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- Актуальные вопросы политики и права;
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### BIOECOLOGY, PESTS AND CONTROL MEASURES OF PSEUDOCOCCUS COMSTOKI KUW

*Abstract. The article describes the distribution, bioecology and harmfulness of the Comstock worm, which causes damage in gardens. In addition, the results of experiments with chemical preparations against the Comstock worm are presented.*

*Key words: Fruit tree, temperature, Comstock worm, claws, egg, larva, pesticides, effectiveness.*

**Enter.** Comstock's worm – (*Pseudococcus comstoci* Kuw) belongs to the subfamily of the coccidae family, coccidae - Sossinea. Widespread, omnivorous insect. It can be found in almost all fruit and ornamental trees, woody plants and some herbaceous plants (even in cotton in places near mulberry rows). From fruit trees, it severely damages pomegranates, apples, pears, peaches, and mulberries.



Komstok qurti. (*Pseudococcus comstoci* Kuw) ning tashqi ko'rinishi

The Comstock worm hibernates in various places: trees, under grape skins, around roots, in wall cracks in the form of eggs. When laying eggs, the female takes out a waxy white feather (ovisak) and places it inside. The remaining forms (larvae, adults) die during the winter. Due to various reasons, most of the eggs may die in winter. In the spring (March-April), the larvae emerge from the cocoons and move along the trunk of the tree. Comstock worm cannot move and migrate far. It can move from place to place mainly in various passive ways: on seedlings and fruits, water flow, agricultural equipment, clothes. The first young of the Comstock worm are active, the 2nd and 3rd young are less active. Comstock worm hibernates in the cracks of plant stems, under the bark, in branches and in the soil around the tree trunk, at a depth of 35 cm. The larvae hatch in the spring when the trees are leafing. During the egg-laying period, the female Comstock

worm produces a white cotton-like sac that surrounds the body. Larvae that should turn into females and mature females are similar in appearance. The development of the male Comstock worm differs from the development of the female in that the larva that turns into a female molts 3 times in a row, jumps and then turns into a mature female shortly after the hibernation period. Two hibernation periods are characteristic for larvae that turn into males. Female chervets can spawn without changing their place after spawning. After two weeks, depending on the maturity of her eggs, she begins to crawl along the plant, looking for a place to lay eggs. The color of newly laid eggs is pale yellow, and as the embryo develops inside them, it turns black. Larvae emerge from overwintered eggs at the end of March, in the first decade of April, they become egg-laying breed in the first ten days of May, and by the end of May, larvae emerge from their second eggs. The female larva lives for 3 months; The development of a young larva takes 12-16 days; The second instar larva lasts 10-20 days and the third instar lasts 8-14 days. 42 - 65 days are enough for the development of one generation in summer. On average, the female lays about 200-600 eggs. After three years, the Comstock worm becomes an adult and begins to lay eggs after 10-30 days. The number of eggs laid by each breed is the highest in the first generation (up to 250-650). In the conditions of Uzbekistan, the Comstock worm develops 3-4 generations per season. Comstock worm (*Pseudococcus comstoci* Kuw) can damage more than 300 species of cultivated and wild plants. It damages all parts of plants (fruits, even roots). The worms usually feed along the veins on the back side of the leaf. Due to the damage of the worm, the leaves of the plant turn yellow and dry, the branches become crooked, swelling and cracks are formed on the trunk, roots and branches of the tree. Such a tree weakens and is more quickly damaged by secondary (bark-eating) pests. The quality of the fruits deteriorates, and the productivity of the tree decreases.

Our experiments were carried out by testing a number of insecticides against the Comstock worm in the conditions of Andijan district. When applying pesticides, emulsions and suspensions of pesticides resistant to the external environment were sprayed. The average number of worms and beetles in the selected plants before processing was calculated, and after processing, the number of insects killed by pesticides on 3-7-15-21 was re-counted. The biological efficiency of pesticides was determined based on Abbot's formula.

The operations were carried out in the morning, when the air temperature was above 27-28 °C and the wind speed was 2 m/s, the flow rate of the working fluid was 200 l/ha.

In each variant, a tree was extracted from 6 bushes. The number of Comstock caterpillars in the mulberry inflorescence was counted every 3 days. The work was carried out on May 7, 2021 using a motorized suspension sprayer.

In the experiment, there was no fight against the Comstock worm in apples. In the experiment, Malaton 57% em.k 3.0 l/ha is used in the sample, Danadim expert 40% em.k 1.5 l/ha, in the amounts according to the rate of consumption.

Before applying the drug, larvae are identified from each plant on a 10 cm stem. For this purpose, branches of 10 cm were examined from 5 places of each option. In this way, the number of larvae per 10 cm of stem is determined.

The organization of the experiment, subsequent accounting and calculation of biological efficiency were carried out in the "Methodological instructions..." (2004) approved by the State Chemical Commission of the Republic of Uzbekistan. Counting of adults and larvae of the Comstock worm was carried out based on the number of butterflies caught in 1 trap, after which the calculation of efficiency was carried out according to the Abbott formula.

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## **SPECIFIC CHARACTERISTICS OF TRANSITION TO ELECTRONIC EDUCATION USING "INFORMATION AND COMMUNICATION TECHNOLOGIES" IN AGRICULTURAL UNIVERSITIES**

*Annation. The article examines the use of information and communication technologies in the education system in the context of the rapid development of information processes in the world. Using e-learning resources when using information and communication technologies in traditional education, using effective teaching methods such as online learning courses, distance learning, mobile learning, e-learning. Online educational resources are widely used in teaching full-time and part-time students, self-study, and advanced training.*

*Key words: Blended education, information and communication technology, online education, self-directed learning, distance learning, e-learning.*

At the same time that information processes are developing rapidly in the world, the use of information and communication technologies in the education system has become the need of the hour. The use of information and communication technologies and the use of electronic educational resources in traditional education is effective. Online education courses, distance education, mobile education, e-education, which are widely used and effective in the USA, Europe, and Korea, are being used as educational methods. Online educational resources are widely used in education for full-time and part-time students, independent learners, advanced training.

As a result of the use of electronic educational resources using information and communication technologies in traditional education, the concept of blended learning (Blended Learning) was created in modern education. Blended Learning [1] – Learner learns new knowledge from teacher and online resources. In this case, the learner will have the opportunity to control the tempo, time, and quality of knowledge.

The system of mixed education can be used in corporate training of schoolchildren, students, employees and various trainings.

In mixed education, the student first learns new knowledge from the teacher in class, and after studying, he improves and strengthens his knowledge by doing homework with the help of electronic resources. Teachers can assign science lab work, seminar exercise control questions, case questions, or independent study of a topic to students as homework. Online electronic resources, in turn, are enriched with control questions that monitor student knowledge, and control the pace and quality of student learning.

Here are the pros and cons of blended learning:

There are a number of benefits for students to learn using online learning resources:

1. The student voluntarily begins to learn from the educational resource. The student develops self-control, striving for the goal;

2. The learner can learn at a convenient time and under conditions. He can learn new knowledge and professions with the help of online courses without going anywhere else to get additional knowledge. A computer and the Internet are sufficient for this;

3. Students' learning is accelerated through educational courses created on the basis of multimedia (video, audio, animation) elements, this technology is especially effective in intensive study of foreign languages;

Disadvantages of mixed education:

1. Students, independent learners do not have the skills to use the online educational resource;

2. Lack of opportunity for students to use online courses. The computer does not work or the Internet is not connected;

3. Teachers, educators do not have sufficient knowledge on creating and using courses;

4. Lack of programmers who create software for online educational resources and specialists who maintain them.

We believe that in order to overcome the above-mentioned shortcomings, adequate funds for the necessary technical support and necessary guidance should be provided by experts for the staff and students.

In short, blended learning is considered a priority area of education in modern educational conditions and creates unlimited opportunities for teachers and students. Blended education allows to optimize the teacher's teaching time and increase the effectiveness of education. At the same time, the student becomes an active participant in the educational process and has the opportunity to create an individual educational path based on his needs. This is a great help in preparing competitive specialists in modern conditions. In these humid days, when globalization and climate change threaten the future of humanity, most of our students and young people who are hungry for knowledge sit at home and take mixed education (distance learning). It is no exaggeration if they make effective use of the elements of education and e-learning and develop learning.

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## **LABORATORY INDICATIONS AND MODERN LABORATORY DIAGNOSTICS OF CHRONIC KIDNEY DISEASE**

*Abstract. Chronic Kidney Disease (CKD) is a prevalent condition affecting millions of people worldwide. Early detection and accurate diagnosis of CKD are crucial for effective management and prevention of further complications. In this article, we will explore the laboratory indications and modern laboratory diagnostics utilized in the assessment of CKD.*

*Keywords: measures, symptoms and signs, factors, prevention, complications, CKD.*

**Introduction:** Chronic kidney failure is a gradual loss of kidney function. The kidney begins to fail its function slowly. Your kidneys filter waste and excess fluids from your blood, which are then excreted in urine. Chronic kidney disease causes dangerous fluid, electrolyte, and waste products to build up in your body.

In the early stages of chronic kidney disease, you may have several signs or symptoms. You may not realize you have kidney disease until the condition progresses.

Treatment for chronic kidney disease usually focuses on slowing the progression of kidney damage by controlling the cause of the disease. However, even controlling the disease cannot prevent the development of kidney damage. When chronic kidney disease progresses to end-stage renal failure, it leads to death, not even allowing for artificial filtration (dialysis) or kidney transplantation.

**Symptoms and Signs:** Signs and symptoms of chronic kidney disease develop over time. Loss of kidney function can lead to fluid or body waste accumulation or electrolyte problems. Depending on the severity of the disease, the following may occur during the loss of kidney function:

- Nausea
- Vomiting
- Loss of appetite
- Fatigue and weakness
- Sleep problems
- Urinating more or less
- Decreased mental acuity
- Muscle cramps
- Swelling of feet and ankles
- Dry, itchy skin
- Uncontrolled high blood pressure (hypertension).



Shortness of breath if fluid accumulates in the lungs

Chest pain if fluid collects around the lining of the heart

Signs and symptoms of kidney disease are often non-specific. This means that they can also be caused by other diseases. Because your kidneys are able to compensate for the lost function, you may not develop signs and symptoms until they are irreversibly damaged.

Chronic kidney disease usually occurs when a disease or condition impairs kidney function, causing kidney damage to worsen over months or years.

Diseases and conditions that can cause chronic kidney disease include:

type 1 or type 2 diabetes;

High blood pressure;

Glomerulonephritis, inflammation of kidney filtering units;

Interstitial nephritis, inflammation of kidney tubules and surrounding structures;

Polycystic kidney disease or other hereditary kidney diseases;

Long-term obstruction of the urinary tract, such as prostate enlargement, kidney stones, and some cancers;

Vesicoureteral reflux, a condition that causes urine to pool in your kidneys;

Recurrent kidney infection, also known as pyelonephritis;

### **Risk factors**

Factors that increase the risk of chronic kidney disease include:

Diabetes

High blood pressure

Heart (cardiovascular) disease

Smoking

Getting fat

Being Black, Native American, or Asian American

Family history of kidney disease

Abnormal kidney structure

Older age

Frequent use of drugs that damage the kidneys

### **Complications:**

Chronic kidney disease can affect almost every part of your body. Potential complications include:

Fluid retention, which can cause swelling in the arms and legs, high blood pressure, or fluid in the lungs (pulmonary edema).

A high level of potassium in your blood (hyperkalemia), which can damage your heart and be life-threatening.

Anemia

Heart disease

Weak bones and increased risk of bone fractures

Decreased sexual interest, erectile dysfunction or decreased fertility

Damage to your central nervous system, which can cause difficulty concentrating, personality changes, or seizures

Decreased immunity, which makes you more vulnerable to infection

Pericarditis, inflammation of the sac covering the heart (pericardium)

Pregnancy complications that pose a risk to the mother and the developing fetus

Irreparable damage to your kidneys (end-stage kidney disease), eventually requiring dialysis or a kidney transplant to survive.

#### **Prevention:**

To reduce the risk of developing kidney disease:

Follow the directions for over-the-counter medications. Follow package directions when using over-the-counter pain relievers such as aspirin, ibuprofen (Advil, Motrin IB, etc.), and acetaminophen (Tylenol, others). Taking too many pain relievers for a long time can cause kidney damage.

