все-таки в данной главе приведена лишь суть данного договора, на основе которой многие авторы предлагают следующее определение коммерческой концессии. [1]

Коммерческая концессия, в контексте предпринимательской деятельности, представляет собой способ взаимодействия между сторонами, где правообладатель обязуется предоставить пользователю право использовать комплекс исключительных прав, таких как товарный знак, знак обслуживания, коммерческое обозначение, секрет производства (ноу-хау) за вознаграждение. В России термин «коммерческая концессия» используется вместо «франчайзинга» и регулируется Гражданским Кодексом РФ. Российская Ассоциация Франчайзинга подчеркивает сходство между коммерческой концессией и франчайзингом. Франчайзинг, как эффективная форма организации предпринимательской деятельности, обладает низким уровнем риска и стабильной прибыльностью, представляя собой продолжительное деловое сотрудничество. В контексте России и других растущих рынков, франчайзинг становится быстрым методом обучения предпринимателей стандартам, необходимым для успешного ведения бизнеса. Международный франчайзинг играет ключевую роль в передаче проверенных технологий, товарных марок и успешных бизнес-моделей между странами. Тенденция интернационализации

франчайзинговых систем становится явной, и несмотря на международную конкуренцию, франчайзинговые системы сохраняют свои преимущества как на внутренних, так и на внешних рынках. Осуществление международных франчайзинговых сделок требует внимательного рассмотрения ряда особенностей, данные аспекты включают в себя отношение правительства к франчайзингу, проблемы недобросовестной конкуренции, законы о промышленной и интеллектуальной собственности, налогообложение, специальные промышленные законы, правовые аспекты собственности, ограничения на экспорт валюты, контрактное законодательство и законы о районировании и планировке. Успешная международная франчайзинговая стратегия требует глубокого понимания и соблюдения этих факторов в каждой конкретной стране. [2]

В международном франчайзинге существует ряд ключевых факторов, которые требуют внимательного рассмотрения при развертывании бизнеса за пределами страны происхождения. Одним из таких аспектов является трудовое законодательство. Различные виды дополнительных расходов для работодателя, связанных с требованиями законодательства по социальной защите, могут оказать влияние на структуру трудовых отношений в международном контексте. Акцизы и пошлины в том числе являются существенными факторами, влияющими на выбор товаров и стратегии поставок. Франчайзер должен тщательно оценить эти налоговые обязательства и решить, предпочтительнее ли использовать местные товары или продукцию компаний, импорт которой подпадает под более низкие налоговые ставки. Контроль импорта/экспорта представляет собой еще один важный аспект международного франчайзинга. Ограничения на ввоз и вывоз товаров могут создать препятствия для успешного развертывания бизнеса, и франчайзер должен гарантировать, что его товары соответствуют законам принимающей страны. Устойчивая финансовая позиция на рынке в стране происхождения франшизы становится ключевым фактором успешной международной экспансии, что конечно предполагает не только финансовую устойчивость компании, но и способность адаптироваться к различиям в экономической структуре и потребительском поведении в других странах. Квалификация персонала и их знание менталитета и языка принимающей страны также являются факторами успеха в международном бизнесе. Нахождение подходящих менеджеров, обладающих необходимыми профессиональными навыками, может стать вызовом, который требует внимательного рассмотрения. Корректировка системы, включая ассортимент товаров и услуг, под требования и культурные особенности принимающей страны, является необходимым шагом для обеспечения устойчивой позиции на ее рынке. Адаптация руководств, рекламных материалов и обучающих материалов становится ключевым элементом успешной международной стратегии. Трудности в поиске партнеров также являются распространенным вызовом. Новые

экономические и политические условия, различия в менталитете могут затруднить поиск зарубежных партнеров. В свете этого, система мастер-франчайзинга может стать предпочтительным вариантом. Последствия для имиджа компании также следует учитывать. Экспансия в новую страну может быть сопряжена не только с новыми возможностями, но и с рисками, включая потерю имиджа, что особенно важно, учитывая, что даже небольшие финансовые убытки могут отразиться на восприятии бренда в стране происхождения. [3]

Проблема правового регулирования начинается с того момента, когда необходимо определить базовые понятия в этой области. Несмотря на долгую историю франчайзинга, мировое сообщество еще не разработало единой терминологии для описания отношений этого вида и их участников. Особый интерес представляют случаи, когда франчайзор и франчайзи расположены в разных странах, что определяет международный характер франчайзинговых отношений, описываемые отношения, хотя и подпадают под частноправовое регулирование, в то же время осложнены иностранным элементом, так как стороны являются иностранцами по отношению друг к другу. Вопрос о том, правом какой страны следует регулировать эти отношения, становится ключевым. Российское законодательство, в частности, предоставляет возможность сторонам сделки выбрать применимое право, либо использовать коллизионные нормы, более эффективным методом регулирования может быть использование унифицированных норм, содержащихся в международных договорах. На текущий момент существует несколько основных международных источников, которые регулируют франчайзинг: Модельный закон УНИДРУА 2002 года «О раскрытии информации о франшизе», он дает определения ключевых терминов, устанавливает форму договора о франшизе, требования к раскрытию информации перед заключением сделки, а также содержит исключения из этих требований. [4]

Руководство ВОИС по франшизе 1994 года, которое содержит краткое пояснение термина «франшиза», обсуждение различных типов франшиз, стандартные условия договора о франшизе и др. но этот закон, как и модельный закон, является актом рекомендательного характера. Руководство УНИДРУА 1998 года о договорах международного мастер-франчайзинга предоставляет обобщение договорной практики и раскрывает основные элементы отношений между франшизором и мастер-франчайзи. Есть еще типовый контракт международного франчайзинга 2000 года, который разработан Международной Торговой Палатой, он в свою очередь предоставляет единообразные предписания, рекомендуемые для участников франчайзинговых отношений, данные международные источники становятся основой для создания общепринятых правил в сфере международного франчайзинга, способствуя более прозрачным и стабильным отношениям между участниками этого вида

предпринимательства. В современном мире международный франчайзинг занимает важное положение в сфере предпринимательства и несмотря на активное развитие этой формы предпринимательской деятельности, существующие международные акты и правовые нормы, принятые Международной Ассоциацией Франчайзинга (МАФ), ограничены в полномочиях. [5][6]

Необходимость в унификации норм международного франчайзинга становится явной. Организации, имеющие опыт в создании унифицированных норм, такие как УНИДРУА, могли бы принять на себя разработку соответствующего международного акта. К примеру, Конвенция о международном франчайзинге могла бы включать в себя положения о порядке заключения соответствующих договоров, правах и обязанностях франчайзера и франчайзи, а также последствиях неисполнения или ненадлежащего исполнения договора. Такие изменения в международном и российском законодательствах содействовали бы более прозрачным и стабильным международным франчайзинговым отношениям. Создание унифицированных норм стало бы катализатором развития франчайзинговых систем с участием иностранного капитала, способствуя росту предпринимательства в России и других странах.

Рассмотренные аспекты международного франчайзинга подчеркивают его значимость как эффективного механизма для расширения бизнеса за границы. Несмотря на потенциальные сложности и вызовы, связанные с адаптацией к новым рыночным условиям и культурным особенностям, успешное освоение международных рынков может принести значительные выгоды для франчайзера и его партнеров. Ключевыми факторами успеха в этом процессе являются глубокое понимание особенностей международного бизнеса, грамотное управление рисками и финансами, а также поддержание высоких стандартов качества и имиджа компании. Эффективное сотрудничество между франчайзором и франчайзи в рамках международной стратегии позволит установить прочные партнерские отношения и обеспечит долгосрочный успех на новых рынках.

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Цзяо Ян
студент магистратуры
Московский педагогический
государственный университет

ФРАНЧАЙЗИНГ: СТРАТЕГИИ РАЗВИТИЯ И ПРОБЛЕМЫ В КОНТЕКСТЕ РОССИЙСКОГО И МЕЖДУНАРОДНОГО БИЗНЕСА

Аннотация. В статье рассматриваются стратегии развития франчайзинга как в контексте российского, так и мирового бизнеса. Освещаются особенности использования интеллектуальной собственности, вопросы финансовой поддержки, культурные аспекты и проблемы, с которыми сталкиваются франчайзеры и франчайзи. В статье также рассматриваются меры по преодолению этих проблем и стимулированию развития франчайзинга как перспективного механизма создания и расширения бизнеса.

Ключевые слова. франчайзинг, стратегии развития, интеллектуальная собственность, финансовая поддержка, культурные аспекты, проблемы, меры поддержки.

Jiao Yang
graduate student
Moscow Pedagogical State University

FRANCHISING: DEVELOPMENT STRATEGIES AND PROBLEMS IN THE CONTEXT OF RUSSIAN AND INTERNATIONAL BUSINESS

Abstract. The article examines franchise development strategies both in the context of Russian and global business. It covers the peculiarities of intellectual property utilization, financial support issues, cultural aspects, and challenges faced by both franchisors and franchisees. The article also discusses measures to overcome these challenges and stimulate the development of franchising as a promising mechanism for business creation and expansion.

Keywords. franchising, development strategies, intellectual property, financial support, cultural aspects, challenges, support measures.

Франчайзинг становится все более значимым инструментом организации бизнеса в условиях современной рыночной экономики. В контексте развивающихся рынков, в том числе в России, этот вид предпринимательской деятельности приобретает особую актуальность, представляя собой эффективный механизм создания и расширения бизнеса. Однако, несмотря на свой потенциал, франчайзинг сталкивается с рядом проблем, ограничивающих его развитие. В данной статье рассматриваются

ключевые аспекты стратегий франчайзинга как национальном, так и международном уровнях, а также проблемы, с которыми сталкиваются франчайзеры и франчайзи, особенно в контексте российского бизнеса.

Франчайзинг – это инновационный способ организации бизнеса, который приобретает все большую популярность в условиях перехода к рыночной экономике. В контексте развивающихся рынков, таких как Россия, этот вид предпринимательской деятельности становится эффективным механизмом создания и расширения бизнеса. Данная модель позволяет предприятиям использовать уже узнаваемые торговые марки, что способствует ускоренному вхождению на рынок и созданию конкурентных преимуществ, но несмотря на потенциал франчайзинга, существуют определенные проблемы, сдерживающие его развитие в России, описываемые проблемы можно классифицировать по различным аспектам, таким как экономические, социально-психологические, образовательные и организационно-правовые. [1]

В первую очередь, препятствием может служить ограниченная финансовая поддержка для потенциальных франчайзи. Вложения в бизнес требуются не только на старте, но и на протяжении всего сотрудничества. Отсутствие финансовых ресурсов может ограничивать развитие франчайзинговых точек. Отсутствие культуры предпринимательства и определенные стереотипы относительно успеха в собственном бизнесе могут ограничивать потенциальных предпринимателей в выборе франчайзинга. Низкое доверие к партнерам и страх перед неудачей могут сдерживать развитие этой формы предпринимательства. Слабая подготовка предпринимателей в области франчайзинга также является фактором, затрудняющим его развитие. Недостаточное понимание особенностей этой модели бизнеса может привести к ошибкам в процессе реализации стратегий развития франчайзинга. Существующие нормативные и правовые барьеры могут осложнять процедуры заключения и поддержания франчайзинговых соглашений. Недостаточная ясность в законодательстве относительно прав и обязанностей сторон может стать преградой для расширения сети франчайзинговых предприятий. Для преодоления этих проблем и стимулирования развития франчайзинга в России, необходимо принимать целенаправленные меры. В первую очередь, необходимо создание программ поддержки для потенциальных франчайзи, в том числе финансовой поддержки и обучения, а также важно проводить информационные кампании для изменения общественного мнения о предпринимательстве и франчайзинге. Обеспечение четкости и прозрачности в законодательстве относительно франчайзинга также играет ключевую роль в создании благоприятной среды для развития этой формы бизнеса. [2]

Развитие и реализация стратегий франчайзинга на национальном и международном уровне представляют собой сложный процесс,

включающий в себя коммерциализацию различных форм интеллектуальной собственности (ИС) и создание комплексных механизмов передачи знаний и опыта от франчайзера к франчайзи. Эффективное управление этим процессом требует не только глубокого понимания правовых и экономических аспектов франчайзинга, но и учета особенностей интеллектуального капитала, который формируется в ходе сотрудничества. Важнейшим механизмом развития франчайзинга является коммерциализация прав интеллектуальной собственности (ИС). Франчайзер, выступая в роли владельца определенных ИС, переуступает их франчайзи в соответствующем объеме, этот процесс, основанный на концепции открытых инноваций, предполагает как вертикальный, так и горизонтальный трансферты ИС, что означает, что франчайзер не только передает права на стандартные результаты интеллектуальной деятельности, но и обеспечивает доступ к элементам интеллектуального капитала, таким как «дух организации», выгодные связи с контрагентами, капитал процессов и гуманитарные активы. Объектами коммерциализации ИС в рамках франчайзинга могут быть различные права, принадлежащие франчайзеру. Среди них - права на средства индивидуализации (бренд, товарные знаки), патентные права, авторские права и права на секреты производства (ноу-хау), эти элементы составляют интеллектуальный капитал, который делает бизнес франчайзера уникальным и конкурентоспособным. [3]

Франчайзинг, хотя и близкий к стратегии лицензирования, обладает своими уникальными особенностями. К примеру, франчайзи обязаны строго следовать стандартам и стилю франчайзера, что является ключевым отличием от лицензирования. Франчайзинг также предоставляет комплексную поддержку франчайзи, отражая «дух организации», выгодные связи с контрагентами и гуманитарные активы. Несмотря на потенциал франчайзинга, его развитие в российском бизнесе сталкивается с рядом проблем, таких как ограниченная финансовая поддержка, отсутствие культуры предпринимательства и слабая подготовка предпринимателей в области франчайзинга. Для преодоления этих проблем необходимо принимать целенаправленные меры, такие как создание программ поддержки и обучения. А вот на зарубежных рынках франчайзинг также сталкивается с особенностями, такими как различия в законодательстве, культурные различия и необходимость адаптации стратегий под специфику местного бизнес-окружения, но несмотря на эти проблемы, успешные франчайзинговые модели активно развиваются в США, Китае, Австралии и других странах.

Развитие и успешная реализация стратегий франчайзинга как формы бизнеса на национальных и международных рынках обусловлены различными механизмами, которые предоставляют франчайзеру возможность эффективно управлять своим интеллектуальным капиталом и расширять бизнес. В контексте российского законодательства, вопреки

строгим нормам лицензирования, отношения в области франчайзинга являются диспозитивными, что позволяет сторонам свободно определять условия сотрудничества. Стратегия франчайзинга, по сравнению с лицензированием, предоставляет франчайзеру значительный контроль над использованием своего интеллектуального капитала, что конечно важно в контексте сбыта и продвижения инновационных продуктов. Товарный франчайзинг, например, позволяет франчайзеру не только увеличивать объем продаж, но и эффективно контролировать восприятие товара потребителями. Создание фирменных магазинов под брендом франчайзера способствует формированию положительного имиджа, а также открывает новые возможности для дополнительного дохода в виде роялти. [4]

Особенно актуальна стратегия франчайзинга в организации сервиса для технически сложной продукции. В данном случае, делегирование процесса оказания сервисных услуг франчайзи позволяет франчайзеру не только получать дополнительный доход, но и обеспечивать высокий уровень квалификации обслуживания благодаря специалистам, обученным самим франчайзером, что способствует укреплению бренда и улучшению взаимодействия с клиентами. Франчайзинг также эффективен как инструмент управления стоимостью компании. Создание устойчивого бренда, наращивание гудвилла, формирование репутации и деловых связей на рынке - все это позволяет компании укрепить свою позицию и повысить свою стоимость. Франчайзинг дает возможность не только получать прибыль от дополнительных источников, но и использовать информацию от франчайзи для улучшения продукции и адаптации ее к требованиям рынка.

Франчайзинг представляет собой перспективную стратегию для развития бизнеса как на национальном, так и на международном уровнях. Однако для успешной реализации этой модели необходимо учитывать множество факторов, включая финансовую поддержку, культурные особенности, и особенности законодательства. Принятие целенаправленных мер по поддержке франчайзинга, таких как создание программ обучения и финансовой поддержки, а также обеспечение четкости и прозрачности в законодательстве, играет ключевую роль в стимулировании развития этой формы бизнеса. При правильном подходе, франчайзинг может стать мощным инструментом для роста и развития бизнеса в различных отраслях экономики, обеспечивая высокий уровень контроля и эффективности.

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*Чадаева Л.Д.
аспирант*

*ФГБОУ ВО «Чеченский государственный
университет имени Ахмата Абдулхамидовича Кадырова»*

Россия, г.Грозный

Научный руководитель:

*Овхадов М.Р., доктор филологических наук
профессор*

*ФГБОУ ВО «Чеченский государственный
университет имени Ахмата Абдулхамидовича Кадырова»*

Россия, г.Грозный

ЛЕКСИКА ОБОЗНАЧЕНИЙ ЧЕЛОВЕКА В ЧЕЧЕНСКОМ ЯЗЫКЕ

Аннотация. В данной работе представлена углубленная и всесторонняя аннотация, которая раскрывает исследование лексики, связанной с обозначениями человека в чеченском языке. Это исследование несомненно представляет собой значительный интерес для лингвистов, специализирующихся на кавказских языках, а также для всех, кто стремится понять уникальные аспекты и нюансы чеченского языкового культурного наследия.

Ключевые слова: лексика, заимствования, значение, лингвистика.

*Chadaeva L.D.
graduate student*

*Akhmat Abdulhamidovich Kadyrov Chechen State University
Russia, Grozny*

*Scientific supervisor: Ovkhadov M.R., doctor of philology
professor*

*Akhmat Abdulhamidovich Kadyrov Chechen State University
Russia, Grozny*

THE VOCABULARY OF HUMAN DESIGNATIONS IN THE CHECHEN LANGUAGE

Annotation. This paper presents an in-depth and comprehensive abstract that reveals the study of vocabulary related to human designations in the Chechen language. This research is undoubtedly of considerable interest to linguists specializing in Caucasian languages, as well as to anyone who seeks to understand the unique aspects and nuances of the Chechen linguistic cultural heritage.

Keywords: vocabulary, borrowings, meaning, linguistics.

Исследование лексического поля, относящегося к терминологии, описывающей человека в его многообразных проявлениях, в рамках чеченского языка представляет собой уникальное и весьма значимое направление лингвистических исследований. В частности, внимание уделяется подробному анализу слов и выражений, которые используются для обозначения различных аспектов человеческого бытия, его социальных ролей, физических и психологических характеристик в контексте богатого и выразительного чеченского языка.

Такой подход позволяет не только глубже понять специфику языкового мышления чеченского народа, но и открывает новые горизонты для сравнительно-исторических исследований, а также для анализа взаимодействия языка и культуры в целом.

Подобное изучение лексики, связанной с обозначением человека, способствует расширению наших знаний о лингвокультурных особенностях чеченского языка и может служить надежной основой для дальнейших исследований в данной области."

Лексика обозначений человека в чеченском языке имеет глубокие корни в традициях и культуре чеченского народа. Эти слова и выражения отражают особенности и ценности, связанные с общественными отношениями, родством и уважением к старшим.¹¹²

В чеченской культуре существует сильное уважение к старшим и старшинам, и это отражается в лексике обозначений человека. Например, слово "ХІанга" (Ханга) используется для обозначения старшего человека, обладающего авторитетом и мудростью. Это слово выражает уважение и подчеркивает важность старших в обществе.

Также в чеченской культуре существует приверженность семейным ценностям и родственным связям. Лексика обозначений родственных отношений, таких как "Ам" (Ам) для отца, "Нан" (Нан) для матери, "ХІангач" (Хангач) для сына и "ХІаьреч" (Хареч) для дочери, является важной частью этой культуры. Она подчеркивает взаимоотношения внутри семьи и укрепляет связи между родственниками.

Кроме того, лексика обозначений человека в чеченском языке отражает гостеприимство и дружелюбие чеченского народа. Слова, обозначающие друга, подругу, соседа и гостя, выражают отношения и взаимодействия в обществе.

Изучение лексики обозначений человека в чеченском языке помогает лучше понять и оценить культурное наследие и традиции чеченского народа. Это знание способствует сохранению и продвижению языка и культуры, а также укрепляет взаимопонимание и уважение между различными культурами и сообществами.

Бокарев Е. А. Сравнительно-историческая фонетика восточно-кавказских языков. М.: Наука, 2019.

Лексика обозначений человека в чеченском языке включает различные слова и выражения, которые используются в повседневной коммуникации для обозначения людей разного пола, возраста и родственных отношений. Вот некоторые из них:

Термины кровного родства делятся на две подгруппы: прямые, то есть отражающие «восходящие-нисходящие» отношения между двумя лицами (одно лицо происходит от другого или наоборот), и «коллатеральные» названия для лиц, имеющих общих предков, но не происшедших один от другого.

Термины родства чеченцев делятся на три группы:

а) простые (отдельные слова-термины), в состав которых входят семантемы:

да — «отец», нана — «мать», к1ант — «сын», йо1 — «дочь», ваша — «брат», йиша — «сестра», майр — «муж», зуда\сте — «жена, женщина», нуц — «зять», нус — «сноха», нускал — «невеста», дай — «предки»;

б) производные, состоящие из основы и словообразующего элемента, включающего в свой состав семантемы: девешин к1ант — «двоюродный брат», девешин йо1 — «двоюродная сестра», марда — «свекр», марнана — «свекровь», стунда — «тесть», стуннана — «теща», деда — «дедушка по отцу», денана — «бабушка по отцу» и т.д.;

в) составные (чисто описательные, состоящие из двух, иногда трех первичных терминов-комбинаций: к1ентан к1ант — внук (сына сын); к1ентан йо1 — внучка (сына дочь), стунваша — шурин (брат жены), стунвешин йо1 — племянница (жены брата дочь).

Термины кровного родства распределяются по нескольким ступеням, выделяемым по признаку поколения. При выделении ступеней родства различаются восходящая и нисходящая линии, определяемые относительно говорящего. Поколение говорящего образует нулевую ступень. Восходящие ступени образуют родственники старших поколений, нисходящие ступени — родственники младших поколений. К нулевой ступени относятся братья, сестры, двоюродные братья, сестры говорящего. Для обозначения родственников этой ступени используются термины: ваша (брат), йиша (сестра), шича (двоюродный брат /сестра). По прямой линии родства в нулевой ступени используется и возрастной признак. Для обозначения старших и младших братьев и сестер к терминам ваша «брат», йиша «сестра» добавляются «воккха» — старший, «йоккха» — старшая, «юккьера» — средний (средняя), «жима» — младший (младшая).

В нулевой ступени различаются родственники и по боковой линии. Это двоюродные братья и сестры по отцовской и материнской линии, обозначаемые сложными терминами: девешин к1ант — «сын дяди, сын брата отца», девешин йо1 — «дочь дяди, дочь брата отца». Каждый чеченец должен был знать имена семи своих предков; в каждой семье велась

родословная, которая обозначалась термином силсила. Понятие «родство» в чеченском языке обозначается термином гергарло – родство, близость, которое в свою очередь, в зависимости от степени родства, дефицинируется на: чуъра гергарло — близкое по крови родство (объединяет 4-5 поколений по отцовской линии), ара́ра гергарло – внешнее родство (охватывает 5-7 поколений), гена́ра гергарло — далекое родство (не кровнородственное, а идеологическое, объединено единым мифическим предком – эпонимом). Например, Вени некъи, здесь Вена — эпоним, а понятие некъи в литературе имеет значение «путь», а члены некъи — «сопутствующие». Родство — гергарло, возникающее посредством семейно-брачных отношений, обозначается термином захало — «сватовство». Искусственное родство у чеченцев возникает, как и у других народов Кавказа, через институты усыновления, побратимства: сту бийна ваша, дуй би́ина дотта́гла – куначество, кормилицы, аталычество, которое имело свою особую специфику у чеченцев. Понятие «родственники» — гергара, в зависимости от степени близости и дальности родства, имеет свои обозначения терминами: чуъра гергара нах — «люди одного дома», ара́ра гергара нах — «люди внешнего родства», гена́ра гергара нах — «люди дальнего родства». Родственники по линии свойства имеют обозначение захалш. Родственники по отцовской стороне классифицируются термином дехой, по материнской стороне — ненахой. Родственники мужа для жены имеют обозначение марзхой, родственники жены для мужа именуются стунцхой. Родственники мужа с одной стороны и с другой — родня жены обозначаются термином захалш — «сваты, сватья».

Есть еще один термин — цхъана т́ийрган нах — «люди одной веревки», сопоставимый с древнерусскими «вервь, вира, вирник»; этот термин был и в германском праве «виргельд». В чеченской системе родства немаловажную роль играет и уровень поддержки родственников, дружеских, приятельских отношений, обозначающихся терминами т́екаренаш — уровень отношений, возникающих между знакомыми и приятелями, чукаренаш — взаимоотношения на уровне дружбы домами, с обязательствами соучастия при брачных, ритуальных обрядах. В русском языке наиболее близкий аналог слову т́екаре — «шапочное знакомство», вместе с тем т́екаре и чукаре — термины из сложных слов, состоящие из двух частей. Общий для обоих слов корень «каре» можно перевести как «найденное», частица «т́е» означает нечто, лежащее вне, снаружи, в то время как частица «чу» служит для обозначения того, что лежит внутри. Таким образом, т́екаре есть «найденное снаружи» или находящееся вне, в то время как чукаре есть нечто внутри, т.е. близкое, родное.

Это лишь некоторые примеры лексики обозначений человека в чеченском языке. Эти слова и выражения помогают описать и идентифицировать различные аспекты человеческой жизни и отношений в чеченском обществе.

Изучение лексики обозначений человека в чеченском языке представляет собой интересную и важную тему, которая позволяет более глубоко понять и оценить культуру и традиции этого народа. Чеченцы, обладая богатой и разнообразной лексикой, проявляют особое внимание к описанию и характеристикам человека.

Чеченский язык предлагает множество слов и выражений, которые точно и наглядно передают особенности внешности, характера и поведения человека. Это помогает создать яркую и живую картину человека, его индивидуальности и особенностей.

Одной из особенностей лексики обозначений человека в чеченском языке является ее богатство и разнообразие. В чеченском языке существует множество слов, которые описывают внешний вид человека, его физические особенности, а также выражают его эмоциональное состояние и характер.

Кроме того, лексика обозначений человека в чеченском языке имеет свою специфику и особенности, которые отражают культурные и социальные нормы этого народа. Например, слово «шарман» обозначает человека с хорошими манерами и уважительным поведением, а слово «хьамса» описывает человека, который обладает силой и мужеством.

Таким образом, изучение лексики обозначений человека в чеченском языке является важной и интересной задачей, которая помогает лучше понять и оценить культуру и традиции этого народа. 113

Богатство и разнообразие лексики позволяют создать более полную и точную картину человека, его внешнего вида, характера и эмоционального состояния.

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Чжан Сяомин
студент магистратуры
Московский педагогический государственный университет

КИТАЙСКАЯ МЕДИЦИНА ВЫХОДИТ НА МЕЖДУНАРОДНЫЙ РЫНОК

Аннотация. По сравнению с западной медициной, китайская медицина имеет преимущества в профилактике и лечении некоторых заболеваний. В соответствии с текущей международной рыночной средой китайской медицины в этой статье исследуется стратегия выхода китайской медицины на международный рынок. Результаты показывают, что китайская медицина должна укреплять фундаментальные исследования и нормативное управление на основе локализации и ускорять процесс интернационализации китайской медицины путем расширения экспорта китайской медицины и иностранных инвестиций.

Ключевые слова: Китайская медицина, международная рыночная среда, международная рыночная стратегия, маркетинговый подход, иностранные инвестиции.

Zhang Xiaoming
master's degree student
Moscow Pedagogical State University

TRADITIONAL CHINESE MEDICINE ENTERS THE INTERNATIONAL MARKET

Abstract. Compared to Western medicine, traditional Chinese medicine has advantages in preventing and treating certain diseases. This article explores the strategies for traditional Chinese medicine to enter the international market based on the current international market environment. The results indicate that traditional Chinese medicine should strengthen basic research and standardized management on the basis of localization, and accelerate the internationalization of traditional Chinese medicine by expanding its exports and foreign investment.

Keywords: Traditional Chinese medicine, international market environment, international market strategy, marketing methods, foreign investment.

Китайская медицина является ценным культурным наследием Китая, и по мере изменения человеческих заболеваний китайская медицина демонстрирует свои преимущества в профилактике заболеваний и лечении некоторых хронических и пожилых заболеваний. В настоящее время

китайская медицина признана и принята более чем 130 странами, и по мере улучшения инвестиционного климата иностранные ограничения на китайскую медицину будут уменьшаться. Это поможет китайским фармацевтическим предприятиям расширить свой рынок и осуществлять транснациональные инвестиции. Китайская медицина сталкивается с проблемами и возможностями. В этой статье основное внимание уделяется стратегии выхода китайской медицины на международный рынок.

В зависимости от того, насколько легко китайская медицина выходит на международный рынок, международный рынок китайской медицины можно разделить на четыре основные категории: (1) В странах Юго - Восточной Азии больше китайцев, большинство правительств признают, что китайская медицина в Китае продается в пробном режиме, китайская медицина широко используется. Таким образом, этот рынок является крупнейшим и относительно доступным. (2) Япония и Южная Корея под влиянием китайской культуры сформировали современную китайскую медицину. Обе страны также в полной мере используют богатые ресурсы китайской медицины для переработки и производства китайской медицины, поэтому китайская медицина менее сложна для входа в Японию и Южную Корею. (3) Европейские страны предъявляют более строгие требования к импорту китайской медицины, и китайской медицине труднее выйти на европейский рынок. С изменением понимания китайской медицины, в последние годы количество импортируемых китайских лекарств в западноевропейских странах также растет с каждым днем, Германия, Франция, Великобритания, Италия, Запад, Бельгия и Нидерланды являются странами с наибольшим импортом. (4) Китайская медицина для выхода на рынок США должна сначала пройти сертификацию FDA, используя много средств и большой риск, поэтому вход является наиболее сложным.

Китайские фармацевтические предприятия выходят на международный рынок и осуществляют международный маркетинг в основном по трем основным категориям: прямые инвестиции, иностранное сотрудничество и экспорт лекарств. Из - за больших социально - культурных различий между международным рынком и внутренним рынком, предприятия традиционной китайской медицины должны обратить внимание на исследование международного рынка, разработать соответствующие сорта и упаковку традиционной китайской медицины, культивировать известные бренды традиционной китайской медицины и выпускать больше бутиков традиционной китайской медицины в соответствии с международными стандартами; В то же время выбор эффективных каналов распределения и способов продвижения по службе позволяет местным потребителям и врачам в конечном итоге признать использование лекарств и постоянно повышать удовлетворенность и лояльность клиентов.

Интернационализация китайской медицины должна осуществляться на уровне инвестиций и исследований. Ключом к выходу на международный рынок является продукция, которая решает проблему уровня вводимых ресурсов и исследований. Увеличение объема вводимых ресурсов, в том числе финансовых и управленческих. В настоящее время наши исследования все еще далеки от международного уровня, некоторые передовые устройства на международном уровне у нас еще не есть, поэтому мы должны приобрести соответствующее оборудование, улучшить уровень научных исследований, в то же время ускорить организационную сертификацию, повысить уровень управления.

В настоящее время основной разрыв между экспортом китайской медицины заключается в культурных различиях между Китаем и Западом. Поэтому внедрение стандартизированного управления китайской медициной является необходимым шагом для интернационализации китайской медицины, и государство также шаг за шагом регулирует производство китайской медицины. Например, GAP (стандарт выращивания лекарственных трав), предложенный Китаем в 1998 году, является одним из усилий в этом направлении. Помимо выращивания лекарственных трав, необходимо также обратить внимание на стандартизацию производства китайской медицины. Гарантируются нормы и стандарты лекарственных препаратов.

Усиление изучения правил международного рынка способствует лучшей защите своих прав и интересов. В настоящее время многие фармацевтические компании в нашей стране безразличны к регистрации товарных знаков, что приводит к потере прав на товарные знаки. После вступления в ВТО, на основе первого повышения осведомленности о товарных знаках, предприятия должны добросовестно изучать знания о регистрации товарных знаков в других странах - членах ВТО, придавать большое значение регистрации товарных знаков, чтобы сформировать фирменные знаки фармацевтических предприятий Китая. Потенциальные продукты должны быть разработаны с учетом возможности подачи заявки на патент и регистрацию товарного знака за рубежом для получения правовой защиты в принимающей стране.