Maintain a healthy weight. If you are at a healthy weight, maintain it by being physically active most days of the week. If you need to lose weight, talk to your doctor about healthy weight loss strategies.

Don't smoke. Smoking can damage your kidneys and worsen existing kidney damage. If you are a smoker, talk to your doctor about a strategy to quit smoking. Support groups, counseling, and medication can help you stop.

Manage your medical conditions with your doctor's help. If you have diseases or conditions that increase your risk of kidney disease, work with your doctor to control them. Ask your doctor about tests to look for signs of kidney damage.

#### Understanding Chronic Kidney Disease

Before delving into laboratory indications and diagnostics, it is important to have a basic understanding of CKD. This condition occurs when the kidneys are no longer able to filter waste products and excess fluid from the blood efficiently. CKD is often a progressive disease, meaning it may worsen over time, eventually leading to kidney failure if left untreated.

#### Laboratory Indications for CKD

Laboratory tests are an integral part of diagnosing and monitoring CKD. These tests provide valuable insights into kidney function and help healthcare professionals determine the stage and severity of the disease. Some important laboratory indications for CKD include:

#### Creatinine and Blood Urea Nitrogen (BUN)

Creatinine and BUN tests measure the levels of waste products in the blood. When kidneys are functioning properly, they filter out these waste substances. Elevated creatinine and BUN levels indicate impaired kidney function, which may be indicative of CKD.

#### Estimated Glomerular Filtration Rate (eGFR)

eGFR is a calculation that approximates the kidneys' ability to filter waste products. It is calculated based on factors such as age, gender, race, and serum

creatinine levels. A lower eGFR value suggests reduced kidney function and may indicate the presence of CKD.

#### Urinalysis

A urinalysis involves testing a urine sample for various substances, such as protein, red and white blood cells, and the presence of bacteria or other abnormalities. Proteinuria (presence of excessive protein in urine) is a common finding in CKD and can be an indication of kidney damage.

#### Modern Laboratory Diagnostics for CKD

Advancements in laboratory diagnostics have significantly contributed to the early detection and management of CKD. Here are some modern laboratory diagnostics methods used for evaluating CKD:

#### Albumin-to-Creatinine Ratio (ACR)

ACR is a urine test that measures the ratio of albumin (a type of protein) to creatinine in a urine sample. It is used to identify and monitor kidney damage in CKD patients. Elevated ACR values suggest the presence of proteinuria and may indicate CKD progression.

#### Cystatin C

Cystatin C is a protein produced by all cells in the body. It is primarily removed from the blood by the kidneys. Measuring cystatin C levels in the blood can provide an estimate of kidney function, particularly in individuals with normal or near-normal creatinine levels. This test is especially useful in certain populations, such as the elderly, where creatinine-based estimates may be less accurate.

#### Genetic Testing

Genetic testing plays a crucial role in diagnosing certain types of CKD, such as polycystic kidney disease (PKD). By identifying specific genetic mutations, healthcare professionals can confirm the presence of inherited kidney disorders and provide appropriate management and counseling to patients and their families.

#### **Conclusion**

Laboratory indications and modern laboratory diagnostics play a pivotal role in the comprehensive assessment of Chronic Kidney Disease. Blood tests, urine tests, imaging studies, biomarkers, genetic testing, and proteomic analysis are all valuable tools utilized to diagnose and monitor CKD. Early detection and accurate diagnosis can significantly improve patient outcomes by enabling timely intervention and appropriate management strategies. By harnessing the power of modern laboratory diagnostics, healthcare professionals can enhance the precision and efficacy of CKD management.

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## **CLASSIFICATION OF RESEARCH METHODOLOGY IN PEDAGOGICAL EDUCATION**

*Annotation. Knowing the essence of the phenomena and processes of nature and society, determining their peculiarities, aspects, characteristics, and making objective scientific-philosophical ideas and generalizations about them is realized only by using certain research methods. In addition to the general-philosophical sense, the method is also used in a narrow (specific) sense. Philosophical method is characteristic of all sciences and is called dialectical method. The dialectical method serves as a methodology - a methodological basis for existing sciences. Currently, methodology is not a teaching about various methods and methods of analysis used in science, but means how the researcher understands the source of research, how he approaches it, and what the goal of the research. Each method, whether philosophical or scientific, is a method of conducting work - a method of examining the source of research. Methodology is a researcher's practical work system, which includes the methods of collecting, studying, and summarizing facts.*

*Key words: method, philosophical method, special method, methodology, methodology.*

**Introduction.** Linguistics, like any other science, during its historical development, studies linguistic phenomena, scientifically analyzes the research object (source), reveals its internal "secrets", specific aspects, determines its nature, composition, and works on the basis of certain methods. This is completely natural. Because the method uses an aspect, side (part,) of the research source (object part) is a way of learning, identifying, knowing. In other words, knowing the essence of natural and social phenomena and processes, determining their peculiarities, aspects, characteristics, and making objective scientific-philosophical ideas and generalizations about them can only be realized through the activity of specific research methods and their application. Therefore, the method serves the concept of scientificity, which is the existence of science, its integral component, logical part (component). It ensures the development of science, establishes that science is a powerful part, a type of social consciousness, and serves it.

### **Literature analysis and methodology**

It can be said that in addition to having a number of facts and events that serve as a direct basis for making certain scientific and theoretical conclusions

and creating doctrines, each science must also have methods for researching and analyzing these facts. Therefore, the existence, conclusions, and activity of each science are determined and measured by its research object (source), research goal, and, at the same time, research methods. So, what is the method that serves the scientific principle in science? What does the term method mean? What does it represent? It is logical and natural for the question to arise. Method is etymologically derived from the Greek word (methodos), which means "research", "study".

### **Results**

The method is a way of knowing nature, society and thinking process - thinking, according to the theory of knowledge, approaching reality according to the principles (principles) of the theory of knowledge. Therefore, the method in this philosophical sense is a way of knowing, explaining and interpreting any phenomena and processes of objective reality. At the same time the method can be used in a narrow (specific) sense, in addition to being used in a general-philosophical sense. In this case, it becomes important with regard to a specific science, with the analysis of the research object (source) of the same science. Therefore, the method is distinguished by being different in different disciplines as a special, private, field method. In other words, the method is characterized by having general and specific, philosophical and branch views. So, the method is essentially in a dialectical relationship with its existence as a philosophical and scientific "weapon".

### **Discussion**

Philosophical method has relative independence and individuality due to its specificity to all sciences, its generality for all sciences, and it is called the dialectical method. This method, unlike the scientific-research method of a particular science, is of particular importance due to its wide scope and the fact that it works within all disciplines. Also, the idea of strict adherence to the principle of scientific consistency is among the important, main aspects of this method. According to what has been said, the dialectical method serves as a methodology-methodological basis for all sciences. In other words, the general philosophical method - the dialectical method is a general teaching that affects special scientific methods, that is, methods related to various disciplines, so it is called methodology, that is, a teaching about methods that are a method of scientific research. But nowadays (at the time) methodology, scientific research methodology is not a teaching about various methods and methods of analysis used in a certain science, but how the researcher understands the source and object of research and how he approaches it, what purpose he plans for the research, in other words, it refers to the worldview of the researcher. To be clear, methodology is, first, what kind of knowledge the researcher seeks to generate about the source of his research, what kind of knowing he engages in. It is known that in philosophy, a researcher can create two types of knowledge about a thing - an object of study:

- a) emotional, empirical knowledge;
- b) intellectual, logical, theoretical knowledge.

Each type of knowledge creation has different ways, means and methods, as well as goals.

Secondly, it is the method by which the researcher approaches the source of the research. There are two ways of approaching things in philosophy. They are:

- a) metaphysical (nominalistic) approach;
- b) dialectical approach.

Both the metaphysical approach and the dialectical approach (the metaphysical or dialectical understanding and interpretation of things) have their own principles. The researcher conducts research based on these principles in the process of scientific research.

The third is that the researcher takes a materialistic or idealistic (spiritual) point of view and conducts scientific research from this point of view. We remind you that each method, whether it is a philosophical (general) method or a scientific (specific) method, each has a method of conducting work, conducting work, and checking the source and object (subject) of research. In other words, if the method is a way to know and determine the reality, object (subject), events and processes - the truth, then the methodology is a tool to open and build this way. Methodology is a system of practical work of a scientist, which includes the methods of finding, studying and summarizing facts. In other words, the methodology is generalization, analysis, classification, mapping of language and speech units, in practice is to reach the goal by trying ways.

**In conclusion**, I will try to explain this with a simple life example. The knowledge about different aspects of the language and the discovered laws can be compared with the pictures taken from the front, back, sides, and top of a big building. Although these photos are not completely similar to each other, they all unite in one breed - the shape of a building; these photos complement each other and serve to perfect our knowledge about the shape of the building. None of the scientists who drew pictures of the four sides of the building did anything wrong. The mistake is equating the image of the building from one side (the law that is studied by a certain method about one side of the language) with the building itself - whoever did this, surely made a mistake." Conclusion that is, the method - the method of scientific research is a method of knowing and studying a specific feature (aspect) of the phenomena of objective existence, objects.

Methodology - the methodology of scientific research is a set of methods and methods of generating scientific knowledge about the source of research. Methodology - the methodology of scientific research takes into account the researcher's worldview, how he understands the source of research, how he approaches it, what he determines - the purpose (intention) of the research.

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## PLANTS WITH DIURETIC PROPERTIES

*Abstract.* The plant world has long attracted the attention of doctors, pharmacists, and pharmacologists as an inexhaustible source of biologically active substances and medications.

*Key words:* diuretics, herbal remedies, uric acid, plant, kidneys.

Herbal medicines are usually characterized by a mild effect and a high degree of safety even with long-term use, and due to the significant amount of biologically active substances, their effect on the body, as a rule, is favorably multimodal in nature. The world flora is rich in plants that affect the excretory function of the kidneys (the most characteristic and deeply studied is the diuretic effect inherent in hundreds of species, although more than two dozen species exhibit antidiuretic activity).

There are also many plants that have nephroprotective properties that can protect the kidneys from numerous damaging influences, the frequency of which is steadily increasing in the modern world. Of undoubted interest are also medicinal plants that affect the metabolism of uric acid. Its disorders play an important role in the pathogenesis of not only gout, but also cardiovascular diseases, metabolic syndrome, and urolithiasis. The study of the active substances of these plants, their pharmacological properties, especially their mechanisms of action, is extremely important due to the widespread prevalence of kidney diseases and uric acid metabolic disorders.

Development of effective and safe medicines, regulating the excretory function of the kidneys remains an urgent task. We are talking primarily about diuretics. Drugs with such activity, including herbal ones, have long been used for widespread diseases of the cardiovascular, urinary and other systems. Even in the "Canon of Medical Science" by Abu Ali Ibn Sina (Avicenna), written almost 1000 years ago, 124 plants with a diuretic effect are mentioned. Dioscorides' *De Materia Medica*, the main source of information on herbal medicine for many centuries, lists more than 200 medicinal plants used for diseases of the genitourinary system.

The diuretic effect of flavonoids is manifested in plants containing them in sufficiently large quantities. Plants with a pronounced diuretic effect include: horsetail, knotweed, blue cornflower, corn (stigma), etc. In terms of the degree of action, flavonoids are inferior to synthetic drugs, but they do not cause the complications typical of the latter. In addition, under the action of flavonoids, not

only water is removed from the body, but also nitrogenous wastes, stone-forming acids and other metabolic products. Flavonoids are used for edema of various origins, chronic heart failure, hypertension, kidney disease, especially urolithiasis.

The following plants have diuretic properties: silver birch, wild strawberry, stinging nettle, common flax, field steelhead, dandelion, St. John's wort, common motherwort, tricolor violet, horsetail, lingonberry, juniper, smooth licorice, yarrow, erect cinquefoil, chamomile officinalis, bearberry, garden parsley, small-leaved linden, etc.