Интернационализация китайской медицины должна начаться с самого легкодоступного рынка Юго - Восточной Азии. Предприятия китайской медицины могут принять стратегию одновременного экспорта китайской медицины и лекарственных трав, продвигать экспорт китайской медицины путем сотрудничества с иностранными компаниями в области исследований и разработок, а также могут пройти стандартизированные испытания за рубежом, получить сертификацию и маркировку лекарств, производить и продавать непосредственно за рубежом. На японско - южнокорейском рынке китайские фармацевтические компании могут активизировать свое сотрудничество в области исследований и разработок, через регистрацию

продукции, массовое проникновение китайской медицины на рынки двух стран. Тем не менее, отечественная китайская медицина не имеет полных научных данных с точки зрения безопасности, качества и эффективности и не имеет конкурентоспособности по сравнению с западной медициной. Согласно статистическим данным, в настоящее время мировой объем торговли китайской медициной составляет более 5 миллиардов долларов США, экспорт Китая составляет всего 10%, в то время как Япония составляет 60%. Поэтому китайские фармацевтические компании должны сосредоточиться на повышении научно - технического содержания лекарств. Компании, занимающиеся китайской медициной, могут выбирать для выхода на европейский рынок те сорта, которые соответствуют требованиям рынка и обладают значительной терапевтической эффективностью, а также предоставлять клиническую информацию, соответствующую международным нормам, для получения разрешения на регистрацию лекарств. Компании традиционной китайской медицины могут сначала выйти на рынок США в форме здоровой пищи и безрецептурных лекарств, после получения стабильной доли рынка, а затем подать заявку на сертификацию продукции, входящей в страну, до успешной регистрации и постепенной оккупации рынка.

Подводя итог вышесказанному, китайская медицина должна продвигаться на международный уровень, прежде всего, она должна быть локализована, мы должны укреплять фундаментальные исследования и нормативное управление, укреплять изучение и освоение правил международного рынка, мы можем ускорить темпы интернационализации китайской медицины путем расширения экспорта китайской медицины и иностранных инвестиций, а также содействовать процессу интернационализации китайской медицины.

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Чжан Сяомин
студент магистратуры
Московский педагогический государственный университет

КАК НЕФТЯНЫЕ КОМПАНИИ МОГУТ РАСШИРИТЬ СВОИ ВОЗМОЖНОСТИ ДЛЯ ВЫХОДА НА МЕЖДУНАРОДНЫЕ РЫНКИ

Аннотация. В этой статье в сочетании с развитием китайских предприятий по обслуживанию нефтяных месторождений анализируются проблемы, существующие в процессе открытия международного рынка, предлагается эффективная стратегия повышения способности к освоению международного рынка, чтобы заложить основу для содействия развитию китайских предприятий по обслуживанию нефтяных месторождений. Исследования показывают, что в процессе развития международного рынка китайские предприятия по обслуживанию нефтяных месторождений, как правило, не используют свои конкурентные преимущества, недостаточное оборудование и другие проблемы, поэтому предприятиям по обслуживанию нефтяных месторождений необходимо принять эффективные меры с точки зрения повышения общей силы, расширения доли на международном рынке и т. Д. Чтобы всесторонне улучшить свои возможности для развития международного рынка.

Ключевые слова: нефтяные сервисные предприятия, международные рынки, открывающие возможности, проблемы, эффективные стратегии.

Zhang Xiaoming
master's degree student
Moscow Pedagogical State University

HOW CAN OIL COMPANIES IMPROVE THEIR ABILITY TO EXPLORE INTERNATIONAL MARKETS

Abstract. This article combines the current development status of Chinese oilfield service enterprises, analyzes the problems existing in the process of expanding international markets, and proposes effective strategies to improve the ability to expand international markets, laying a foundation for promoting the development of Chinese oilfield service enterprises. Research has shown that Chinese oilfield service enterprises generally face problems such as not fully leveraging their competitive advantages and insufficient equipment support in the process of expanding their international market. Therefore, oilfield service enterprises need to take effective measures from the perspectives of improving their comprehensive strength and expanding their international market share to comprehensively enhance their ability to expand their international market.

Keywords: Oilfield service enterprises, International market, Development ability, Problem, Effective strategy.

В настоящее время конкуренция между различными типами предприятий растет, и на этом фоне вопрос о том, как продвигать дальнейшее развитие китайских предприятий по обслуживанию нефтяных месторождений, становится важным. В процессе развития предприятий по обслуживанию нефтяных месторождений, только непрерывное освоение международного рынка может всесторонне повысить свои экономические выгоды и способствовать их дальнейшему развитию. Несмотря на то, что нефтесервисные компании придают большое значение развитию международного рынка, в процессе развития рынка существует ряд проблем, существование которых наносит ущерб дальнейшему развитию этого типа предприятий. Это исследование в основном направлено на повышение способности наших предприятий осваивать международные рынки, систематически расчешивать проблемы, существующие в развитии, и предлагать эффективные стратегии повышения, чтобы заложить основу для дальнейшего развития предприятий по обслуживанию нефтяных месторождений.

Для китайских компаний по обслуживанию нефтяных месторождений, хотя их целевой рынок относительно велик, их доля на рынке в целом относительно невелика, а рынок китайских компаний по обслуживанию нефтяных месторождений сосредоточен главным образом на Ближнем Востоке. С другой стороны, под влиянием различных типов факторов, хотя предприятия уже вовлечены в рыночную конкуренцию, они не в полной мере используют свои преимущества в конкуренции, и в международной конкуренции очень легко попасть в пассивную ситуацию.

В процессе развития китайских предприятий по обслуживанию нефтяных месторождений, стандарты, которые следует соблюдать, в основном основаны на собственных стандартах Китая, эти стандарты и нормы по - прежнему имеют определенный разрыв по сравнению с международным уровнем, в то же время некоторые китайские предприятия относительно скудны в средствах, не могут эффективно обновлять и модернизировать соответствующее оборудование, в процессе международной конкуренции недостатки в этой области заставят предприятия потерять много возможностей

Для предприятий по обслуживанию нефтяных месторождений, в процессе открытия международного рынка, риск и давление больше, чтобы всесторонне повысить свою конкурентоспособность, мы должны повысить свою собственную силу, в то же время необходимо также улучшить свою собственную устойчивость к рискам. В процессе выполнения производственных операций предприятие должно исходить из многих аспектов, таких как материалы, технический уровень и стандарты, которые

следует соблюдать, чтобы качество продукции было полностью улучшено, в то же время необходимо привести производственные технологии, используемые на предприятии, производственное оборудование в соответствие с интернационализацией, что позволит полностью улучшить свои возможности.

В процессе развития международного рынка компании также нуждаются в поддержке со стороны государственных ведомств и фондов, что, в свою очередь, позволяет нефтесервисным компаниям плавно выезжать за границу. С одной стороны, предприятиям необходимо активно общаться с правительственными ведомствами, широко запрашивать предложения правительственных ведомств, получать соответствующую финансовую поддержку от правительства и преференциальную поддержку, в то же время предприятиям необходимо широко сотрудничать с организациями социального финансирования, чтобы расширить свои собственные финансовые цепочки, при финансовой поддержке возможности развития предприятий неизбежно будут улучшены. С другой стороны, в настоящее время монополия различных видов сервисных предприятий на международном уровне постепенно повышается, на этом фоне соответствующим предприятиям в нашей стране необходимо создать разумные каналы связи, осуществлять широкое сотрудничество, благодаря формам сотрудничества, чтобы увеличить долю международного рынка.

В настоящее время наши предприятия по обслуживанию нефтяных месторождений придают большое значение развитию международного рынка, но из-за отсутствия опыта в этой области наши предприятия не могут в полной мере использовать свои преимущества, подвержены различным типам проблем, существование этих проблем очень неблагоприятно для развития предприятий этого типа, поэтому предприятиям необходимо искать разумные меры реагирования в соответствии с их собственными проблемами, чтобы повысить свою основную конкурентоспособность, Укрепляется способность осваивать международные рынки и стимулировать дальнейшее развитие.

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Чжан Сяомин
студент магистратуры
Московский педагогический государственный университет

УПРАВЛЕНИЕ РИСКАМИ ИНОСТРАННЫХ ИНВЕСТИЦИЙ КИТАЙСКИХ КОМПАНИЙ

Аннотация. В нынешнюю эпоху экономической глобализации международные экономические отношения очень близки, и конкуренция между странами становится все более ожесточенной. Китай относится к числу крупных экономических держав, но еще не является мощной экономической державой, и в настоящее время ему не хватает технологий и конкурентоспособности. Таким образом, уточнение нынешнего положения дел с вывозом ПИИ из Китая, освоение существующих проблем и изучение соответствующих мер, которые помогут улучшить ситуацию, помогут повысить уровень вывоза ПИИ китайскими предприятиями, повысить внимание правительства и предприятий, а также лучше направлять бизнес вывоза ПИИ китайскими предприятиями. В этой статье основное внимание уделяется управлению рисками иностранных инвестиций китайских предприятий.

Ключевые слова: иностранные инвестиции, международный рынок, тип риска, методы управления, китайские предприятия.

Zhang Xiaoming
master's degree student
Moscow Pedagogical State University

RISK MANAGEMENT OF CHINESE ENTERPRISES' FOREIGN INVESTMENT

Abstract. In the current era of economic globalization, international economic relations are very close, and competition among countries is becoming increasingly fierce. Although China is an economic powerhouse, it is not yet an economic powerhouse and currently lacks technology and competitiveness. Therefore, clarifying the current situation of China's outward foreign direct investment, grasping the existing problems, exploring ways to improve the level of outward foreign direct investment by Chinese enterprises, increasing the attention of the government and enterprises, and better guiding Chinese enterprises to make outward foreign direct investment. This article focuses on exploring the risk management of foreign investment by Chinese enterprises

Keywords: Foreign investment, international market, risk types, management measures, Chinese enterprises.

Более эффективным способом повышения конкурентоспособности стран является участие в конкурентной борьбе на международных рынках посредством вывоза ПИИ. Китайское правительство активно поощряет предприятия выходить на глобальный рынок, чтобы больше стран знали о китайских предприятиях и продуктах, расширили свои международные горизонты и заняли больше мировых рынков. Тем не менее, вывоз ПИИ из Китая начался с опозданием, время развития относительно короткое, в настоящее время все еще находится на стадии исследования, сталкивается со многими препятствиями как внутри страны, так и за рубежом, поэтому требуется больше поддержки, и есть много препятствий, которые необходимо преодолеть, чтобы обеспечить лучшее и более быстрое развитие нашей экономики.

Политический риск является одним из наиболее распространенных и неконтролируемых рисков для корпоративных инвестиций за рубежом. Политические риски включают в себя множество типов, в том числе военные риски, социальные риски, риски изменения политики, риски дефолта правительства и так далее. Политические риски, возникающие в процессе иностранных инвестиций китайских предприятий, обычно связаны с определенным конфликтом интересов между страной, в которой находится инвестор, и нашей страной.

Операционные риски возникают в результате того, что сами предприятия принимают неадекватные стратегии развития своей деятельности или не имеют достаточного опыта в области иностранных инвестиций. История развития иностранных инвестиций предприятий Китая по - прежнему очень коротка, опыт недостаточен, многие предприятия не очень хорошо знают международную среду, прежде чем выйти на международный рынок, не имеют опыта независимых инвестиций. В этом случае, если на международном рынке произойдут значительные изменения, то это приведет к увеличению операционного риска для инвестиций предприятий. Мало того, некоторые предприятия Китая не придают большого значения узнаваемости бренда, осведомленность о бренде и известность за рубежом невелики, а большинство экспортных товаров Китая имеют низкую добавленную стоимость, когда окружающая среда меняется, стоимость растет, предприятия, скорее всего, пострадают.

Финансовый риск делится на две части: финансовый риск и валютный риск. Предприятия, осуществляющие инвестиции за рубежом, обычно нуждаются в значительных инвестициях, особенно в крупных слияниях и поглощениях, и нуждаются в большей финансовой поддержке. Для осуществления такой инвестиционной деятельности предприятиям требуется финансирование для привлечения этой части средств. Чтобы увеличить долю рынка и расширить масштабы инвестиций, некоторые китайские предприятия редко проводят всестороннюю и научную оценку инвестиционных проектов, большинство инвестиционных проектов не

могут быть прибыльными, получаемая прибыль не может удовлетворить высокие затраты, а также опыт китайских предприятий в области иностранных инвестиций, как правило, сталкиваются с ценовыми рисками, налоговыми черными дырами и другими финансовыми рисками. Риск изменения обменного курса представляет собой риск, связанный с постоянным изменением стоимости активов и пассивов в иностранной валюте в результате динамических изменений обменного курса. Китай, как правило, использует методы контроля обменного курса, но механизмы предотвращения рисков, связанных с обменным курсом, несовершенны, что не позволяет предприятиям полностью и эффективно избегать валютных рисков. На данном этапе, когда китайский юань постепенно становится интернационализированным, риски, связанные с обменным курсом, постепенно уменьшаются.

Управление рисками означает, что у китайских предприятий есть определенные проблемы с внутренним управлением, которые оказывают определенное негативное влияние на доходы от иностранных инвестиций, в основном отражаются на финансовом управлении, организационном управлении, управлении людскими ресурсами и других аспектах, которые являются факторами, стимулирующими бизнес - риск, и есть много таких факторов. Внешняя инвестиционная среда намного сложнее, чем внутренняя инвестиционная среда. Различия в экономической системе, стандартах бухгалтерского учета, культурной среде и т. Д. Все это приведет к тому, что предприятия создадут много неопределенности и столкнутся с огромными проблемами в процессе иностранных инвестиций.

Чтобы избежать этих рисков, на макроуровне необходимо разработать и усовершенствовать стратегию вывоза ПИИ из Китая, усилить защиту предприятий, обеспечить стабильность и устойчивость их стратегии вывоза инвестиций и снизить инвестиционные риски. Государство может создать агентство по иностранным инвестициям и ввести соответствующие положения и методы управления рисками, связанными с иностранными инвестициями. Для управления вывозом ПИИ необходимо создать единый регулирующий орган, в котором могли бы участвовать государственные и частные аккредитованные лица. Необходимо разработать эффективную политику поощрения вывоза инвестиций. Китайские предприятия должны в полной мере понимать все аспекты информации принимающей страны при осуществлении иностранных инвестиций, включая экономическую среду, политическую среду, гуманитарную среду, природную среду и т.д., всесторонне рассмотреть вопрос о выборе соответствующих инвестиционных проектов и научно определить размер инвестиций. В то же время Китай должен готовить соответствующий технический персонал, поддерживать технологические исследования и разработки и повышать научно - технический уровень предприятий.

На микроуровне, на ранней стадии иностранных инвестиций, предприятиям необходимо тщательно выбирать страну инвестиций, научно продемонстрировать взаимосвязь между инвестиционными доходами и затратами, а затем сформулировать рациональную стратегию планирования инвестиций, четкую рыночную ориентацию, вектор инвестиций

Риск проведения оценки. В то же время усилить внутреннюю защиту от рисков, сделать хорошую работу по предотвращению рисков и реагированию на чрезвычайные ситуации. Использование диверсифицированных инвестиционных стратегий делает инвестиции более конкурентоспособными. Что касается регионального выбора, предприятия должны придерживаться принципа интеграции основных регионов со стратегией диверсификации рынка, отдавая приоритет вступлению в развивающиеся страны. В промышленном выборе, в соответствии с их конкурентными преимуществами, мы должны обратить внимание на ориентированные на экспорт ресурсы, ориентированные на развитие управления иностранными инвестициями. Что касается выбора партнеров, то для снижения рисков, совместного использования ресурсных преимуществ и предпочтений необходимо развивать стратегическое чувство сотрудничества. Что касается управления зарубежными предприятиями, то необходимо разработать модель управления предприятиями, которая соответствовала бы местным реалиям. В повседневном управлении предприятиями с иностранными инвестициями необходимо диверсифицировать бизнес - стратегии, что поможет снизить риски и создать международные бренды с китайской спецификой. Разработка и освоение основных технологий. Своевременное понимание изменений на рынке, прогнозирование того, что может произойти на рынке, чтобы избежать перегрузки из - за резких изменений на рынке, создавая рыночные риски для корпоративных инвестиций. Всесторонне улучшать общее качество и конкурентоспособность предприятий с иностранными инвестициями, повышать основную конкурентоспособность иностранных инвестиций. Подготовка и внедрение международных инвестиционных и управленческих талантов. Эта категория специалистов знакома с международными инвестиционными подходами и инвестиционными рисками, знает международные рынки, обладает высокой чувствительностью к изменениям в международных инвестициях и умеет общаться на иностранных языках.

Иностранные инвестиции Китая имеют присущие им особенности, риски иностранных инвестиций также имеют много влияющих факторов, поэтому бизнес - операторы должны признать свои собственные недостатки в системе предотвращения и контроля рисков иностранных инвестиций, активно принимать рациональные меры по совершенствованию системы управления рисками иностранных инвестиций, избегать рисков иностранных инвестиций, уменьшать потери, расширять экономические

выгоды и максимизировать прибыль предприятий от иностранных инвестиций.

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Чжан Сяомин
студент магистратуры
Московский педагогический государственный университет

КУЛЬТУРНЫЕ РАЗЛИЧИЯ В МЕЖДУНАРОДНОМ МАРКЕТИНГЕ

Аннотация. Культурные различия оказывают значительное влияние на международные маркетинговые решения. Компании должны иметь правильный менталитет, чтобы реагировать на культурные различия, полностью признавая роль культурных различий в межкультурном маркетинге. Среди многих факторов, влияющих на международную маркетинговую деятельность бизнеса, влияние культурной среды на общество является наиболее глубоким и устойчивым, и культурные различия, несомненно, стали важным фактором, влияющим на международную маркетинговую стратегию и эффективность бизнеса. В этой статье основное внимание уделяется тому, как китайские компании реагируют на культурные различия в международном маркетинге.

Ключевые слова: Международный маркетинг, культурные различия, экономика, китайский бизнес, влияющие факторы.

Zhang Xiaoming
master's degree student
Moscow Pedagogical State University

CULTURAL DIFFERENCES IN INTERNATIONAL MARKETING

Abstract. Cultural differences have a significant impact on international marketing decisions. Enterprises should have the correct mindset when dealing with cultural differences and fully recognize the role of cultural differences in cross-cultural marketing. Among the numerous macro marketing factors that affect the international marketing activities of enterprises, cultural environment has the deepest and most lasting impact on society, and cultural differences undoubtedly become an important factor affecting the international marketing strategy and efficiency of enterprises. This article mainly studies how Chinese enterprises cope with cultural differences in international marketing.

Keywords: International marketing, cultural differences, economy, Chinese enterprises, influencing factors.

С ускорением процесса экономической глобализации и быстрым экономическим развитием Китая, все больше и больше предприятий от мелкой интернационализации до глубокой стадии интернационализации, китайские предприятия добились гордых успехов, но также столкнулись со

многими трудностями и препятствиями, культурные различия являются одним из более длительных вилок, которые легко игнорировать. Поскольку маркетинг основан на удовлетворении различных потребностей клиентов, и этот спрос в значительной степени основан на культуре, когда китайские компании входят в страну, они не должны учитывать только экономические и институциональные факторы, но также должны тщательно изучать скрытые культурные различия и разрабатывать соответствующие маркетинговые стратегии для удовлетворения потребностей потребителей в различных культурных условиях.

Культура представляет собой сочетание материальных и духовных богатств, созданных человечеством в процессе исторического развития общества, включая ценности, этику, моральные нормы, религию, искусство, язык, эстетику, жизненные обычаи и т.д. Способы потребления, приоритеты потребностей или желаний людей и способы их удовлетворения относятся к сфере культуры, которая влияет на образ жизни людей, формирует его и определяет его. Различия в культурных представлениях и ценностях неизбежно приводят к различиям в социальных потребностях, что свидетельствует о том, что маркетинг, отвечающий различным потребностям или требованиям корпоративных клиентов, в значительной степени основан на культуре, поэтому успешный международный маркетолог должен стремиться понять культурные нормы, которым следует следовать на рынке, который он хочет открыть. На самом деле, культура проникает во все виды деятельности международного маркетинга, включая исследования рынка, сегментацию и позиционирование рынка, маркетинговые портфели, послепродажное обслуживание и транснациональные переговоры. Распространенность культурных различий создает множество препятствий для развития международной маркетинговой деятельности, и понимание культурных различий является необходимой предпосылкой для бизнеса для международного маркетинга.

Ценности определяют и определяют цели, убеждения, нормы поведения и цели отдельных лиц или организаций. Различные ценности напрямую влияют на различия в покупательском поведении потребителей. В западных странах потребители имеют очевидные различия в ценностях по сравнению с восточными странами, что влияет на их потребительское поведение. Западные люди, понимающие чувственное наслаждение и стремящиеся к свободной жизни, всегда находят способы удовлетворить свою реальную жизнь материальными средствами, что, по - видимому, противоречит культурным добродетелям восточных людей, которые наследуют бережливость и бережливость. Поэтому в международном маркетинге маркетологи должны быть полностью осведомлены об этих внешних культурных различиях потребления, чтобы разработать соответствующие стратегии.

Язык и привычки поведения несут на себе основную тяжесть международного маркетинга. Языки в мире сильно различаются, и даже один и тот же язык, разные способы перевода могут сильно различаться. Язык является инструментом общения для маркетологов, и в международном маркетинге, в разных странах, могут использоваться разные языки. Знание языка страны очень важно. Успешные международные маркетологи должны уметь общаться, не только говорить на этом языке, но и хорошо понимать его. Это позволяет эффективно общаться и общаться с клиентами, знакомя их с продуктами и понимая их потребности, а также выбирать язык и текст, приемлемые для потребителей.

Большинство стран исторически исповедуют ту или иную религию, и религиозные убеждения составляют важную часть их культуры. Влияние религии на международный маркетинг также очень велико, и разрушение религиозных убеждений иногда приводит к этническим конфликтам. Чтобы попасть в принимающую страну, предприятия должны строго уважать местные религиозные убеждения. Особое внимание следует уделять уважению местных верований, которые являются наиболее чувствительным фактором культурных различий, особенно в странах с сильным религиозным влиянием. Это напрямую влияет на потребительское поведение людей.

Продолжение китайской модели культурной ориентации - это модель, принятая, когда разница между китайской культурой и культурой принимающей страны относительно мала, а возможности культурной интеграции китайских предприятий относительно низки. Модель межкультурного маркетинга, используемая китайскими предприятиями на начальном этапе транснационального маркетинга, должна быть моделью культурной ориентации Китая. Это означает, что, осуществляя транснациональный маркетинг, компании начинают в полной мере использовать лучшие знания и возможности, которые они делают в стране для межкультурного маркетинга, начиная с расширения своих бизнес - и маркетинговых портфелей в Китае.

Культурные различия имеют потенциальное преимущество в транснациональном маркетинге, и если они хорошо понимают различия и трансформируют противоречия, объединяя различные языки, культуры и ценности, конечным результатом является повышение конкурентоспособности предприятий и увеличение их богатства. Формирование новой, единой корпоративной культуры посредством взаимодополняемости и координации различных культур.

Культура, как совокупность человеческих знаний, верований, этики, законов, обычаев и т.д., играет важную роль во многих аспектах формирования отдельных лиц, групп и общества в целом. Она не только стимулирует стремление людей к ценностям, стимулирует потребительские потребности общества, но и регулирует экономическое поведение групп,

влияет на механизмы функционирования экономики и так далее. Международный маркетинг как способ ведения бизнеса, естественно, не может работать в вакууме без культуры. В культуре нет хорошего или плохого, есть только различия. Поэтому транснациональные корпорации и международные маркетологи должны обратить внимание на возможности и проблемы, создаваемые культурными различиями для бизнеса, своевременно скорректировать международную маркетинговую стратегию предприятия, своевременно и правильно выбрать местную маркетинговую стратегию, чтобы продукты и услуги предприятия лучше соответствовали потребностям международного целевого рынка.

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Шерматов А.А.
врач анестезиолог-реаниматолог
отделение нейрореанимации
РНЦЭМП АФ

ЗНАЧИМОСТЬ ВНУТРИБРЮШНОГО ДАВЛЕНИЯ (ГИПЕРТЕНЗИЯ) У БОЛЬНЫХ, НАХОДЯЩИХСЯ В КРИТИЧЕСКОМ СОСТОЯНИИ

Аннотация. Внутривнутрибрюшная гипертензия приводит к развитию внутричерепной гипертензии за счет повышения внутриплеврального давления, центрального венозного давления и ухудшения венозного оттока из полости черепа. Зависимость между ВБГ и ВЧГ носит нелинейный характер, и описывается классическими для интракраниальной ситуации взаимоотношениями давление – объем.

ВБД необходимо измерять у пациентов с ВЧГ, поскольку ВБГ является одним из курбельных факторов, коррекция которых может драматично нормализовать резистентную ВЧГ. Повреждения хиазмально-селлярной области могут приводить к развитию ВБГ различной степени выраженности и АКС, в том числе. Продленная эпидуральная анестезия на нижнегрудном уровне может явиться перспективным направлением коррекции ВБГ у этой категории больных.

Ключевые слова: внутривнутрибрюшной гипертензией, перфузионное давление, комплаенс мозга, интактный мозг.

Shermatov A.A.
anesthesiologist-resuscitator
neuroreanimation department
RSC EMC AB

SIGNIFICANCE OF INTRA-ABDOMINAL PRESSURE (HYPERTENSION) IN PATIENTS IN CRITICAL CONDITION

Annotation. Intra-abdominal hypertension leads to the development of intracranial hypertension due to an increase in intrapleural pressure, central venous pressure and deterioration of venous outflow from the cranial cavity. The relationship between IAH and ICH is non-linear and is described by the classic pressure-volume relationship for the intracranial situation. IAP should be measured in patients with ICH because IAH is one of the curable factors whose correction can dramatically normalize refractory ICH. Damage to the chiasmalsellar area can lead to the development of IAH of varying severity and ACS, including. Prolonged epidural anesthesia at the lower thoracic level may be a promising way to correct IAH in this category of patients.

Keywords: intra-abdominal hypertension, perfusion pressure, brain compliance, intact brain.

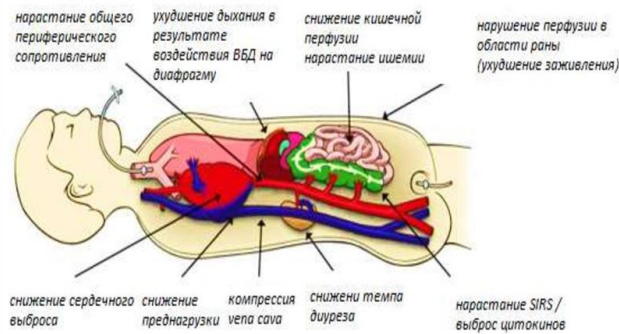
Введение. Нормальным уровнем внутрибрюшного давления (ВБД) для пациентов, находящихся в критическом состоянии, являются значения 5-7 мм.рт.ст. Устойчивое или повторяющееся повышение ВБД выше 12 мм.рт.ст. является внутрибрюшной гипертензией (ВБГ).

Выделяют 4 степени ВБГ в зависимости от величины ВБД: I степень – 12-15 мм.рт.ст.; II степень – 16-20 мм.рт.ст.; III степень – 21-25 мм.рт.ст.; IV степень > 25 мм.рт.ст. [1]. ВБГ III, IV степени в сочетании с признаками вновь развившейся органной дисфункции является абдоминальным компартмент синдромом (АКС). При АКС развивается полиорганная недостаточность - дыхательная, сердечно-сосудистая, почечная, печеночная недостаточность. Причинами органной дисфункции являются или само по себе повышение давления в брюшной полости, ведущее к увеличению плеврального давления, снижению сердечного выброса и снижению респираторного комплайенса, или транслокация бактерий при формировании ишемии кишечной стенки. Если АКС развивается у пациентов с патологией брюшной полости, забрюшинного пространства или таза, то это – первичный АКС, если он развивается у больных с другой патологией, то это – вторичный АКС. Абдоминальное перфузионное давление (АПД) является разницей среднего артериального давления и ВБД.

ВБГ и, в частности, АКС достоверно ухудшают течение критического состояния, и исходы заболевания, а также могут быть непосредственной причиной летального исхода. Это является основанием считать ВБГ и, в особенности, АКС ургентными состояниями, требующими незамедлительной коррекции. Алгоритм лечения ВБГ, рекомендованный международным обществом по изучению АКС, представлен на рисунке 1.

Взаимоотношения между внутрибрюшным давлением и центральной нервной системой (ЦНС) являются малоизученными и представляют значительный интерес. Этой проблеме и посвящен настоящий литературный обзор.

Изменения при ВБД 12-15 мм рт.ст.



Внутрибрюшное давление и центральная нервная система *Внутрибрюшная и внутричерепная гипертензия*

Работы, посвященные проблеме ВБГ, появились еще в начале XX века, однако, взаимоотношения между ВБД и ЦНС начали изучаться только в конце прошлого века. Первыми были исследователи Университета Бостона - Josephs LG с соавт, которые в 1994 году в лабораторных условиях изучили влияние пневмоперитонеума на динамику ВЧД. Производилось нагнетание углекислого газа в брюшную полость до достижения ВБД 15 мм.рт.ст. и параллельное измерение ВЧД. В исследовании было включено две группы животных. В первой группе головной мозг был интактным, во второй – моделировалась повреждение головного мозга при помощи раздувания эпидурально введенного баллона. ВЧД в первой группе возрастало с $13,46 \pm 1,01$ мм.рт.ст до $18,72 \pm 1,5$ мм.рт.ст, а во второй - с $22 \pm 1,75$ мм.рт.ст до $27,4 \pm 0,93$ мм.рт.ст. Повышение ВЧД в обеих группах было статистически достоверным. Авторы предположили, что сначала ВБГ увеличивает плевральное давление (ПД), а затем - центральное венозное давление (ЦВД). Это приводит к затруднению венозного оттока из полости черепа. Ухудшение оттока крови, по мнению авторов, являлось непосредственной причиной повышения ВЧД. Это предположение основывалось на доктрине Монро-Келли, которая гласит, что ВЧД обусловлено тремя составляющими – паренхима головного мозга, ликвор и кровеносные сосуды с находящейся в их полости кровью. Для того, чтобы ВЧД оставалось в пределах нормы при увеличении объема любого из этих составляющих, объем двух других компонентов должен уменьшиться, поскольку черепная коробка ригидна. Этим механизмом обусловлен и комплаенс мозга, и его компенсаторные способности, направленные на поддержание нормального уровня ВЧД. Исходя из этой концепции, у животных первой группы с интактным мозгом ухудшение венозного оттока компенсировалось за счет уменьшения объема других компонентов полости черепа. В результате, ВЧД увеличивалось, но не достигало уровня ВЧГ. У

животных второй группы еще до формирования ВБГ уже существовала ВЧГ, поэтому они не имели возможности компенсации повышенного, вследствие ухудшения венозного оттока, ВЧД. Именно это стало причиной значимого нарастания ВЧГ.

В 1996 году Bloomfield GL с соавт. провели исследование, в котором уточнялись механизмы повышения ВЧД при ВБГ, и изучались взаимоотношения между ВБД, ПД, ЦВД, сердечным выбросом (СВ) и ВЧД. Лабораторным животным повышали ВБД до 25 мм.рт.ст. при помощи баллона, введенного в брюшную полость. При этом проводили динамическое измерение ПД, ЦВД, СВ и ВЧД с церебральным перфузионным давлением (ЦПД). Авторы показали, что при создании ВБГ происходило увеличение ВЧД с $7,6 \pm 1,2$ мм.рт.ст. до $21,4 \pm 1,0$ мм.рт.ст. Увеличивались также и ПД вместе с ЦВД, тогда как СВ и ЦПД достоверно уменьшались. При выполнении животным декомпрессивной лапаротомии ВБД возвращалось фактически к исходному уровню – $11,2 \pm 1,8$ мм.рт.ст. Вместе с этим происходила нормализация ПД, ЦВД, СИ и ЦПД. Эта работа, по-сути, подтвердила гипотезу Josephs LG с соавт о том, что причиной ВЧГ при ВБГ является нарушение венозного оттока при снижении торакоабдоминального комплаенса. Еще одним важным результатом этой работы стало демонстрация того, что само по себе повышение ВБД до 25 мм.рт.ст. способно привести к развитию ВЧГ даже у животных с интактным мозгом.

Первые клинические работы, посвященные изучению взаимоотношений ВБД и ВЧД, так же, как и лабораторные исследования, появились в конце прошлого века, когда в 1995 году вышли в свет два клинических наблюдения. В первом из них Bloomfield GL с соавт описали эффективное снижение высокого ВЧД, резистентного к проводимой интенсивной терапии, непосредственно после выполнения декомпрессивной лапаротомии у пациента с тяжелой сочетанной травмой. Во втором клиническом наблюдении Irgau I с соавт описали остро развившийся выраженный подъем ВЧД у пациента с тяжелой сочетанной травмой в ответ на формирование пневмоперитонеума для выполнения холицистэктомии.