Lingonberries are called the berry of immortality, such is their beneficial effect on human health. It is collected and prepared in the fall. Lingonberries are used to treat a wide variety of diseases; the beneficial properties of lingonberry berries and leaves depend on arbutin (a glycoside with an antiseptic effect), antioxidants, organic acids, tannins, flavonoids and vitamins. The leaves are even considered more beneficial than the fruits. The healing properties of lingonberries have been used for hundreds of years. In this case, its leaves are most useful. Lingonberry is actively used in urology as a diuretic and a natural remedy against cystitis and urethritis. Its special value is that it simultaneously has antibacterial, anti-inflammatory, and diuretic effects, working in all main directions at once. Lingonberry infusion is usually prescribed in complex therapy for inflammation of the bladder and urinary tract, as well as in other situations where a pronounced diuretic effect is required against the background of the inflammatory process. Lingonberries are often included in combination medications for cystitis.

The healing plant goldenrod has antiseptic, anti-inflammatory, wound-healing, antispasmodic and astringent effects. It is used for pyelonephritis, edema, chronic kidney and bladder diseases, and urinary disorders in the elderly. For bronchial asthma, sore throat, pulmonary tuberculosis. Externally, tincture of the roots in the form of lotions is used as a wound-healing agent for purulent wounds, cuts and ulcers, as well as for bone fractures.

For nephritis and pyelonephritis, 2 tbsp. 1. dried crushed leaves pour 0.5 liters of water. Keep in a water bath over low heat for 5 minutes. Cool, then strain. Take 0.5 cups 3-4 times a day half an hour before meals.

For kidney stones 2 tsp. Pour a glass of boiling water over dry crushed goldenrod herb, let it brew for 4 hours, then strain. Take 0.5 cups 4 times a day half an hour before meals.

For urinary problems, mix 1 tbsp. 1. chopped goldenrod herb, stinging nettle herb, yarrow herb, prickly steel root, fennel fruit and 1 tsp. crushed birch buds. Pour a glass of boiling water, let it brew for 6 hours, then boil over low heat for 15 minutes. Take 50 ml 5 times a day 15 minutes before meals.

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## **IMPROVING REFEREEING IN THE SPORT OF BOXING**

*Annotation: referees play a decisive role in boxing, ensuring the fair and safe passage of meetings. However, there are many cases where questionable decisions or missed violations have led to disputes and even injuries. There are several measures that can be taken to improve the quality of boxing refereeing.*

*Keywords: referee, referee and player interactions, training practice, pedagogical function, youth sports.*

Sport does not automatically benefit education for players. In order for the sports field to become a child-friendly educational environment, it is necessary for all subjects involved in the organization of youth sports to take deliberate educational measures. Among these actors are referees who must be considered in the study of the educational significance of the sport for the youngest.

The subject of this study was handball referees who interacted with players during the game. Considering that the referee is an important participant in sports education and that the interaction of the referee and the players is the main mechanism of the referee's educational influence, this study is aimed at assessing the quality of his interaction with the players during handball games for children from 9 to 12 years old. years.

The interaction of educational referees and players was studied in six dimensions: positive climate, sensitivity, behavioral management, competence, guidance, and communication. The data was statistically analyzed using the chi-square test, the Mann-Whitney U test, and discovery factor analysis (EFA). Cronbach's alpha values were above 0.90 in terms of factors, indicating a sufficient level of reliability. The results of the study showed that neither the experience of the referees nor the outcome of the game affect the assessment of the quality of the referee's educational impact on the players.

In five of the six dimensions studied, the quality of the relationship between the referees and the players was assessed as average, while the positive climate was assessed as bad (three-stage scale: bad, average, good). If referees are required to help coaches and parents achieve their educational goals, the results show areas in which they can improve.

The study provided empirical evidence that could be the basis for changing previous curricula for referees developed by local and national athletic associations. Referees must be trained to create a positive environment on the sports field, which consists of building emotional ties with players (physical

intimacy, social conversation), in a passionate attitude and joy of communication (smile, activity, positive impact reaction, positive reviews, respectful and inclusive language, the use of players' names, listening to players).

In addition, referees must actively monitor the emotional, cognitive, social, and health needs of the players, as well as teach them to respond to the needs of the players and solve problems.

Many actors and institutions are involved in the organization of youth sports. Some of them carry out long-term targeted initiatives aimed at the cognitive, moral and social development of players using people with relevant information (pedagogical and psychological). Others view the educational process as an additional activity that is more or less consciously carried out. In order for the sports field to become a child-friendly educational environment, it is necessary for all subjects who make up youth sports to take deliberate educational measures.

So far, various educational strategies have been developed in sports, regulatory models of coaches, parents and physical education teachers, tools for assessing the social and anti-social behavior of players. Shields et al. the sport claimed that education was not beneficial for children and young people in its own right. It is the behavior and attitudes of adults at the moment of training, games, training camps, etc. that are very important for their multilateral development.

Athletes often imitate the behavior of their coaches, parents, or teachers and accept their attitudes, views, norms, and values as their own. Therefore, all adults involved in youth sports are teachers. There are also often forgotten referees in the study of the educational values of youth sports among these adults.

Publications on the quality of the sports environment as a social space indicate that sports have educational potential. Properly and skillfully used by coaches, parents or referees can lead to the multifaceted development of the personality of young players. Often, playing sports improves children's self-esteem, helps to maintain emotional balance, encourages cooperation and leadership.

Training, sports competitions, defeats and victories can be a rich source of positive personal and social experiences, if these situations are skillfully and consciously used for educational purposes. In addition, the results of the research on the use of methods such as Judge modeling, adoption of a child's point of view, orientation towards misconduct, creating a positive climate, etc., increase the effectiveness of educational effects.

Improving referee performance in boxing is important in ensuring the safety and fairness of the sport. There are several basic steps that can be taken to improve the performance and effectiveness of referees in boxing competitions:

Advanced training and training: referees must conduct comprehensive training and training programs that focus on boxing rules and regulations, as well as decision making. - creation skills. This will help them draw more specific

conclusions and react quickly and appropriately to various situations within the ring.

Consistent application of rules: referees must ensure that boxing rules are consistently applied throughout all matches. They must be vigilant in detecting and punishing violations such as low kicks, head kicks, and holds to maintain a fair playing field. 3. Improved communication: referees must actively communicate with fighters during the game, ensuring that they understand the rules and receive clear instructions. Establishing effective communication will prevent misunderstandings and reduce the likelihood of potential violations.

Routine assessment and evaluation: regular assessment and evaluation of judges' performance is important to identify areas of improvement and to provide constructive feedback. This can be done through video communication and through the feedback of experienced fans and coaches.

Use of technology: technology integration, such as instant replay, helps referees make more specific decisions in critical situations. A video game can provide an additional perspective in controversial situations, allowing judges to make a more fair verdict.

Continuous professional development: referees must engage in continuous professional development in order to be aware of the latest changes and changes in the sport. Attending seminars, workshops, and conferences can help referees improve their skills and gain a deeper understanding of boxing rules and strategies.

Accreditation and licensing: the introduction of a comprehensive accreditation and licensing system for referees can ensure that boxing competitions are managed only by qualified and competent officials. This will help maintain a high standard of refereeing and increase confidence in the sport.

Cooperation with boxing organizations: referees must work closely with boxing organizations to create guidelines, protocols and training programs that reflect the specific needs of the sport. Regular communication and cooperation will help strengthen strong working relationships between referees and boxing organizations. By implementing these measures, it is possible to significantly improve the boxing performance of the referees. This gives priority to the safety and fairness of the sport, increasing the overall experience for fighters and spectators.

#### *Conclusion*

*In boxing, a versatile approach is required to increase referee activity. Extended training programs, the use of technology, the introduction of rapid repetition, the strengthening of communication with referees and comprehensive post - fight analysis are all important aspects to consider. By implementing these measures, boxing can seek to judge more clearly and fairly, resulting in a good experience for athletes and fans.*



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## **SPREAD OF ISLAMIC RELIGION TO CENTRAL ASIA**

*Annotation: this article explores the historical path of the spread of Islam in Central Asia and the emergence of teachings that later questioned and challenged these religious changes. Central Asia, a diverse and culturally rich region, witnessed the spread of Islam in various ways, including through trade, conquest and peaceful interactions.*

*Keywords: Islam, Arabs, Central Asia, religion, culture, goodness.*

A region of wide and historical importance, Central Asia has been a crossroads of civilizations and religions for thousands of years. The spread of Islam in Central Asia is an important section in the history of the region, deeply shaping its religious and cultural landscape. The introduction of Islam into Central Asia was a complex process, consisting of trade routes, invasions and peaceful interactions. He brought with him new beliefs, religious customs and social structures, which over time left an indelible mark on the region.

However, the adoption of Islam in Central Asia was not a uniform or undisputed phenomenon. As with any significant religious change, it faced opposition and alternative narratives. Over time, Central Asia has witnessed the emergence of doctrines, movements and individuals that question, challenge, or reinterpret the dominant Islamic narrative.

These conflicting teachings and movements often reflected the region's rich cultural and ethnic diversity and reminded of the complex interrelationships between religious spread and the preservation of previous traditions.

It was a widely and culturally diverse region. Central Asia has hosted many civilizations, and each of them has left an indelible mark on its history. Among these influences, the spread of Islam remains the main chapter that has significantly shaped the religious and cultural landscape of Central Asia. The journey of Islam to this region was complex and reflected the multifaceted interaction of trade, conquest and peaceful interaction. However, like any profound religious change, the spread of Islam was not without difficulties. Over time, Central Asia has witnessed the emergence of doctrines and movements that question, challenge, or reinterpret the dominant Islamic narrative. This article seeks to explore the complex history of the spread of Islam in Central Asia and the simultaneous emergence of teachings that seek to challenge it.

Uzbekistan and other countries of Central Asia are an integral part of the incredibly complex, multifaceted Islamic world. It is no secret that in this world, in sufficient formal and informal or other words, they are placing Islam in their

political plans, whether for the purpose of intolerance towards all religions or the use of Islam as the basis for the humiliation of narrow national interests. By the last few years, a group of people and categories had emerged who had made Islam their mask. They are trying to cause conflict among the community, to cause discord, to destroy the Muslim peace, to harm the Islamic religion, which incites all the virtues of the world afterlife, and to cause discord among the people, to escalate negative prejudices among society, such as corruption, bloodshed.

Uzbekistan has long been a land of religions, and before Islam: Zoroastrianism, Judaism and about ten other religions existed. The fact that there was a conflict in interreligious relations has not been repeated in historical books. Historically it has been known that Amir Temur understood Islamic religion as distinct, free from fanaticism, freely. His perfect faith did not extend to the rejection of other religions, and in this respect it is an example not only for his own century, but also for the modern one.

After the independence of the Republic of Uzbekistan in 1991, this and similar parties and groups were banned and their activities were suspended. The freedom of conscience and Religious Organizations Act of 1991 was passed, which defined the state's policy on freedom of conscience and religion. Its adoption has played an important role in the lives of citizens practicing Islam and other religions.

Freedom of conscience was guaranteed to everyone. Everyone has the right to believe in any religion they want or not to believe in any religion. Forced absorption of religious views is not allowed. In 1992, by decree of the president of the Republic of Uzbekistan, a committee on Religious Affairs was established under the Cabinet of Ministers. Today, there are 2,238 religious organizations of 16 religious denominations, 9 secondary special educational institutions operating in our Republic. Our President Shavkat Mirziyoyev's speech at the 72nd Session of the General Assembly of the United Nations proves that it is becoming an important program for achieving solidarity, Interfaith Harmony, Peace Preservation not only in our country, but also in Central Asia and all over the world.

The head of our state, Shavkat Mirziyoyev, from the early days of the Presidency, stressed the need to fight against ignorance with enlightenment. President Shavkat Mirziyoyev, in his speech at the 72nd session of the United Nations General Assembly on September 19, 2017, stated that the formation and education of the mindfulness of people on the basis of enlightenment is the main task. For this, first of all, it is the most important task to convey to the public of the whole world the true humanitarian nature of Islam. Islam calls us to goodness and peace, to preserve the original human qualities.

The introduction of Islam into Central Asia can be traced back to the 7th century, primarily through trade networks and interactions with neighboring regions. Over time, it became the dominant religion in most areas of Central Asia, influencing both spiritual and social aspects of various societies. The expansion

of Islam in Central Asia can be attributed to various factors, including Arab invasions, the attractiveness of the unifying faith, the flourishing of the Silk Road trade routes that facilitated the exchange of goods and ideas.

The adoption of Islam brought significant changes to the region. Mosques and madrasas were built, Arabic script was introduced, Islamic legal systems were introduced. These changes served to integrate Central Asia into the larger Islamic world, linking it to the caliphate in Baghdad and the wider Muslim society.

The peculiarity of Central Asia is expressed in the cultural diversity within its borders, where various ethnic groups, languages and Customs live side by side. The rich heritage of the region, including the heritage of ancient civilizations such as the Tajik culture, Turkic nomadic traditions, Sogdians, influenced by the Persians, is characterized by the uniqueness of Central Asia.

The introduction of Islam into Central Asia is a multifaceted process, with different ethnic groups adapting to the religion and interpreting it in a unique way. As a result, the spread of Islam in the region was not uniform, and this led to a tapestry of various Islamic practices and interpretations.

With the introduction of Islam, Central Asia also witnessed the emergence of doctrines and movements questioning the dominant faith. These teachings were often based on pre-existing religious or spiritual traditions in response to the difficulties and opportunities created by the spread of Islam.

Mysticism: mysticism played an important role in Central Asian religious life, emphasizing a botanic journey to find the divine. He proposed an alternative spiritual path that often coexisted with Islamic orthodoxy. Sufi sects spread throughout the region, and their teachings were sometimes seen as distinct from mainstream Islamic practices.

Shamanistic and folk practices: in more remote and isolated areas, especially among the nomadic population, elements of shamanism and traditional folk religions remain alongside Islamic beliefs. These syncretic practices were a form of opposition to the full establishment of Islamic orthodoxy.

The spread of Islam in Central Asia testifies to the historical and cultural complexity of the region. The coexistence of various religious and philosophical traditions with Islam enriched the cultural tapestry of Central Asia. The emergence of anti-Islamic teachings and movements reflects the dynamic history of the region and the ability of its inhabitants to adapt and reinterpret religion in a unique way. The history of Central Asia reminds that religious change is never a monolithic process, but rather a complex interaction of various influences and responses that contribute to the vibrant mosaic of the religious and cultural history of the region.

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## **ROLE OF PHENOTYPES IN ALLERGIC DISEASES**

*Annotation. The variety of causes that cause the development of allergic diseases, the complex pathogenesis, and the unequal response of patients to therapy have become the basis for identifying phenotypes and endotypes of allergic diseases. Such a high interest in this problem is due to the fact that modern advances in the diagnosis and treatment of allergic diseases do not always satisfy patients, and many of them experience ineffectiveness of the standard treatment [1]. As a result, all the signs and properties of the organism develop, which make up its phenotype. Thus, a phenotype is a product of the implementation of the genetic program contained in the genotype. However, the genotype does not unambiguously determine the phenotype: to a greater or lesser extent it also depends on external conditions. Sometimes phenotypes differ extremely dramatically in different conditions. Various methods of carrying out this type of immunotherapy have been proposed: oral, subcutaneous, etc., but the question of its appropriateness for food allergies requires further study.*

*Key words: oral, allergy syndrome, phenotype, endotype, therapy.*

**Introduction.** The variety of causes that cause the development of allergic diseases, the complex pathogenesis, and the unequal response of patients to therapy have become the basis for identifying phenotypes and endotypes of allergic diseases. Such a high interest in this problem is due to the fact that modern advances in the diagnosis and treatment of allergic diseases do not always satisfy patients, and many of them experience ineffectiveness of the standard treatment [1]. All this served as a reason for studying the phenotypes and endotypes of allergic diseases, which make it possible to explain the clinical, pathophysiological, functional, and sometimes genetic characteristics of each individual patient and to select personalized therapy for him [2, 3]. To date, the phenotypes of bronchial asthma have been described in most detail [4, 5]. For the first time, the term “phenotype” (phenotype from the Greek phaino - I show, discover and typos - imprint, form, sample) was proposed by the Danish scientist Wilhelm Johansen in 1909, who explained that under the influence of environmental factors the genotype of an organism (hereditary predisposition) is realized into any symptom inherent in a given organism, or disease.

Each biological species has a phenotype unique to it. It is formed in accordance with the hereditary information contained in the genes. However, depending on changes in the external environment, the state of traits varies from organism to organism, resulting in individual differences - genetic variability, which can be combinative and mutational. Combinative variability arises as a



result of the exchange of homologous regions of homologous chromosomes, which leads to the formation of new gene associations in the genotype. Mutational variability (mutations) causes changes in the genotype, is inherited by offspring and is not associated with crossing and recombination of genes. There are chromosomal and gene mutations. Chromosomal mutations are associated with changes in the structure of chromosomes. This may be a change in the number of chromosomes, a multiple or not a multiple of the haploid set. Gene mutations affect the structure of the gene itself and entail changes in the properties of the organism and occur in both somatic and germ cells. Phenotypic characteristics are not transmitted from parents to offspring, only the reaction norm is inherited, i.e. the nature of the response to changes in environmental conditions. And if the totality of all the genes of an organism constitutes its genotype, then the totality of all its characteristics (anatomical, morphological, functional, etc.) constitutes its phenotype. During life, the phenotype of an organism can change, while the genotype remains unchanged. Each phenotype has its own molecular markers (endotypes), which require further decoding. Endotypes are precisely those biomarkers that determine the pathogenesis and characteristics of the phenotype of a patient with a particular disease. So, a phenotype is the totality of all the characteristics and properties of an organism, which is formed in the process of its individual development as a result of the interaction of the genotype and environmental conditions.

**Results.** The set of chromosomes received from the parents carries a set of genes that are characteristic of a given species in general and a given organism in particular. These genes carry information about proteins that can be synthesized in this organism, as well as about the mechanisms that determine the synthesis itself and its regulation. During development, genes are sequentially turned on and the proteins they encode are synthesized (gene expression). As a result, all the signs and properties of the organism develop, which make up its phenotype. Thus, a phenotype is a product of the implementation of the genetic program contained in the genotype. However, the genotype does not unambiguously determine the phenotype: to a greater or lesser extent it also depends on external conditions. Sometimes phenotypes differ extremely dramatically in different conditions. Phenotype can be defined as the “carrying out” of genetic information towards environmental factors. In light of the above, the identification and study of food allergy phenotypes as a trigger and etiological factor in many allergic diseases is of great importance for clinical practice [6, 7]. Food allergy is characterized by polymorphism of clinical manifestations and complex immunological mechanisms. It has a high and uneven prevalence in different regions of the globe, due to specific dietary traditions and the unique impact of environmental factors on the child’s body [8, 9, 10]. The heterogeneity of food allergies with all the variety of clinical manifestations, differences in severity and, in special cases, resistance to traditional treatment makes it possible to distinguish individual food allergy phenotypes based on clinical signs and a number of immunological

markers. Currently, this issue is controversial and requires further discussion. Food allergies underlie many allergic diseases: atopic dermatitis, urticaria, angioedema, gastrointestinal symptoms, allergic rhinitis, bronchial asthma, anaphylaxis. In most cases, food allergies are caused by overproduction of IgE antibodies with the formation of chronic inflammation in the shock target organ [11]. The main role in it is played by various immunocompetent cells, among which are lymphocytes, dendritic cells, eosinophils, mast cells and basophils. In patients with IgE-mediated reactions, there is an imbalance of the Th2/Th1 cytokine profile with a predominance of the activity of Th2 lymphocytes with the generation of pro-inflammatory cytokines. The cause of polarization of Th1 cells may be the excretion by dendritic cells of a large number of antigenic peptides with high affinity for the major histocompatibility complex (HLA) class II and their production of IL-12. With delayed maturation of the innate immune system, polymorphic variants of Toll-like receptor genes and decreased production of IL-12 are observed. The reason for the insufficiency of the Th1 immune response may be a decrease in the functional activity of T-regulatory lymphocytes (CD4+CD25+FOXP3+, Tr1, Th3), which may cause hyperactivation of Th2 lymphocytes. IL-4 plays a significant role in the development of immune Th2/Th1 imbalance; the predominance of the Th2 immune response leads to increased production of IgE antibodies. In addition to IgE-mediated reactions, non-IgE-mediated and cell-mediated reactions, responsible for the development of various clinical manifestations in many organs and systems of the body, can play an important role in the pathogenesis of food allergies [12]. The formation of clinical phenotypes of food allergy can occur with the participation of pathophysiological processes at the molecular level. Today, when identifying individual phenotypes of food allergy, one should focus on a description of its clinical manifestations, the most significant triggers (food allergens), as well as the response to standard therapy.

Thus, with regard to the differences in clinical manifestations of food allergy, cutaneous, gastrointestinal and respiratory phenotypes of food allergy are distinguished. In patients with food allergies, several phenotypes may be present, and one phenotype may transform into another. The cutaneous phenotype of food allergy can manifest itself as atopic dermatitis, urticaria, and angioedema. Atopic dermatitis is the most common manifestation of food allergy in children during the first 3 years of life. At this age, the predominance of the exudative component of inflammation on the skin is characteristic. As the child grows older, the clinical picture of atopic dermatitis changes; pruriginous and lichenoid skin manifestations predominate. When exposed to food allergens, urticaria and allergic swelling (angioedema) may develop. The causes of the development of the skin phenotype of food allergies are cow's milk, eggs, fish, seafood, wheat, soy, peanuts, nuts, carrots, beets, tropical fruits (kiwi, mango, avocado, bananas), citrus fruits. The gastrointestinal phenotype of food allergy is manifested in children by periodic vomiting, abdominal pain, and recurrent diarrhea. There may

be weight loss and blood in the stool. A number of patients have oral allergic syndrome, characterized by rapidly occurring itching and swelling of the lips, sometimes of the oral mucosa and the back wall of the pharynx. Causes any food products. Most often, cow's milk, wheat, fish, seafood, soy. The respiratory phenotype of food allergy is manifested by acute rhinoconjunctival syndrome in the form of itching in the nose, rhinorrhea, sneezing, difficulty in nasal breathing, signs of conjunctivitis, and bronchial asthma. Caused by apple, tomato, carrot, fresh fruits, vegetables, peanuts, fish, seafood. The presence of various immunological mechanisms influencing the development and course of food allergies gave rise to the identification of pathogenetic phenotypes. Today, the basic developmental mechanisms underlying food allergies are known. These are IgE-, non-IgE- and cell-mediated mechanisms.

Potential triggers (food allergens) and accompanying conditions determine the clinical picture and course of food allergies. Food allergies occur when consuming a wide variety of foods, among which are food allergens of animal origin [cow's milk and the milk of other domestic animals; eggs of chickens and other birds; fish, crustaceans (crayfish, crabs, shrimp) and other seafood] and food allergens of plant origin [cereals (wheat, barley, rye, oats, corn, sorghum, millet, rice); umbrella crops (carrots, celery, parsley, dill); nightshade crops (tomato, potato, pepper, eggplant, coffee); fruits (kiwi, banana, tangerines, oranges, lemon, apple, peach) and berries (strawberries, watermelon); plants of the cruciferous family (cabbage, radish, radishes, turnips, mustard, horseradish); legumes (peanuts, soybeans, green peas); nuts (hazelnut, chestnut, coconut)]. With regard to the time of onset of food allergies, the duration and severity of the course, food allergies should be distinguished in young children and in older children. There is a certain age sequence to food allergies. Thus, in children of the first years of life, the leading causes of food allergies are cow's milk proteins, gluten from cereal products, eggs, soy, and a number of vegetables and fruits. At older ages, nuts, seafood, herbs, spices, etc. play a significant role in the exacerbation of food allergies [8, 9]. At the stage of diagnosing food allergies, it is very important to establish an individual causally significant food allergen or allergenic fractions of this product responsible for the manifestation of allergic symptoms. The preparation of individual elimination diets taking into account the age of the child and the determination of allergen-specific IgE antibodies in the blood serum not only to whole food protein, but also to its allergenic fractions is always more justified than the empirical exclusion of a food product from the diet. It should be noted that cross-allergy - reactions to food products in patients with pollen or fungal allergies - is an additional factor that modifies the phenotype of food allergy. In case of pollen allergy (hay fever), symptoms may occur when eating fruits or other parts of allergenic plants, as well as other foods containing common antigenic determinants. In patients with fungal allergies, allergy symptoms may occur when consuming products that have been subjected to fungal fermentation during manufacturing. Currently, groups and families of plant