В 2001 году Citerio G с соавт провели исследование у 15 пациентов с тяжелой ЧМТ. На живот пациентам выкладывался 15-литровый мешок с водой. Критериями включения пациентов в исследование был подострый период ЧМТ и стабилизация их состояния, под которой понимался, как минимум 24-часовой период с нормальными значениями ВЧД и ЦПД. Во время исследования производился многопараметрический церебральный мониторинг, мониторинг центральной гемодинамики и, конечно - измерение ВБД. Все параметры фиксировались до, во время и спустя 20 минут после искусственного повышения ВБД. Авторы установили, что повышение ВБД с $4,7 \pm 9,9$ мм.рт.ст. до $15,4 \pm 4,1$ мм.рт.ст. ($p < 0.001$)

приводило к незамедлительному увеличению ЦВД с $6,2 \pm 2,4$ мм.рт.ст. до $10,4 \pm 2,9$ ($p < 0.001$) мм.рт.ст. и ВЧД - с $12,0 \pm 4,2$ мм.рт.ст. до $15,5 \pm 4,4$ ($p < 0.001$) мм.рт.ст. Требовалось всего несколько секунд для повышения давлений, которые сохранялись на уровне плато до момента, когда убирался груз с живота. Затем происходило незамедлительное возвращение всех давлений к исходному уровню.

Кроме вышеописанных опций мониторинга авторы измеряли комплаенс дыхательной системы и торакальное трансмуральное давление. Было выявлено снижение комплаенса дыхательной системы с $58,9 \pm 9,8$ мл/см H₂O до $44,9 \pm 9,4$ мл/см H₂O. При этом торакальное трансмуральное давление, являющееся разницей между ЦВД и внутрипищеводным давлением, оставалось стабильным, а комплаенс грудной клетки достоверно снижался – с $204,7 \pm 37,1$ мл/см H₂O до $123,6 \pm 38,0$ мл/см H₂O. Интерпретируя эти результаты, авторы пришли к выводу, что повышение ВБД приводит к смещению диафрагмы вверх и, соответственно, снижению комплаенса грудной клетки. Другими словами, повышение давления в брюшной полости ведет к повышению давления в грудной полости, увеличению ЦВД, ухудшению оттока крови из полости черепа и, в конечном счете, к повышению ВЧД.

Механизм повышения ВЧД при затруднении венозного оттока из полости черепа был описан Huseby JS с соавт еще в 1981 году. Авторы в своем исследовании показали, что повышение давления во внутренней яремной вене увеличивает давление в верхнем сагиттальном синусе и корковых мостиковых венах. В итоге, происходит повышение давления во всех отделах венозной системы мозга и увеличение интракраниального объема крови. В результате, повышается ВЧД.

Проведенные в конце 90-х – начале 2000-х годов работы позволили рекомендовать для рутинной клинической практики, во-первых, проводить измерения ВБД для своевременного выявления потенциально курабельных причин повышения ВЧД у пациентов с ЧМТ, и, во-вторых, соблюдать особую осторожность при необходимости использования лапароскопических методик у пациентов с сочетанной – черепно-мозговой и абдоминальной травмой. Эти рекомендации актуальны, поскольку сочетание черепно-мозговой и абдоминальной травмы является частым. По данным различных авторов, частота такой сочетанности достигает 30 – 40%.

В 2004 году Joseph DK с соавт опубликовали большую серию наблюдений, состоящую из 17 пациентов с тяжелой ЧМТ, резистентной к проводимой терапии ВЧГ ($30,0 \pm 8,1$ мм.рт.ст.), и ВБГ ($27,5 \pm 5,2$ мм.рт.ст.) [19]. Авторы показали, что декомпрессивная лапаротомия является эффективным методом не только нормализации ВБД, но и ВЧД. Лапаротомия позволила снизить ВБД до $21,4 \pm 1,0$ мм.рт.ст. У 6 пациентов с транзиторным снижением ВЧД был летальный исход, тогда как 11 больных с устойчивой нормализацией ВЧД выжили.

В 2004 – 2005 годах бельгийские ученые Malbrain M с соавт и Deeren DH с соавт провели два исследования, в которых изучались взаимоотношения между ВБД и ВЧД у пациентов с повреждением мозга нетравматического генеза. Как и для пациентов с ЧМТ, для больных с ишемическим, геморрагическим инсультами и метаболической энцефалопатией была характерна прямая корреляция между уровнем ВБД и значением ВЧД. Кроме этого, авторы этих исследований ведут активное обсуждение интракраниальных взаимоотношений, в частности, - зависимости давление – объем. Эта зависимость нелинейна. Другими словами, при наличии у пациента повышенного ВЧД даже незначительное увеличение объема в полости черепа приводит к развитию выраженной ВЧГ, часто резистентной к интенсивной терапии. Роль такого фактора, незначительно увеличивающего интракраниальный объем у пациента, находящегося в критическом состоянии, вполне может выполнять увеличение интракраниального объема крови вследствие ухудшения венозного оттока из полости черепа вследствие ВБГ. Этот клинический сценарий более чем вероятен с учетом того, что ВБГ развивается у 54-65% пациентов, находящихся в критическом состоянии.

Подтверждением того, что интерес клиницистов к проблеме ВБГ у нейрохирургических пациентов остается крайне высоким, является клиническое наблюдение, опубликованное в 2011 году в журнале *Neurocritical Care*. Авторы приводят описание клинической ситуации, ставшей уже классической, когда декомпрессивная лапаротомия у пациента с тяжелой сочетанной травмой позволила нормализовать резистентную к проводимой терапии ВЧГ.

Центральная нервная система и внутрибрюшное давление.

Очевидна гипотетическая вероятность вторичного повышения ВБД у пациентов с неврологической или нейрохирургической патологией и первичным повреждением различных отделов мозга. Однако нам не удалось найти работ, которые бы таким образом рассматривали взаимосвязь ЦНС и ВБД. В течение последнего года мы опубликовали 2 работы, посвященные этой проблеме. Первая работа – это клиническое наблюдение, в котором описано развитие вторичного АКС у пациента с интра-экстравентрикулярной краниофарингиомой и осложненным течением послеоперационного периода. У этого пациента после операции выросла неврологическая симптоматика, а затем развился АКС. ВБД удалось нормализовать при помощи продленной эпидуральной анестезии (ЭА) на нижегрудном уровне. Постепенно был достигнут регресс неврологической симптоматики. Мы пришли к выводу, что при осложненном течении послеоперационного периода у пациентов с опухолями хиазмально-селлярной области (ХСО) возможно развитие ВБГ, которая, в свою очередь, утяжеляет течение послеоперационного периода и состояние пациента и может ухудшать исход заболевания.

Анализ этого клинического наблюдения позволил нам создать дизайн проспективного исследования. Объектом исследования стали пациенты с опухолями ХСО и осложненным течением послеоперационного периода. Целью исследования было определение эффективности консервативной терапии и ЭА для коррекции ВБГ у пациентов с опухолями ХСО и осложненным течением послеоперационного периода. Вместе с этим изучались причины и механизм развития ВБГ у этой категории пациентов. В результате, было выявлено, что ВБГ развивалась у 68,3% пациентов, при этом АКС развивался у 22% больных. Это соответствует декларируемой другими авторами частоте развития ВБГ у пациентов, находящихся в критическом состоянии. Такое соответствие вряд ли является случайным. До сих пор отсутствует общепринятое мнение о причинах столь частого развития ВБГ у пациентов, находящихся в критическом состоянии. В то же время, известно, что частота церебральной дисфункции, развившейся вследствие критического состояния, у пациентов с первично интактной нервной системой достигает 60 – 80%. Возможно, развивающаяся вследствие критического состояния церебральная дисфункция вызывает или утяжеляет течение ВБГ.

Механизмом развития ВБГ во всех наблюдениях нашего исследования было формирование различных вариантов нарушения моторики желудочно-кишечного тракта (ЖКТ), которые манифестировали одновременно с повышением ВБД и сохранялись дольше, чем ВБГ. Причиной развития нарушений моторики ЖКТ, вероятнее всего, является утрата контроля диэнцефальных структур над функцией ЖКТ. Также возможной причиной является формирование дисгормональных нарушений, прежде всего, гипотиреоза, или, что наиболее вероятно, сочетание этих причин.

Консервативная терапия ВБГ, не достигшей уровня АКС, была эффективна в подавляющем большинстве наблюдений. Однако, при развитии АКС, который был зафиксирован у 9 пациентов, консервативная терапия, как правило, оказывалась неэффективной. Она была эффективной только в двух наблюдениях. При неэффективности консервативной терапии выполнялась ЭА. Противопоказанием для ЭА был сепсис, который развивался у 2 больных с АКС. Таким образом, из 9 пациентов с АКС в 4 наблюдениях проводилась ЭА, которая эффективно корригировала ВБГ у всех этих больных. Кроме этого, исходы пациентов с АКС, которым проводилась ЭА, были существенно лучше исходов пациентов с АКС, но которым ЭА не проводилась по различным причинам. Эти результаты позволяют включить ЭА в международный алгоритм коррекции ВБГ, который приведен на Рисунке 1. Однако полученные обнадеживающие результаты при проведении исследования у пациентов с опухолями ХСО, являются обоснованием для проведения дальнейших работ, объектом

которых должны стать пациенты с другой нейрохирургической и неврологической патологией.

Заключение. Внутривентрикулярная гипертензия приводит к развитию внутричерепной гипертензии за счет повышения внутриплеврального давления, центрального венозного давления и ухудшения венозного оттока из полости черепа. Зависимость между ВВГ и ВЧГ носит нелинейный характер, и описывается классическими для интракраниальной ситуации взаимоотношениями давление – объем.

ВВД необходимо измерять у пациентов с ВЧГ, поскольку ВВГ является одним из курабельных факторов, коррекция которых может драматично нормализовать резистентную ВЧГ.

Повреждения хиазмально-селлярной области могут приводить к развитию ВВГ различной степени выраженности и АКС, в том числе. Продленная эпидуральная анестезия на нижнегрудном уровне может явиться перспективным направлением коррекции ВВГ у этой категории больных. Проведение дальнейших исследований, посвященных проблеме ВВГ у пациентов с первичным повреждением ЦНС, оправдано и целесообразно.

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*Шертайлаков Г.М.
доцент
ДжПИ РУз
Муродов Д.Ш.
студент 1 курса
ДжПИ РУз*

СТАЦИОНАРНЫЕ И НЕСТАЦИОНАРНЫЕ ИСТОЧНИКИ ПОГРЕШНОСТЕЙ

Аннотация: измеряемые величины, определяемые по моделям, всегда отличаются от свойств реальных объектов, поскольку модель никогда не может быть абсолютной копией оригинала. Это отличие выражается неопределенностью, обусловленной неадекватностью модели измеряемой величине. Во многих случаях разработанная физическая теория позволяет построить достаточно хорошие модели, описывающие влияние различных факторов на результат измерений.

Ключевые слова: постулаты, эталоны, измерение, величины, единицы, измерений, правильность, воспроизводимость, случайные погрешности.

*Shertailakov G.M.
associate professor
JPI RUz
Murodov D.Sh.
1st year student
JPI RUz*

STATIONARY AND NON-STATIONARY SOURCES OF ERROR

Annotation: measured quantities, determined by divisions, always differ from the properties of real objects, so the model cannot be an absolute copy of the original. This difference is manifested by uncertainty caused by the inadequacy of the model of the measured quantity. In many cases, a developed physical theory allows one to build a fairly accurate model that describes the influence of various factors and measures the result.

Keywords: postulates, standards, measurement, quantities, units, measurements, correctness, reproducibility, random errors.

Для качественной оценки результатов измерений часто используют такие понятия как, правильность, сходимость, воспроизводимость, точность измерений. При этом под понятием «правильность измерения» понимают

качество измерения, отражающее близость к нулю систематической составляющей погрешности измерений [1].

Понятие «сходимость результатов измерений» характеризует близость друг к другу результатов измерений, выполняемых в одинаковых условиях, т.е. близость к нулю случайной составляющей погрешности данной серии измерений.

Под понятием «воспроизводимость измерений» понимают качество измерений, отражающее близость друг к другу результатов измерений, выполненных в различных условиях.

Точность измерений характеристика качества измерений, отражающая близость к нулю как систематической, так и случайной составляющих погрешности измерений [2].

Случайная погрешность может рассматриваться как случайная величина с математическим ожиданием равным нулю. Другими словами, среднее арифметическое бесконечного числа повторных измерений одной и той же величины не будет содержать случайной погрешности.

Для конечного числа наблюдений возможные границы случайной погрешности могут быть определены путем специальной математической обработки результатов этих наблюдений. Окончательный результат при этом может быть уточнен с некоторой вероятностью, естественно, не равной 100 %. Но так как в каждом из результатов наблюдений присутствует некая систематическая составляющая (систематическая погрешность), то и окончательный результат будет искажен этой погрешностью [3].

Как наличие случайной погрешности невозможно выявить по результату однократного наблюдения, так и систематическую погрешность невозможно определить математической обработкой результатов многократных наблюдений.

Систематическая погрешность может быть определена и, соответственно, исключена только опытным путем. Многообразие причин, вызывающих систематические погрешности, определяет и многообразие приемов их обнаружения и исключения.

Погрешность измерения является важнейшей характеристикой средств и результатов измерений и представляет собой количественную оценку степени приближения результата измерения к истинному значению величины. При определении понятия погрешности необходимо четко разграничивать три понятия:

1. Истинного.
2. Действительного значений измеряемой физической величины.
3. Результата измерения.

Истинное значение физической величины – это значение, абсолютно точно отражающее количественное или качественное свойство данного объекта. Оно не зависит от средств нашего познания и относится к категории абсолютной истины, которая в условиях относительного

физического мира не может быть познана. Поскольку истинное значение величины является недостижимым, на практике при оценке погрешности вместо него используют действительное значение величины [1].

Действительное значение физической величины – это максимально приближенное к истинному в условиях данного конкретного измерения экспериментально найденное значение, которое для данной цели может быть использовано вместо него.

Результат измерения представляет собой приближенную оценку истинного значения величины, найденную путем измерения.

Говоря о погрешности измерений, следует также различать понятия «погрешность результата измерения» и «погрешность средства измерения». Эти два понятия во многом близки друг к другу и классифицируются по одинаковым признакам [2].

Погрешность результата измерения – это разность Δx между результатом измерения X и истинным $X_{и}$ (или действительным $X_{д}$) значением измеряемой величины:

$$\Delta x = X - X_{и}.$$

Она указывает границы неопределенности значения измеряемой величины.

Погрешность средства измерения – это разность между показанием СИ и истинным (действительным) значением измеряемой физической величины. Она характеризует точность результатов измерений, осуществляемых данным средством.

Погрешности измерений классифицируются:

- по способу их числового выражения;
- по характеру проявления при измерениях;
- в зависимости от причины их возникновения;
- в зависимости от изменения измеряемой величины в процессе измерения;
- по зависимости абсолютной погрешности от значений измеряемой величины;
- по влиянию внешних условий и другим признакам.

Систематическая погрешность измерения – детерминированная составляющая погрешности измерения, остающаяся постоянной или закономерно изменяющаяся при повторных измерениях одной и той же величины. Отличительные признаки систематической погрешности состоят в том, что она может быть предсказана, обнаружена и, поэтому, почти полностью скомпенсирована [3].

Случайная погрешность измерения – составляющая погрешности измерения, изменяющаяся случайным образом (по знаку и значению) при повторных измерениях одной и той же величины, проведенных с одинаковой тщательностью в одних и тех же условиях. В случайных погрешностях не проявляются детерминированные закономерности, как в

случае систематических погрешностей. Они неизбежны, непредсказуемы и неустранимы. Случайные погрешности описываются методами теории случайных процессов и математической статистики.

Грубые погрешности или промахи - это случайная погрешность результата отдельного измерения в ряду измерений, которая для данных условий резко отличается от остальных результатов этого ряда [2].

Грубые погрешности могут возникнуть из-за ошибок или неправильных действий оператора, а также вследствие кратковременных, резких изменений условий проведения измерений. Обычно результаты измерений, содержащие грубые погрешности, обнаруживают и исключают из дальнейшего рассмотрения основываясь на статистических критериях аномальности измерений.

При анализе классификации обобщенных приемов показывает, что наибольшее количество обобщенных приемов совершенствования конструкций разработана с целью уменьшения погрешности. Для уменьшения рассмотренных составляющих погрешности необходимо введение цепи балансировки [4,5].

Производится расчет систематической составляющей погрешности интегратора, обусловленной неидеальностью оперативного усилителя, в качестве которого используется, например, оперативного усилитель типа К14ОУД7 [6,7].

Он также основан на создании входных значений, где вид случайных чисел с заданным законом распределения и их к набору случайных чисел с помощью модели измерения закон распределения, соответствующий распределению измеряемой величины [8]. А также использование новых методов стало настоящим прорывом в области неопределенности измерений, где оценку, поскольку это позволило избавиться от недостатков традиционным подходом, описанный выше [9].

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*Шертайлаков Г.М.
доцент
ДжПИ РУз
Джурабеков Ж.Й.
студент 2 курса
ДжПИ РУз*

ОСНОВНЫЕ ПОЛОЖЕНИЯ ТЕОРИИ ИЗМЕРЕНИЙ

Аннотация: показатели назначения характеризуют свойства продукции, определяющие основные функции, для выполнения которых она предназначена и обуславливает область ее применения. Изучает под нормированием понимается установление пределов, следовательно, нормирование метрологических характеристик средств измерений означает установление пределов их изменения, а к нормируемым характеристикам относятся такие показатели, которые определяют качество функционирования СИ.

Ключевые слова: нефизические величины, унификации, эргономические, эстетические, транспортабельности, безопасности, экологические, надежности, технологичности, унификации, патентно, правовые.

*Shertailakov G.M.
assistant professor
JPI RUz
Jurabekov Zh.Y.
2nd year student
JPI RUz*

BASIC PROVISIONS OF THE THEORY OF MEASUREMENTS

Annotation: purpose indicators characterize the properties of a product, defining the main functions for which it is intended to perform and determining the scope of its application. The study of standardization means the establishment of limits, therefore, normalization of the metrological characteristics of measuring instruments means the establishment of limits for their change, and the normalized characteristics include such indicators that determine the quality of the functioning of measuring instruments.

Keywords: non-physical quantities, unification, ergonomic, aesthetic, transportability, safety, environmental, reliability, manufacturability, unification, patent, legal.

К объектам измерений относятся не только физические, но и нефизические величины. Например, в пищевой промышленности часто измеряют такие показатели, как вкус, цвет, запах, внешний вид, вид в разрезе и т. д. Они определяют совокупность свойств продукции, удовлетворяющих определенные потребности в соответствии с их назначением. Мерой этих свойств являются показатели качества [1].

В квалиметрии - разделе метрологии, изучающей измерение показателей качества продукции, различают следующие группы показателей качества: назначения; надежность; технологичность; унификация; патентно-правовое; эргономический; эстетический; транспортабельность; безопасность; экологичность; экономный расход трудовых и материальных ресурсов.

Показатели назначения характеризуют свойства продукции, определяющие основные функции, для выполнения которых она предназначена и обуславливает область ее применения [2].

Показатели надежности определяют свойство продукции сохранять во времени в установленных пределах значения всех параметров, характеризующих способность выполнять требуемые функции в заданных режимах и условиях применения, технического обслуживания, ремонта, хранения и транспортирования.

Каждый граф на топограмме можно охарактеризовать по меньшей мере четырьмя основными показателями:

- чувствительность (S);
- погрешность (P);
- надёжность (C);
- быстродействие (L) [3].

Анализ классификации обобщенных приемов показывает, что наибольшее количество обобщенных приемов совершенствования конструкций разработана с целью уменьшения погрешности [4]. Показатели технологичности характеризуют совокупность свойств конструкции изделия, которая определяет ее приспособленность к достижению оптимальных затрат при производстве, эксплуатации и ремонте для заданных показателей качества, объема выпуска и условий выполнения работ.

Показатели унификации характеризуют степень использования в продукции стандартизованных изделий и уровень унификации составных частей изделия [5].

Патентно-правовые показатели характеризуют степень патентной защиты и патентной чистоты изделия.

Эргономические показатели, характеризующие систему «человек - изделие - среда», устанавливают соответствие свойств изделия тем или иным свойствам человека.

Эстетические показатели продукции характеризуют ее эстетическое

воздействие на человека.

Показатели транспортабельности характеризуют приспособленность продукции к перемещениям, не сопровождающимся ее использованием и потреблением [4].

Показатели безопасности характеризуют свойства продукции, обуславливающие безопасность человека при потреблении или использовании продукции.

Показатели экономного расходования сырья и материалов, топлива, энергии и трудовых ресурсов характеризуют те свойства изделия, которые отражают его техническое совершенство по количеству потребляемых в процессе производства ресурсов.

Экологические показатели характеризуют уровень вредного воздействия на окружающую среду в процессе эксплуатации изделия.

В свою очередь каждая группа показателей качества подразделяется на подгруппы, а подгруппы показателей качества - на единичные.

Количественной характеристикой измеряемых величин является размер. Качественной характеристикой измеряемых величин - ее размерность. Последняя обозначается символом \dim от латинского слова «dimension», которое переводится как размер и как размерность в зависимости от контекста [2].

Размерности основных физических величин Международной системы единиц обозначаются заглавными буквами латинского алфавита.

Например, размерность длины $\dim l=L$, размерность массы - $\dim m=M$, размерность времени - $\dim t=T$, размерность электрического тока - $\dim i=I$. Производные величины могут быть образованы как с помощью основных, так и других (уже образованных) производных величин.

При определении размерности производных физических величин руководствуются следующими правилами:

1. Размерности левой и правой частей уравнений не могут не совпадать, так как сравнивать между собой можно только одинаковые свойства [6].

2. Алгебра размерностей мультипликативна, т.е. состоит из одного математического действия - умножения. Размерность произведения нескольких величин равна произведению их размерностей. Если зависимость между величинами имеет вид:

$$Q = A C B, \text{ то } \dim Q = \dim A \cdot \dim C \cdot \dim B.$$

Размерность частного при делении одной величины на другую равна отношению их размерностей [4,10].

Размерность любой величины, возведенной в некоторую степень, равна произведению ее размерности в той же степени. То есть если $Q = A^n$, то $\dim Q = \dim^n A$.

Следовательно, размерности производной физической величины можно выразить через размерности основных величин с помощью

степенного одночлена: $dim Q = L^a \cdot M^p \cdot T^r \dots$,

где L, M, T - размерности основных физических величин; a, p, r, ... - показатели размерности.

Поэтому важно знать, при каких условиях реализуется режим работы [7]

Сущность многопараметрового метода повышения точности заключается в следующем. Если выходная величина преобразователя зависит от двух или более неизвестных параметров, то для исключения влияния неинформативных параметров необходимо решить систему линейно независимых уравнений, число которых равно числу неизвестных параметров. Процессы информатизации в современном обществе характеризуются совершенствованием и глобальным распространением информационно-коммуникационные технологии (ИКТ). Особенностью этого процесса является накопление, хранение, использование, передача информации, которая воспроизводится с помощью современных средств вычислительной техники [8,9].

Использование новых технологий и процессов стало настоящим прорывом в неопределенности измерения оценка, поскольку это позволило избавиться от недостатков традиционного подхода, перечисленный выше. Однако, оказалось, что мера оценки неопределенности, полученные с помощью современных приборов, различаются по показаниям [11,12].

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Шишкина Е.И.

студент

Научный руководитель: Елкина В.Н., к.э.н.

доцент

Омский государственный педагогический университет

**ТЕОРЕТИЧЕСКОЕ ОБОСНОВАНИЕ ПРИМЕНЕНИЯ ЦИФРОВЫХ
ТЕХНОЛОГИЙ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ
УПРАВЛЕНИЯ РАБОЧИМ ВРЕМЕНЕМ НА ПРЕДПРИЯТИИ
СТРОИТЕЛЬНОЙ ОТРАСЛИ**

Аннотация: в статье рассматривается возможность использовать современные цифровые сервисы, предназначенные для улучшения управления рабочим временем. Руководитель получает возможность рационально распределять фонд рабочего времени как по отдельным сотрудникам, так и по выполняемым производственным операциям. Это позволяет добиться роста эффективности управления и производительности труда.

Ключевые слова: управление рабочим временем, производительность труда, эффективность труда, контроль производительности, управление персоналом.

Shishkina E.I.

student

Scientific supervisor: Elkina V.N., candidate of economic sciences

associate professor

Omsk State Pedagogical University

**THEORETICAL JUSTIFICATION OF THE APPLICATION OF
DIGITAL TECHNOLOGIES TO INCREASE THE EFFICIENCY OF
WORKING TIME MANAGEMENT AT AN ENTERPRISE IN THE
CONSTRUCTION INDUSTRY**

Annotation. The article discusses the possibility of using modern digital services designed to improve work time management. The manager gets the opportunity to rationally distribute the working time fund both for individual employees and for ongoing production operations. This allows for increased management efficiency and labor productivity.

Keywords: working time management, labor productivity, labor efficiency, productivity control, personnel management.

Актуальность выбранной темы обусловлена серьезным влиянием того, насколько способно строительное предприятие контролировать имеющийся фонд рабочего времени, и обеспечивает ли руководство должный уровень управления этим ограниченным ресурсом. В том случае, если компания допускает нерациональное использование персоналом времени, если возникают вынужденные простои из-за непродуманных графиков сменности или несогласованного взаимодействия между подразделениями, неизменно наступают негативные последствия в виде снижения показателей производительности труда. Между тем, именно производительность является ключевым фактором в эффективности работы всего предприятия в целом [8, с. 11].

Данные соображения определяют цель исследования – теоретически обосновать использование цифровых технологий с целью повысить эффективность процессов управления фондом рабочего времени на предприятии строительной отрасли.

Современный строительный комплекс имеет ярко выраженную специфику, которая отражается на всей организации труда в целом. Главным образом это связано с тем, что само понятие «рабочее время» для основных производственных категорий в строительстве значительно отличается от стандартной офисной деятельности, которую достаточно легко регламентировать и за которой сравнительно несложно установить контроль. В частности, широкое распространение получили технологии контроля активности офисных сотрудников через элементарные программы, отслеживающие движение компьютерной мышки [1, с. 82].

В строительной же отрасли только инфраструктурные подразделения имеют рабочие места, оснащенные ПК – бухгалтерия, ИТ, правовая служба, административный аппарат и пр. Основная деятельность (выполнение непосредственно строительных работ) ведется техническим персоналом, который к тому же перемещается в процессе выполнения различных производственных операций по обширной территории [3, с. 74].

Кроме того, в ряде случаев операции строительного спектра сложно поддаются нормированию, так как выполняются в каждом конкретном случае с учетом определенной местной специфики. Тем самым процесс технологического контроля за тем, как технический персонал расходует время в рабочую смену, становится затруднительным [7, с. 76].

В то же время имеется осознаваемая потребность в системном планировании рабочего времени многочисленного технического персонала с тем, чтобы избежать авралов и потери качества из-за упущенных сроков, а также чтобы сгладить возможное негативное воздействие внешних факторов (начиная от неблагоприятных для строительных технологий погодных условий и вплоть до резких изменений в поставках необходимых строительных материалов из-за возможного геополитического давления).

Только на этих условиях возможно в полной мере использовать имеющиеся возможности для эффективной работы строительного предприятия [3, с. 77].

Все перечисленные соображения диктуют необходимость систематического поиска решений, позволяющих найти баланс между высокой неопределенностью, свойственной функционированию строительной отрасли сегодня, и потребностью выстроить деятельность предприятия в плановом режиме, добиваясь высокой точности контроля и прогнозирования в управлении ресурсом времени.

С учетом подобных условий перспективным выходом представляется внедрение современных цифровых сервисов, которые позволили бы в автоматизированном режиме контролировать работу технического персонала с учетом специфики строительной отрасли. Только нормально отлаженные и рационально организованные процессы контроля рабочего времени дадут строительному предприятию устойчивые преимущества на высококонкурентном рынке [6, с. 144].

Спектр готовых программных продуктов для контроля рабочего времени офисных работников достаточно широк, однако их использование в строительной отрасли нецелесообразно, если речь идет о техническом персонале, ведь в большинстве случаев производственная деятельность данной категории работников вообще не подразумевает использование ПК [2, с. 118].

Наиболее подходящим с этой точки зрения выглядит специализированный модуль программы SAP SuccessFactors Time Tracking.

Стандартный функционал SAP рассчитан именно на офисный персонал, учет рабочего времени которого привязан непосредственно к нахождению у компьютера и позволяет учитывать моменты включения/выключения ПК, движение мышью. Например, конфигурация SAP HCM дает возможность отделу персонала и бухгалтерии учитывать фактически отработанные дни и периоды больничных, отгулов, отпусков.

Однако подобный функционал не дает тех возможностей, которые требуются для повышения показателей продуктивности труда технического персонала строительной компании.

Поэтому предлагается использовать модуль SAP FCC, который позволил бы реализовывать следующий набор возможностей [5]:

- анализировать фактические затраты времени на определенный вид работ и сопоставлять их с плановыми (нормативными), отмечая отклонения и фиксируя их статистику;

- разделять выполняемые работы по приоритетности (с точки зрения задействования работников на различных участках или в различных проектах), а также по условиям выполнения (например, технологические требования к погодным условиям или наличию допусков).

Тем самым сотрудник, на которого возложены обязанности по распределению рабочих задач между техническим персоналом (например,

прораб), получает удобный прикладной инструмент, позволяющих оценивать реальные трудозатраты для каждого работника, а также фиксировать и контролировать выполнение задач по конкретному работнику или по отдельной бригаде. Такой подход позволяет выявить неочевидные резервы для повышения производительности труда и обеспечить улучшение управления рабочим временем [5].

Отдельный интегрируемый модуль SAP FCC позволяет в централизованном порядке управлять периодическими операциями, выполняемыми техническими работниками – планировать их, отслеживать выполнение, контролировать соблюдение нормативных сроков. Кроме того, предусмотрена также система автоматических уведомлений о выполняемых задачах – срок выполнения, статус, отклонения от плановых показателей [5].

Использование функционала SAP FCC позволяет улучшить прозрачность труда технического персонала и установить контроль за фактической производительностью их труда. Это позволит проанализировать имеющиеся «узкие места» и улучшить показатели эффективности использования трудового ресурса.

Разработчики SAP FCC утверждают, что использование данного цифрового сервиса позволяет закрывать производственные задачи на 15-50 % быстрее [5]. При этом неизбежно растет нагрузка на линейных руководителей, поскольку от них требуется проведение предварительная подготовка:

1. В модуль SAP FCC необходимо внести нормативные данные по планируемым видам работ с указанием времени, затрачиваемого на выполнение работниками различных категорий.

Рекомендуется проверить достоверность и исполнимость данных нормативов, опираясь на отраслевые показатели и наработанный опыт, а также на экспертные оценки специалистов по данному направлению.

2. Оценить фактически имеющийся фонд рабочего времени (с учетом рабочих и выходных дней, сезонной специфики, условий найма и прочих факторов по каждому из проектов);

3. Актуализировать список технических работников, где учитывались бы не только идентифицирующие данные, но и тарифную категорию, которая прямо связывает показатели производительности труда (соответствие получаемых результатов отраслевым нормативам по времени выполнения) с материальной мотивацией по каждой тарифной категории.

Данная возможность заложена в специализированный функционал модуля SAP FCC, ее использование доступно при правильном заполнении справочников, которые уже встроены в информационную систему и интегрированы с корпоративной электронной средой SAP [5].

4. Инвентаризировать плановые расходы рабочего времени, анализируя в данном аспекте текущие задачи по всем выполняемым проектам / объектам.

Условием качественного управления фондом рабочего времени можно считать создание единой информационной среды, где ответственные за контроль специалисты создавали бы календарно-сетевые графики с интегрированным доступом. Это позволит согласовывать занятость технического персонала по разным рабочим задачам, не допуская серьезных пересечений (дублирование, перегрузка, простой и пр.). Тем самым удастся добиться более качественного планирования времени персонала, что положительно отразится на эффективности работы всего строительного предприятия [4, с. 61].

Резюмируя сказанное, можно сделать следующие выводы:

- Строительная отрасль в силу специфики работы технического персонала нуждается в особых подходах к контролю эффективности использования рабочего времени. Данная задача может быть реализована при использовании встроенного функционала специализированного модуля SAP FCC.

- Продуктивное использование указанного цифрового сервиса возможно при соблюдении определенных рекомендаций и условий. В частности, при нормировании производственных операций необходимо опираться на проверенные практикой и подтвержденные отраслевыми нормативами данные, оценивая их объективность и увязывая получаемые работником определенной тарифной категорией результаты с его вознаграждением за труд.

- Модуль позволяет рационализировать процессы распределения рабочих задач и выдачи поручений техническому персоналу, поскольку наглядно показывает загруженность данного работника (или бригады) и позволяет обоснованно прогнозировать сроки выполнения задач.

В едином информационном пространстве руководитель видит четкий список задач с указанием сроков выполнения и заложенным резервом времени, что позволяет анализировать занятость персонала, согласовывать деятельность между разными работниками с уточнением приоритетности задач, а также соотносить фактический результат с нормативными (ожидаемыми) показателями эффективности труда.

В совокупности подобные цифровые решения позволяют целенаправленно улучшать показатели производительности труда строительного предприятия.

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СОЦИАЛЬНО-ЭКОНОМИЧЕСКОЕ РАЗВИТИЕ РЕГИОНОВ КАРАКУЛЕВОДЧЕСКОЙ ОТРАСЛИ

Аннотация. В статье рассмотрен вопрос социально-экономического развития регионов каракулеводческой отрасли. Были представлены инновационные идеи по динамике цепочки добавленной стоимости в системе подготовки, переработки и реализации продукции каракулеводства.

Ключевые слова: животноводство, каракулеводство, экосистема, ресурсосберегающие разработки, экономическая эффективность.

Shodiev B.T.

associate professor

Department of “Innovative Economics”

Karshi Engineering and Economic Institute

Uzbekistan, Karshi

SOCIO-ECONOMIC DEVELOPMENT OF THE TERRITORIES WHERE KARAKUL FARMING INDUSTRIES ARE LOCATED

Annotation. The article examines the issue of socio-economic development of the regions of the karakul farming industry. Innovative ideas were presented on the dynamics of the value chain in the system of preparation, processing and sale of karakul products.

Key words: animal husbandry, astrakhan breeding, ecosystem, resource-saving development, economic efficiency.

Комплексно увеличить существующий потенциал каракулеводческой отрасли, обеспечить эффективную работу ферм, укрепить экономические связи между предприятиями в “системе производство-подготовка-сортировка-переработка-сбыт продукции каракулеводства”, наконец, в качестве. В результате целесообразно ускорить институциональные реформы с целью реализации систематических мер по устойчивому развитию этой отрасли.

В последние годы в целях последовательного развития отрасли животноводства и каракулеводства приняты Указ Президента Республики

Узбекистан 2 сентября 2020 года № УП-6059 “О мерах по дальнейшему развитию шелководства и каракулеводства в Республике Узбекистан” и 2 сентября 2020 года № ПП-4817 “Об организации деятельности Комитета Республики Узбекистан по развитию шелководства и шерстяной промышленности”.

По нашему мнению, каракульское племенное животноводство имеет 21,5 млн гектар в резервах обществ с ограниченной ответственностью, фермерских хозяйств, специализирующихся на пастбищном скотоводстве, государственных лесных хозяйств и районных хокимиятов для решения таких актуальных вопросов, как сохранение, восстановление и развитие биоразнообразия, сохранение чистой окружающей среды и пустынно-пастбищных территорий, предлагается осуществить следующие организационные и экономические мероприятия.

Во-первых, общества с ограниченной ответственностью "каракулеводство" и крупные пастбищные территории, находящиеся на балансе государственных лесхозов, ежегодно выделяются населению и другим юридическим лицам на определенный срок (например, марте – октябрь) для содержания скота, и за это взимается плата за поголовье каждого крупного рогатого скота.

Начиная с 2020 года, средства, получаемые от оказания услуг в этом направлении, не должны расходоваться на другие направления, а должны расходоваться на мероприятия по повышению биоразнообразия и борьбу с деградацией пастбищ в полном объеме.

По данному вопросу заинтересованные министерства и ведомства совместно разрабатывают и проводят государственную регистрацию соответствующих нормативно-правовых актов.

Во-вторых, начиная с 2020 года - общества с ограниченной ответственностью по разведению крупного рогатого скота, специализирующиеся на пленоводстве животноводческие фермы с пастбищными территориями должны ежегодно в обязательном порядке разработать “план системного и упорядоченного кормления скота на пастбищных территориях” совместно со специалистами учеными и практикантами по животноводству и организациями кормлений животных строго в соответствии с этим планом. Во-вторых, подразумевается проведение постоянных мониторингов реализации данного плана на практикесоответствующими местными государственными органами, территориальными подразделениями министерств и ведомств, учеными, представителями средств массовой информации.

В-третьих, для укрепления материально-технической базы высших образовательных учреждений, а также научно-исследовательских институтов, в которых готовятся специализированные кадры по пастбищам (скотовод геоботаник, почвовед, эколог, мелиоратор и другие), необходимо ежегодно добиваться выделения целевых средств за счет республиканского

и местных бюджетов, высших образовательных учреждений и научных учреждений.

Вышеизложенные предложения носят комплексный характер, по которым разработка и внедрение в практику необходимых документов дает свои положительные результаты в кратчайшие сроки. Так как эти предложения были разработаны на основе научных исследований по развитию пастбищного животноводства, в частности, в сфере каракулеводства.

В-четвертых, в нашей республике рекомендуется внедрить **“механизм планирования гармоничного управления использованием пастбищных земель”**. Данный механизм внедрен в деятельность организаций/ассоциаций при использовании пастбищ в развитых странах, соседних республиках как Кыргызстан и Казахстан, что дает положительные результаты.

В целях осуществления мониторинга состояния использования пастбищных земель или контроля за выполнением других социально-экономических и экологических мероприятий, находящихся в ведении обществ с ограниченной ответственностью по разведению каракулеводства, хозяйствующих субъектов, специализирующихся на пастбищном скотоводстве, хокимията района, отдела ветеринарии и развития животноводства, отдела сельского хозяйства, отдела земельных ресурсов и государственного кадастра, Совета фермеров, экологической инспекции, депутата районного совета, Комитета женщин в условиях Республики Узбекистан, Рабочая группа, состоящая из представителей таких организаций, как ”Союз молодежи”, должна быть создана и постоянно взаимодействовать с этой рабочей группой.

Каждый член рабочей группы в рамках своих служебных полномочий дает предложения и рекомендации руководителям хозяйствующих субъектов, использующих пастбища, и через определенный срок эта группа будет находиться в хозяйственном субъекте и совместно изучать исполнение данных рекомендаций и предложений, то есть будет создана **“скоординированная система сотрудничества в управлении использованием пастбищ”**.

В-пятых, Государственному комитету по ветеринарии и развитию животноводства совместно с Ассоциацией “Каракулеводство”, Министерством сельского хозяйства, Государственным комитетом лесного хозяйства и Советом фермерских, дехканских хозяйств и владельцев приусадебных земель Узбекистана необходимо провести практические семинары по эффективному использованию пастбищ с привлечением ученых и квалифицированных специалистов в обществе с ограниченной ответственностью по разведению, фермерских хозяйствах пастбищ.

Кроме того, комитет в сотрудничестве с высшими образовательными и научными учреждениями имеет целью финансово-организационную

поддержку инновационных и практических проектов по эффективному использованию пастбищ.

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*Эгамбердиев Ш.Ш.
студент 2 курса
направление «Экономика»
Тешабоева З.Т.
доцент
кафедра «Экономика»
Андижанский машиностроительный институт*

ИСПОЛЬЗОВАНИЕ ЭНЕРГОСБЕРЕГАЮЩИХ ТЕХНОЛОГИЙ В СТРОИТЕЛЬСТВЕ – ФАКТОР ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ

Аннотация. В статье рассмотрена необходимость повышения эффективности строительства и снижения его стоимости. Показано значение новых технологий строительства и повышения энергоэффективности как фактора повышения экономической эффективности строительства. Предложены направления повышения энергоэффективности строительства.

Ключевые слова: Развитие строительства, стоимость строительства, энергоэффективные технологии в строительстве, новые материалы.

*Egamberdiev Sh.Sh.
2nd year student
direction "Economics"
Teshaboeva Z.T.
associate professor
Department of Economics
Andijan Mashine- Building Institute*

THE USE OF ENERGY-SAVING TECHNOLOGIES IN CONSTRUCTION IS A FACTOR IN INCREASING EFFICIENCY

Annotation. The article considers the need to increase the efficiency of construction and reduce its cost. The importance of new construction technologies and energy efficiency improvement as a factor in increasing the economic efficiency of construction is shown. Directions for improving the energy efficiency of construction are proposed.

Keywords: Development of construction, cost of construction, energy-efficient technologies in construction, new materials.

Введение. Одним из ключевых секторов экономики Узбекистана, развитие которого играет значительную роль в социально-экономическом

развитии страны, является строительство. В последние годы, благодаря ряду реформ и инвестиций, строительная сфера Узбекистана переживает заметный рост. По итогам 2022 года доля строительства в ВВП Республики Узбекистан составила 6,7 % (в 2021 году – 6,6 %). Объем валовой добавленной стоимости строительства составил 55 522,7 млрд. сумов, что составило 106,6% по сравнению с 2021 годом [6].

Одним из важных направлений развития строительной сферы является повышение качества строительства и улучшение его технологических характеристик. Внедряются новые стандарты и нормы строительства, что позволяет улучшить качество строительных объектов и снизить риски для здоровья и безопасности людей.

В последние годы в стране активно развиваются новые технологии в строительстве. В частности, все больше используются технологии информационного моделирования зданий (BIM), которые позволяют более эффективно использовать ресурсы и сокращать сроки строительства [2].

Привлечение иностранных инвестиций также играет важную роль в развитии строительной отрасли Узбекистана. В стране активно работают иностранные строительные компании, которые предлагают новые технологии и опыт работы на международном рынке. Благодаря этому, в Узбекистане реализуются крупные строительные проекты с участием иностранных инвесторов.

Тем не менее, строительная отрасль Узбекистана сталкивается с рядом вызовов, включая рост цен на строительство, коррупцию, недостаток квалифицированных кадров и устаревшие строительные нормы и стандарты в области энергоэффективности. Для решения этих проблем, правительство Узбекистана продолжает работу по совершенствованию законодательства, борьбе с коррупцией и повышению качества образования в строительной сфере [4, с.307].

Одной из актуальных задач, стоящих на сегодняшний день перед строительной отраслью страны, являются вопросы снижения стоимости строительства жилья и повышения его энергоэффективности [5].

В современном жилищном строительстве используются различные методы энергосбережения. Некоторые из них включают:

- Использование энергоэффективных материалов, таких как утеплители, которые помогают сохранять тепло внутри здания и снижать затраты на отопление.
- Установка солнечных панелей на крышах домов для генерации электроэнергии для нужд здания, например, для питания систем освещения, отопления, вентиляции и кондиционирования воздуха.
- Применение системы “умный дом”, которая позволяет контролировать и автоматизировать потребление энергии в доме.
- Установка окон с высоким коэффициентом теплопередачи, которые снижают потери тепла через окна.

- Использование светодиодного освещения, которое потребляет меньше электроэнергии и имеет более длительный срок службы.
- Установка рекуператоров воздуха, которые позволяют возвращать тепло из вытяжного воздуха обратно в помещение.
- Применение технологии пассивного дома, которая снижает потребность в активном отоплении и охлаждении.
- Использование геотермальной энергии для отопления и охлаждения зданий.
- Внедрение водосберегающих технологий, таких как сенсорные краны и аэраторы для снижения расхода воды.

Использование местного сырья в строительстве может снизить стоимость строительства за счет уменьшения транспортных расходов и улучшения доступности материалов. Однако, необходимо учитывать качество и характеристики местного сырья, а также его влияние на долговечность и безопасность зданий. В некоторых случаях, использование местного сырья может потребовать дополнительных затрат на обработку и подготовку материалов.

Архитектурные решения зданий для энергосбережения и увеличения солнечного света в помещениях также играют важную роль и включают в себя следующие аспекты:

- Оптимизация формы и ориентации здания: расположение здания таким образом, чтобы оно максимально использовало солнечный свет и минимизировало потери энергии. Например, использование южного фасада для максимального поглощения солнечной радиации и установка окон на восток и запад для оптимального освещения помещений.
- Создание естественной вентиляции: использование естественной вентиляции для снижения потребности в кондиционировании воздуха и уменьшения потребления энергии.
- Применение систем умного дома: использование технологий умного дома для контроля и оптимизации потребления энергии в здании.

Создание домов на 3D принтере является новым и перспективным направлением в строительстве. Этот метод позволяет быстро и эффективно строить дома с использованием экологически чистых материалов.

Однако, для широкого налаживания этого направления необходимо решить ряд проблем, связанных с качеством печати, стоимостью материалов и сложностью конструкции. Кроме того, необходимо разработать стандарты и нормы для таких домов, чтобы они были безопасными и долговечными.

Заключение. Таким образом, решение вопросов повышения эффективности жилищного строительства и снижения его стоимости тесно связано с технологиями энергосбережения и новыми подходами к организации строительных работ.

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Эргашев Х.М.
старший преподаватель
кафедра анестезиологии – реаниматологии
и экстренной медицинской помощи
Андижанский государственный медицинский институт

ПРЕДОПЕРАЦИОННАЯ ПОДГОТОВКА БЕРЕМЕННЫХ С АНЕМИЕЙ

В обзорной статье дано определение железодефицитной анемии, представлены механизмы, влияющие на дефицит железа при беременности, осложнения беременности, родов и послеродового периода, методы коррекции и профилактики дефицита железа, включая современную альтернативу пероральному приему железа — его внутривенные формы, которые способствуют быстрому повышению уровня железа, а также не обладают токсичностью и легко переносятся.

Ключевые слова: карбомальтозат железа; олигоизомальтозат железа; внутривенное железо; железодефицитная анемия; дефицит железа; анемия беременных.

Ergashev Kh.M.
senior lecturer
Department of Anesthesiology – Reanimatology
and Emergency Medical Care
Andijan State Medical Institute

PREOPERATIVE PREPARATION OF PREGNANT WOMEN WITH ANEMIA

The review article defines iron deficiency anemia, the mechanisms determining iron deficiency in pregnancy, the complications of pregnancy, childbirth and the postpartum period, the methods of correction and prevention of iron deficiency, including a modern alternative to oral iron intake-its intravenous forms, which contribute to a rapid increase of iron levels. And also do not have toxicity and are easily tolerated.

Keywords: ferric carboxymaltose; iron isomaltose; intravenous iron; iron deficiency anemia; iron deficiency; anemia in pregnancy.

Анемия относится к числу глобальных проблем современного здравоохранения, в частности акушерства. Анемия беременных стабильно занимает первое место в ряду экстрагенитальной патологии беременных.

По данным ВОЗ, в мире железодефицитной анемией (ЖДА) страдают более 2 млрд человек (свыше 30 % населения), большинство из них

женщины и дети. В России около 12 % женщин фертильного возраста страдают ЖДА, а скрытый дефицит железа, являющийся фактически предстадией ЖДА, наблюдается почти у половины женщин фертильного возраста.

Актуальность совершенствования методов лечения беременных с ЖДА обусловлена ростом заболеваемости и неблагоприятным влиянием на течение и исход гестационного процесса.

Железодефицитная анемия при беременности — состояние, обусловленное снижением содержания железа в сыворотке крови, костном мозге и депо в связи с увеличением объема циркулирующей крови и потребности в микроэlemente, снижением его депонирования, высоким темпом роста организма плода, что приводит

к нарушению образования гемоглобина, гемической гипоксии с последующим развитием вторичных метаболических расстройств.

Распространенность анемии в развитых странах составляет 8–20 %, в слаборазвитых странах доходит до 80 %. В 90 % случаев анемия у беременных является железодефицитной.

Согласно современным данным дефицит железа в конце гестационного процесса развивается у всех беременных либо в скрытой, либо в явной форме. Это связано с тем, что беременность сопровождается дополнительной потерей железа (около 1200 мг).

Особенности течения беременности, родов и послеродового периода у больных с железодефицитной анемией

К осложнениям в период беременности относятся: угроза прерывания беременности в 20–42 % случаев, повышение риска преждевременных родов в 11–42 % случаев, гестоз у 30–50 % беременных с ЖДА, хроническая плацентарная недостаточность, внутриутробная задержка развития плода (25 %), преждевременная отслойка плаценты (25–35 %), гипоксия плода, артериальная гипотония (40 %).

При анемии, возникшей на поздних сроках беременности, преобладают преждевременные роды у 11–42 %, основной причиной которых является фетоплацентарная недостаточность на фоне гемической и тканевой гипоксии, резкого снижения уровня железа не только в материнской крови, но и в плаценте.

При длительном течении анемии нарушается функция плаценты, происходит изменение ее трофической, метаболической и газообменной функций, что способствует развитию плацентарной недостаточности, синдрома задержки внутриутробного развития плода, что, в свою очередь, обусловлено резким снижением уровня железа в плаценте, изменением активности дыхательных ферментов. Кроме того, недостаточное депонирование железа в антенатальном периоде становится одной из причин развития дефицита железа и анемии у грудных детей.

Дисциркуляторные и дистрофические изменения в миометрии при дефиците железа, нарушение нейромышечной передачи приводят к нарушению сократительной деятельности миометрия и преждевременной отслойке нормально расположенной плаценты.

К осложнениям в родах относятся: слабость родовой деятельности, кровотечения. Риск для матери включает: истощение резервов крови при родах, что ведет к повышению риска переливания аллогенной крови при значительной кровопотере (> 1000 мл), появление симптомов анемии (усталость, головная боль, головокружение, упадок сил, снижение переносимости физических и психологических нагрузок, продолжительная госпитализация).

Нарушение тканевого метаболизма вызывает понижение сократительной функции миометрия, развитие слабости родовой деятельности в родах у 10–15 % рожениц и, как следствие, увеличение объема патологической кровопотери в родах и в послеродовом периоде у 7,8–23,6 % родильниц.

Истинные ЖДА беременных могут сопровождаться нарушениями коагуляционных свойств крови, что приводит к увеличению кровопотери в родах и гипотоническим кровотечениям у 10 % женщин, находящимся в прямой зависимости от степени тяжести анемии.

Наличие кровяной (гемической) гипоксии, характерное для анемии, позволяет говорить о высокой степени риска патологического течения послеродового (послеоперационного) периода. Нарушение инволюции матки, инфекционно-воспалительные поражения полового аппарата, пониженная лактация (гипогалактия), гипотонические кровотечения в раннем послеродовом периоде, истощение запасов железа в организме матери и новорожденного часто диагностируются у родильниц с железодефицитной анемией. У 12 % родильниц с ЖДА послеродовой период осложняется гнойно-септическими заболеваниями. У 38–61,2 % развивается гипогалактия, причем наблюдаются изменения как в объеме и длительности лактации, так и в качественном составе грудного молока, а для детей первых 3–4 месяцев жизни материнское молоко является единственным продуктом питания, который обеспечивает равновесие обмена железа в организме.

Неблагоприятно сказывается железодефицитное состояние у матери на состоянии новорожденного, которое может привести к хронической гипоксии, что находит выражение в таких клинических проявлениях, как гипотрофия, высокая частота асфиксии, нарушение созревания тканей плода с отставанием срока гестации (патологическая незрелость). У детей в раннем неонатальном периоде отмечаются большая потеря массы тела и более медленное ее восстановление, запоздалое отпадение пуповинного остатка, длительное течение физиологической желтухи, нарушение процесса становления микробиоценоза кишечника. Гнойно септические

заболевания, обусловленные относительным иммунодефицитным состоянием, развиваются в два раза чаще, чем у детей здоровых матерей.

По данным исследований клиники Ганга Рам (Пакистан), частота перинатальной смертности существенно выше у пациентов, которые к моменту родоразрешения имели ЖДА 6,2 % против 1,3 %.

Кардиоинтервалографические исследования показывали, что в периоде новорожденности у детей, рожденных от матерей с ЖДА, выявлены высокая функциональная активность симпатической нервной системы и напряжение адаптационно-компенсаторных способностей новорожденного в стрессовой ситуации, при этом степень выраженности этих нарушений зависит от длительности и тяжести анемии у матерей.

Следовательно, анемия отягощает течение неонатального периода и послеродового периода, особенно после родоразрешения путем кесарева сечения.

Диагностика и дифференциальная диагностика анемии

Постановка диагноза анемии у беременных складывается из данных анамнеза, физикального обследования и клинико-лабораторных показателей. Учитывая появление клинической картины анемии лишь при средней и тяжелой степенях анемии, однозначна ведущая роль оценки лабораторных показателей обмена железа и гемограммы с целью раннего скрининга его дефицита. Скрининг включает определение концентрации гемоглобина, гематокрита, числа эритроцитов, концентрации сывороточного ферритина, трансферрина, цветового показателя.

Важнейшим показателем анемий служит уровень гемоглобина, при котором следует диагностировать анемию.

По данным ВОЗ,

- легкая степень анемии характеризуется снижением уровня гемоглобина от 109 до 90 г/л;
- средняя степень — от 89 до 70 г/л;
- тяжелая степень анемии — 70 г/л и менее.

Концентрация сывороточного железа подвержена суточным колебаниям: снижается после 12.00 и максимально высока между 7.00 и 10.00, и поэтому концентрация сывороточного железа не является патогномичным признаком анемии.

Определение количества гемоглобина в эритроците (МСН) и среднего объема эритроцитов (МСV) неспецифично, поскольку во время беременности нарастает объем плазмы и эритроцитной массы, вследствие чего объем циркулирующей крови (ОЦК) возрастает на 30–40 %.

Определение уровня ферритина в сыворотке крови в настоящее время считается «золотым стандартом» в лабораторной диагностике ЖДА, так как его снижение указывает на дефицит запасов железа в организме. Уровень ферритина менее 15 мкг/л подтверждает наличие дефицита железа независимо от концентрации гемоглобина.

Основными критериями ЖДА, отличающими ее от других патогенетических вариантов анемий, являются гипохромия эритроцитов, уменьшение среднего содержания Hb в эритроците, снижение содержания СЖ, стойкое снижение уровня СФ менее 15 нг/мл, тенденция к лейкопении. При выраженной анемии наблюдается умеренное увеличение скорости оседания эритроцитов (СОЭ).

ЖДА следует дифференцировать от анемии хронических заболеваний, заболеваний аутоиммунного характера, инфекционно-воспалительных заболеваний. Отличительной особенностью феррокинетики, характерной для больных с инфекционно-воспалительными заболеваниями, являются высокие значения сывороточного ферритина (СФ), которые не зависят от этиологии заболевания, но коррелируют со степенью тяжести анемии. Различие показателей норм объясняется влиянием на концентрацию сывороточного ферритина воспалительных, аутоиммунных факторов. Следовательно, при наличии инфекционного процесса в организме уровень ферритина может быть ложнонормальным или повышенным, поскольку апоферритин относится к острофазовым белкам.

При острой инфекции, когда анемический синдром развивается быстро, анемия часто нормохромная. Чем больше длительность хронического течения анемии, тем она становится более гипохромной с более выраженным воспалительным компонентом в ее этиологии.

Для данного состояния характерно отсутствие признаков сидеропенического синдрома и положительного эффекта от ферротерапии. Индикатором воспалительного процесса в организме служат повышение С-реактивного белка, лейкоцитоз, сдвиг лейкоцитарной формулы влево и ускорение СОЭ.

Выяснению связи между влиянием иммунной системы на обмен железа и развитием анемии хронических заболеваний помогло открытие белка острой фазы воспаления гепсидина, регулятора метаболизма железа. Повышение синтеза гепсидина приводит к развитию тяжелой ЖДА, так как гепсидин снижает абсорбцию железа и способствует его задержке в макрофагах. Следовательно, при дефиците гепсидина воспалительный процесс не сопровождается снижением концентрации железа.

Профилактика и лечение железодефицитной анемии. Согласно рекомендациям ВОЗ все женщины для профилактики и лечения анемии на протяжении всей беременности и в первые 6 месяцев лактации должны принимать препараты, содержащие железо и его синергисты.

Целью терапии железодефицитных состояний является устранение дефицита железа и восстановление его запасов. Добиться этого можно только при устранении причины, лежащей в основе ЖДА и одновременном возмещении дефицита железа в организме.

При лечении ЖДА существуют три способа восстановления положительного баланса железа в организме:

- диета — повышение содержания пищевого железа;
- оральное введение железа;
- парентеральное введение железа.

При выборе пищевого рациона, как одного из составляющих компонентов комплексной терапии ЖДА, следует ориентироваться не на общее содержание железа в продуктах, а на форму, в которой оно представлено. Наиболее полно всасывается гемическое железо, поскольку его биодоступность оптимальна. Из растительной пищи усваивается около 1 % железа. Известно, что покрытие дефицита железа в организме с помощью только диетической коррекции невозможно вследствие ограничения всасывания микроэлемента из пищи в желудочнокишечном тракте. Предел всасывания железа из продуктов питания в кишечнике составляет 2–2,5 мг, а потребность железа во втором и третьем триместрах соответственно возрастает на 2–3 и 3–6 мг/сут. Поэтому основным методом профилактики дефицита железа у беременных считают оральное применение препаратов железа.

Идеальный противоанемический препарат должен содержать оптимальное количество железа, оказывать минимальные побочные эффекты, иметь простую схему применения, наилучшее соотношение эффективность/цена. Однако многие железосодержащие препараты обладают рядом недостатков: низкая биодоступность, диспептические явления из-за способности раздражать слизистую оболочку желудочнокишечного тракта, окрашивание зубов в темный цвет, металлический привкус, зависимость абсорбции от других химических веществ, взаимодействие с другими лекарственными препаратами, компонентами пищи, нарушение режима приема из-за длительного приема препарата (от двух месяцев).

Кроме того, пероральная терапия невозможна при нарушениях всасывания (гастрит, язвенная болезнь, болезнь Крона, резекция тонкого кишечника и др.) и малоэффективна при необходимости срочной коррекции выраженной анемии.

В указанных случаях препаратами выбора становятся внутривенные препараты железа. Основанием для такого подхода являются быстрое повышение концентрации гемоглобина и пополнение запасов железа в организме за счет максимальной однократной дозы, максимальное снижение частоты гемотрансфузий, длительный эффект после однократного введения пролонгированных форм препаратов железа, что снижает затраты, а частота побочных реакций составляет при этом менее 0,5 %.

В некоторых случаях (тяжелая ЖДА после 14 недель гестации и в третьем триместре беременности при всех формах анемии) требуется

быстрое восполнение запасов железа в организме путем введения максимальной дозы железосодержащего препарата за относительно короткий промежуток времени, что возможно только при внутривенном введении препаратов железа.

В настоящее время в клинической практике используются следующие препараты железа для внутривенного введения: декстран железа (Космофер), сахарат железа (Венофер), глюконат железа (Феррлецит), карбоксимальтозат железа (Феринжект), олигоизомальтозат железа (Монофер). Все перечисленные препараты представляют собой коллоиды, состоящие из сфероидальных железо-углеводных комплексов. Углеводная оболочка придает комплексу стабильность, замедляет высвобождение железа и поддерживает образующиеся формы в коллоидной суспензии. Эффективность и безопасность внутривенных препаратов железа зависят от их молекулярной массы, стабильности и состава. Комплексы с низкой молекулярной массой, такие как глюконат железа, менее стабильны и быстрее высвобождают в плазму железо, которое в свободном виде может катализировать образование реактивных форм кислорода, вызывающих перекисное окисление липидов и повреждение тканей, в связи с чем они не могут быть использованы в высоких разовых дозах. Значительная часть дозы подобных препаратов выводится через почки в первые 4 часа после приема и не используется для эритропоэза. Хотя препараты декстрана железа обладают высокими молекулярной массой и стабильностью, их недостатком является повышенный риск аллергических реакций. Декстран, входящий в состав оболочки некоторых микроорганизмов, высокоиммуногенное для человека вещество. Многие пациенты сенсibilизированы к этому веществу в связи с естественной иммунизацией, вызванной контактами с декстран-содержащими бактериями. В связи с этим внутривенное введение сенсibilизированным пациентам препаратов железа, разработанных на основе декстрана или же на основе подобных по структуре декстрану молекул других углеводов, может вызывать смертельно опасный анафилактический шок или тяжело протекающую анафилактоидную реакцию.

Препараты на основе мальтозы и изомальтозы обладают высокой эффективностью, низкой иммуногенностью и минимальной токсичностью. Такими новыми железосодержащими препаратами для внутривенного введения являются карбоксимальтозат железа (Феринжект) и олигоизомальтозат железа (Монофер).

Карбоксимальтозат железа сочетает в себе положительные свойства высокомолекулярных комплексов железа, не содержит декстран и не вызывает реакции гиперчувствительности, наблюдающиеся при применении препаратов, содержащих декстран, и, в отличие от сахарата и глюконата железа, может вводиться в более высокой дозе (1000 мг за 15 минут). Кроме удобства применения важными свойствами

карбоксимальтозата железа являются низкая токсичность и отсутствие оксидативного стресса, которые определяются медленным высвобождением железа из стабильного комплекса с углеводом, по структуре сходного с ферритином.

Олигоизомальтозат железа (Монофер) представляет собой комплекс гидроксида железа III. Этот олигоизомальтозный комплекс по структуре аналогичен ферритину, защищает организм от токсического действия несвязанного железа (III) неорганической природы, так как обеспечивает контролируемое и медленное высвобождение биодоступного железа при незначительном риске образования свободного железа. Ввиду низкой токсичности препарата Монофер может применяться в высоких дозах. Максимальная разовая доза — 20 мг/кг и должна вводиться не менее 60 мин. Кроме того, пациент должен находиться под медицинским наблюдением в течение часа после окончания инфузии.

В заключение следует отметить, что анемия значительно отягощает течение гестационного процесса и послеродового периода, особенно после родоразрешения путем кесарева сечения, вследствие этого необходимо совершенствование методов лечения и оптимизации алгоритмов ведения беременных с анемией. Необходимо учитывать, что эффективность лечения зависит от своевременности постановки диагноза. Чем раньше приступить к лечению анемии, тем вероятнее восстановить запасы железа в организме беременной и избежать серьезных осложнений, связанных с дефицитом железа.

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*Эсанов Н.А.
преподаватель
кафедра “Географии”
Термезский государственный университет
Узбекистан, Термез*

ПЕРСПЕКТИВЫ ИСПОЛЬЗОВАНИЯ ТЕХНОЛОГИЙ «УМНЫЙ ГОРОД» В ЭКОНОМИЧЕСКОМ И СОЦИАЛЬНОМ РАЗВИТИИ ГОРОДА ТЕРМЕЗ

Аннотация. В данной статье изучены конкретные аспекты развития городов в условиях Узбекистана, в частности, некоторые аспекты их современного развития, разработки и реализации концепции умного города в создании безопасных и комфортных условий жизни населения. Изучены возможности реализации концепции «умного города» в условиях города Термез и сделаны соответствующие предложения. Был рассмотрен опыт реализации идеи умных городов в ведущих странах мира, последовательно исследованы наблюдаемые в них достижения и недостатки и даны соответствующие выводы.

Ключевые слова: умный город, интернет-инструменты, технологии, стандартизация, цифровые технологии.

*Esanov N.A.
lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

PROSPECTS FOR THE USE OF SMART CITY TECHNOLOGIES IN THE ECONOMIC AND SOCIAL DEVELOPMENT OF THE CITY OF TERMEZ

Annotation. This article examines specific aspects of urban development in the conditions of Uzbekistan, in particular, some aspects of their modern development, development and implementation of the smart city concept in creating safe and comfortable living conditions for the population. The possibilities of implementing the “smart city” concept in the conditions of the city of Termez have been studied and appropriate proposals have been made. The experience of implementing the idea of smart cities in the leading countries of the world was reviewed, the achievements and shortcomings observed in them were consistently examined and the corresponding conclusions were given.

Keywords: smart city, internet tools, technologies, standardization, digital technologies.

К XXI веку города стремительно развиваются, что, безусловно, является положительной тенденцией. Однако есть положительные и отрицательные стороны развития городов, и если проанализировать их, то увидим, что проблем, ожидающих своего решения, достаточно. Пробки на дорогах, проблемы в коммунальном хозяйстве, преступность, эффективная борьба с ней, вопросы энергосбережения, которые сегодня часто наблюдаются в современных городах, требуют нового, современного, инновационного подхода к таким проблемам. В густонаселенных городах предпринимаются усилия по достижению эффективного управления и экономики с использованием возможностей интернет-системы и технологий искусственного интеллекта. Одним из таких подходов является идея «Умного города».

Прежде всего, нам нужно понять, что это за идея. Развитие науки и техники, прогресс в сфере информационных технологий (наличие программного обеспечения в любой области или отсутствие проблем, связанных с его созданием...) сегодня позволяют людям эффективно использовать цифровые технологии в управлении городами. Эти технологии обеспечивают наиболее оптимальное решение проблемы в короткие сроки за счет сбора большого объема информации о городе, выявления факторов, их вызывающих. Добиться таких результатов, используя только Интернет, конечно, сложно, многие объекты инфраструктуры города имеют специальное оборудование для анализа ситуации-камеры наблюдения для наблюдения за дорогами, инфракрасные датчики, метеорологические приборы для наблюдения за погодой и состоянием окружающей среды, беспроводной Интернет-данные из системы wi-fi и многих других источников, главное это искусственный интеллект (интегрированный), который собирает, хранит, анализирует, сравнивает их в режиме онлайн, предлагает оптимальные решения проблем и минимизирует вмешательство человека в этот процесс (программное обеспечение) нам необходимо понять, как связаться с системой.