allergens that play an important role in the formation of cross-reactions have been identified and studied. These include PR proteins, or “protection proteins,” as well as storage proteins; 2S-albumin; thiol proteases; protease inhibitors [13–15]. PR proteins are low molecular weight proteins. They are synthesized in plants under the influence of stressful situations, such as infection, ultraviolet rays heat, unfavorable meteorological conditions, some chemicals, mechanical damage. In the pollen or fruits of some plants, the accumulation of these proteins is especially high. They can be compared to acute phase proteins in mammals; they provide the first phase of plant protection from infections and other irritants. PR proteins are classified into 14 different groups, of which 8 have allergenic activity. In the process of cross-reaction formation, the most significant are defense proteins of groups 2, 3, 4, 5, 10 and 14 (Table 3). PR type 2 includes  $\beta$ -1,3-glucanases, the action of which is aimed at destroying the cell wall of fungi (protection against mold fungi). One of these enzymes, which has a pronounced sensitizing activity, was isolated from natural latex obtained from the *Hevea brasiliensis* tree (*Hevea brasiliensis* - the main source of natural rubber), and was characterized as one of the latex allergens Hev b 2. Homologous peptides contain many fruits and vegetables, especially avocados, bananas, kiwis, figs, chestnuts, tomatoes and potatoes. They are responsible for the development of “fruit-latex syndrome”. Type 3 PRs are predominantly class I chitinases. They have the ability to break down chitin, the main structural element of the exoskeleton of insects and the cell wall of most fungi (antifungal protection). Chitin-binding proteins include latex allergens - prohevein (Hev b 6.01) and hevein (Hev b 6.02), as well as the main avocado allergen (Pre a 1), banana and chestnut allergens, which can cause fruit-latex syndrome. PR type 4 includes chitinases found in latex (Hev b), potatoes and turnips. The main function of these chitinases is protection against wound damage. Type 5 PRs are found in the fruits of the shrub plant of the genus *Thaumatococcus daniellii* (a natural source of thaumatin). They were first isolated from apples (Mal d 2). They may cross-react with cherry, apple, black pepper and mountain cedar. The main function of PR-5 protein is antifungal protection, protection against drought and frost. Group 8 PRs are class III chitinases. Contains latex minor allergen – hevamin. Allergies to fruits, vegetables and nuts are often combined with sensitization to birch pollen. Bet v 1 belongs to PR type 10 and is the main allergen of birch pollen. Proteins homologous to it are present in most flowering plants: Cor a 1 - the main allergen of hazel pollen, Mal d 1 - the main allergen of apple, allergens of cherry - Pru av 1, apricot - Pru ar 1, pear - Pr c 1, celery - Api g 1, carrots – Dau with 1. Homologous Bet v 1 proteins are also found in parsley and potatoes. Homologues of the birch allergen Bet v 1 form the basis of cross-reactions in the development of food allergies in patients with sensitization to tree pollen. PR type 14 are polypeptides with a molecular weight of 9 kDa, consisting of 90–95 amino acid residues, resistant to proteases. They belong to lipid transfer factors (LTP), and their biological function is to transfer phospholipids from liposomes to mitochondria. They have antimicrobial and

antifungal activity. Allergens of fruits of rosaceous plants (Pru p 3 peaches, Pru ar 3 apricots and Mal d 3 apples) are TFL. IgE antibodies to TPL were found in patients who have allergic reactions to these fruits, but are not sensitized to pollen allergens. Allergenic proteins that cause cross-reactions also include profilins. They are low molecular weight proteins and are found in all plant cells. They play an important role in the development of birch-wormwood-fruit-vegetable syndrome. The presence of profilin in pollen and in food is one of the reasons for cross-reactivity to various vegetables in patients with pollen allergy. Profilin in latex, which causes latex fruit syndrome, is also officially called latex allergen Hev b 8. Profilin can cause severe anaphylactic reactions to peanuts and soy. Preparation of personalized diet therapy taking into account identified individual causally significant food allergens, the severity of food sensitization (from + to ++++), the presence of cross-reactivity with other allergens significantly increases the effectiveness of treatment and improves the patient's quality of life, eliminating the inconvenience that he experiences while following a strict elimination diet. Thus, eliminating a food product and replacing it with another product of the same calorie content and the same protein content is usually not difficult. For example, if a food allergy develops to rarely consumed foods (strawberries, strawberries, chocolate, crab, etc.), elimination may be considered the only effective treatment method. If the spectrum of allergens is fully identified, an elimination diet can maintain a satisfactory condition of the patient without additional therapy. Exclusion from the diet of such important foods as milk, meat, potatoes and grains should be sufficiently justified (only with a clearly proven intake-response relationship). Elimination requires excluding from the diet not only a specific allergen food product, but also any others that contain it, even in trace quantities. When following an elimination diet, the child's age-specific energy and micronutrient needs should be taken into account. At the same time, the diet should contain a minimum of foods with a high allergenic potential; To reduce allergenic activity, food products must be thoroughly cooked; exclude extractive substances, hot seasonings, salty dishes, broths; limit the consumption of mono- and disaccharides. When prescribing complementary foods and dishes, you should select products with relatively low allergenicity and consistently include them in the diet from monocomponent to multicomponent.

**Conclusion.** As for pathogenetic treatment such as allergen-specific immunotherapy, it has not yet found widespread use in clinical practice. Various methods of carrying out this type of immunotherapy have been proposed: oral, subcutaneous, etc., but the question of its appropriateness for food allergies requires further study. Thus, the identification of food allergy phenotypes in children is of great practical importance for the selection of effective therapy that prevents the development of some of its clinical manifestations that are resistant to traditional treatment, reducing the development of a severe course and the frequency of exacerbations of the disease.



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## EFFICACY OF CHEMICAL SUBSTANCES AGAINST WHITE ROT DISEASE OF SUNFLOWER VARIETY “MADINA”

*Annotation. Due to the use of modern technologies in the cultivation of sunflower in the conditions of naturally damaged meadow gray soil, the full germination of seeds differed by 2-3 days compared to the control option.*

*At the same time, when treated with 0.7-0.9 kg/t of Bordeaux drug concentrate, sunflower white rot disease was affected 2 times less than the control. Productivity is more than 9s/ha due to healthy plants, and 6.4s/ha more than the standard option.*

*Keywords: soil, variety, seedling thickness, growth and development, white rot, yield conclusions. Fungicide, productivity, conclusions.*

The sunflower crop is considered to be one of the most important oil crops. The valuable part of this crop is that valuable oil is extracted from it for our people. Currently, due to the expansion of the sunflower cultivation area, the yield is increasing year by year. However, the obtained yield and the amount of oil produced from it are not at the required level, because part of the crop is destroyed due to the spread of pests and diseases. As a result of research carried out by a number of our scientists in recent years, it can be seen in the example of sunflower experiment [2] that it is not necessary to plant sunflowers in the same field with successive harvests against infection, therefore, it was concluded that it is necessary to recommend short-rotational planting.

He came to the conclusion that sunflower seeds should not be sown on the same field for two years.

**Table 1**

t/r	Experience options	Annual norm l/ga	Duration of use of chemicals	Reserved area ga
1	Control			2. 0.ga
2	Copper cup (standard)	4 kg/t	When the first appearance of the disease occurs	2.0 ga
3	Maksim 3.5% s.p	5 l/ ga	Seed treatment before planting	2.0 ga
4	Bordo 0.7-0,9kg/t	2 l/ga	When the disease first occurs	2.0 ga

The experiment was conducted in the area of the educational experimental farm of the Andijan Institute of Agriculture and Agrotechnologies. The experiment consists of 4 returns and 4 options, all options are placed in one layer, each option consists of 8 rows.

On the 6th day after sowing the seeds, the number of young sprouts germinated in the 3rd variant was 76.2%, while in the control variant this figure

was 67.4%. In the remaining 2 and 4 variants, this appearance was in 70.3-72.9%. In fact, the thickness of seedlings is considered to be an important factor in increasing productivity, because if the thickness of seedlings in the plan is maintained in each hectare, the life period of sunflower will not only be extended by 7-10 days, but also the indicator of grains in the basket will be higher. will bring.

**Table 2**

Experience options	Germinate the seeds Output indicator	Dates taken into account				Leaves
		15 VIII	1 IX	15 IX	1 X	
Control	83.2	17.3	29.1	73.9	78.4	9
Copper cup (standard)	88.4	25.3	37.8	79.3	88.1	12.3
Maksim -3.5% s.p	90.5	28.6	43.4	85.1	96.0	13.7
Bordo 0.7-0,9kg/t	96.8	32.4	52.2	93.8	109.3	14.6

Determining the date of sunflower planting is considered to be an event of great importance, because clear days of the weather allow timely sowing of seeds, along with the formation of full hectares in this area, early growth of seedlings and development will be made possible.

It is known from the given table-2 that the height of the stem of the plants in the field planted with sunflowers was close to the height of the stem of the plants in all options. But the data received on the next September 15 was completely different from the previous data, the best option turned out to be the 4th. The height of the sunflower stem in these options is 92.8 cm. if there was, on this date, the growth branch of the plants in the control warrant is 72.9 cm. the difference between them is that the height of the stem of the plants of the 4th option grew 19.9 cm high.

When the number of leaves was obtained according to the options, the emergence of leaves in the seedlings of the control option was behind compared to the plants of the other option. From the data presented in the table, it can be seen that in the control variant, 8.9 pieces were formed in each seedling, and the maximum number of leaves collected was 5.9 pieces more than in the control variant, which occurred in the seedlings of the 4th variant. there were leaves. It can be seen from this that the use of high agrotechnical measures for plants is the basis for the emergence of new morphological signs in sunflower.

**Table 3**

**Effect of various chemical substances on disease and productivity of sunflower parts.**

Experience options	The thickness of the seedling is 1,000	Counted number of plants	Disease development			A lifelong illness %	General productivity s/ga	The weight of a thousand seeds is gr
			Stem	Leaf	Shopping cart			
Control	42.7	100	17.0	26.0	33.0	36.2	14.7	47.8
Copper cup (standard)	41.6	100	9.0	21.0	27.0	31.5	17.2	51.3
Maksim-4.0-4.5l/ga	42.3	100	7.0	19.0	24.0	28.6	18.3	53.4
Bordo 0.7-0.9 kg/t	41.9	100	3.0	12.0	6.0	17.3	23.6	56.7

In order to find out the aggressiveness of the pathogen that causes white rot disease of sunflower, from the 1st and 3rd returns of the experiment, i.e. 100 seedlings from each option were counted and calculations were made on the distribution in separate parts of the sunflower stems table -3 from the conducted data, it is known that the most infection with the pathogen *S chroet f helianthi* Novot was observed in the stems of the control variant, i.e. it was 17%, while in the stems of the plant in the 4th variant, this appearance was 3 made up %. In other words, when we pay attention to the disease on the leaves, a strong disease was observed in the control variant, the number of diseases on the leaves of the plants in this variant was 3 times more infected than in the 4th variant. An incidence of more than 5% was observed compared to the reference variant. In fact, high yield of high-oil sunflower varieties is an important indicator.

Due to the use of modern technologies in increasing the productivity of the sunflower crop in the following years, it is possible to extend their life period by 8-10 days by cultivating varieties with a high oil content and resistant to diseases.

It is known from the given table-4 that the highest yield was obtained from sunflower seedlings of the 4th option, 23.6s/ha was obtained from this option, and this indicator was 18.3s/ha from the control option. in other words, 5.3s/ha less yield was obtained. The weight of 1000 grains in the control option was 47.8 grams, while the weight of the grains in the 4th option was 56.4 grams, the difference between them was 0.8 grams.

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## **DEVELOPING INNOVATIVE WAYS TO INCREASE THE COMPETITIVENESS OF THE DIGITAL ECONOMY IN THE TOURISM INDUSTRY IN THE COUNTRY**

*Abstract. This article analyzes the existing opportunities in the development of innovative technologies in the field of tourism. In particular, the level of use of Internet communications by potential consumers was studied, and recommendations for the introduction of digital communications were developed based on the results of research.*

*Key words: economy, domestic and foreign tourism digital economy, competitiveness, innovation, investment, strategy.*

**INTRODUCTION.** In the context of the coronavirus pandemic, the development of the digital economy as an important factor in mitigating the negative effects of the global crisis requires increasing attention to pressing issues such as increasing the competitiveness of the tourism sector, which suffers the most.