Вкратце можно сказать, что «Умный город»-это концепция города нового поколения, обеспечивающего эффективное управление и высокий уровень жизни населения за счет использования инновационных технологий. Идея создания умного города вошла в нашу жизнь сравнительно недавнем прошлом, когда такие ИТ-гиганты, как IBM, развивают города, способные удовлетворить потребности сегодняшнего растущего населения и растущего населения в этих городах, обеспечивая им высокие стандарты. Можно сказать, что все началось с продвижения развития идеи строительства новых городов в рамках инициативы «УМНАЯ ПЛАНЕТА». Идея была немедленно тщательно изучена ведущими

мировыми ИТ-компаниями и предпринимателями, градостроителями и архитекторами, работающими в этой области, и начали разрабатываться планы и предложения по реализации. Ведущие промышленно развитые страны мира, такие как Южная Корея, Сингапур, Япония, страны, уделяющие большое внимание развитию туристического сектора, такие как Объединенные Арабские Эмираты, и такие страны, как Китай и Индия, поставившие перед собой цель Став мировым центром промышленности, науки и техники, начали вкладывать значительные средства в исследования и разработки городских проектов. В качестве первого умного города, спроектированного в 2002 году, можно указать город Сонгдо (SongDo) в Республике Корея (Южная Корея). Новый инновационный город Сонгдо расположен в 30 км от столицы Сеула, города с трехсоттысячным населением, экологически чистым, полностью заранее спланированной инфраструктурой, коммунальными, образовательными, развлекательными и досуговыми услугами. введен в эксплуатацию в 2016 году, но несмотря на то, что большая часть города сдана, мы можем наблюдать, что люди еще не заселились¹¹⁴.

Сегодня программы, основанные на идее «умного города», активно используются при планировании городов во многих странах мира, при проектировании существующих или планируемых новых территорий. В качестве примера таких городов можно показать многие города развивающихся и быстро развивающихся стран Индии и Китая, а также всемирно известные древние города, такие как Амстердам, Барселона, Мадрид, Стокгольм, Чикаго, Пекин, Глазго, Дублин.

114 <https://bigpicture.ru/umnyj-gorod-budushhego-v-kotorom-nikto-ne-zhivet-kak-provalilsya-samyj-ambicioznyj-stroitelnyj-proekt-v-azii/>



Рисунок-1. По данным Smart City Index, города, которые больше всего интегрировали умные технологии в повседневную жизнь горожан в 2021 году¹¹⁵

Сегодня в Республике Узбекистан разработана концепция «Умный город», и принимаются плановые меры по ее реализации.

Например, в качестве основных направлений реализации проектов внедрения технологий «Умный город», «Умный транспорт», «Умное образование», «Умная медицина», «Умная энергетика», «Умное водоснабжение и водоотведение». «Умное жилищно-коммунальное управление», «Умное здание», «Умный дом», «Умная власть».

На сегодняшний день общее количество автотранспортных средств в городе Термез составляет 15 605, а ежедневное количество въезжающих в город автотранспорта извне – 4 958. Количество автомобилей на тысячу жителей-12,5. Помимо преимуществ автомобилей, не следует забывать и об ущербе, который они наносят окружающей среде, и о вкладе, который они вносят в увеличение городского шума. В городе Термез ежегодное количество токсичных веществ, выбрасываемых в окружающую среду от транспорта, составляет 59 тысяч тонн.

Наблюдения за автотранспортной системой города Термеза показывают, что 74 процента автотранспорта, передвигающегося по городу, составляют частные автомобили, поэтому на центральных 6 улицах города наблюдаются заторы, это А.Темур, И.Он. на улицах Каримова, Ат-Термизи,

¹¹⁵ <https://nonews.co/directory/lists/cities/smart-city-index>

С.Оллохьяра, Истикляля и А.Навои пробки 5 из 10. Основная причина этого заключается в том, что пропускная способность дороги не соответствует объему транспортного потока. К сожалению, только в 2022 году в городе произошло 55 ДТП, из них 8 (14,5%) ДТП закончились смертью, 51 (92,7%) ДТП повлекло за собой различные травмы.

Опыт крупных городов мира показывает, что пробки возникают из-за неправильной парковки или стоянки большинства автомобилей на обочине дороги.

Если следовать мировому опыту, то для улучшения движения городского транспорта, уменьшения заторов на дорогах, а главное, уменьшения количества выбрасываемого в атмосферу CO₂, экономии времени горожан и туристов практически на всех парковках города В городе Барселона водителям по специальной программе предоставлено более 20 000 бесплатных парковочных мест. Мы видим, что установлены датчики, передающие информацию. Это позволило сэкономить время и деньги водителей, а главное, снизить загрязнение городской атмосферы.

Очевидно, что такой опыт должен быть реализован уже сегодня в городе Термезе. В то же время есть один упущенный из виду аспект этой практики, о котором не следует забывать, а именно онлайн-информация о запланированных парковочных местах, их занятости или наличии, недоступность программного обеспечения.



Рисунок-2. Проект уличной парковки автотранспорта

Сегодня улицы Северного Дарвоза, соединяющие город Термез с другими районами области в северном направлении, Ибн Сины, Алишера Навои, Баркамола Авлода, Шарафа Рашидова, Чоршанби Сафарова, Ислама Каримова, которые являются центральными улицами-ветвями Термеза. Мы считаем целесообразным выделение временных парковочных мест, как указано выше, на оживленных улицах и внедрение системы «Умное размещение», предусмотренной концессией «умный город».

Как мы уже упоминали выше, к 21 веку в городах будет жить несколько миллиардов человек. Если кратко проанализировать статистику, то к 2050 году две трети населения мира будет проживать в городах, тогда как в 1800 году этот показатель составлял всего 2%, а в 1950 году в городах проживали 30% населения мира¹¹⁶.

В процессе построения умных городов недостаточно сосредоточить основу городской политики на целях устойчивого развития, важнее проанализировать совместное функционирование технологий умного города с различными аспектами социальной среды¹¹⁷.

На наш взгляд, появление и развитие умных городов сегодня могут быть обусловлены следующими факторами:

Таблица №1

Положительные и отрицательные факторы, влияющие на развитие умных городов

№	Факторы положительного влияния	Негативные влияющие факторы
1	высокий уровень развития урбанизации	Поскольку многие технические факторы концессии находятся в стадии первоначального тестирования и разработки, их использование в повседневной жизни пока невозможно или ограничено
2	развитие интернета и связанных с ним инструментов	высокая стоимость реализации концессии «умный город»
3	появление и развитие современных стандартов мобильной связи (4G, 5G)	нехватка квалифицированных специалистов, работающих в данной сфере
4	относительно дешевизна процесса реализации концессии умного города	

Таблица составлена автором

Словом, пробки, аварии, которые сегодня часто наблюдаются в городах, требуют нового, современного, инновационного подхода к решению вопросов обеспечения чистоты атмосферного воздуха города. В густонаселенных городах, таких как Термез, необходимо попытаться добиться эффективного управления и экономии, используя возможности системы Интернет и технологий искусственного интеллекта.

Например, следующего можно добиться путем внедрения технологических решений в сфере «Умный транспорт»:

¹¹⁶ <https://www.un.org/ru/youthink/urbanization.shtml>

¹¹⁷ Мухаметов Д.Р. Создание устойчивых умных городов: технологии вовлечения граждан и совместного экспериментирования // Вопросы инновационной экономики.–2022.–Том 12.–№ 2.–С. 843-858.–doi:10.18334/vinec.12.2.114443.

- автоматизация системы управления дорожным движением и мониторинг показателей транспортных потоков, в том числе мониторинг дорожного движения в режиме реального времени;
- программное обеспечение управления общественным транспортом; предоставление участникам дорожного движения информации о дорожных условиях и ситуациях, расписаниях движения общественного транспорта через автоматизированную систему;
- системы безопасности в общественном транспорте;
- внедрение технологий передачи информации, то есть средств связи и устройств обработки стандартов 4 и 5G, комплексной сети Интернет и других элементов, обеспечивающих сбор и передачу данных в хранилище;
- Внедрение городских платформ сети Интернет для «Умного города»;
- Технология «Интеллектуальное позиционирование», определяющая свободные места для размещения транспортных средств и их расстояние;
- электронные системы оплаты за пользование автомобилями и дорогами;
- постоянный мониторинг пассажирских перевозок;
- мы думаем, что это должно предложить улучшенные представления о геоинформационных технологиях и навигационных системах.

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Эшев А.С.
старший преподаватель
кафедры управления бизнесом и инновациями
Каршинский инженерно-экономический институт

ПОВЫШЕНИЕ КОНКУРЕНТОСПОСОБНОСТИ СЕЛЬСКОХОЗЯЙСТВЕННОЙ ПРОДУКЦИИ И ЕЁ СТРАТЕГИЧЕСКИЕ ПОДХОДЫ

Аннотация. Кластерное развитие как фактор повышения конкурентоспособности сельского хозяйства и агропромышленного комплекса в целом имеет большое значение в силу уникальности современной инновационной экономики. С этой точки зрения в данной статье поясняется, что разработаны предложения, направленные на внедрение системы кластеров для повышения конкурентоспособности сельскохозяйственной продукции.

Ключевые слова: сотрудничество, кластерная система, стратегия, поддерживающая кластерная политика, интервенционная кластерная политика, концепция, кластеризация, конкурентоспособность, агропромышленные предприятия, конкурентоспособность сельскохозяйственной продукции, государственно-частное партнерство.

Eshev A.S.
senior lecturer
Department of Business Management and Innovation
Karshi Institute of Engineering and Economics

IMPROVING THE COMPETITIVENESS OF AGRICULTURAL PRODUCTS AND THEIR STRATEGIC APPROACHES

Abstract. Cluster development as a factor in increasing the competitiveness of agriculture and the agro-industrial complex as a whole is of great importance due to the uniqueness of the modern innovative economy. From this point of view, this article explains that proposals have been developed aimed at introducing a cluster system to increase the competitiveness of agricultural products.

Keywords: cooperation, cluster system, strategy, supportive cluster policy, interventional cluster policy, concept, clustering, competitiveness, agro-industrial enterprises, competitiveness of agricultural products, public-private partnership.

Роль аграрного сектора в социальном-экономическом развитии стран мира стремительно возрастает, так как именно одним из основных направлений устойчивого развития нашей страны является сельское

хозяйство. Тенденции развития в этой сфере приводят к осознанию необходимости использования современных технологий управления для стратегического развития. Эффективное стратегическое управление аграрного сектора сегодня возможно только в том случае, если оно признано производством качественной продукции. Без комплексного подхода к решению вопросов планирования, обеспечения качества и управления им невозможно дальнейшее совершенствование его развития.

Эффективность стратегического управления аграрного сектора выражается в том, насколько своевременно и точно фермерские хозяйства в состоянии реагировать на новые запросы и требования. Для успешного функционирования этих хозяйств, необходимо определить миссию, видение, ценности, цели деятельности, провести стратегический анализ, используя различные методологии и методы моделирования. Отсутствие или нечеткая формулировка некоторых из перечисленных компонентов может служить препятствием формированию стратегии сектора. Стратегия раскрывает долгосрочные цели, задачи и направления развития системы.

Необходимость формирования стратегии — это повышение эффективности использования ресурсов, дифференциация, основанная на отличительной характеристике территорий и учитывающая сельскохозяйственную специализацию, создание точек роста, позволяющих эффективно использовать концентрированные ресурсы, создание возможностей для взаимодействия и формирование интегрированной системы аграрного сектора.

В связи с этим вопросы развития и либерализации экономики, направлены на дальнейшее укрепление макроэкономической стабильности и сохранение высоких темпов роста экономики, повышение ее конкурентоспособности, модернизацию и интенсивное развитие сельского хозяйства, активное привлечение иностранных инвестиций в отрасли экономики и, в частности, сельского хозяйства страны путем улучшения инвестиционного климата, что является основной стратегией аграрной отрасли.

Для совершенствования аграрного сектора предстоит выполнение поставленных задач правительством, в частности расширение социального и корпоративного взаимодействия между органами власти и бизнесом по реализации задач долгосрочного экономического развития АПК. Вместе с тем, реализация стратегии развития аграрного сектора, развитие новых технологий в целях достижения конкурентоспособности, решения маркетинговых задач по развитию сектора и ориентирование на создание самостоятельной среды по производству продукции сельского хозяйства.

Сельское хозяйство является одной из важных отраслей экономики Узбекистана. Эта отрасль, наряду, с удовлетворением потребности населения в продуктах питания, а отраслей перерабатывающей

промышленности – в сырье, считается одним из перспективных источников укрепления экономического потенциала.

В «Стратегии действий по пяти приоритетным направлениям развития Республики Узбекистан в 2017-2021 годах», утвержденным Указом Президента Республики Узбекистан от 7 февраля 2017 года № УП-4947, основное внимание обращено на модернизацию и интенсивное стратегическое развитие сельского хозяйства.

Углубление структурных реформ и динамичное развитие сельскохозяйственного производства, дальнейшее укрепление продовольственной безопасности страны, расширение производства экологически чистой продукции, значительное повышение экспортного потенциала аграрного сектора являются важнейшими задачами, предусмотренными к осуществлению в перспективе.

Приоритетными направлениями стратегического развития сельского хозяйства, определенными в Стратегии действий, являются:

- развитие сельского хозяйства путем углубления структурных реформ, дальнейшее укрепление продовольственной безопасности и экспортного потенциала страны;

- совершенствование вопросов по улучшению мелиоративного состояния орошаемых земель, развитию мелиорационных и ирригационных объектов, внедрению в отрасль современных вода - и ресурсосберегающих технологий, использование инновационной технологии;

- внедрение научно-исследовательских работ по созданию новых селекционных сортов сельскохозяйственных культур, обладающих высокой продуктивностью, устойчивостью к болезням и вредителям, адаптированных к местным почвенно-климатическим и экологическим условиям;

- реконструкция и строительство существующих перерабатывающих предприятий, выпускающих сельскохозяйственную продукцию и упаковочные материалы на основе глубокой переработки;

- развитие многопрофильных фермерских хозяйств, занимающихся производством, переработкой, заготовкой и реализацией сельскохозяйственной продукции, строительными работами и оказанием услуг;

- расширение инфраструктуры по хранению, транспортировке и сбыту сельскохозяйственной продукции, оказанию агрохимических, финансовых и других современных рыночных услуг;

- принятие системных мер по смягчению негативного воздействия глобального изменения климата и высыхания Аральского моря на развитие сельского хозяйства и жизнедеятельности населения.

Во исполнение этих задач специалистами будут осуществлены работы по дальнейшей оптимизации посевных площадей, связанные с расширением

площадей под картофель, овощи, интенсивные сады, масленичные культуры и виноградники. Осуществляемые меры по оптимизации состава посевных площадей и повышению урожайности приведут к существенному росту объемов производства сельскохозяйственной продукции в нашей стране.

В условиях рыночной экономики выживаемость любого предприятия, его устойчивое положение на рынке товаров определяется уровнем его конкурентоспособности, то есть способности производить и сбывать товары, которые по ценовым и неценовым характеристикам более привлекательны для потребителей, чем товары их конкурентов. Она характеризует возможности и динамику приспособления фермеров к условиям рыночной конкуренции.

Важный аспект конкурентоспособности - наличие конкурентных преимуществ, то есть уникальных осязаемых и неосязаемых активов, которыми владеет предприятие, которые стратегически важны для бизнеса и позволяют побеждать в конкурентной борьбе. Чтобы предприятие стало лидером на рынке, ему необходимо опережать конкурентов в нововведениях в системе производства и сбыта, в установлении новых цен, снижении издержек. Поэтому конкурентоспособность не является постоянным признаком, преимущество над соперником может утрачиваться со временем, как за счет факторов внешней среды, так и за счет внутренних факторов. Среди факторов эффективности выделяют уровень образования, эффективность рынков, размер рынка, а также уровень технологического развития.

В настоящее время система сельскохозяйственного производства обеспечивает рост уровня качества продукции, а значит и уверенность в повышении удовлетворенности потребителей в сельскохозяйственной продукции. В условиях рыночной экономики выживаемость любого предприятия, его устойчивое положение на рынке товаров определяется уровнем его конкурентоспособности, то есть способности производить и сбывать товары, которые по ценовым и неценовым характеристикам более привлекательны для потребителей, чем товары их конкурентов. Она характеризует возможности и динамику приспособления к условиям рыночной конкуренции. Конкуренция в сельском хозяйстве формируется одновременно хозяйствами с различными формами собственности и хозяйствования по наиболее выгодным экономическим условиям, так как конкурентоспособность заключается в возможности и способности любого субъекта рыночных отношений опережать конкурентов в достижении поставленных стратегических целей, закреплять свои позиции на рынке и извлекать определенную выгоду для эффективной деятельности.

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*Юлдошева Ш.А.
и.о. доцента
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт*

АНАЛИЗ ЦЕННОСТИ УСЛУГ ЖКХ: ПУТЬ К ЭКОНОМИИ

Аннотация. В данной статье проводится глубокий анализ экономической эффективности услуг, предоставляемых жилищно-коммунальным хозяйством. Целью исследования является выявление ключевых аспектов, влияющих на стоимость и качество обслуживания, а также разработка рекомендаций для повышения их эффективности.

Ключевые слова. жилищно-коммунальное хозяйство, сервис, жилищная политика, глобализация, экономическое развитие, жилой фонд, недвижимост, инфраструктура, доход населения, расход населения, индикаторы, условия.

*Yuldosheva Sh.A.
acting associate professor
Department of Innovative Economics
Karshi Engineering and Economic Institute*

ANALYSIS OF THE VALUE OF HCS: THE PATH TO SAVINGS

Annotation. This article provides an in-depth analysis of the economic efficiency of services provided by housing and communal services. The purpose of the study is to identify key aspects affecting the cost and quality of service, as well as to develop recommendations for improving their effectiveness.

Keywords. housing and communal services, service, housing policy, globalization, economic development, housing stock, real estate, infrastructure, income of the population, consumption of the population, indicators, conditions.

В целях полного удовлетворения потребностей населения в услугах жилищно-коммунального хозяйства, причин и последствий повышения тарифов постановлением Кабинета Министров Республики Узбекистан №897 от 1 ноября 2018 года «О поэтапном изменении цен и тарифов на коммунальные услуги и топливно-энергетические ресурсы» мы рассмотрели анализ в предыдущем пункте.

Система международных статистических показателей использовалась и при комплексном исследовании уровня благосостояния и уровня жизни населения. Он включает в себя 12 типов индикаторов:

1. Рождение, смерть и другие демографические характеристики населения.
2. Санитарно-гигиенические условия.
3. Потребление пищи.
4. Жилищные условия.
5. Информация и культура.
6. Условия труда и занятости.
7. Доходы и расходы
8. Стоимость жизни и потребительские цены.
9. Транспортные средства.
10. Организация отдыха.
11. Социальное обеспечение.
12. Человеческая свобода.¹¹⁸

Эти показатели защищают интересы широких слоев населения и способствуют дальнейшему повышению уровня благосостояния населения в результате улучшения жилищных условий, уровня труда и занятости, санитарно-гигиенических условий, социальной поддержки, организации отдыха, образования и культура.

В Республике Узбекистан, особенно в Кашкадарьинской области, удовлетворение потребности в жилье не идет ни в какое сравнение с уровнем развитых стран. Даже если переход к рыночным отношениям начал приносить относительно высокие доходы, качество услуг, предоставляемых населению, нельзя назвать достаточным. Ведь на улучшение жилищных условий населения влияет несколько факторов. Эти факторы неразрывно связаны между собой, между ними существует определенная взаимосвязь, и развитие одного влияет на изменение другого. Например, чем выше производство, тем выше благосостояние.

Влияние сферы услуг на улучшение условий жизни и благосостояния населения является самым высоким. Кроме того, такие показатели, как демография населения, местонахождение населения, особенности производства в месте проживания населения, обеспеченность земельными, водными и природными ресурсами, доходы населения, занятость населения, оказание услуг населению населения, большое значение имеет расположение в районе предприятий производственно-строительного комплекса ЖКХ.

В Кашкадарьинской области в 2020 году проживает около 3 280 100 человек на площади 28 700 квадратных километров, а плотность населения в области составляет 114 300 человек на 1 км²/чел.

¹¹⁸ Джуманова Р. Пути повышения уровня жизни населения в странах с переходной экономикой // Экономика и образование. - 2007., № 3. -стр. 14

Однако темпы роста благосостояния не тождественны темпам роста экономики. Потому что это зависит от того, какая часть дохода тратится на потребление.

Обеспеченность населения питьевой водой в районе составляет 50 процентов, в частности, в Косе - 26 процентов, а в Дехканабаде - всего 4 процента. 60 процентов трубопроводов находятся в ремонте. Канализационная система города Карши также устарела. 8 тысяч 700 километров дорог пришли в негодность.

Особое внимание Президент Республики Узбекистан уделил вопросам обслуживания жителей жилищно-коммунального хозяйства, строительства дорог и сетей питьевого водоснабжения. В Кашкадарьинской области поставлена задача довести уровень централизованного хозяйственно-питьевого водоснабжения до 79%, в частности, до 50% в Гузорском районе, где ситуация в этом отношении сложная.

В рамках стратегии «Цифровой Узбекистан – 2030», как указано в программе цифровой трансформации Кашкадарьинской области на 2020-2022 годы, предусмотрено внедрение интеллектуальной системы учета и контроля услуг в жилищно-коммунальном хозяйстве.

В Кашкадарьинской области установка устройств (концентраторов) сбора и передачи данных о потреблении электроэнергии со счетчиков в 2020 году - 3 941, в 2021 году - 5 703, установка 9 152 счетчиков электроэнергии на распределительных пунктах и трансформаторах, подключение потребителей с установленными счетчиками к биллинговой системе - в 2020 году - 338 200, в 2021 году - 316 455, "Худудгаз Кашкадарья" газ в 2020 году - 90 485; 2020-2021 гг. Внедрение автоматизированной системы учета и контроля расхода природного газа в филиале снабжения АО «Худудгазтаминот» - в 2021 г. - 60 324, планируется установка счетчиков газа и интеграция в биллинговую систему.

Внедрение системы учета и контроля сжиженного газа в филиале газоснабжения «Худудгаз Кашкадарья» в 2020 году – 184 674, в 2021 году – 246 233, в 2022 году – 184 674, инвентаризация баллонов со сжиженным газом и установка штрих-кодов в 2020 году – 184 674 в 2021 году – 246 233, в 2022 году - 184 674 потребителя сжиженного газа с пластиковыми картами, внедрение современных информационно-коммуникационных технологий в деятельность служб водного хозяйства, гидрометрии и диспетчеризации. Внедрение системы учета и контроля сжиженного газа в филиале газоснабжения «Худудгаз Кашкадарья» в 2020 году – 184 674, в 2021 году – 246 233, в 2022 году – 184 674, инвентаризация баллонов со сжиженным газом и установка штрих-кодов в 2020 году – 184 674 в 2021 году – 246 233, в 2022 году - 184 674 потребителя сжиженного газа с пластиковыми картами, внедрение современных информационно-коммуникационных технологий в деятельность служб водного хозяйства, гидрометрии и диспетчеризации.

Пошаговая установка автоматизированных устройств - 2021 год. - 269, 2022. - Внедрение автоматизированных систем контроля потребления 400 единиц и «онлайн» контроля потребления электроэнергии. Установка 47 692 приборов учета электроэнергии (электросчетчиков) у потребителей электроэнергии, в том числе: 1-фазного счетчика электроэнергии – 45 740, 3-фазного счетчика электроэнергии – установка 624 приборов (концентраторов), осуществляющих сбор и передачу данных о потреблении электроэнергии от 1 952 счетчиков, исполнителей За счет средств и банковских кредитов стратегической задачей поставлено подключение 26 650 потребителей с установленными счетчиками к биллинговой системе на основе отдельных расчетов.¹¹⁹

В целом проведенный анализ дает достаточные основания говорить о том, что отрасль переживает период депрессии в Кашкадарьинской области, особенно в сельской местности (рисунок 1).

¹¹⁹ Меры по реализации стратегии «Цифровой Узбекистан-2030» Указ Президента Республики Узбекистан ОФ-6079 от 5 октября 2020 года.



Рисунок 1. Сфера услуг и ЖКХ влияющие на условия жизни населения

Если проанализировать основные показатели, отражающие удовлетворение потребностей населения в сфере оказания услуг жилищно-коммунального хозяйства, то в Кашкадарьинской области, входящей в состав Республики Узбекистан, необходимые темпы развития сфера обслуживания жилищно-коммунального хозяйства в сельской местности в последние годы недостаточно развита. Однако правильное развитие этого сектора открыло бы множество возможностей для повышения благосостояния людей. В существующей литературе отсутствуют значимые подходы к видам факторов, влияющих на жилищно-коммунальную сферу, и их составу.

На наш взгляд, к развитию сферы услуг в жилищно-коммунальных предприятиях можно отнести следующие факторы:

Внешние факторы, влияющие на развитие сферы услуг в жилищно-коммунальных предприятиях: - научно-технический прогресс; - налоговая и кредитная политика государства; - валовой внутренний продукт; - уровень инфляции; - инвестиции в ЖКХ; - денежные доходы населения; - денежные расходы населения; - сбережения населения.

Научно-технический прогресс приводит к созданию новых товаров, оборудования, новых средств автоматизации и механизации. Это, в свою очередь, способствует повышению производительности труда в жилищно-коммунальном хозяйстве, повышению качества услуг и развитию отрасли в целом.

Большое влияние на развитие жилищно-коммунального хозяйства оказывает налогово-кредитная политика государства. Высокие уровни банковских кредитов и налоговых ставок сдерживают реализацию экономических и инновационных преобразований в жилищно-коммунальном хозяйстве, поскольку приводят к увеличению затрат хозяйствующих субъектов и резкому сокращению размеров и сроков использования заемных средств.

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*Якименко И., доктор технических наук
филиал ФГБОУ ВО «НИУ «МЭИ»
Каршибоев Ш.
Муртазин Э.
старший преподаватель
кафедра «Радиоэлектроника»
Джизакский политехнический институт*

ИСКУССТВЕННЫЙ ИНТЕЛЛЕКТ В МАШИНОСТРОЕНИИ

Аннотация. Данная статья рассматривает применение искусственного интеллекта (ИИ) в машиностроении. Исследование представляет основные области использования ИИ в машиностроении, такие как проектирование продуктов, оптимизация производства, контроль качества, обслуживание, автоматизация процессов, оптимизация материалов и энергии, а также персонализированное производство.

Ключевые слова: Искусственный интеллект, машиностроение, проектирование продуктов, оптимизация производства, контроль качества, обслуживание, автоматизация процессов, оптимизация материалов и энергии, персонализированное производство.

*Yakimenko I., doctor of technical sciences
Branch of the Federal State Budgetary Educational Institution of Higher
Education "National Research University "MPEI"
Karshiboev Sh.
Murtazin E.
senior lecturer
Department of Radio Electronics
Jizzakh Polytechnic Institute*

ARTIFICIAL INTELLIGENCE IN MECHANICAL ENGINEERING

Annotation. This article examines the use of artificial intelligence (AI) in mechanical engineering. The study presents the main areas of use of AI in mechanical engineering, such as product design, production optimization, quality control, maintenance, process automation, material and energy optimization, and personalized manufacturing.

Keywords: Artificial intelligence, mechanical engineering, product design, production optimization, quality control, maintenance, process automation, material and energy optimization, personalized manufacturing.

Использование искусственного интеллекта (ИИ) становится все более распространенным во многих отраслях. Примеры включают интеллектуальное управление, интеллектуальные механические системы, системы распознавания образов и обработку знаний. Метод/статистический анализ. В этой статье был проведен обширный обзор применения искусственных нейронных сетей ИНС в интеллектуальных системах машиностроения, включая диагностику неисправностей в машинах, анализ механических структур и геометрическое моделирование механических конструкций, механическое проектирование и его оптимизацию. Адаптация искусственных нейронных сетей (ИНС), особенно в области машиностроения, все еще находится на ранних стадиях развития. В этой статье освещаются различные способы использования искусственных нейронных сетей (ИНС) в интеллектуальных системах, а также возможности сокращения затрат и времени и получения более эффективных систем для механического проектирования и обнаружения дефектов [1,2].

Машиностроение считается фундаментальной дисциплиной в повседневной жизни из-за быстрого развития технологий. Однако технология, основанная на машиностроении, имеет ряд недостатков, таких как несогласованность систем, вызванная неисправностью механических компонентов [3]. На выходные данные это не повлияет, поскольку ИИ может быстро поменять входные данные и своевременно их обработать. По этой вине он также может принимать эффективные решения. Когда характер входной информации более сложный, общий процесс преобразования входных данных в выходные данные в технологии машиностроения сталкивается с дополнительными проблемами. По сравнению с ручной информационной системой, обычная информационная система может быть более подвержена ошибкам. Для устранения этих недостатков возросла потребность в автоматизированных системах обработки данных на основе искусственного интеллекта [4]. Недостатки машиностроения легко исправить, если ИИ и механика

Вычислительная модель ИИ, называемая искусственной нейронной сетью, основана на общей структуре или функциональных компонентах нейронной сети (НС). Эти биологические симуляции и имитируют характеристики нейронов и электрические сигналы, которые протекают между ними в идеализированной обстановке. Эти сигналы могут быть обработаны перед отправкой в качестве выходных данных [5].

Ниже перечислены многие интеллектуальные подходы, основанные на ИНС, используемые в машиностроении для проектирования и устранения ошибок. Другие технологии на основе ИНС в машиностроении будут применяться в большем количестве приложений, если позволят время и исследования [6].

Нейронные сети обратного распространения, версия (BPNN)

BPNN — это многоуровневая сеть прямого распространения,

основанная на алгоритме BP. BPNN, трехуровневая многоуровневая сеть, используется в различных приложениях, включая машиностроение. В скрытом слое нелинейная функция выполняет роль функции преобразования. Алгоритм BPNN разделен на два этапа: первый этап — процесс активного распространения, второй — процедура обратного распространения [7].

Нейронная сеть Хопфилда, версия (HNN)

Это рекуррентная NN-модель Хопфилда с сетевой основой. В этой сети есть соединение, которое действует как обратная связь между выходом и входом. Сеть Хопфилда часто имеет два типа обратной связи, например, дискретную и непрерывную. Эта сеть работает по принципу обратной связи. Следовательно, выход этой сети останется постоянным [8,9].

На основе вызова Хопфилда пользователь имеет возможность изменить или удалить весь выходной сигнал сети из входного. Чтобы создать новый выход, выход можно затем вернуть обратно на вход [10].

Сеть самоорганизующейся карты (SOM), версия Боевая НС самоорганизующейся разновидности. Входной слой и выходной уровень — это два уровня, которые присутствуют в этой сети. Двумерный массив нейронов составляет выходной слой. Через нейроны два слоя связаны друг с другом. С помощью узлов выходного слоя осуществляется обучение этой НС.

Поскольку нейронные сети обладают потенциалом автоматического обучения, в прошлом они применялись для диагностики дефектов вращающихся машин [11]. Эта характеристика НС позволяет обнаруживать неисправности с использованием обучающих данных.

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Якубов Ф.У.
старший преподаватель
Джизакский политехнический институт

ИНДИВИДУАЛЬНЫЙ ПОДХОД К ОБУЧЕНИЮ ИНОСТРАННЫМ ЯЗЫКАМ

Аннотация. Индивидуальный подход в обучении иностранному языку рассматривается как сложное педагогическое явление, которое определяет эффективность обучения иностранному языку и предполагает активную роль субъекта учебной деятельности. Основными условиями реализации индивидуального подхода выступает дифференциация, которая выражается в оценке первоначальной языковой подготовки ученика, постановка лично значимых для него целей, выработка навыков самостоятельной работы и умения осуществлять системный подход к овладению новыми знаниями.

Ключевые слова: индивидуальный подход, дифференцированное обучение, в развитии навыки, психологические особенности.

Yakubov F.U.
senior lecturer
Jizzakh Polytechnic Institute

INDIVIDUAL APPROACH TO TEACHING FOREIGN LANGUAGES

Abstract. In this article, individual approach to teaching a foreign language is considered as a complex pedagogical phenomenon that determines the effectiveness of teaching a foreign language and involves the active role of the subject of educational activity. The main conditions for the implementation of an individual approach are differentiation, which is expressed in the assessment of the initial language training of the student, the setting of personally significant goals for him, the development of independent work skills and the ability to implement a systematic approach to mastering new knowledge.

Key words: Individual approach, differentiated education, development skills, psychological characteristics.