As the President of the Republic of Uzbekistan Shavkat Mirziyoyev said in his Address to the Oliy Majlis, “In 2021, we will continue consistent reforms to develop tourism. Special attention will be paid to the development of pilgrimage tourism and domestic tourism. The budget will also allocate 1 trillion soums to improve land, water and road infrastructure around tourist facilities.

Innovative competitiveness serves as a general indicator that characterizes the innovative activity of the tourism industry. Because “innovation” and “competition” are closely related. For example, Michael Porter described innovation as a means of shaping competitive forces [2], while Robert Dole described innovation as a tool for global competition [3]. Innovative aspects of competition theory were developed by Joseph Schumpeter, who described competition as a “creative distortion” of the struggle between the old and the new, a competition between the old and the new with innovation, and related to the innovation process and entrepreneurial functions. The terms "effective competition" and "effective monopoly" are included in the scientific exchange.

The innovative concept of competition has gained a new impetus in the 21<sup>st</sup> century thanks to the “blue ocean strategy” model developed by W. Chan Kim and R. Moborn. The authors argue that companies now compete in completely new market segments and even free markets (“blue ocean”) instead of competing in traditional sales markets with limited growth rates and low profits (“red

ocean”), it is advisable to focus on creation through the introduction of innovations [].

### **LITERATURE REVIEW.**

Innovative competitiveness serves as a general indicator that characterizes the innovative activity of the tourism industry. Because "innovation" and "competition" are closely related. For example, Michael Porter described innovation as a means of shaping competitive forces [2], while Robert Dole described innovation as a tool for global competition [3]. Innovative aspects of competition theory were developed by Joseph Schumpeter, who described competition as a "creative distortion" of the struggle between the old and the new, a competition between the old and the new with innovation, and related to the innovation process and entrepreneurial functions. The terms "effective competition" and "effective monopoly" are included in the scientific exchange.

The innovative concept of competition has gained a new impetus in the 21st century thanks to the “blue ocean strategy” model developed by W.Chan Kim and R.Moborn. The authors argue that companies now compete in completely new market segments and even free markets ("blue ocean") instead of competing in traditional sales markets with limited growth rates and low profits ("red ocean"), it is advisable to focus on creation through the introduction of innovations [8].

### **RESEARCH METHODOLOGY.**

The methodology of the article analyzes the importance and role of strategic development and increasing the competitiveness of the tourism sector in accelerating the competitiveness of the economy in the service sector, ranging from the analysis of sources that are becoming scientific and increasingly popular science.

### **ANALYSIS AND RESULTS.**

"Innovative competitiveness" means "the ability to gain a competitive advantage through innovative activities" [4]. In other words, innovation competitiveness is the use of the existing innovation potential of the service sector and the level of development of the innovation system in this area. Innovative competitiveness also means that businesses have a competitive advantage in innovation by creating and providing innovative types of services.

The main feature of competition in the service sector and its sharp difference from industry and agriculture is that competition occurs simultaneously at several interconnected levels, including macro-, meso-, micro-. and requires consideration and analysis on a mono-level basis.

Only if competition at these levels can provide an advantage, the synergistic effect of competitiveness in the provision of services will be manifested, and new structural features of the industry will be formed. It is recommended to allocate 7-M levels of innovative competitiveness in the service sector. We think they could be:

1. Innovative competitiveness at the mega-level (international prestige of new tourist services);



2. Innovative competitiveness at the macro level (national prestige of new tourism services);

3. Innovative competitiveness at the meta-level (industry and industry-wide prestige of new tourism services);

4. Innovative competitiveness at the meso level (regional and regional prestige of new tourist services);

5. Innovative competitiveness at the micro level (the prestige of new tourism services among similar enterprises);

6. Innovative competitiveness at the mini-level (the prestige of new tourist services in the eyes of families);

7. Mono-level innovative competitiveness (the prestige of new tourist services in terms of individual and group consumers).

The creation of innovative projects plays an important role in increasing the innovative competitiveness of the tourism industry. The creation and implementation of an innovative project consists of three stages:

1) pre-investment stage: identification of investment opportunities for the project; select the latter based on the analysis of its alternatives; feasibility study; project research support, etc.

2) investment stage: coordination; conclusion of contracts; development of design documentation; identification of project manager; staff training; launch preparations.

3) stage of operation: commissioning; bringing the project to full capacity: the use of existing capacity and the cost of upgrading fixed assets [5].

Innovative projects are divided into the following types according to the scope of the problem to be solved [6]:

❖ mono-projects - usually designed to solve a single task, carried out in a timely manner, within certain financial resources and coordinated by the project manager.

❖ multi-projects are in the form of a program of action involving dozens of mono-projects, aimed at achieving a complex innovative goal, associated with the creation of a large scientific and technical complex, and the need for a coordinating unit.

❖ megaprojects are multi-purpose complex programs that combine hundreds of interconnected mono-projects and several multi-projects to achieve a single goal and require management by a centralized funding and coordination center.

The criteria for determining the success of innovative projects are: financial success; radical innovation; patent purity; protected by license; innovation priorities; the competitiveness of the innovations it introduces [7].

Thus, innovative competitiveness, on the one hand, reflects the level of innovative development of the tourism industry in practice, on the other hand, it serves as a measure of the efficiency of the industry.

As the President of the Republic of Uzbekistan Sh.M. Mirziyoyev noted in his Address to the Oliy Majlis, “The unique nature of our country, national reserves, there is a great potential for the development of tourism in mountainous areas. In particular, the development of medical tourism, pilgrimage tourism and ecotourism will give a great impetus to the development of not only the economy but also the social sphere. On this basis, by 2025, the number of foreign tourists visiting our country should reach 7 million, and the annual income from tourism exports should reach \$ 2 billion.”

Today, tourism occupies a leading position in a number of priority areas of socio-economic development of our country. First of all, it contributes to the employment of economically active population and the creation of new and additional jobs. Second, it serves to increase the welfare of the people. Third, it contributes to the development of many interconnected sectors of economic activity and infrastructure. Fourth, it plays an important role in shaping the spiritual foundations of enlightenment and civil society.

The formation of tourist clusters in the regions of the country will pave the way for the opening of new travel agencies, further intensification of existing ones and the production of modern tourism products on the basis of full use of tourist and recreational resources.

One of the most important issues today is the innovative development of the service sector and the growth of employment. This is due to the fact that the industry employs a number of factors to meet tourists, provide services, create vacancies, increase the inflow of foreign currency, and generate revenue for the tourism industry. The proper use of local tourism resources will have a positive impact on the economic recovery of the region, and ultimately on the replenishment of local and state budgets through the payment of various taxes.

The Decree of the President of the Republic of Uzbekistan No. PD-5611 dated January 5, 2019 “On additional measures for the accelerated development of tourism in the Republic of Uzbekistan” is a logical continuation of the policy pursued by the state in the field of tourism. And it will create a favorable economic, administrative and legal environment for the rapid development of tourism, the introduction of the most effective order, expanding the economic potential and income base of the regions, creating new jobs, increasing the flow of tourists to our country, as well as aimed at active and comprehensive promotion of national tourism products in the world market.

### **CONCLUSIONS AND SUGGESTIONS.**

1. In order to achieve economic efficiency, it is necessary to clearly define the goals of the tourism industry, as well as the means and ways to achieve it. Producing high-quality and competitive services at the lowest cost will ensure maximum profitability, prevent crises, and is a key task of any tourism industry.

2. The need to analyze the trends and laws of the service and increase its competitiveness based on the principles of strategic management is assessed. Since sustainability consists of the effectiveness of tourism activities, the

realization of competitive potential, and competitiveness - the effective use of services in the tourism industry and the identification of opportunities for competitive services, it is important to take into account the combination of these concepts. allows you to form an optimal strategy to increase competitiveness.

3. Improving the economic efficiency of tourism enterprises is one of the most important directions today. The demand of the population for tourism is growing every year. To meet this demand, tourism enterprises need to use innovative technologies, make sufficient investments and improve the mechanisms for using new effective methods.

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## **TESTING OF STUDENT'S KNOWLEDGE AT THE LESSONS**

*Annotation. The idea of testing and teaching is covered in this article, along with test creation, types of tests, help learning tests, and some important instructor reminders regarding before, during, and after test possibilities. You will be able to define formative evaluation, discuss the principles of test creation, describe the distinction between teaching and testing, and share your thoughts on how assessments might support learning after reading this article.*

*Key phrases: Testing; informal testing; formative evaluation; summative tests; face validity; "wash back"; narrative evaluation; productive and receptive tests; formal test; increase motivation.*

Testing and Teaching First of all, it is essential to understand what the difference is between testing and teaching. In some ways, the two are so interconnected and interdependent that it is difficult to separate them. Teachers always measure or evaluate learners' skills and ideally learners also measure and evaluate themselves. Every time a student answers a question or tries a new word or structure, you can test the student. Written work is a test. The speaking test is a test. Reading and writing performance are tests.

The difference lies in what we will call formal and informal testing. Informal testing implies unplanned assessments that are made as a course moves along towards its goals. Most informal testing is what testing experts call formative evaluation: assessing students in the process of "forming" their competencies and skills with the goal of helping them to continue that growth process. Formal tests are exercises or experiences specifically designed to tap into an extensive storehouse of skills and knowledge, usually within a relatively short time limit. They are regular, planned sampling techniques constructed to give teacher and student an appraisal, as it were, of their achievement. These tests are often summative, as they take place at the end of a unit, module or course and therefore attempt to measure or summarize what the student has understood.

Pedagogically, it is important to distinguish between informal testing and formal testing. For optimal learning to take place, students must have the freedom to experiment and test things in class, to "test" their own hypotheses about language without feeling that their overall competence is I'm being "judged" by flawed terms. Likewise, for example, tournament tennis players must have the freedom to practice their skills - without any impact on their final ranking - before the tournament begins, your learners must also have many opportunities to "play" in classroom language without being formally graded.

The creation of tests is based on four main principles:

1. Principle of student preparation. It sounds simple, but often teachers don't help students prepare much for exams. Tests, by their nature, are anxiety-provoking experiences. Students don't know what to expect. And they may not know testing strategies that could help them. So your first task when creating a test is to be an ally in the preparation process.

2. Principles of face validity. Sometimes students don't know what is being tested when they take a test. Sometimes they feel, for various possible reasons, that the test is not testing what it is "supposed" to test. Face validity means that students, when they perceive the test, believe that it is valid.

3. Authentication principles. Make sure your test language is as natural and authentic as possible. Also, try to provide some context to the language so that the entries aren't just a series of unrelated language patterns.

4. The principle of "washback". "Washback" is an advantage that tests bring to learning. When a student takes a test, within a reasonably short period of time, the student can use the information about his or her skills provided by the test feedback. Therefore, formal tests should be learning tools through which students can receive a diagnosis of their strengths and weaknesses. Therefore, it is very important for intrinsic motivation that you promptly return written tests with your comments. One way to improve washback is to provide narrative assessments of test performance.

Types of Tests Productivity and Receptivity Tests: Tests can be useful in nature when students are asked to perform – speak, read aloud, write sentences or complete tasks. Tests may be receptive in nature, in which students are asked to read silently and answer multiple-choice questions, which require accurate recognition rather than giving an answer. Typically, the most widely used and well-prepared tests involve answering multiple-choice questions.

Vocabulary Test: Vocabulary Test has many types. Beginners' vocabulary skills are tested using questions that require a yes or no answer or by asking them to complete a simple task. In multiple choice questions, "a sentence with a missing word is presented; students choose one of four vocabulary items given to complete the sentence". A third type, multiple choice paraphrases, is a test in which a sentence with one word underlined is given. Students choose which of four words is the closest in meaning to the underlined item.

Grammar tests: Limited response questions which ask students to do certain tasks, multiple choice completion, simple completion of sentences, and close test are some of the test forms used in the grammar section. The grammatical structures offer an endless list of test items.

Pronunciation Test: Pronunciation Test focuses on useful communication, not perfect pronunciation. The pronunciation of each sound, expression or sentence is no longer emphasized. "One reason for this view is that, even after extensive training, very few adolescents or adults achieve perfect speaking ability in a foreign language. Speaking practice, multiple-choice auditory recognition,



reading aloud, simple dialogue and simple narration are very useful ways of testing pronunciation skills.