ВВЕДЕНИЕ

Индивидуальный подход является одной из актуальных проблем обучения иностранным языкам. Эта проблема не нова. Однако ее значение в решении всех разнообразных задач образовательного процесса до конца не раскрыто. Сам термин «индивидуальный подход» понимается как система дидактических средств организации процесса обучения иностранному языку, включающая изменение формы, цели, содержания и

процесса урока. Индивидуальный подход рассматривается как сложное педагогическое явление, определяющее эффективность обучения иностранному языку и включающее активную роль субъекта учебной деятельности. Основными условиями реализации индивидуального подхода является классификация, которая выражается в оценке исходной языковой готовности студента, в постановке для него лично важных целей, в развитии навыков самостоятельной работы, в умении осуществлять систематическую работу. Подходы к овладению новыми знаниями и навыками. Эта, казалось бы, простая проблема вызывает большие затруднения практически у каждого второго учителя. Основная трудность заключается не в поиске оптимального сочетания фронтальной, индивидуальной и групповой форм работы при обучении иностранному языку. Остальные трудности связаны с организацией деятельности преподавателя, которая должна быть направлена на развитие умственных способностей каждого ученика, определение индивидуальных особенностей личности ученика.

Неоспоримым фактом является то, что студенты имеют разный уровень подготовки. Чтобы правильно понять причины неравномерной успеваемости на уроке, необходимо выявить и попытаться понять причины каждой из них. Эти причины могут быть разными: один пропустил урок по болезни, другой пренебрег на уроке, третий не понял объяснения учителя на уроке.

По мнению многих психологов и методистов, дифференциация в обучении иностранному языку зачастую основывается не на индивидуальных особенностях учащегося, а лишь на индивидуальных недостатках его знаний. Однако стоит учитывать, что способность к изучению иностранного языка неодинакова: один язык дается легко, а другие даются с большим трудом. Изучение студентов, их склонностей и интересов, возможностей обучения, а также анализ перспектив развития этих возможностей должно стать отправной точкой индивидуального подхода к обучению английскому языку. На собственном опыте я понял, что реализовать это на практике непросто. Основная трудность заключается в выборе и использовании заданий разной степени сложности.

ОБСУЖДЕНИЕ И РЕЗУЛЬТАТЫ

При выполнении заданий одного уровня сложности одарённые и одарённые учащиеся могут добиться одного и того же результата только с разными затратами времени.

Знание индивидуальных особенностей детей позволяет предвидеть возможные конфликтные ситуации на уроке, например, в случае несоответствия самооценки ученика оценке его ответа учителем. На занятиях английского языка созданы условия, позволяющие учащимся развивать свои индивидуальные способности к обучению. Языковые способности учащихся могут проявляться не только в легкости, скорости и

прочности усвоения учебного материала, но и в формах учебной деятельности, которые предпочитают и наиболее успешно реализуют студенты. Так, студенты с низким уровнем владения иностранным языком отдают предпочтение репродуктивным заданиям, например, повторению ранее выученного текста;

средний уровень обучения позволяет детям сочетать изученное с элементами самостоятельной речи;

достаточная обучающая способность проявляется в охотном выполнении детьми заданий, требующих самостоятельности;

если уровень владения иностранным языком повышается, студенты сопротивляются формам репродуктивного труда и предпочитают творческую самостоятельность.

С другой стороны, дифференцированное образование предполагает организационные формы, при которых каждый обучающийся работает на уровне своих способностей, преодолевает возможную, но значительную для него трудность.

Таким образом, индивидуализация образования предполагает учет как уровня подготовки учащихся, так и их потенциала. Отсюда следует, что та или иная последовательность упражнений должна включать специальные задания, направленные на развитие как индивидуальных, так и психологических особенностей учащихся. Дифференцированное обучение в основном основано на подборе индивидуальных заданий в зависимости от подготовки учащихся и уровня сформированности речевых умений и навыков. Существует множество форм индивидуального обучения. К ним относятся: использование заданий разного уровня сложности, разное количество повторений одного и того же задания, использование разных вариантов одного и того же типа заданий, выполнение упражнений по отдельным карточкам, оказание разной поддержки учащимся. выполнение одного и того же задания, делая перерывы разной продолжительности для выполнения заданий, разные виды клавиш, опор, чтение текстов разной сложности. Чтобы успешно реализовать индивидуальный подход к обучению английскому языку, преподавателю необходимо решить ряд организационных вопросов при контроле за учебной работой.

Во-первых, исходя из уровня языковой подготовки учащихся, т. е. уровня их навыков чтения на иностранном языке и квалификации, класс условно делится на подгруппы равной подготовки. Во-вторых, необходима психологическая характеристика класса, к которой следует отнести уровень развития индивидуальных психологических особенностей учащихся, определяющих успешность овладения чтением текстов. К таким особенностям относятся общий уровень развития учащихся, памяти, мышления, внимания, сфер интересов.

Исходя из психологических особенностей учащихся, учитель развивает их слаборазвитые психические функции. Таким образом, на

развитие внимания даются следующие задания: - рассказать, сколько персонажей в рассказе; Назовите места, где произошла эта история. Задания этого типа концентрируют внимание учащихся на содержании прочитанного. Также возможны задания: - прочитать предложения и назвать элементы (слова), отличающие их друг от друга. Для развития памяти учащихся им можно предложить следующие задания: - Прочитайте текст. Расположите предметы (картинки) в порядке, указанном в тексте. Расположите предложения в том порядке, в котором они встречаются в тексте; читай их. В целях развития у учащихся языковых предположений и прогностических навыков могут быть предложены следующие виды заданий, направленные на угадывание значения определенного сложного слова, угадывание значения слова по контексту и понимание текста. есть незнакомые учащимся иностранные слова и т. д. Для общего развития можно назвать еще несколько слов из английского языка или попросить это сделать ребят. Развить прогностические навыки помогают следующие задания: - прочитать начало предложений и заполнить их; Составьте связный рассказ из следующих предложений. Одним из важнейших моментов изучения иностранного языка в школе является, конечно же, развитие навыков говорения и аудирования. Но не следует забывать о таком важном аспекте изучения иностранного языка, как письмо. Программы уделяют очень мало времени изучению грамматики и правописания. Что делать учителю в такой ситуации? Используйте метод индивидуальных заданий, который имеет большое значение для эффективного усвоения нового материала разными группами учащихся. С помощью индивидуальных заданий преподаватель может более тщательно контролировать усвоение изучаемого и восполнять пробелы в знаниях учащихся. Учащиеся выполняют индивидуальные задания на уроке.

Как правило, 3-4 ученика получают задания, написанные на карточках, и работают над ними 5-10 минут. Ученик, выполнивший задание, отдал тетрадь учителю и сразу же получил оценку. Задания могут быть одинаковыми или совершенно разными для всех учащихся. Однако не забывайте, что преподавание иностранных языков в школе – это научить учащихся говорить на том языке, который они изучают. Уровень сформированности речевых умений и навыков учащихся следует оценивать по некоторым видам речевой деятельности. Студенты сталкиваются со многими трудностями при выполнении задания на прослушивание текста: большой текст, много говорящих. Опыт показывает, что важной трудностью для многих учащихся при выполнении задания на аудирование является умение понять содержание текста и показать учителю понятное (т. е. раскрыть содержание). Поэтому сильным учащимся можно предложить выполнить одно упражнение, а слабым — другое, а затем при втором прослушивании учащимся можно предложить то же упражнение, что и сильным учащимся при первом прослушивании. Также при назначении

домашнего задания учитываются индивидуальные особенности учащихся. Например, хорошо читающим учащимся дается задание пересказать текст, а плохо читающим — развернутый ответ на вопрос, план текста и т. д. Учебные пособия особенно полезны при дифференцированном подходе, поскольку они доступны. упражнения разных типов и разной сложности. Конечно, учитель решает, как использовать отдельные задания на уроке. Характер заданий зависит от материала, усвоенного учащимися на предыдущих уроках.

ЗАКЛЮЧЕНИЕ

Индивидуальный подход к обучению иностранному языку – это возможность использовать цифровые технологии для более эффективного достижения целей. Интерактивные упражнения, то есть интерактивное обучение, помогают учащимся избежать неэффективных и скучных занятий и активизировать самостоятельную работу вне занятий. В заключение хотелось бы сказать, что реализация индивидуального подхода к обучению иностранному языку требует от преподавателя большого мастерства. Оно должно учитывать реальные условия в классе, возможности каждого ученика и не наносить ущерба ценности и интересам каждого из них.

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*Янгибоев Б.Я., доктор экономических наук
профессор
Университет экономики и педагогики
Республика Узбекистан
Бекбутаев Х.
старший преподаватель
Университет экономики и педагогики
Республика Узбекистан*

ОСНОВНЫЕ АСПЕКТЫ РАЗВИТИЯ ЦИФРОВОЙ ЭКОНОМИКИ В УЗБЕКИСТАНЕ

Аннотация. В статье делается попытка объяснить сущность цифровой экономики, результаты ее развития в странах мира, ситуацию в Узбекистане, в связи с этим, проводимую работу и вопросы ее дальнейшего ускорения. Вместе с тем в статье представлены актуальные проблемы широкого внедрения цифровой экономики в Узбекистане во все сферы национальной экономики страны и пути их решения. В конце статьи приведены выводы, связанные с внедрением цифровой технологии.

Ключевые слова: цифровая экономика, информационные технологии, цифровые технологии, интернет, искусственный интеллект, мобильные сетевые коммуникации, бизнес, информационное общество, локальные сетевые технологии, «робототехника», «интернет вещей», «беспроводные технологии».

*Yangiboev B.Ya., doctor of economics
professor
University of Economics and Pedagogy
Republic of Uzbekistan
Bekbutaev Kh.
senior lecturer
University of Economics and Pedagogy
Republic of Uzbekistan*

MAIN ASPECTS OF THE DEVELOPMENT OF THE DIGITAL ECONOMY IN UZBEKISTAN

Abstract. The article tries to explain the essence of the digital economy, the results of its development in the countries of the world, the situation in Uzbekistan in this regard, the work being done and the issues of its further acceleration. At the same time, the article presents the current problems in the wide introduction of the digital economy in Uzbekistan to all areas of the country's national

economy and their solutions. At the end of the article, conclusions related to the digital economy are given.

Keywords: digital economy, information technologies, digital technologies, digital information technologies, digital economy, internet, artificial intelligence, mobile network communications, business, information society, local area network technology, "robotics", "internet of things", "wireless technologies".

Введение и постановка цели.

Достигнутые результаты прогресса в области цифровых технологий за короткий промежуток времени в развитых странах мира служат положительным примером для других государств. В результате таких усилий были созданы возможности для населения мира получить доступ к компьютерам и интернету и широко пользоваться их услугами. Ведь трудно представить нашу сегодняшнюю жизнь без компьютеров и интернет-сервисов.

Следует отметить, что сегодня, учитывая международную значимость данного вопроса, необходимо дальнейшее развитие сотрудничества с мировым сообществом для лучшего понимания основных направлений и проблем цифровой сферы. Основная задача - провести работу в этом направлении исходя из требований времени.

При участии различных групп экспертов из разных стран мира вырабатываются высокоэффективные и актуальные рекомендации по передовым модулям развития цифровых технологий с использованием открытых и гибких моделей, в том числе развития национальной экономики каждой страны на основе цифровых технологий. Без него человечество может быть лишено счастливой службы цифровых технологий.

Новые технологии, в частности искусственный интеллект, неизбежно приведут к существенным изменениям на рынке труда, включая сокращение рабочих мест в одних отраслях и появление больших возможностей в других, что в свою очередь создаст множество новых знаний и навыков, кардинально новые меры социальной защиты, труда и отдыха требует качественно новых отношений между ними. Поиск новых решений также требует сотрудничества между государствами, хозяйствующими субъектами, политическими партиями и научными сообществами в деле эффективного использования современных технологий.

Становится закономерным процесс, когда цифровая экономика служит общим интересам людей и охватывает все аспекты в больших масштабах. Такая экономика требует много новых знаний и умений, принципиально новых мер социальной защиты населения, качественно новых отношений труда и отдыха.

В Узбекистане реализуются комплексные меры по активному развитию цифровой экономики, широкому внедрению современных информационно-коммуникационных технологий во все отрасли и сферы

национальной экономики, в первую очередь, в государственное управление, бизнеса, образование, здравоохранение, промышленность, сельское хозяйство.

В данной статье рассматриваются основные аспекты развития цифровой экономики в Узбекистане, тенденции развития, их изменения и совершенствования в соответствии с жизнью, а также существующие проблемы и решения этих вопросов. При этом были высказаны мнения относительно государственной поддержки развития цифровой экономики, результатов, достигнутых в международной и местной практике.

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. Существует множество определений цифровой экономики, в большинстве из них близко научному мышлению то, что она связана с развитием информационных технологий, потому целесообразно рассматривать цифровую экономику как процесс развития, связанный с технологиями и экономическими агентами или интернета, но этого недостаточно, ведь цифровая экономика - это прежде всего развитие цифровых информационных технологий.

По этой причине мы считаем, что более полным было бы определение цифровой экономики, как обеспечения экономического и социального развития в результате внедрения и эффективного использования достижений современных информационных технологий во всех отраслях национальной экономики каждой страны и различные стороны общественной жизни.

Цифровая экономика не ограничивается электронной коммерцией, производством товаров и услуг, связанных с информационными технологиями, но и здравоохранением, наукой и образованием, строительством, энергетикой, транспортом, геологией, кадастром, архивом. Она обеспечивает высокая эффективность в каждой из этих отраслей.

Исходным фундаментом цифровой экономики являются информационные технологии. Правильнее было бы назвать это цифровыми информационными технологиями, потому что в основе информационных технологий лежат соответствующие цифры. Их эволюция делится на несколько этапов и имеет свои особенности. Несомненно, появление и развитие цифровых информационных технологий - это объективный процесс, вытекающий из потребности развития общества.

Сегодня основной целью продвижения цифровой экономики является создание системы информационных технологий на уровне, позволяющем решать любые стратегические задачи, принимать решения по

осуществлению, оптимального управления социально-экономическими процессами. Это окажет влияние на развитие цифровой экономики.

В настоящее время наиболее популярным и распространенным технологическим средством развития цифровых информационных технологий является интернет. Технологии распределенных систем, глобальных, региональных и локальных сетей активно используются в различных областях науки, производства и бизнеса.

Какова основная цель перехода к цифровой экономике? Это развитие национальной экономики каждой страны на оптимальном уровне и тем самым обеспечение материального благополучия народа. Быстрое внедрение цифровых технологий в отрасли национальной экономики и все сферы социальной сферы является приоритетом для всех стран.

Сегодня быстрый процесс оцифровки создал цифровую экономику. Эта малоизученная и глубоко укоренившаяся экономика создает перед производителями большие возможности для организации эффективной маркетинговой деятельности в предпринимательской и социальной сферах, снижения затрат до минимума, получения максимальной прибыли, успешной реализации товаров и оказания услуг.

В последующие годы в предпринимательстве и других социально-экономических видах деятельности во всем мире появилось новое поколение цифровых технологий, и в силу масштабов их развития термины “искусственный интеллект”, “робототехника”, “интернет вещей”, “беспроводная связь”, “технологии” и другие термины появились в науке. Все это относится к элементам цифровой экономики.

Согласно расчетам, переход к цифровой экономике позволит повысить производительность труда фирмы, эффективность их работы, увеличить производство, обеспечить прозрачность деятельности и абсолютный объем продукции и резко сократить их себестоимость. Это его самое большое преимущество.

С помощью цифровой экономики обеспечивается качественное обслуживание потребителей, покупателей и клиентов и создается ряд других удобств. Это включает в себя заказ обеда в час пик, вызов такси, отправку денег родственникам, трансграничное деловое сотрудничество, пространство электронной коммерции и т. д.

Внедрение цифровых технологий и их стремительное развитие уже стали главными приоритетами для ряда стран. Их отличает большая продолжительность периода реализации цифрового развития, преемственность приоритетов, начиная с создания базовых информационно-коммуникационных технологий, формирования приемлемой политики в этой сфере, поддержки программ по широкому внедрению цифровых технологий.

По некоторым данным в настоящее время лидирующие в мировом рейтинге в двадцати странах для этих целей направляется около 2 трлн

долларов в год для развития цифровой экономики. Кроме того создаются дополнительные фонды для быстрого развития этой направленности. Подсчитано, что их внедрение позволит увеличить производительность труда в компаниях на 40% и валовой внутренний продукт не менее чем на 30%. В то же время это будет препятствием для приписки, возникновения теневой экономики и распространения подобных пороков. Как отметил Президент Республики Узбекистан Ш.М.Мирзиёев, обеспечение высокого уровня экономического роста позволит предотвратить и ликвидировать зло коррупции(1).

Экономисты прогнозируют, что к 2025 году больше половины мирового валового внутреннего продукта будет приходиться на цифровую экономику. В связи с этим необходимость развития новой экономики станет еще более актуальной. По некоторым данным, в Англии, которая является одной из ведущих стран мира по уровню экономического развития, доля цифровой экономики в валовом внутреннем продукте составляла 12 процентов, тогда как в Узбекистане этот показатель в 2022 году составлял всего 3 процента. В нашей стране к 2025 году планируется увеличить этот показатель в 3 раза(5).

В условиях, когда большинство развитых стран мира развиваются на базе цифровой экономики, цифровизация всех отраслей и секторов национальной экономики страны является главным условием интеграции в мировое сообщество, завоевания места в мировом рынке, обеспечение экономической стабильности, достижение эффективности и создание достаточных удобств для наших граждан.

Объявление 2024 год “Годом развития бизнеса и молодежи” в Узбекистане имело большое символическое значение, так как в программе этого года были намечены полная цифровизация таких сфер, как образование, транспорт, бизнес, медицина и другие важные отрасли национальной экономики.

Сегодня в Ташкенте, в ряде областных и районных центров создан парк информационных технологий с современной инфраструктурой. Создание таких парков в Карши, Нукусе, Бухаре, Намангане, Самарканде, Гулистане, Ургенче и других городах - является большим шагом на пути к цифровой экономики.

На основе широкого внедрения в нашей стране системы интернет, в целях дальнейшего развития форм общения физических и юридических лиц с государственными органами в условиях перехода к цифровой экономике в новой редакции “Единых интерактивных государственных услуг”.

По данным информационной службы Министерства цифровых технологий Узбекистана в направлении развития телекоммуникационной инфраструктуры проведен ряд работ, в том числе расширение магистральных сетей телекоммуникаций на 237 объектах по республике. Модернизации их оборудование и пропускная способность магистральных

сетей телекоммуникаций составляет 200 Гбит/с, на межрайонном уровне поставлено 40 Гбит/с. Однако все это не позволяет сделать вывод о том, что этого достаточно.

Так что, наряду с некоторыми позитивными сдвигами по переходу на цифровую экономику в Узбекистане, есть и достаточных проблем, ожидающих своего решения. Как отметил Президент “Хотя в 2019 году наша страна поднялась на 8 позиций по международному индексу развития информационно-коммуникационных технологий, мы все равно сильно отстаем. Если говорить о том, что большинство министерств, ведомств и предприятий совершенно далеки от цифровых технологий, то у их руководителей и, тем более, у нашего населения навыков для полного понимания сути проблем, связанных с цифровой экономикой, недостаточно. Это остается еще одним препятствием для стремительного развития цифровой экономики”(1).

Есть также нерешенные проблемы с онлайн и другими способами работы. В 2023 году только 39 процента держателей пластиковых карт совершали цифровые платежи в республике, например этот показатель составляет 96% в Англии. Стоит отметить, что в нашей стране есть широкие возможности для увеличения количества платежей через терминал. Как отметил глава нашего государства, “Конечно, мы прекрасно понимаем, что формирование цифровой экономики требует наличия необходимой инфраструктуры, больших денежных и трудовых ресурсов. Но как бы тяжело это ни было, если мы не начнем сегодня, то когда завтра будет слишком поздно. Поэтому активный переход к цифровой экономике будет одним из наших главных приоритетов в ближайшие пять лет”(4).

Развитие данной проблемы в Узбекистане, безусловно, заставляет уделять особое внимание вопросам обеспечения и взаимодействия государственных органов и субъектов предпринимательства по внедрению инновационных идей, технологий и разработок, подготовки кадров, обладающих глубокими знаниями, современные знания и интеллектуальный потенциал.

Для развития цифровой экономики на уровне востребованности в Узбекистане также особое значение имеет формирование образовательных программ, отвечающих мировым тенденциям, и образовательных методик, обеспечивающих цифровую грамотность.

Итак, каковы препятствия или проблемы для широкого внедрения цифровой экономики в нашей стране в соответствии с мировыми стандартами? По мнению аналитиков консалтинговой службы “ERGO Research Advisory”, главной проблемой в нашей стране является телекоммуникационная инфраструктура, низкое качество связи и недостаточное финансирование из государственного бюджета.

В результате низких инвестиций в развитие цифровой экономики плотность базовых станций связи была низкой. Это приводит к тому, что

интернет и мобильные услуги не работают должным образом, что приводит к снижению роста цифровой экономики, что приводит к цифровым потрясениям. В связи с этим следует отметить, что скорость интернета в Узбекистане в два раза ниже, чем в среднем по странам Содружества Независимых Государств.

Также проблемой внедрения цифровой экономики стало отсутствие высоких зарплат у ИТ - специалистов, являющихся техническим персоналом в бюджетных организациях. Причина в том, что квалифицированные программисты долго на этой должности не задерживаются. Они предпочитают работать на международных организации, совместные предприятия, зарубежных заказчиков. Теперь введен механизм предоставления им бонуса.

Итак, проблем в широком внедрении цифровой экономики в нашей стране хватает. Нет сомнений, что решением этой проблемы послужит принятие Программы «Цифровой Узбекистан - 2030», утвержденной Указом Президента от 5 октября 2020 года.

Опираясь на изученные в статье мнения и комментарии, посчитаем необходимым в качестве вывода подчеркнуть следующее:

-существуют различные взгляды, подходы и мнения относительно цифровых технологий, опубликованные в зарубежных странах и в нашей стране в научных источниках, в правительственных решениях и документах решений, в источниках, опубликованных на страницах прессы, по таким вопросам, как его определение, его место в развитии общества и его концептуальных основах;

-на наш взгляд, было бы достаточным определить цифровую экономику как обеспечение социально-экономического развития в результате внедрения достижений современных цифровых информационных технологий во все отрасли национальной экономики каждой страны и различные стороны общественной жизни и его эффективное использование;

-цифровые технологии являются основным источником экономического развития;

-благодаря развитию цифровых технологий повысится производительность труда и будет высокой конкурентоспособность национальных предприятий;

-внедрение и стремительное развитие цифровых технологий позволяет хозяйствующим субъектам прогнозировать спрос, оптимизировать процессы и совершенствовать другие виды деятельности. Это, в свою очередь, приводит к существенному изменению требований к специалистам.

-использование цифровых технологий, помимо наличия благоприятной инвестиционной среды, создает условия для ее развития на местах;

-Узбекистан полностью соблюдает требования и правила развития цифровых технологий. В связи с этим возникают более сложные задачи, комплексное решение которых повысит инновационную активность национальных предприятий и подготовит почву для полноценного формирования спроса на цифровые технологии.

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СОВРЕМЕННЫЕ ТЕХНОЛОГИИ УПРАВЛЕНИЯ ОРГАНИЗАЦИЕЙ

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*Кодочигова А.А.
студент 2 курса
факультет психологии и специального образования
Томский государственный педагогический университет
Российская Федерация, г.Томск*

СОЦИАЛЬНО-ПСИХОЛОГИЧЕСКИЙ КЛИМАТ СОТРУДНИКОВ ОРГАНИЗАЦИИ

Актуальность. Исследование социально-психологического климата организаций и предприятий является актуальной проблемой на сегодняшний день. На постоянной основе увеличиваются требования к уровню психологической включенности личности в профессиональную деятельность. Эмоциональное состояние всех работников характеризует психическое состояние работников, а также раскрывает качество и уровень социально-психологического климата в организации.

*Kodochigova A.A.
2nd year student
Faculty of Psychology and Special Education
Tomsk State Pedagogical University
Russian Federation, Tomsk*

SOCIO-PSYCHOLOGICAL CLIMATE OF ORGANIZATION EMPLOYEES

Relevance. The study of the socio-psychological climate of organizations and enterprises is a pressing problem today. The requirements for the level of psychological involvement of an individual in professional activities are constantly increasing. The emotional state of all employees characterizes the mental state of employees, and also reveals the quality and level of the socio-psychological climate in the organization.

Человеку свойственно выстраивать межличностные отношения, даже находясь на рабочем месте, это связано с тем, что львиную долю времени мы посвящаем трудовой деятельности. Следовательно, от стабильной психологической обстановки зависят и продуктивность работы, и

комфортная атмосфера в коллективе, и желание работать, развиваться, с удовольствием ходить на работу.

В отечественной социальной психологии термин психологический климат впервые использовал Н.С. Мансуров, который изучал производственные коллективы. Автор под социально-психологическим климатом понимает «качественную сторону межличностных отношений, проявляющаяся в виде совокупности психологических условий, способствующих или препятствующих продуктивной совместной деятельности и всестороннему развитию личности в группе».

Считается, что среди персонала предприятия все равно могут и часто возникают конфликтные ситуации, так как коллектив – это живой организм, состоящий из людей с различными психологическими типами. Результатом таких ситуаций ожидаемо становится снижение эффективной работы коллектива. Следовательно, существует большое количество людей, которые отдадут предпочтение хорошему слаженному коллективу, спокойной эмоциональной обстановке, нежели высокой заработной плате..

Огромный вес имеет уровень взаимоотношений в любом коллективе. Для обозначения уровня социально-психологического климата в любой организации используются понятия «психологическая атмосфера» или «микроклимат». И именно от психологического климата зависит настроение коллектива и моральная и психологическая атмосфера.

Благоприятный социально-психологический климат является условием повышения удовлетворенности работников трудом соответственно повышается и производительности труда. Социально-психологический климат представляет собой итог систематической психологической работы каждого работника.

Когда ведут речь о социально-психологическом климате коллектива, подразумевают следующее:

- социально-психологические характеристики каждого работника и их совокупность;
- психологический настрой всего коллектива;
- взаимоотношения внутри коллектива.

Благоприятный социально-психологический климат характеризуют такие понятия как: доверие, свободное выражение мнения каждого работника, оптимизм, безопасность, комфорт, поддержка друг друга, теплота в отношениях, уверенность, возможность свободно творить и мыслить, профессиональный рост и т.д.

Есть ряд признаков, по которым косвенно можно судить об состоянии социально-психологического климата в организации. К ним относят:

- уровень текучести кадров;
- уровень производительности труда;
- качество выпускаемой продукции/продукции/оказываемых услуг;

- количество прогулов и опозданий;
- количество жалоб, поступающих от сотрудников и клиентов;
- небрежность в обращении с оборудованием;
- частота перерывов в течении рабочего дня.

Руководителю на постоянной основе необходимо регулировать характер отношений в организации. Для этого необходимо знать основы формирования социально-психологического климата в организации.

Существует целый ряд факторов, определяющих социально-психологический климат в коллективе:

1. Глобальная макросреда: экономическое кризисы, военные конфликты и эпидемии. 2. Экономическая и политическая стабильность в обществе обеспечивает психологическое благополучие членов общества и косвенно влияет на социально-психологический климат в организациях.

3. Локальная макросреда: личность руководителя, система подборки кадров, состав подразделений или отделов, система планирования и распределения ресурсов организации

4. Физический микроклимат и санитарно-гигиенические условия труда.

5. Удовлетворенность работой. Удовлетворенность сотрудников тесно связана со многими важными факторами для организации это и текучесть кадров, производительность труда и организационная культура. Чтобы получать максимальную отдачу от персонала, необходимо на постоянной основе уделять уровню удовлетворенности сотрудников.

На основании вышесказанного можно сделать несколько выводов: социально-психологический климат это важнейшее составляющая уровня мотивации сотрудников. Социально-психологический климат оказывает влияние на то, что и как делает работник. Чем благоприятнее его уровень в коллективе, тем менее сотрудники склонны менять место работы, тем ниже уровень текучести кадров не предприятия и тем реже случаи отклоняющегося поведения сотрудников. Повышая уровень социально-психологического климата, компания придет к тому, что кадровый состав организации будет стабильным и лояльным. Удовлетворенность трудом и благоприятный уровень СПК сегодня достаточно актуальная проблема, так как персонал – это основной ресурс любой организации.

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THE ROLE AND SIGNIFICANCE OF MEDIA EDUCATION IN TRAINING FUTURE ENGINEERS

Abstract. This article discusses the possibilities of improving the quality of education based on media education technology. Media education allows you to raise and educate an enterprising child. The purpose of using this technology is, on the one hand, flexibility, on the other hand, new stages of preparation of future engineers for professional activities, development of thinking qualities such as mobility, consistency; on the other hand - search activity, striving for novelty; is to develop speech and creative imagination.

Key words: media education, pedagogical technologies, engineer, information, media literacy, modern interactive programs.

The purpose of media education is to serve future engineers in the formation of media and information literacy, infoethics, intense and complex processes of today's information age, the globalization of the information space, the provision of freedom of speech, the strengthening of mass communication, therefore, in the conditions where the manipulative influence of the mass media is increasing, students are deprived of information. enjoyment, its proper use, and providing knowledge on identifying reliable sources of information [1].

Media and information literacy is a set of knowledge, skills, attitudes, skills and practices that enable the effective acquisition, analysis, critical evaluation, interpretation, use, creation and distribution of information and media products using all necessary tools in creative activities. Today, the ability to select and correctly evaluate information in the world mass media remains relevant. Media literacy, media education, media culture, resistance to fake and propaganda information - all these key words reflected the essence of the two-day seminar training [2]. So what is media literacy? Why is it increasingly important today? The multifold acceleration of the flow of information, the increase of positive information as well as negative information made it necessary to acquire media literacy. Traditionally, media literacy consisted of a person's ability to analyze literary texts and create quality texts. Today, media literacy means knowing how and why information is being transmitted [3].

Media literacy is critical to understanding today's news environment. It is necessary to find answers to the questions of where, by whom and for what purposes the information is being transmitted, whose interests it reflects. There

are different opinions about the concept of media literacy. According to the American International Encyclopedia of Society, "Media literacy is the ability of a person to be active and literate while feeling his responsibility as a citizen in society, to be able to receive, create, analyze media texts. it means to be able to receive and evaluate, to be able to understand the socio-cultural and political content of modern media" [4,5].

The goal of media literacy is to form the ability to sort out the information disseminated by them while understanding the priorities and shortcomings of each media, and to form the skills to accept what is necessary, while the main task is to limit it, realizing the manipulative power of any information consumed by people. It is also to help people understand the role of media and citizen journalism. At the moment, the basics of media education should be included in the curriculum of every educational institution, the basics of media education should be explained to students and young people in the educational process in schools in the form of interactive, various games, and the choice of what is needed by the growing generation in the intense flow of information. and allows him to be critically evaluated [6]. This, in turn, serves as a basis for further strengthening of the citizenship position of young people in the future, for them to be able to objectively assess the events taking place in the world and make the right decisions.

Multimedia is a rapidly developing modern information technology. Its distinguishing features include:

It integrates various types of media information: traditional (text, tables, decorations, etc.), original (speech, music, clips from video films, TV frames, animation, etc.) in one software product. Such integration is performed under computer control using various devices for recording and displaying information: microphones, audio systems, optical CDs, televisions, VCRs, video cameras, electronic musical instruments; - work at a certain time, unlike text and graphics, which are static by their nature, audio and video signals are considered only at a certain time interval [7,8].

The need for such education arises for several reasons. Before talking about them, it should be noted that the definition of "media education" to a large extent includes the answer to your question, because this term, introduced relatively recently, refers to the influence of various media on the public mind, and as a result It is a relatively broad set of tools for media workers to present the truth.

More correctly, we can talk about media education as a means of communication, which in itself should be considered as a shaping force of a person, culture and society. The impact of these processes on modern human life and outlook cannot be overestimated. The need to understand these media, how they are structured, how they work and develop, did not appear yesterday and is growing stronger every day [9]. The skills we are talking about are foundational, basic skills that form the basis of education today and should be included in the educational programs available to every modern person. The reason is simple:

humanity is developing rapidly, replacing many difficult skills with robotics, neural networks and artificial intelligence. There is a developing trend, according to which sooner or later humans will be replaced by artificial intelligence in many areas of activity. Neural networks capable of not only communicating with a person, answering questions, but also joking in response and even predicting the continuation of the conversation; novels written by artificial intelligence, fully autopilot cars, etc. are not even today's reality, but yesterday's reality. We can't ignore it, so in the future, all human physical abilities can be replaced by robots, but some human abilities have not yet been subjugated by artificial intelligence, and I think that in the next 10-15 years, robots will be able to think emotionally. can't. A person still retains some privileges - these are emotions and professional communication skills [10,11].