Reading tests range from reading aloud to reading comprehension. Students at the beginning level should be tested on their ability to “read” words, phrases, and sentences with correct pronunciation and tone. This requires mastering the connection between letters and sounds and other phonological rules such as vowel reduction, placing stress, and using appropriate syllabic pauses.

Writing Test Sentence combining, sentence expansion, sentence shortening, copying and dictation are commonly used in beginner-level writing tests. Writing instruction and paragraph editing are also common forms of testing.

Listening Test Visual cues are found to be very useful in testing listening skills. There are a number of listening exercises that can be used to test progress and proficiency in listening skills.

Some reminders for teachers: Pre-, during, and post-test options: Before the test – Give students all the information you can about the test. What exactly will the test cover? What topics will be most important? What types of items will be included? Encourage students to review material systematically. For example, skim manuals and other documents, underline key points, take example notes, etc.

During the test – Immediately after handing out the test, ask students to quickly look at the entire test to fully understand the different sections. Remind them to mentally determine how much time they will need for each section. Advise them to focus as carefully as possible. Tell students a few minutes before class ends so they can reread their answers, detect careless mistakes, and complete them on time.

After the Test – When you return the test, include comments about the specific things the student did well, what they did not do well, and, if applicable, your reasons for the comments there. Advise students to listen attentively in class to whatever you say about the test results.

In summary, after studying this article, you will be able to explain the difference between testing and teaching, define the concept of process estimation, explain the principles of test creation, define the concept of concept of “wash back, name the test types, express your opinion about how tests can facilitate learning, to name a few options before, during and after tests.

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## **UMUMIYTA'LIM MUASSASALARIDA YOSHLARNI HARBIY TAYYORGARLIK TIZIMINI SHAKLLANTIRISH VA ROJLANTIRISHNING PEDAGOGIK TAHLILI**

*Annotatsiya: mamlakatimizda barkamol avlodni shakllantirish, yoshlarni ma'naviy axloqiy va jismonan sog'lom etib tarbiyalash, ularni olib borilayotgan islohotlarning faol ishtirokchisiga aylantirishga qaratilgan chora-tadbirlar izchil amalga oshirilmoqda. jumladan, zamonaviy oliy ta'lim muassasalari hamda nufuzli xorijiy universitetlarning filiallari tashki etilmoqda.*

*Kalit so'zlar: ta'lim, harbiy tayyorgarlik, intizom, munosabat, tarbiya, davlat, ta'lim ob'ekti, jismoniy tarbiya, sport.*

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## **PEDAGOGICAL ANALYSIS OF THE FORMATION AND DEVELOPMENT OF YOUTH MILITARY TRAINING SYSTEM IN UNIVERSITY INSTITUTIONS**

*Abstract: in our country, measures aimed at forming a mature generation, educating young people to be morally and physically healthy, and to turn them into active participants in the ongoing reforms are being implemented consistently. including branches of modern higher education institutions and prestigious foreign universities.*

*Key words: education, military training, discipline, attitude, upbringing, state, educational object, physical education, sport.*

### ***Kirish***

Ta'lim muassasalarida o'rnatilgan intizom ta'lim muassasalari jamoasini jipslashtirish, ta'lim muassasasi ichki hayoti va faoliyatining mo'tadil kechishini ta'minlaydi. Intizom o'quvchilardan hamjihatlik asosida faoliyat olib borish, o'quv yurti manfaati uchun birgalikda kurashish, rahbariyat hamda vakolatli o'quvchilar organlari, uning a'zolari talablarini to'ldirish va ularning bajarilishini talab etadi. Ongli intizom kursantlarning o'qish va mehnat faoliyatiga ongli munosabatda bo'lish, o'quv yurti ichki tartib intizomiga bo'ysunish, jamoa tomonidan topshirilgan topshiriqni bajarishga vijdonan

Yondashgan holda xulq-atvor me'yorlariga qat'iy rioya etish zarurligini tushunib olishlari va ularga o'z ixtiyorlari bilan itoat etish ko'nikmalarining hosil bo'lishiga sharoit yaratadi.

Tarbiya jarayonida talabalarning hayoti va faoliyatini pedagogik jihatdan to'g'ri uyushtirish g'oyat muhimdir. Faoliyat jarayonida talaba tashqaridan kelayotgan tarbiyaviy ta'sirlarga nisbatan ma'lum munosabatda bo'ladi. Bu munosabat shaxsning ichki ehtiyoj va xohishlarini ifodalaydi. Psixolog va pedagoglarning tadqiqotlari shaxsga tashqi omillarning (xoh salbiy, xoh ijobiy) ta'siri bolaning ularga munosabatiga bog'liqligini ko'rsatadi.

Talabalar faoliyatini uyushtirishgina emas, balki tarbiyalanuvchining bu faoliyatga nisbatan turli kechinmalarni qanday anglashi, baholashi, his qilishi, ulardan o'zi uchun nimalarni olayotganligini bilishi zarur. Zero, tarbiya ijtimoiy munosabatlarning murakkab lashib borishi asosida kechadi. Tarbiya jarayonida talabaning ongigina emas, balki his tuyg'ularini ham o'stirib borish, unda jamiyatning shaxsga qo'yadigan axloqiy talablariga muvofiq keladigan xulqiy malaka va odatlarini hosil qilish lozim. Bunga erishish uchun o'quvchining ongi, hissiyoti va irodasiga ta'sir etib boriladi. Agar bularning birortasi e'tibordan chetda qolsa, maqsadga erishish qiyinlashadi. Tarbiya jarayoniga o'qituvchi rahbarlik qiladi. U talabalar faoliyatini belgilaydi, ularning ijtimoiy jarayonda ishtirok etishlari uchun shart-sharoit yaratadi.

#### **NATIJA VA MUHOKAMA**

Davlatimizdagi umumta'lim tashkilotlari faoliyatini tarixiy pedagogik va bibliografik jihatdan o'rganish shuni ko'rsatdiki, yoshlarning harbiy tayyorgarligi uning tarkibiy qismi bo'lib xizmat qilgan. Shunga qaramay, o'rganilayotgan jarayonning mohiyatini asoslash, qoida tariqasida, uning turli tomonlarini taqdim etishni, uni o'qitishni har tomonlama aniqlash va tahlil qilish uchun emas, balki sinfda va darsdan tashqari vaqtda amalga oshiriladigan tadbirlar ro'yxatini o'z ichiga oladi. Amalga oshirilgan pedagogik tadqiqotlar, shu jumladan umum ta'lim tashkiloti sub'ektlari faoliyatini maqsadli kuzatish, shuningdek, umumta'lim muassasalarida yoshlarni harbiy tayyorgarlik

muammolari bo'yicha boshqa tadqiqotlarning fikrlarini o'rganish shuni aniqlashga imkon berdi. uning mohiyati, tuzilishi va mazmunini asoslab berish.

Ushbu talablar umumta'lim muassasalarida yoshlarni harbiy xizmatga tayyorlash bo'yicha tadbirlar uchun asos bo'lib xizmat qiladi. Umumta'lim muassasalarida yoshlarni harbiy xizmatga tayyorlash tizimining muhim elementlaridan biri va shu bilan birga uning samarali faoliyat ko'rsatishi uchun shart-sharoitlar ham mazkur faoliyat sub'ekti hisoblanadi. Bugungi kunda ularga quyidagilar kiradi:

davlat organlari; jamoat (faxriylar tashkilotlari, askarlar onalari qo'mitalari va boshqalar) diniy tashkilotlar; turli vazirliklar va idoralar, masalan: harbiy komissarliklar va harbiy patrul bo'linmalari; madaniyat va san'at organlari; ommaviy axborot vositalari va boshqalar. Ularning samaradorligi bugungi kunda talab darajasiga to'g'ri kelmaydi va ko'pincha tarqoq. Boshqa tomondan, yoshlarni

harbiy xizmatga tayyorlashga umumiy ta'limning barcha bosqichlari jalb qilingan:

- 1) maktabgacha ta'lim;
- 2) boshlang'ich umumiy ta'lim;
- 3) asosiy umumiy ta'lim;
- 4) o'rta umumiy ta'lim.

Umumiy ta'lim deganda, odatda, shaxsning rivojlanishiga va insonning jamiyatda hayoti uchun zarur bo'lgan bilim, ko'nikma, ko'nikma va malakalarni shakllantirishga, kasbni ongli ravishda tanlashga va kasbiy ta'lim olishga qaratilgan ta'lim turi tushuniladi. asosiy umumiy ta'lim dasturlarini o'zlashtirish jarayoni. Ta'lim ob'ekti - yoshlar yoki ta'lim muassasalarida talabalar.

Ushbu ijtimoiy moslashuv davrida faol fuqarolik shakllanishi sodir bo'ladi, shaxsning e'tiqodi, axloqiy va boshqa fazilatlarini shakllanadi. Har qanday ijtimoiy-pedagogik jarayon, shu jumladan ko'rib chiqilayotgan jarayon, yoshlarni armiya muhitiga muvaffaqiyatli moslashtirish uchun harbiy tayyorgarlikning yakuniy natijalarini prognoz qilish imkonini beradigan aniq va aniq maqsadlarning mavjudligi bilan tavsiflanadi. Shu bilan birga, olib borilgan tadqiqotlar shuni ko'rsatadiki, umumiy ta'lim tashkilotlari yoshlarni harbiy xizmatni muvaffaqiyatli o'tash uchun harbiy tayyorgarlik jarayonida o'z oldiga quyidagi maqsadlarni qo'yadilar:

- o'quvchilarning davlat sohasida asosiy bilimlarni olishlari.
- ularga harbiy xizmat asoslari bo'yicha bilimlarni o'tkazish;
- ularning harbiy-vatanparvarlik va jismoniy tarbiyasi;
- jismoniy tarbiya va sportga ijobiy munosabatni shakllantirish va h.k.

Tadqiqot natijalari shuni ko'rsatadiki, muayyan maqsadlarga erishish quyidagi vazifalarni hal etish bilan bog'liq:

- "Hayot xavfsizligi" kursida "Harbiy xizmat asoslari" bo'yicha nazariy mashg'ulotlar o'tkazish, davlat mudofaasi asoslari, tashkiliy tuzilishi, funktsiyalari va asosiy vazifalari bo'yicha bilimlarni shakllantirish. Ularning jangovar an'analari, davlatimiz fuqarolarining harbiy burchi haqida; - shakllangan nazariy bilimlarni mustahkamlash va zarur amaliy ko'nikmalarga ega bo'lish, o'quv muassasalari negizida yigitlar bilan lager mashg'ulotlarini o'tkazish;

- yoshlarga boshlang'ich harbiy-amaliy bilim, ko'nikma va malakalarni singdirish, tegishli kompetensiyalarni shakllantirish;

- talabalarni psixologik jihatdan chiniqtirish, kelajakdagi Vatan himoyachisining ichki tayyorgarligi, hissiy-irodaviy va psixologik fazilatlarini shakllantirish va rivojlantirish va boshqalar.

Bundan tashqari, yoshlarni samarali harbiy faoliyatga harbiy tayyorlash jarayonida aniq funktsiyalar namoyon bo'ladi: kognitiv, moslashish, rehabilitatsiya, qayta tarbiyalash, dam olish, etakchilik fazilatlarini amalga oshirish, qayta tarbiyalash va boshqalar. Bir necha yillar davomida nashrlar mualliflari umumiy ta'lim maktabida yoshlar ni harbiy tayyorgarlikning pedagogik

jarayonining muhim elementlarini aniqlash va umumiy doirasini aniqlashga harakat qildilar.

Masalan, yoshlarning o'z vatanini qurolli mudofaaga ichki tayyorgarligini shakllantirishga har tomonlama tayyorgarlik ko'rishga hissa qo'shadigan o'ziga xos shakl va usullar, shuningdek, tarkibiy qismlarning mazmuni sifatida yoshlarning kognitiv va amaliy harakatlarini tashkil etish;

yoshlarni armiya xizmatiga tayyorlash tizimini o'z dissertatsiyasida asoslab bergan.