The most important criterion for the effectiveness of the media education policy is the level of competence of the persons who take responsibility for its implementation. Unfortunately, all is not well in this direction, where colleagues are actively working: the powers of heads of departments and departments, officials of various levels, administration employees in the field of mass media, mass communications and information culture are expanding. is required.

We can't ignore it, so in the future, all human physical abilities can be replaced by robots, but some human abilities have not yet been subjugated by artificial intelligence, and I think that in the next 10-15 years, robots will be able to think emotionally [12,13]. A person still retains some privileges - these are emotions and professional communication skills.

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Гиясова Ш.
преподаватель

**кафедра дошкольного, начального и технологического образования
Самаркандский государственный университет**

ТВОРЧЕСКИЕ СПОСОБНОСТИ МЛАДШИХ ШКОЛЬНИКОВ КАК КОМПОНЕНТ ЛИЧНОСТНО ОРИЕНТИРОВАННОГО ПРОЦЕССА ВОСПИТАНИЯ

Аннотация. В статье освещаются подготовки учеников начальных классов к творческой деятельности. Согласно современным требованиям существуют ряд этапов творческой деятельности. Автор статьи предлагает рекомендации по улучшению подготовки к творческой деятельности. Среди них выделяются такие рекомендации как: необходимость учета личностных особенностей учеников, усиление воспитательной работы и др.

Ключевые слова: система образования, дошкольное образование, образовательный процесс, личные отношения.

Giyosova Sh.
lecturer
**Department of Preschool
Primary and Technological Education
Samarkand State University**

CREATIVITY OF JUNIOR SCHOOL CHILDREN AS A COMPONENT OF PERSONALLY ORIENTED EDUCATION PROCESS

Abstract. The article deals with the guest ions of preparation of the innovative activates in the example. According to the contemporary requirements, several stages of innovative activities exist. The authors of the article propose recommendations on the improvement of preparation to the innovative activities. Among Hem, such recommendations as; necessity of consideration of personal characteristics of pupils, string Honing of education worth and others can be Signified.

Key words: educational system, preschool education, educational process, personal relationships.

Как отмечал в своих выступлениях Президент нашей страны, «важно «воспитать наших детей самостоятельно мыслящими, сильными патриотами, обладающими современными знаниями и профессиями» [1; 103] Важным фактором в решении этой проблемы является начальное образование, являющееся одним из основных звеньев системы

непрерывного образования, а также профессионализм и педагогическое мастерство педагогов, работающих в этих образовательных учреждениях.

Совершенствование системы непрерывного образования является одним из важнейших вопросов социально-экономического развития Узбекистана. Потому что без развития предпринимателя, способного в полной мере использовать свои знания и возможности для развития общества, самостоятельно мыслящих, творчески активных профессионалов сложно совершить коренные изменения в обществе. Сегодня каждая школа страны старается улучшить свою систему образования. Ведется создание учебников нового поколения, внедрение рейтинговой системы в образовании, контроль по различным направлениям, использование активных методов обучения в учебном процессе и другая организационная работа.

Следует отметить, что какой бы стиль работы ни внедрялся, большой проблемой останется личность учащегося, его стремление к знаниям, самостоятельная наблюдательность, способность к творческому мышлению. Сегодня содержание образования обновляется, возникает потребность в широкой трактовке категории «творческая способность». Это, в свою очередь, направлено на воспитание граждан, чувствующих нашу независимость, осознающих свою ответственность перед обществом, государством и семьей, зрелых, умных, интеллектуальных и творческих людей. Определены особенности процесса формирования творческих способностей, первая из которых - участие ребенка в многогранном процессе. Неизбежно участие в нем образовательного учреждения, семьи, общества, района, средств массовой информации, детского театра, литературы и искусства.

Духовность – понятие многомерное, включающее в том числе и творческое начало, на развитие которого оказывает существенное влияние школа и околошкольная среда. В условиях классической системы воспитания развитие творческих способностей не является одной из важных задач, преимущество отдается когнитивному компоненту.

Для воспитания свободной личности, способной к генерированию творческих идей, требуется иной подход. Необходимо создать в рамках школьного обучения систему развития дивергентного мышления детей, снять у ребенка психологические барьеры, мешающие проявлять ему свою индивидуальность; раскрыть потенциал личности каждого воспитанника. Решение этих задач наиболее эффективно происходит в системе личностно ориентированного воспитания, в котором ребенок является высшей ценностью и ставится в центр воспитательного процесса. Вокруг личности воспитанника концентрируются все остальные приоритеты. Личностно ориентированное воспитание основывается на известных принципах гуманистической педагогики: самоценность личности, уважение к ней, природосообразность воспитания, добро и ласка как основное средство.

Реализация данных принципов в практике воспитательного процесса позволяет наилучшим образом выявить и раскрыть творческие способности ребенка.

Ряд психологов и ученых-педагогов: А.В. Петровский, Б.М.Теплов, В.А.Крутецкий изучали развитие у детей мыслительной деятельности, внимания, памяти, уровня восприятия, мышления, эмоций под влиянием учебной деятельности, ученые республики: Р. Суннатова, Е. Гозиев, Г.Шоумаров проводили исследования проблем познания и творческих способностей учащихся, их тенденций и стремлений, формирования талантов. О. Розиков, Б. Адизовы изучали творческую деятельность детей и их таланты. В.Каримова, З.Нишонова, Б. Кадыров также проводили исследования развития индивидуального творчества, трактуя творческую способность применительно к проблемам умственной способности ребенка, познавательной активности, самостоятельного мышления. В частности, Р. Ибрагимова посвящена изучению дидактических основ формирования познавательной деятельности младших школьников. Б. Б. Кадыров же проводил исследования технологии воспитания в формировании индивидуального творчества. Для развития творческого мышления и творческого воображения учащихся начальных классов необходимо предлагать такие задания, как классифицировать объекты, ситуации, явления по различным основаниям; видеть взаимосвязи и выявлять новые связи между системами; выявлять и формировать противоречия; разделять противоречивые свойства объектов в пространстве и во времени; представлять пространственные объекты и др.

Творческие задания дифференцируются по таким параметрам, как сложность содержащихся в них проблемных ситуаций, сложность мыслительных операций, необходимых для их решения; формы представления противоречий (явные, скрытые).

Диапазон творческих задач, решаемых на начальной ступени обучения, необычайно широк по сложности – от нахождения неисправности в моторе или решения головоломки, до изобретения новой машины или научного открытия, но суть их одна: при их решении происходит опыт творчества, находится новый путь или создается нечто новое. Именно поэтому требуются особые качества ума, такие, как наблюдательность, умение сопоставлять и анализировать, комбинировать, находить связи и зависимости, закономерности и т.д. все то, что в совокупности и составляет творческие способности.

Осуществляя процесс творчества, ребенок испытывает целую гамму положительных эмоций как от процесса деятельности, так и от полученного результата. Творческая деятельность способствует более оптимальному и интенсивному развитию высших психических функций, таких, как память, мышление, восприятие, внимание. Последние, в свою очередь, определяют успешность обучения ребенка. Вместе с тем и само воображение значимо

включено в учебный процесс, поскольку он на 90 процентов состоит из открытия нового. Творческая деятельность развивает личность ребенка, помогает ему усваивать моральные и нравственные нормы – различать добро и зло, сострадание и ненависть, смелость и трусость и т.д. Создавая произведения творчества, ребенок отражает в них свое понимание жизненных ценностей, свои личностные свойства, по-новому осмысливает их, проникается их значимостью и глубиной.

Исходя из вышесказанного, очевидно, что в начальной школе необходимо внесение следующих изменений в учебный процесс: вовлечение учащихся в систематическую совместную творческую деятельность на основе личностно - деятельностного взаимодействия, ориентированную на познание, создание, преобразование, использование в новом качестве объектов материальной и духовной культуры, обязательным результатом которой должно быть получение творческого продукта; системное использование методов творчества, обеспечивающих продвижение учащихся в развитии креативных способностей путем накопления опыта творческой деятельности при выполнении постепенно усложняющихся творческих заданий в рамках дополнительной учебной программы; промежуточное и итоговое диагностирование креативных способностей младших школьников.

При таком подходе усиливается организаторская функция педагога, которая предполагает выбор оптимальных методов, форм, приемов, а функция ученика заключается в приобретении навыков организации самостоятельной творческой деятельности, осуществлении выбора способа выполнения творческого задания, характера межличностных взаимоотношений в творческом процессе.

Накопление каждым учащимся опыта самостоятельной творческой деятельности предполагает активное использование на различных этапах выполнения творческих заданий коллективных, индивидуальных и групповых форм работы.

Индивидуальная форма позволяет активизировать личный опыт учащегося, развивает умение самостоятельно выделить конкретную задачу для решения.

Групповая форма развивает умение согласовывать свою точку зрения с мнением товарищей, умение выслушивать и анализировать предлагаемые участниками группы направления поиска.

Коллективная форма расширяет возможности учащихся анализировать сложившуюся ситуацию в более широком взаимодействии со сверстниками, родителями, учителями, предоставляет возможность ребенку высказать различные точки зрения на решение творческой задачи.

Эффективность проводимой работы по развитию творческих способностей младших школьников во многом определяется характером взаимоотношений как между учащимися, так и между учащимися и

педагогом. Развитие личности непосредственно связано с изменением ее деятельности, мотивов, целей, применением новых средств, методов и программы деятельности, и на основе изменений формируется способность. Также эти задачи выполняются с результатом цели, предмета деятельности, средств, способов выполнения.

Учебный процесс требует систематической организации деятельности учащихся. Все компоненты образования составляют формирование его способности ученика - оно происходит во взаимодействии образовательных целей, содержания, форм, методов, средств, образовательных продуктов, знаний, умений и навыков. В образовательном процессе развитие индивидуального творческого потенциала учащегося требует выбора содержания образования, выраженного в программах. Потому что в настоящее время программы и учебники не отвечают требованиям развития творческих способностей и потенциала учащегося. Однако социальные науки, гуманитарные науки, науки и естествознание воздействуют на умы учащихся и стимулируют развитие творческой активности учащихся. Технологизация учебного процесса также является одним из важнейших требований в формировании творческих способностей учащихся. Самосознание, или формирование личности, также имеет важное значение в развитии творческих способностей учащихся. Это система самовоспринимаемых и самосознательных восприятий, составляющих поведение учащегося. Основной целью педагогических технологий, направленных на развитие творческого потенциала учащихся, является также развитие творческой активности в целом. Из вышеизложенного видно, что развитие личности непосредственно связано с изменением ее деятельности, мотивов, целей, применением новых средств, методов и программы деятельности, и на основе изменений формируется способность. Также эти задачи выполняются с результатом цели, предмета деятельности, средств, способов выполнения. В образовательном процессе развитие индивидуального творческого потенциала учащегося требует выбора содержания образования, выраженного в программах. Потому что в настоящее время программы и учебники не отвечают требованиям развития творческих способностей и потенциала учащегося. Однако социальные науки, гуманитарные науки, науки и естествознание воздействуют на умы учащихся и стимулируют развитие творческой активности учащихся. Таким образом, формирование творческих способностей учащихся младшего школьного возраста осуществляется на основе опыта их разнообразной учебной, практической, общественной деятельности. Поэтому в образовательных стандартах особое внимание уделяется деятельностному, практическому содержанию образования, конкретным средствам деятельности, знаниям, умениям и навыкам, используемым в реальных жизненных ситуациях.

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*Муртазина Д.Р.
Джизакский государственный
педагогический университет
Муртазин Э.Р.
Джизакский политехнический институт*

МЕТОДИКА ПРЕПОДАВАНИЯ В ИГРОВОЙ ФОРМЕ: ПУТЬ К ЭФФЕКТИВНОМУ ОБУЧЕНИЮ

Аннотация. Данная статья обсуждает методiku преподавания в игровой форме как эффективный инструмент образования. В ней рассматриваются преимущества геймификации в образовании, ключевые принципы этого подхода и примеры игровых активностей. Представленный обзор позволяет понять, как игровые элементы могут стать средством мотивации, активизации учащихся и обеспечения глубокого усвоения учебного материала.

Ключевые слова: геймификация, образование, методика преподавания, игровая форма, мотивация, активное участие, обратная связь, индивидуализация, квесты, ролевые игры, соревнования, командные игры.

*Murtazina D.R.
Jizzakh State Pedagogical University
Murtazin E.R.
Jizzakh Polytechnic Institute*

TEACHING METHODOLOGY IN A GAME FORM: THE PATH TO EFFECTIVE LEARNING

Abstract. This article discusses game-based teaching methods as an effective educational tool. It discusses the benefits of gamification in education, the key principles of this approach and examples of gaming activities. The presented review allows us to understand how game elements can become a means of motivating, activating students and ensuring deep assimilation of educational material.

Keywords: gamification, education, teaching methods, game form, motivation, active participation, feedback, individualization, quests, role-playing games, competitions, team games.

Преподавание в игровой форме, или геймификация образовательного процесса, становится всё более популярным методом обучения в современных классах. Эта методика предлагает использовать игры,

соревнования и развлекательные элементы для достижения образовательных целей. На первый взгляд может показаться, что игры и обучение — вещи, несовместимые, но на практике геймификация доказывает свою эффективность как инструмент обучения.

Преимущества геймификации в образовании:

1. Мотивация: Игровой подход способствует более высокой мотивации учащихся. Задачи становятся интересными, а достижение целей — более весомой наградой.

2. Активное участие: Игровой формат активизирует учащихся, заставляя их принимать активное участие в процессе обучения.

3. Практическое применение знаний: Через игровую деятельность студенты могут применять теоретические знания на практике, что улучшает их понимание и запоминание материала.

4. Коллективная работа: Многие игры включают в себя элементы коллективной работы, что способствует развитию командной работы и умения решать задачи вместе.

Ключевые принципы методики преподавания в игровой форме:

1. Ясные цели: Перед началом игрового урока необходимо четко сформулировать образовательные цели и задачи, которые должны быть достигнуты через игровую активность.

2. Адаптация курса: Игровые задания и активности должны быть тесно связаны с учебным материалом и адаптированы к конкретной теме или предмету.

3. Обратная связь: После завершения игровой активности важно обсудить результаты и оценить эффективность обучения, чтобы корректировать стратегии и методики в будущем.

4. Разнообразие игровых форматов: Используйте различные игровые форматы, такие как квесты, ролевые игры, головоломки и соревнования, чтобы разнообразить обучающий процесс и удовлетворить разные потребности учащихся.

5. Индивидуализация обучения: Учитывайте индивидуальные особенности и потребности учащихся, чтобы каждый мог получить максимальную выгоду от игрового обучения.

Примеры игровых активностей:

1. Квесты и приключения: Создание квестов, в которых учащиеся решают задачи и головоломки, чтобы продвигаться по сюжету и достигать целей.

2. Ролевые игры: Имитация реальных ситуаций или исторических событий через ролевые игры, где каждый участник играет определенную роль.

3. Интерактивные симуляции: Использование интерактивных симуляций для понимания сложных процессов или явлений, например, экономических моделей или научных экспериментов.

4. Соревнования и командные игры: Организация соревнований и командных игр для стимулирования сотрудничества, командной работы и развития стратегического мышления.

В заключение, методика преподавания в игровой форме предлагает инновационный и эффективный подход к обучению, который не только повышает мотивацию учащихся, но и способствует глубокому усвоению знаний и развитию ключевых навыков. Правильное применение игровых элементов в учебном процессе может значительно улучшить образовательный опыт и помочь учащимся достичь высоких результатов.

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*Салимова Б.Д., кандидат технических наук
профессор
кафедра изысканий и проектирования автомобильных дорог
Ташкентский государственный транспортный университет
Республика Узбекистан, г.Ташкент*

*Ходан Е.П.
заведующий кафедрой
кафедра автомобильных дорог, факультет транспортных
коммуникаций
Белорусский национальный технический университет
Республика Беларусь, г.Минск*

ИННОВАЦИОННЫЕ РЕШЕНИЯ ДЛЯ ПОВЫШЕНИЯ УСТОЙЧИВОСТИ ДОРОЖНОЙ ИНФРАСТРУКТУРЫ УЗБЕКИСТАНА В УСЛОВИЯХ ИЗМЕНЕНИЯ КЛИМАТА

Аннотация. Представленное исследование имеет важное значение для Узбекистана, так как страна является одной из наиболее уязвимых к изменению климата. Анализ статистических данных ряда климатических исследований показывает, что в Узбекистане наблюдается тенденция к повышению температуры воздуха, увеличению количества дней с экстремально высокими температурами и повышению частоты и интенсивности осадков. Эти изменения создают определенные угрозы устойчивости дорожной инфраструктуры, приводя к преждевременному износу и разрушению дорожных покрытий. В статье представлены примеры успешных проектов в зарубежных странах, направленных на решение аналогичных проблем. Предложенные меры по адаптации дорожной инфраструктуры к существующим и прогнозируемым климатическим условиям Узбекистана могут способствовать повышению устойчивости дорожно-транспортной инфраструктуры, долговечности автомобильных дорог.

Ключевые слова: изменение климата, дорожная инфраструктура, Узбекистан, адаптация, меры по улучшению автомобильных дорог, опыт зарубежных стран.

*Salimova B.D., candidate of technical sciences
professor
Department of Research and Design of Highways
Tashkent State Transport University
Republic of Uzbekistan, Tashkent
Khodan E.P.*

INNOVATIVE SOLUTIONS FOR ENHANCING THE RESILIENCE OF ROAD INFRASTRUCTURE IN UZBEKISTAN UNDER CLIMATE CHANGE CONDITIONS

Abstract. The presented study holds significant importance for Uzbekistan, as the country is among the most vulnerable to climate change. Analysis of statistical data from various climate studies indicates a trend of rising air temperatures, an increase in the number of days with extremely high temperatures, and heightened frequency and intensity of precipitation in Uzbekistan. These changes pose specific threats to the resilience of road infrastructure, leading to premature wear and deterioration of road surfaces. The article showcases examples of successful projects in foreign countries aimed at addressing similar challenges. The proposed measures for adapting road infrastructure to the existing and projected climatic conditions in Uzbekistan can contribute to the enhancement of the resilience of road transportation infrastructure and the durability of roadways.

Keywords: climate change, road infrastructure, Uzbekistan, adaptation, measures for improving roads, experiences of foreign countries.

Введение

Изменение климата является одной из наиболее актуальных проблем современности. Оно оказывает негативное влияние на различные сферы человеческой деятельности, в том числе на транспортную инфраструктуру [1]. В Узбекистане, как и в других странах Центральной Азии, дорожная инфраструктура является критически важной для обеспечения экономического роста и развития [2]. Однако изменения климата создают серьезные угрозы для ее устойчивости, в частности, приводя к преждевременному износу и разрушению дорожных покрытий [3].

Проведенное нами исследование направлено на изучение основных трендов в изменении климата на территории Узбекистана, и поиск эффективных решений для адаптации дорожной инфраструктуры к новым климатическим условиям.

На территории Узбекистана преобладает аридный климат с ограниченными осадками и низкой влажностью, характеризующийся исключительно высокими летними температурами, острыми колебаниями температур воздуха и интенсивными дождями, приводящими к потокам грязи и наводнениям. Анализ статистических данных, климатических исследований, проводимых на территории Узбекистана и

Центральноазиатского региона, позволяет делать некоторые прогнозы по изменению климата в данном регионе.

Инструментальные измерения с конца 19-го века, свидетельствует о заметном увеличении температур воздуха в Центральной Азии. В летний период абсолютные максимумы температур в пустынях Каракум и Кызылкум, все чаще переваливают отметку 45-49°C. Глобальные климатические изменения приводят к повышению среднегодовых температур воздуха. В частности, сравнение температурных трендов показывает увеличение на 2,4°C и 1,8°C на метеостанциях Ташкента и Андижана соответственно (рисунок 1). Увеличивается количество дней с высокими температурами. Например, в 2019 году в Ташкенте было в два раза больше дней с температурой выше 38°C по сравнению с нормой [4]. Прогнозируемые изменения в климате предполагают продолжение тенденции повышения температуры воздуха в Узбекистане, и к 2030 году средняя температура может увеличиться на 1,0-1,4°C. В контексте глобального потепления возрастает риск экстремальных тепловых волн [5].

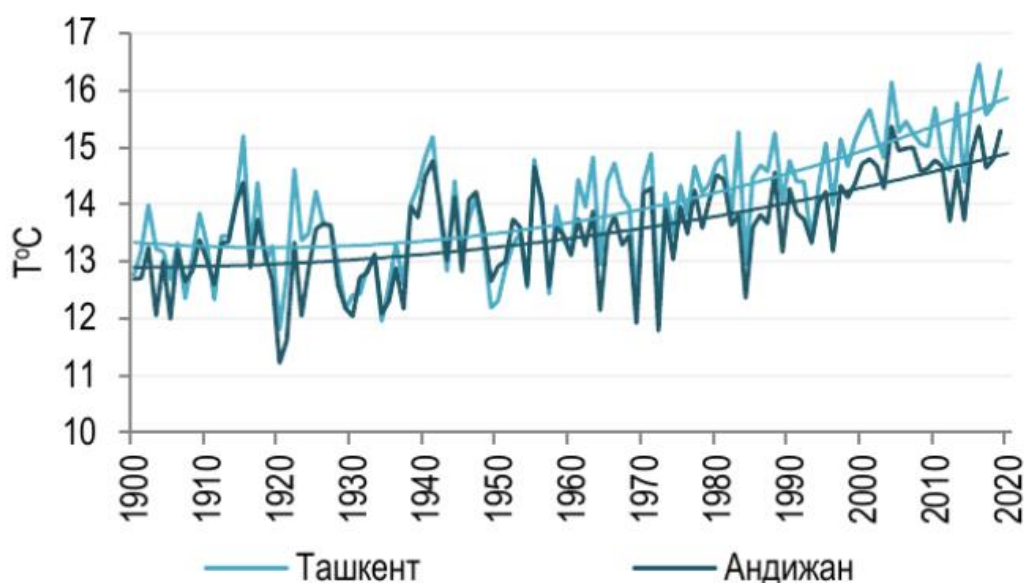


Рис. 1. Изменение среднегодовых температур воздуха на метеостанциях в Андижане и Ташкенте (Источник [4])

Узбекистан характеризуется значительными колебаниями температур, типичными для континентального климата, с различиями между дневными и ночными температурами, а также между летними и зимними сезонами. Летние температуры в равнинных и предгорных областях колеблются от 25 до 39°C, а зимой могут достигать -25°C [6]. Холодные зимы на равнинной территории обусловлены географическим положением и возможностью проникновения холодных воздушных масс с северной части континента, не огороженной горными массивами. В горных

районах Узбекистана постоянные температурные колебания от минусовой до плюсовой температуры в течение одного дня обусловлены низкой тепловой инерцией горных массивов, повышенной солнечной активностью и низкой влажностью воздуха, что в совокупности создает условия для быстрого прогрева и быстрого охлаждения воздуха и частого перехода через отметку 0°C.

Прогнозируется увеличение осадков в равнинных и предгорных районах до 50 мм к 2030 году, увеличение интенсивности и частоты ливневых дождей [7]. Прогнозы Центральноазиатского регионального экономического сотрудничества указывают на возможное усиление экстремальных осадков в Узбекистане к 2050 году, с варьированием в зависимости от региона и сезона. Ожидается увеличение среднегодового количества осадков на 10-20% в западных районах по сценарию RCP 4.5 и умеренное увеличение на большей части территории страны по сценарию RCP 8.5. Особенно значительное увеличение ожидается в весенние и летние месяцы, при этом в отдельных регионах прогнозируется небольшое снижение интенсивности экстремальных осадков [8].

Таким образом, мы можем говорить о наличии таких важных климатических фактора как:

- Рост количества дней с экстремально высокими температурами воздуха.
- Постоянные температурные колебания с частым переходом через отметку 0°C.
- Повышение количества интенсивных осадков.

Данный анализ подчеркивает важность усовершенствования инфраструктурных стратегий с целью обеспечения устойчивости и адаптивности автомобильных дорог к существующим и прогнозируемым климатическим условиям в Узбекистане. Необходимо применение передовых технологий и инновационных материалов для повышения устойчивости дорожных покрытий в условиях изменяющегося климата. В этой связи немаловажным становится изучение опыта стран, столкнувшихся со схожими климатическими вызовами, угрожающими стабильности и эффективности дорожных систем и уже внедрившими отдельные решения. Каждая из стран решает проблемы устойчивости дорожных покрытий, адаптируясь к особенностям своего климата и используя инновационные технологии для обеспечения долговечности и безопасности дорожной инфраструктуры. Мы приведем несколько примеров, актуальных для климата Узбекистана.

1. Теплорефлективные асфальтовые смеси.

Цель: Снижение поглощения солнечной энергии, смягчение тепловых воздействий, повышение устойчивости и долговечности дорожных покрытий.

В США штат Калифорния активно применяет теплорефлективные асфальтовые смеси для борьбы с проблемами, связанными с высокими температурами [9]. Используя инновационные составы, содержащие высокоотражающие микрогранулы, строители дорог стремятся снизить поглощение солнечной энергии асфальтовыми покрытиями и, таким образом, смягчить тепловые воздействия, что приводит к более устойчивым и долговечным дорожным покрытиям.

2. Резиновые асфальтовые смеси.

Цель: Эффективное использование ресурсов, придание асфальту дополнительных эластичных свойств, увеличение устойчивости покрытия к механическим воздействиям и температурным колебаниям.

В Нидерландах вопрос устойчивости дорожных покрытий решается путем использования резиновых асфальтовых смесей, в которые интегрированы отходы от переработки автомобильных шин [10]. Технология успешно сочетает в себе аспекты повышения износостойкости и экологичности.

3. Полимерные материалы в асфальтовых смесях.

Цель: Высокая устойчивость к атмосферным осадкам и ультрафиолетовому излучению, продление срока службы, снижение затрат на ремонт.

В Японии, Германии, Великобритании использование полиуретанов и полиэтиленов в асфальтовых смесях [11] стало важной частью стратегии создания прочных и экологичных дорожных покрытий. Такие материалы обеспечивают высокую устойчивость к атмосферным осадкам и ультрафиолетовому излучению, что в конечном итоге приводит к более долгому сроку службы и снижению затрат на регулярные ремонтные работы.

4. Управляемые дренажные системы для автоматического регулирования стоков воды.

Цель: Предотвращение образования луж на дорогах, повышение безопасности движения, адаптация к интенсивным ливням.

Дренажные системы с управлением стоками активно применяются в Швеции для борьбы с последствиями интенсивных ливней. Системы автоматически регулируют стоки воды в зависимости от интенсивности осадков, предотвращая образование луж и повышая безопасность движения.

В Нидерландах создана разветвленная система каналов и резервуаров для эффективного сбора и отвода ливневых вод. Интегрированные дренажные каналы, оснащенные сенсорами и системами управления, позволяют регулировать стоки воды в реальном времени, предотвращая образование луж и минимизируя риск затоплений на дорогах.

В Японии, где встречаются сильные муссоны и тайфуны, использование технологий "гидроинженерии" стало важным аспектом систем дренажа. В городах, таких как Токио, инфраструктура включает в

себя подземные резервуары, способные временно поглощать и удерживать большие объемы воды в периоды интенсивных дождей, предотвращая возможные наводнения и повреждения дорожных покрытий.

В Австралии применяются так называемые "промежуточные водоотводы", которые направляют воду в специальные резервуары с фильтрационными системами. Это позволяет не только предотвратить негативные экологические последствия, но и переработать ливневые воды для дополнительного использования в сельском хозяйстве или других областях.

Применяемые в развитых странах инновационные системы контроля дренажа воды не только снижают риск затоплений дорожных инфраструктур, но и способствуют сохранению биоразнообразия, обеспечивая устойчивость дренажной инфраструктуры в условиях переменчивого климата [12].

5. Использование геосинтетические материалы для укрепления склонов и предотвращения оползней.

Цель: Создание стабильных и прочных дорожных конструкций в условиях изменчивого климата.

Важный аспект инноваций в проектировании дорог для горных районов проявляется в использовании геосинтетических материалов для укрепления склонов и предотвращения оползней [13]. Опыт Швейцарии в строительстве дорог в Альпах демонстрирует эффективность применения геосинтетиков для создания стабильных и прочных склонов, способных выдерживать воздействие атмосферных осадков и изменения температур.

Выводы

Таким образом, анализ статистических данных и климатических исследований, проводимых в Узбекистане и Центральноазиатском регионе, позволяет сделать следующие выводы:

1. В Узбекистане наблюдается тенденция к повышению температуры воздуха, увеличению количества дней с экстремально высокими температурами и повышению частоты и интенсивности осадков.

2. Данные изменения создают определенные угрозы устойчивости дорожной инфраструктуры, приводя к преждевременному износу и разрушению дорожных покрытий.

В качестве мер по адаптации дорожной инфраструктуры к новым климатическим условиям предлагается использовать опыт зарубежных стран, основывающийся на передовых технологиях и инновационных материалах:

- Теплорефлективные асфальтовые смеси для снижения поглощения солнечной энергии и смягчения тепловых воздействий.
- Резиновые асфальтовые смеси для повышения износостойкости и экологичности дорожных покрытий.

- Полимерные материалы в асфальтовых смесях для повышения устойчивости к атмосферным осадкам и ультрафиолетовому излучению.
- Управляемые дренажные системы для автоматического регулирования стоков воды и предотвращения подтоплений дорожного полотна и наводнений.
- Использование геосинтетических материалов для укрепления склонов и предотвращения оползней.

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ТРИХОГРАММА ТАРҚАТАДИГАН ТЕХНИКА ВОСИТАСИ ВА ИШЛАШ ТЕХНОЛОГИЯСИ

Аннотация: мақолада трихограммани тарқатиш қурилмасини қатор ораларига ишлов бериш ва гўзани баргидан озиқлантиришда қўллаш бўйича тадқиқотлар натижалари ва тажриба нусхаси тўғрисида маълумотлар келтирилган.

Калит сўзлар: трихограмма, қурилма, эжекция, тажриба нусхаси, ҳаво оқими.

Tukhtabaev M.A.

associate professor

*Namangan Engineering-Construction Institute
Republic of Uzbekistan*

TRICHOGRAM DISTRIBUTING TECHNIQUE AND TECHNOLOGY PROCESS

Abstract: the article presents the results of the research and the experimental data on the application of the trichogram spreader in inter-row tillage and foliar feeding of cotton.

Key words: trichogram, device, ejection, pilot copy, air flow.

Трихограмма қўлда тарқатилганидаги камчиликларни ҳисобга олган ҳолда, уни трактор, айнан культиваторда тарқатиш юқори самара беради. [1,2]. Қишлоқ хўжалигини механизациялаш илмий-тадқиқот институтида гўза майдонларига трихограммани кам меҳнат ва маблағ сарфлаб, қисқа муддатларда механизация усулида сифатли тарқатиш технологияси ва уни амалга оширадиган техник воситаси [3-6] нинг макет нусхаси ишлаб чиқилди (1-расм). Қурилманинг техник тавсифи 1-жадвалда келтирилган.

Биолабораторияда тайёрланган трихограмма ғумбак ҳолида, уйғонишидан 2-3 кун аввал янги қурилма ёрдамида далаларга тарқатилади.



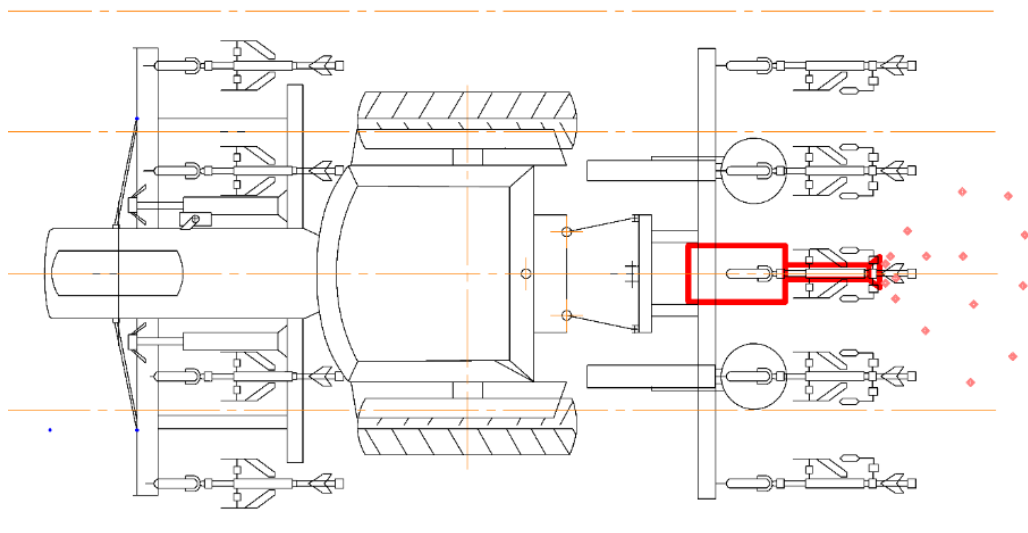
1-расм. Трихограммани тарқатиш қурилмасининг макет нусхаси

1-жадвал

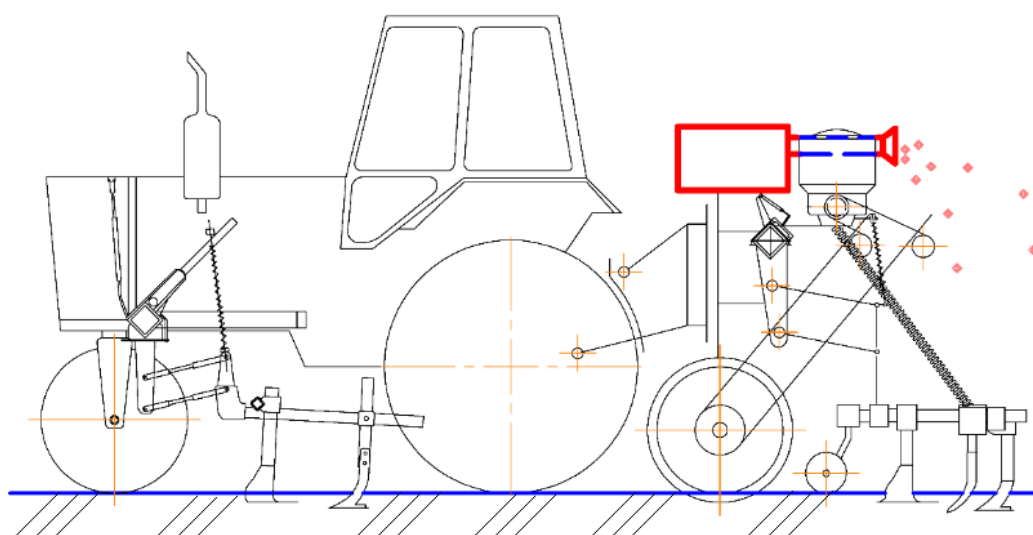
Қурилманинг техник тавсифи

Агрегат тури	Ўрнатма (КХУ-4А култиваторига)
Иш унуми, га/соат	1,5-2,5
Талаб этиладиган энергия кучланиши, В	12
Массаси, кг	25± 2
Габарит ўлчамлари (узунлиги, эни, баландлиги)	800x400x750
Тарқатиш меъёри, г/га	1-3

Қурилма ҳаво қувурчаси, таглик, вентилятор, ҳаво оқимини меъёрлагич, трихограмма (ғумбак ҳолида) учун бункер, герметик беркитувчи қопқоқ, меъёрланган трихограммани сўрувчи патрубк, меъёрланган трихограммани йўналтирувчи қувур (диффузор), трихограмма аралашмасини чиқариш бўғизларидан иборат [7-9]. Ушбу қурилма пахтачиликда кенг фойдланиладиган КХУ-4А русумли чопиқ култиватори рамасига махсус мослама ёрдамида ўрнатилади (2-расм).



а) юқоридан кўриниши



б) ёндан кўриниши

2-расм. Қурилма ўрнатилган КХУ-4А чопиқ култиваторининг технологик схемаси

Вўза майдонларига трихограммани тарқатиш учун ишлаб чиқилган қурилманинг афзаллиги шундаки, уни чопиқ култиватори ғўза қатор орларига ишлов бериш билан бир пайтда кўллаш мумкин. Демак, трихограммани тарқатиш учун далага алоҳида агрегат кириши талаб этилмайди. Кўл меҳнатидан тўлиқ воз кечилиб, меҳнат сарфи бир неча баробарга қисқаради ва мақбул агротехник муддатларда ғўза майдонларига биологик усулда ишлов бериш масаласи ҳал этилади.

Юқори биологик самарага эришиш учун қурилма ёрдамида трихограммани тарқатишдан аввал, ғўза баргларига махсус суспензия (ИСО, азотли, фосфорли, калийли эритмалар) билан ишлов берилди. Бунда сепилган трихограммалар ғўза баргларига ёпишиб қолади (тупроққа тушиб

нобуд бўлмайди). Шунингдек, бир вақтнинг ўзида ғўза баргидан озиклантирилганлиги сабабли пахта яхши ривожланади ҳамда ўргимчак кана, занг канаси, моғор касалликларининг олди олинади.

Мазкур усул билан бир вақтда ғўза қатор ораларига ишлов бериш, ғўзани баргидан қўшимча озиклантириш ва биомахсулотни тарқатиш муаммоларини ҳал этиш имкони мавжуд [10,11]. Қурилманинг иш унуми култиватор унумига тенг бўлиб, бир кунлик иш сменасида 15–20 гектаргача майдонга ишлов бериш мумкин.

Техника воситаси ёрдамида ғўза майдонларига трихограмма тарқатиш меъёри дала шароитига қараб 1,5–2,5 г/га миқдорда бўлиши ва ҳар квадрат метр юзага тақсимланган трихограммалар сони 5 донадан кам бўлмаслиги талаб этилади.

Тажриба, синов ва ҳисоб-китоблар кўрсатмоқдаки [1,2] пахтани хосилини хосилини сақлаб қолиш учун тавсия этилаётган биологик кураш технологияси ва трихограмма тарқатувчи тажрибавий қурилмадан фойдаланишда рентабеллик 57,0% ташкил қилмоқда, бундан ташқари энг муҳими қўл меҳнати бартараф этилмоқда ва рентабеллик яна 22,32% кўшилмоқда.

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Salomov Sh.N.

student

Andijan State Medical Institute

CURRENT FREQUENCY AND ETIOLOGY OF MELAS SYNDROME

Abstract. Mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes (MELAS) condition is an interesting hereditary mitochondrial problem that influences the body's capacity to deliver energy. This article will look at the ongoing comprehension of the recurrence of melas disorder and investigate the hereditary causes and etiology of this condition.

Keywords: syndromes, signs, diseases, investigation, MELAS, determinations, levels, potential treatments.

Introduction: Mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) syndrome is an uncommon maternally inherited mitochondrial disease that predominantly influences the anxious gadget and muscles. MELAS normally seems in childhood after a duration of everyday early development. This situation manifests with recurrent episodes of encephalopathy, myopathy, headache, and focal neurological deficits in teenagers or younger adults, typically between a long time of two and 15. An extraordinary characteristic of the syndrome is the incidence of stroke-like episodes main to hemiparesis, hemianopia, or cortical blindness.

Objectives:

-Screen in danger people, like those with a family ancestry, for potential mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) condition, using proper symptomatic devices.

-Survey the hereditary premise of mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) condition, explicitly perceiving the m.3243A>G and m.3271T>C varieties.

-Select suitable analytic tests, including hereditary examinations and imaging, to affirm the analysis of mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) condition.

-Work together with interprofessional colleagues, including physical and word related specialists and social laborers, to actually speak with patients and their families about the analysis, guess, and accessible administration choices for mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes (MELAS) condition.

Etiology: MELAS is a mitochondrial acquired hereditary confusion brought about by changes in mitochondrial DNA. Fatherly mitochondria are available just in the rear end of sperm, which demonstrates that mitochondrial

legacy is maternal. Maternally acquired mitochondrial messes, including MELAS, result from the deficiency of mitochondria during treatment. In uncommon cases, MELAS might result from an irregular variety without a familial history. Mitochondrial hereditary issues originate from succession varieties that disable mitochondrial capability, including oxidative phosphorylation (OXPHOS) and energy creation [1,2,3].

Specialists accept that changes in tRNA cause disability of protein gathering into respiratory chain buildings in patients with MELAS. Nonetheless, the specific systems stay muddled. Mitochondria are the force to be reckoned with of cells, and any mitochondrial issue will influence the most metabolically dynamic organs of the body, particularly the cerebrum, eyes, heart, and skeletal muscles.

Labaratory Testing: Research facility testing for MELAS includes surveying serum lactic corrosive, serum pyruvic corrosive, cerebrospinal liquid (CSF) lactic corrosive, and CSF pyruvic corrosive.

A raised lactate level is often the underlying marker in diagnosing MELAS during an intense stroke-like episode. Lactic acidosis prompts clinicians to investigate elective findings, including tissue hypoxic-ischemic injury, hyperglycemia, hypoglycemia, and amino corrosive and unsaturated fat metabolic disorders. [3] Assuming these elective determinations are improbable, evaluating lactic corrosive and pyruvate levels is a powerful evaluating test for recognizing MELAS condition. Outstandingly, lactic acidosis doesn't bring about foundational metabolic acidosis. Furthermore, it is fundamental to perceive that a few impacted patients might display typical serum lactic corrosive levels while showing raised CSF levels.

Expected discoveries incorporate raised blood vessel lactate and pyruvate, raised CSF lactate, significant expansions in lactate and pyruvate levels with work out, and a possibly raised lactate-to-pyruvate proportion. The raised lactate-to-pyruvate proportion happens close by typical O₂ immersions in patients with MELAS disorder. Conversely, patients encountering lactic acidosis because of tissue injury show an expanded proportion related with diminished O₂ immersion.

Treatment and Management: In the administration of MELAS condition, there is as of now no treatment accessible that can actually sluggish or stop the movement of the illness.

Arginine and Citrulline

MELAS condition is a mitochondrial acquired hereditary confusion that is essentially influenced by a lack in nitric oxide. Controlling nitric oxide antecedents, like arginine and citrulline, may increment nitric oxide accessibility and diminish the impacts of nitric oxide lack. During an intense stroke-like episode, clinicians might oversee arginine to decrease cerebrum harm because of weakened vasodilation in intracerebral corridors brought about by nitric oxide depletion. [1,6]

Complications

Expected confusions of MELAS are recorded underneath.

- Inability to flourish and short height
- Moderate scholarly disintegration conceivably prompting dementia
- Improvement of mental circumstances like discouragement with maniacal highlights, schizophrenia, or bipolar problem
- Mental imbalance range issues
- Sensorineural hearing misfortune
- Cardiomyopathy causing congestive cardiovascular breakdown

Deterrence and Patient Education

Upon doubt or affirmation of a determination of MELAS, patients and their guardians ought to counsel a geneticist for hereditary directing. Also, it is pivotal to talk about the assessment of other relatives who might be in danger of being impacted. The patient and parental figures need training in regards to the expected movement of the ailment, including overseeing intense neurological occasions, as well as data on movement and likely confusions.

Patients, families, and guardians ought to know about the potential dangers related with cardiomyopathy, nephrotic disorder, hearing misfortune, diabetes, moderate neurological downfall, dementia, and gastrointestinal troubles. Training and backing concerning the significance of keeping up with legitimate hydration and nourishment are critical. Besides, it is fundamental to lay out clear and sensible assumptions about the forecast. Medical care experts can likewise give significant help by examining and offering data about continuous clinical preliminaries.

Conclusion

In synopsis, momentum research gauges MELAS disorder has a commonness of roughly 1 of every 30,000 to 1 out of 100,000 people around the world. The condition is basically brought about by a typical change in mitochondrial tRNA qualities, however more extraordinary mtDNA transformations and improvements can likewise set off MELAS. Understanding the hereditary underpinnings of this problem gives knowledge into sickness systems and pathogenesis. Proceeded with epidemiological observation and examination of genotype-aggregate connections will help further explain the recurrence and etiology of MELAS condition.

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Umurzakova M.R.
assistant
department of social hygiene and health management
Andijan State Medical Institute
Republic of Uzbekistan, Andijan

CURRENT CHARACTERISTICS PANCREATIC DISEASES IN CHILDREN

Annotation. The pancreas (P) is the most important exocrine organ of the human digestive system, ensuring the digestion of all the main components of food: proteins, fats, carbohydrates. In addition, it contains endocrine elements grouped into islets of Langerhans or diffusely distributed throughout the parenchyma. The main endocrine function of the pancreas is the regulation of carbohydrate metabolism through the secretion of insulin and glucagon, but it also produces somatostatin, gastrin, vasoactive intestinal peptide and many other regulatory peptides [1].

Key words: Pancreatic diseases, children, chronic pancreatitis, diagnostics, treatment.

Relevance: Timely diagnosis and treatment of pancreatic diseases in children are one of the most difficult problems of clinical gastroenterology. There is a certain tendency towards an increase in the frequency of these diseases and at the same time, their recognition presents significant difficulties and is often accompanied by diagnostic errors. In this regard, timely diagnosis of pancreatic diseases and timely adequate treatment will improve the prognosis of the disease and reduce the incidence of complications [4].

This also applies to the identification of pancreas pathology as the underlying disease, and the differential diagnosis of inflammatory (pancreatitis) and functional changes (pancreatopathy). It is also necessary to take into account the possibility of anomalies and malformations of the pancreas, among which congenital pancreatic hypoplasia (Shwachman syndrome) is more common [1, 2]. The issue of adequate therapy for pancreatic diseases is also quite complicated, which must be differentiated depending on the presence or absence of inflammatory changes, the period of the disease and the nature of the violation of the exocrine function of the pancreas. [4].

Introduction. Currently, the frequency of pancreatitis in children with diseases of the digestive system, according to various authors, ranges from 5 to 25% [1]. A variety of pancreatic diseases occur in children; different age categories have their own specific problems. Thus, young children often suffer from pancreatic insufficiency [5]. Moderate or minor pancreatic insufficiency can accompany many gastroenterological diseases, such as celiac disease, can be a symptom of chronic pancreatitis and is often detected only during a special

examination. In school-age children, inflammatory diseases of the pancreas prevail, which are not always diagnosed in a timely manner.

Purpose of the study. to study the clinical features, tactics of examination and treatment of children with pancreatic diseases hospitalized at the State Children's Clinical Hospital.

Materials and methods of research. The anamnesis, features of the clinical picture, diagnosis and treatment of children with pancreatic diseases hospitalized at the State Children's Clinical Hospital over the past 5 years were studied.

Results. Under observation were 259 children aged 4 to 17 years who were diagnosed with pancreatic diseases (acute pancreatitis - 33, chronic pancreatitis - 53, reactive pancreatitis - 22, dyspancreatism - 161 children, respectively). There were 56 children aged 4-6 years, 129

children aged 7-14 years, 64 children aged 15-17 years. There were 147 girls (57%), 112 boys (43%). Children with acute pancreatitis were hospitalized in the surgical department, the remaining patients were treated as inpatients in the pediatric department.

The clinical examination included the study of complaints, medical history and life history, physical examination, general blood and urine tests, coprogram, urine diastasis, biochemical blood test with determination of the level of total protein, amylase, glucose, ALT, AST, thymol test, alkaline phosphatase, bilirubin, ionogram, Ultrasound of the abdominal organs.

Regardless of the form of the disease, all children complained of abdominal pain, which is the most common complaint in diseases of the gastrointestinal tract [4]. On palpation, abdominal pain was detected in 94% of children. Acute pancreatitis was more common in children aged 7- 14 years (65%). Children complained of intense abdominal pain, worsening after eating, painful nausea and vomiting, loss of appetite, looseness or retention of stool. The duration of abdominal pain ranged from 1-2 days to 1 month. The diagnosis was verified by a pronounced increase in the level of amylase, diastase and ultrasound dimensions of the pancreas (42%). The children received dietary therapy, infusion therapy, antispasmodics, proteolysis inhibitors, enzymes, and antibiotics as indicated. The duration of hospital treatment was 20.0 ± 5.0 bed days.

Reactive pancreatitis was diagnosed as an acute secondary disease of the pancreas for children aged 3-14 years (65%) against the background of other diseases of the gastrointestinal tract (chronic gastroduodenitis, duodenal ulcer, food allergy). The children received treatment corresponding to the main diagnosis, as well as according to indications - proteolysis inhibitors, antispasmodics, enzyme preparations. The duration of hospital treatment was 12.0 ± 5.0 bed days.

Chronic pancreatitis, characterized by fibrosis of the pancreas, was detected in 79% of cases in children aged 12-17 years. Children complained of recurrent abdominal pain, nausea, occasional vomiting, decreased appetite, and insufficient

weight gain. The diagnosis was verified by a persistent increase in the level of amylase, diastase, ultrasound size and echogenicity of the pancreas (52%). In the vast majority of cases, these patients had not previously been diagnosed with acute pancreatitis, although episodes of abdominal pain were observed for 2-4 years. The duration of the last episode of abdominal pain ranged from several days to 2 months. The children received Ovomin, Omez, antispasmodics, and enzymes. The duration of hospital treatment was 17.0 ± 2.5 bed days.

Dyspancreatism (ICD-10 code K 86.9 - unspecified pancreatic disease), according to our observations, was typical for children aged 7-14 years and amounted to 78%. The disease develops against the background of other diseases of the gastrointestinal tract. The duration of abdominal pain ranged from several days to 1 month. The diagnosis was verified by complaints of decreased appetite, pain in the upper abdomen, which usually have a pulling or aching character, changes in the character of stool, pain on palpation at the points of the pancreas, amylase and diastase levels close to normal, and ultrasound signs of insignificant unstable increase in the size of the pancreas due to edema, without changes in echogenicity. The children received a hypoallergenic diet, antispasmodics, and enzyme preparations. The duration of hospital treatment averaged 17.0 ± 3.0 bed days.

Conclusions. Diseases of the pancreas in children are more common (76.5%) at school age; In most cases (63%), damage to the pancreas in children is functional in nature; Diagnosis of chronic pancreatitis in children presents certain difficulties; in case of recurrent abdominal pain syndrome, it is necessary to conduct an in-depth clinical examination for timely diagnosis.

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Umurzakova M.R.
assistant
department of social hygiene and health management
Andijan State Medical Institute
Republic of Uzbekistan, Andijan

PREVENTION OF ACUTE INTESTINAL INFECTIONS IN CHILDREN

Annotation. It is impossible to overestimate the relevance of the problem of acute infectious diarrhea in children today. Widespread prevalence, high incidence, universal susceptibility - these are the main epidemiological points that explain the interest in acute intestinal infections (AEI) among researchers and practitioners. Moreover, the high frequency of moderate and severe forms of acute intestinal infections in children, the likelihood of a protracted course of the disease, the formation of post-infectious pathology of the gastrointestinal tract [1, 2] now complement from the clinical side the complex of problems that a pediatrician has to face almost every day. And finally, even mild forms of diarrheal diseases significantly reduce the quality of life of the patient.

Key words: Children, acute intestinal infections, etiology, diagnostics.

Relevance. Acute intestinal infections (AI) occupy one of the leading places in the structure of infectious pathology in childhood. The variety of etiological agents (bacteria, viruses and protozoa) that cause infectious diarrhea, the high frequency of mixed infections, frequent adverse outcomes and uneven course justify the need to find ways to optimize diagnostic and therapeutic approaches in accordance with modern scientific data. The article discusses the principles of clinical and laboratory diagnosis of acute intestinal infections. Criteria for assessing the severity of the disease and prognostic criteria for the development of life-threatening conditions associated with exicosis are presented. From a modern perspective, the principles of treatment of acute intestinal infections are presented, the need for an integrated approach and phasing in therapy with a personalized choice of drugs, taking into account the severity, phase and clinical form of the disease, the age of the child and the state of the macroorganism at the time of the onset of the disease, is emphasized [1]. The need for a strictly differentiated approach to the prescription of antibiotics is emphasized. Separately, data are presented on the advisability of including probiotics in the initial therapy of acute intestinal infections of viral etiology, taking into account strain-specific effectiveness, which ensures a significant reduction in the severity and duration of the main symptoms of the disease, and also has a beneficial effect on the state of the microflora of the gastrointestinal tract [2].

Purpose of the study. To study the etiological structure of modern acute intestinal infections in children and evaluate their clinical and pathogenetic features for the timely prescription of adequate therapy.

Material and methods.

An assessment was made of the spectrum of pathogens dominant in the Andijan region in children. The study included 532 children - all (complete sample) admitted for hospitalization at the Children's Hospital Andijan Region for 3 years (2020-2023) with a clinic for acute intestinal infection. The age of those examined was from birth to 14 years. The etiological decoding of the diagnosis was carried out using the method of bacteriological examination of feces to identify

bacterial pathogens and immunochromatographic analysis to determine the rotavirus antigen in feces.

Statistical processing of data was carried out using statistical software packages STATISTICA 8.0, Microsoft Excel 2013, and an online calculator for calculating statistical criteria (<http://medstatistic.ru/calculators.html>). The construction of a mathematical model to determine the etiology (viral or bacterial) of acute intestinal infections based on clinical and laboratory (CLA) data was carried out using the logistic regression method. The model is implemented in a MS Excel file (model accuracy rate is 75%). To assess the diagnostic significance of selected clinical tests ("anxiety symptoms"), Receiver Operating Characteristic (ROQ) analysis was performed with calculation of the area under the curve.

Research results

The average age of 60 patients whose etiology of the disease was studied using the maximum possible range of laboratory research methods was 2.7 CI 1.4-4 years. Children under one year old were 18.3% (95% CI 8.5-37.9), 11/60, from one to 3 years old - 51.7% (95% CI 39.1-64.3),

31/60, from 3 to 7 years - 23.3% (95% CI 12.6-34), 14/60, over 7 years - 6.7% (95% CI 0.4- 13),

4/60. There were no significant differences by gender: the proportion of boys was 46.7% (95% CI 34.1-59.3), 28/60, $p > 0.05$. The etiological structure of the isolated pathogens is presented.

Unfortunately, in practice, such a complete verification scheme for the causative agent of ACI is implemented only in epidemiological areas in Andijan regions when group cases of diseases (outbreaks) occur. As a rule, laboratory tests use routine methods accessible to the average laboratory: bacteriological examination of feces for pathogenic intestinal enterobacteria (Salmonella, Shigella, diarrheagenic Escherichia) and determination of rotavirus antigens in feces using ICA. When using such limited laboratory capabilities, the etiological structure of AEI looks different.

The proportion of rotavirus gastroenteritis is maximum during the cold period (41-53.4%) of the year. Bacterial intestinal infections are more often recorded in the summer-autumn period (9.3%). In summer and autumn, the

proportion of children with acute intestinal infection of unspecified etiology (AEI) increases significantly. The “monthly” etiological structure of ACI is presented.

Discussion

Distinguishing between different etiologies of acute intestinal infections, or, in other words, viral and bacterial diarrhea at the very beginning of the disease, is the main task facing the doctor at the time a child with diarrhea first seeks medical help. Verification of the diagnosis largely determines the tactics of managing patients with intestinal infection, anti-epidemic measures, preventive approaches, etc.

Attempts to identify certain “pathognomonic” symptoms that would allow one to correctly determine the etiology of acutely developed diarrhea have been made for quite a long time. The data presented in the literature largely coincide with the results of our study. Thus, it was previously reported in the Andijan region that one should think about bacterial acute intestinal infections in a child if the clinic identifies symptoms of hemocolitis, an increase in body temperature above 40°C, abdominal pain syndrome and acute neurological symptoms (during the period of diarrheal disease) [6].

In addition, the possibility of identifying laboratory markers of bacterial acute intestinal infections was assessed. In particular, it was reported in the Andijan region that in diseases

caused by salmonella, the levels of C-reactive protein (CRP) significantly increase and the ESR accelerates. Determination of fecal lactoferrin and calprotectin indicators, stool pH also has a certain value in the diagnostic search [6]. Rotavirus infection, according to the data presented, is characterized by increased levels of liver enzymes, more pronounced signs of metabolic acidosis, and low CRP values [4].

Recently, with the improvement of the laboratory diagnostic facilities of most clinics, relatively new methods for etiological decoding of the diagnosis of intestinal infection have become available [1, 5]. We are talking about molecular genetic diagnostics. In the Andijan region, the use of polymerase chain reaction (PCR) for the etiological decoding of ACI allows increasing the number of verified diagnoses to 70% [5]. Of course, these methods for diagnosing the etiology of acute intestinal infections are the future.

However, no matter what modern and “advanced” capabilities laboratories have, about 30-60% of acute infectious diarrhea still remain etiologically undeciphered [2]. With the development of new medical diagnostic technologies, this percentage will inevitably decrease. Human ecology, and with it the factors leading to the formation of various kinds of disease processes, will change: the importance of some microbes will increase, while others will decrease against this background. With an understanding of the causes of diarrhea, their mechanisms, as well as effective means that can intervene in the development of this process, it will be possible to reliably control this

phenomenon. Probably, then we will decide on the need to mandatory clarify the etiology of infectious diarrhea.

In the meantime, today, in a clinic setting for children in the absence of the possibility of a “universal” bacteriological examination, the proposed “alarm symptoms” make it possible to identify a group of patients who require mandatory bacteriological examination for pathogenic enterobacteria. And it is in them that the likelihood of confirming the bacterial nature of the disease is maximum. All this will significantly reduce the costs of this item of work with patients with ACI.

Acute intestinal infections in children whose clinical presentation does not include the proposed “alarm symptoms” are almost always

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*Нарзиев Д.У., кандидат медицинских наук
ассистент
Шайкулов Х.Ш.
старший преподаватель
кафедра микробиологии, вирусологии и иммунологии Самаркандский
государственный медицинский университет
Узбекистан, г.Самарканд*

ТЕЧЕНИЕ ОСТРОЙ ПНЕВМОНИИ У ДЕТЕЙ РАННЕГО ВОЗРАСТА В ЗАВИСИМОСТИ ОТ ВЫДЕЛЕННОЙ МИКРОФЛОРЫ

Аннотация. В статье рассмотрено результаты изучения клиники заболевания острой пневмонией у детей раннего возраста в зависимости от выделенной микрофлоры. Проведен анализ течения острой пневмонии у 12-ти больных с выделенной стафилококковой и у 21 больного с нестафилококковой микрофлорой.

Ключевые слова: Escherichia coli, Pseudomonas, Candida, пневмония, заболевание легких, стафилококк.

*Narziev J.U., candidate of medical sciences
assistant
Shaykulov Kh.Sh.
senior lecturer
Department of Microbiology, Virology and Immunology
Samarkand State Medical University
Uzbekistan, Samarkand*

COURSE OF ACUTE PNEUMONIA IN EARLY CHILDREN DEPENDING ON THE IDENTIFIED MICROFLORA

Annotation. The article discusses the results of a study of the clinical picture of acute pneumonia in young children, depending on the isolated microflora. The course of acute pneumonia was analyzed in 12 patients with isolated staphylococcal and in 21 patients with non-staphylococcal microflora.

Key words: Escherichia coli, Pseudomonas, Candida, pneumonia, lung disease, staphylococcus.

Введение. Острая пневмония - это острое инфекционное заболевание легких, которое характеризуется воспалением альвеол и образованием гнойного экссудата. Это одно из наиболее распространенных заболеваний у детей, особенно у детей раннего возраста [4,6].

По данным ВОЗ, в 2020 году во всем мире было зарегистрировано около 154 миллионов случаев пневмонии у детей в возрасте до 5 лет. Из них около 1,6 миллиона случаев закончились летальным исходом.

В России ежегодно регистрируется около 100 тысяч случаев пневмонии у детей в возрасте до 5 лет. Из них около 2 тысяч случаев заканчиваются летальным исходом [2,5].

Течение острой пневмонии у детей раннего возраста в зависимости от выделенной микрофлоры: стафилококковая пневмония - характеризуется тяжелым течением, высокой вероятностью развития осложнений, в том числе дыхательной недостаточности, сепсиса и менингита; пневмоцистная пневмония - характеризуется медленно прогрессирующим течением, высокой вероятностью развития дыхательной недостаточности; грибковая пневмония - характеризуется тяжелым течением, высокой вероятностью развития осложнений, в том числе дыхательной недостаточности и сепсиса, а вирусная пневмония - характеризуется более легким течением, чем бактериальная пневмония, и меньшей вероятностью развития осложнений [1,3].

Целью нашей работы явилось изучение клиники заболевания острой пневмонией у детей раннего возраста в зависимости от выделенной микрофлоры.

Материалы и методы исследования. Проведен анализ течения острой пневмонии у 12-ти больных с выделенной стафилококковой и у 21 больного с нестафилококковой микрофлорой.

Больные поступили в клинику на 3-8 день от начала заболевания. На искусственном вскармливании были 3 детей, один из них из двойни, преобладали дети в возрасте до 6 месяцев.

Результаты и их обсуждение. Выявлена чувствительность к оксациллину, метициллину, карбенициллину, эритромицину, линкомицину, гентамицину, стрептомицину, канамицину, левомицетину, фузидину, рифампицину *Staphylococcus aureus*, *epidermidis* et *saprophyticus*; высеянных из крови, зева и плеврального пунктата больных. У больных, выделивших *Staphylococcus aureus*, преобладало острое начало заболевания на фоне ОРВИ, со стойким повышением температуры до 38 °С в течение 7 дней.

При поступлении у детей определялось стонущее дыхание, выражена бледность, вялость, отказ от еды, опрелости. В легких ослабленное дыхание, сухие рассеянные и мелкопузырчатые влажные хрипы, отмечались деструктивные изменения в легких у больных, обструктивный синдром - у 2, явления инфекционно - аллергического кардита с нарушением внутрижелудочковой проводимости и неполной блокадой правой ножки пучка Гисса на ЭКГ - у 2, отит и картина токсической почки - у 2, вздутие живота и жидкий стул.

Бактериальная ассоциация *Staphylococcus epidermidis* в крови и *Streptococcus agalactiae* и грибы рода *Candida* из зева выделена у 7 недоношенных детей весом от 1800 до 2500г., родившихся от 3 до 10 беременности. Начало болезни у этой группы детей было постепенное. Давность заболевания от 7 до 21 дня, пневмония осложнилась у них токсической энцефалопатией и дисбактериозом, токсической почкой, которые протекали на фоне рахита, гипотрофии и экссудативно - катарального диатеза. Температура до 38 °С держалась до 25 дней. Деструкция легких определена у одного больного, анемия у 2, отит - у 2. У больных отмечались: выраженная слабость, вялость, акроцианоз, сниженный аппетит, втяжение межреберных промежутков, перкуторно в легких - коробочный звук, аускультативно - крепитация, единичные влажные хрипы на фоне жесткого или ослабленного дыхания, вздутие живота, увеличение печени.

При рентгенологическом обследовании слева определено тотальное просветление легочных полей и пневмоторакс там же или инфильтрация с нечеткими контурами на пораженном участке, на ЭКГ изменения в миокарде левого или правого желудочков. Среди выделенной у больных нестафилококковой микрофлоры преобладала кишечная флора, стрептококки и *Candida albicans*. Заболевание у детей в возрасте от 7 мес. до 3 лет с выделенной *Escherichia coli* протекало, как неосложненная острая пневмония. В анамнезе - частые пневмонии. У ребенка от 11 беременности с весом при рождении, меньше 2300 г., находящегося на искусственном вскармливании, выделившего в ассоциации *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa*, пневмония протекала как деструктивная.

Тяжелое течение пневмонии имело место у больных, детей, выделивших *Pseudomonas aeruginosa*. Заболевание у них сопровождалось, выраженной интоксикацией, субфебрилитетом, дисбактериозом, гнилостным запахом изо рта, В легких прослушивался шум трения плевры.

При ассоциации этого возбудителя с *Escherichia coli* наблюдалось двустороннее поражение легких, рентгенологически выявлялась двустороннее сливная, в нижних отделах без четких границ, с выраженным сосудисто - интерстициальным рисунком. При сравнении течения острых осложненных пневмоний в зависимости от возбудителя можно отметить, что чаще встречается стафилококковая и кишечная микрофлора, ассоциация грамположительной и грамотрицательной микрофлоры.

Пневмония со стафилококковой микрофлорой чаще развивалась у детей в возрасте до 6 месяцев с низким весом при рождении от матерей с частыми беременностями, начало заболевания постепенное, большинство детей на искусственном вскармливании. При поступлении дыхале стонущее, деструктивные изменения в легких, Явления кардита с изменениями на ЭКГ, отит, токсическая почка, парентеральная диспепсия.

Рентгенологически - плевральная реакция, воздушные полости.

Пневмония с нестафилококковой микрофлорой (кишечная палочка, стрептококки, *Candida albicans*, *Proteus*) обычно протекала как неосложненная пневмония, или, особенно в ассоциации, также осложнялась деструкцией легких. обструктивным и кардиореспираторным синдромами на фоне экссудативно - катарального диатеза, рахита, гипотрофии, чаще преобладала картина токсической энцефалопатии.

Выводы. Таким образом, мы наблюдали явную взаимосвязь течения осложненной пневмонии с выделенной микрофлорой.

Течение острой пневмонии у детей раннего возраста зависит от выделенной микрофлоры. Бактериальная пневмония, особенно стафилококковая и их ассоциации с другими микроорганизмами, характеризуется более тяжелым течением и высокой вероятностью развития осложнений. Вирусная пневмония протекает более легко и имеет меньшую вероятность развития осложнений.

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