Shu bilan birga, N.A. Belousov, yoshlarni harbiy xizmatga tayyorlash, bir tomondan, ijtimoiy pedagogik tizim bo'lsa, ikkinchi tomondan, butun jamiyat uchun muhim bo'lgan, har tomondan faol bo'lgan, ko'p qirrali xususiyatga ega bo'lgan pedagogik jarayondir, degan xulosaga keldi. va murakkab tabiat. masalan, olib borilgan tadqiqotda. Muxamadeevning so'zlariga ko'ra, yoshlarni harbiy xizmatga tayyorlash ularning ta'lim vajamiyatda ijtimoiylashuvining tarkibiy qismlaridan biri sifatida taqdim etiladi.

Bunday holda, muallif harbiy komissarlikni boshqa muassasa va tashkilotlar, shu jumladan o'quv va kasbiy tashkilotlar bilan hamkorlikda harbiy xizmatga chaqiruv gacha bo'lgan yoshlarni armiya sharoitida motivatsiyani bosqichma-bosqich shakllantirish. O'rganilayotgan jarayon yosh avlodning armiya sharoitida himoya funktsiyalarini amalga oshirish uchun maxsus harbiy qobiliyatlarini shakllantirishni ta'minlashga qaratilgan barcha pedagogik muassasalarning maqsadli, muvofiqlashtirilgan ishi orqali amalga oshirilishi mumkin.

Harbiy tayyorgarlik o'z mazmuniga ko'ra, ijtimoiy -iqtisodiy, psixologik, pedagogik, tibbiy, tashkiliy, uslubiy va boshqa xarakterdagi turli xil jarayonlarning majmuini amalga oshirishni o'z ichiga olishi mumkin, ularning barchasi maqsadli va har tomonlama amalga oshirish uchun mo'ljallangan. Umum ta'lim tashkilotlarida yoshlarni harbiy xizmatga tayyorlashning mohiyati va mazmuni tahlili shuni ko'rsatadiki, o'rganilayotgan ijtimoiy-pedagogik jarayon tabiiy va qarama-qarshidir. tadqiqot shuni ko'rsatadiki, o'rganilayotgan ijtimoiy pedagogic jarayonning qonuniyatlari ularning rivojlanishini tavsiflovchi ob'ektiv, qaror, zaruriy, eng barqaror va muhim munosabatlardir.

Tadqiqot natijalari shuni ko'rsatadiki, umumiy ta'lim muassasalarida ushbu jarayonga xos bo'lgan asosiy qonuniyatlar quyidagilardan iborat bo'lishi kerak:

Tahlil jarayonida aniqlangan qonuniyatlar va qarama-qarshiliklar fundamental nazariy va amaliy qoidalarni asoslash va eksperimental tekshirish uchun asos bo'ldi. Ta'lim muassasalarida yoshlarni harbiy xizmatga tayyorlashning ijtimoiy-pedagogik jarayonining samaradorligini belgilovchi.

Tadqiqotidagi bunday qoidalar qonunlardan kelib chiqadigan tayyorgarlik tamoyillari hisoblanadi. Shu bilan birga, tadqiqot shuni ko'rsatadiki, aniqlangan o'qitish tamoyillari tarbiya tamoyillari va o'qitish tamoyillari yig'indisidir. Ulardan asosiylari quyidagilardan iborat:

a) harbiy va davlat-vatanparvarlik yo\_nalishi bilan ajralib turadigan maqsadlilik tamoyili, uning asosiy maqsadi umumta'lim muassasalaridayoshlarni davlatchilik nuqtai nazaridan harbiy xizmatga tayyorlash, belgilangan vazifalarni bajarishdan iborat. o'z vatanini himoya qilish konstitutsiyaviy burchi.

b) Ko'rsatilgan tamoyilning asosiy talablari shundan iboratki, ijtimoiy-pedagogik jarayonning barcha sub'ektlari chuqur bilim bilan singdirilishi kerak. Yoshlarni Qurolli Kuchlar safida xizmat qilishga tayyorlashning maqsad va vazifalarini bilish va tushunish, umumta'lim muassasalarida maxsus harbiy tayyorgarlikdan o'tgan yoshlarda b o'lishi kerak b o'lgan fe'l-atvor fazilatlarini o'g'risidagi fikrlar aniq b o'ladi.

Umumiy ta'lim muassasalarining bitiruvchilari pedagogik jarayonning natijalarini tahlil qilish, uni baholashga ob'ektiv yondashish, o'ziga xos shartlar va xususiyatlarni hisobga olgan holda natijalarga erishishning maqsad va vositalarida birlikni ta'minlash, o'zaro munosabatlarni amalga oshirish ko'nikmalariga ega bo'lishi kerak.

#### **XULOSA:**

Umuman olganda, ma'naviy-axloqiy qadriyatlar va tarbiyaning uyg'unligi pedagogik jarayonning markaziy muammosidir. Bu borada milliy-ma'naviy meros, axloq mezonlarini insonparvarlikg'oyalariga tayangan holda uning uzviyligi, izchilligi, ilmiyligi, dunyoviyligi tamoyillari asosida insonlarning talab va ehtiyojlarini hisobga olgan holda aql-zakovat bilan yaratilgan, ularning tasavvuri, tafakkuri, orzu istaklari, e'tiqodi, axloq qoidalarini o'zida mujassam etgan, amaliy ha'etda sayqal topgan bo'lib, tarbiyaning asosiy negizi sanaladi. Ma'naviy-axloqiy qadriyatlarni kursantlar

tarbiyasida uyg'unlashtirishning o'ziga xos jihatlari mavjud bo'lib, bular har bir yosh jamiyatda yashar ekan, o'z-o'zini anglashi va jamiyatda axloq me'yorlariga rioya etishi, jamoatchilik o'rtasida o'zini tuta bilishi, oilada hurmat va oqilona munosabatlarni tarkib toptirishi, farzandlik burchini bajarishi, halollik, iymonlilik mezonlariga amal qilishi, Vatanni sevish, buni o'z faoliyatida namoyon etishi kabilardan iboratdir.

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## **O'ZBEKISTONNING HOZIRGI GEODEMOGRAFIK VAZIYATI**

*Annotatsiya. Ushbu maqolada O'zbekiston aholisining geodemografik vaziyati va o'sib borish dinamikasi yoritib berilgan. Mamlakat aholisining hududiy joylashuvi tahlil qilinib, aholi soniga ko'ra yetakchi viloyatlar o'rganilgan. Aholining yosh-jins tarkibiga doir ko'rsatkichlarni aholi tabiiy ko'payish miqdoriga ta'siri tahlil qilingan.*

*Kalit so'zlar: aholi, aholi soni, doimiy aholi, geodemografik vaziyat, demografik salohiyat, tug'ilish, o'lim, tabiiy o'sish, mehnat resurslari.*

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## **CURRENT GEODEMOGRAPHIC SITUATION OF UZBEKISTAN**

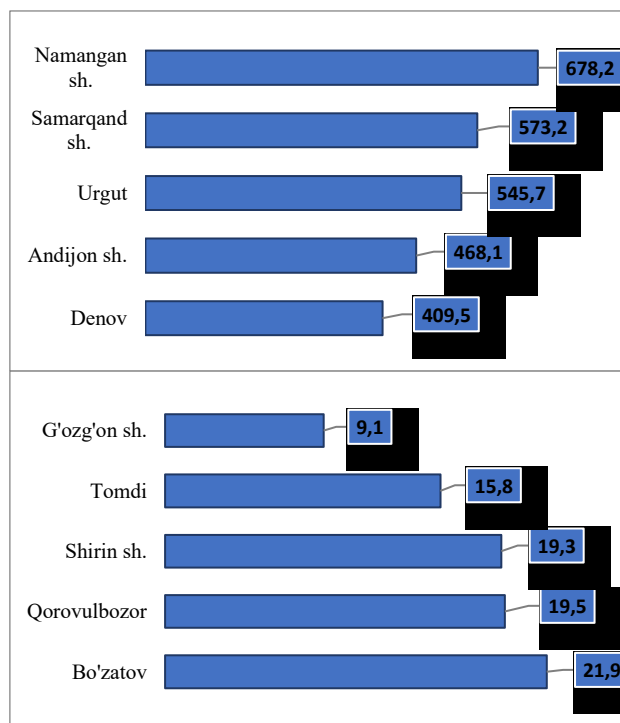
*Annotation. This article describes the geodemographic situation and dynamics of the population of Uzbekistan. The territorial location of the country's population was analyzed, and the leading regions according to the population were studied. The effect of indicators on the age-sex composition of the population on the rate of natural population increase was analyzed.*

*Key words: population, population size, permanent population, geodemographic situation, demographic potential, birth, death, natural growth, labor resources.*

Demografik ma'lumotlar – aholi soni, tarkibi, joylashuvi va takror barpo bo'lishiga oid statistik usullardan foydalangan holda yig'ilgan, qayta ishlangan hamda tahlil qilingan ma'lumotlardan iborat. Mazkur ma'lumotlarning asosini aholi soni tashkil etadi. Doimiy aholi – ro'yxatdan o'tkazilayotgan vaqtda muayyan aholi punkti yoki hududda doimiy istiqomat qilayotgan aholidan iborat bo'lib, bunga ushbu hududda doimiy ro'yxatda turgan, lekin vaqtincha yashamaydigan aholi ham kiritiladi. Respublikaning demografik salohiyati keyingi yillarda ham tabiiy ko'payish hisobiga saqlanib qolishi bilan xarakterlanadi. 2001-2007 yillarda O'zbekiston aholisi yiliga 500 mingga ko'paygan. 2007-2013 yillarda esa aholi soni yiliga 600 mingdan ko'proqqa o'sib borgan. 2014-2018 yillar oralig'ida mamlakat aholisi yiliga 700 mingga o'sgan bo'lsa, 2019 yildan keyin o'sish yanada tezlashgan. 2019-2021 yillarda aholi soni yiliga 800 mingdan ko'proqqa ko'paygan. Mamlakatning hozirgi geodemografik vaziyati aholining dinamikasida, yosh-jins tarkibida, uning migratsion (mexanik) harakatida, umumiy ish bilan bandligida hamda shu kabi demografik holatlarida bevosita aks etadi. O'zbekiston Respublikasi Statistika agentligi ma'lumotlariga

ko'ra, 2023 yil 1 iyul holatiga ko'ra mamlakat doimiy aholisi soni 36 372,3 ming kishi bo'lib, shundan 18 306,3 ming erkaklar (50,3 %), 18 066,0 ming kishini ayollar (49,7 %) tashkil etdi. Shahar aholisi soni 18 557,5 ming kishini (51,0 %), 17 814,8 ming kishi qishloq aholisi (49,0 %) dan iborat. Doimiy aholi soni o'tgan yilning mos davri bilan solishtirilganda 2,2 foizga o'sib, 2023 yilning har bir oyida o'rtacha 63,9 ming kishiga oshgan. 2023 yil boshidan buyon 574,8 ming kishiga ortib, har bir kunda o'rtacha 2,1 ming kishiga ko'paymoqda. Hududlar bo'yicha doimiy aholi soni eng ko'p Samarqand viloyatida 4 159,1 ming kishi (11,4 %), Farg'ona viloyatida 4 014,8 ming kishi (11,0 %), Qashqadaryo viloyatida 3 515,7 ming kishi (9,7 %), eng kam aholi soni Sirdaryo viloyatida 904,9 ming kishi (2,5 %) ni tashkil etgan (1-rasm).

Aholining yosh tarkibi – demografik jarayonlar borishini o'rganish maqsadida aholining yosh guruhlari bo'yicha taqsimlanishini bildiradi. Aholining yosh tarkibi haqidagi ma'lumotlar ijtimoiy-iqtisodiy va demografik jarayonlarni tadqiq qilish uchun muhimdir. Demografik hodisalar ma'lum yoshda amalga oshadi. Iqtisodiy tahlillarda mehnatga layoqatli yoshgacha (0–15 yosh), mehnatga layoqatli (16-54 ayollar uchun va 16-59 erkaklar uchun) va mehnatga layoqatli yoshdan katta (55 yosh va undan katta ayollar va 60 yosh undan kattalar erkaklar) aholiga ajratiladi. 2023-yil 1-iyul holatiga ko'ra, respublika doimiy aholisining 31,9 foizi mehnatga layoqatli yoshdan kichiklar, 56,7 foizi mehnatga layoqatli yoshdagilar va 11,4 foizi mehnatga layoqatli yoshdan kattalar hissasiga to'g'ri kelmoqda.



*Uzstat ma'lumotlari asosida muallif tomonidan ishlandi.*

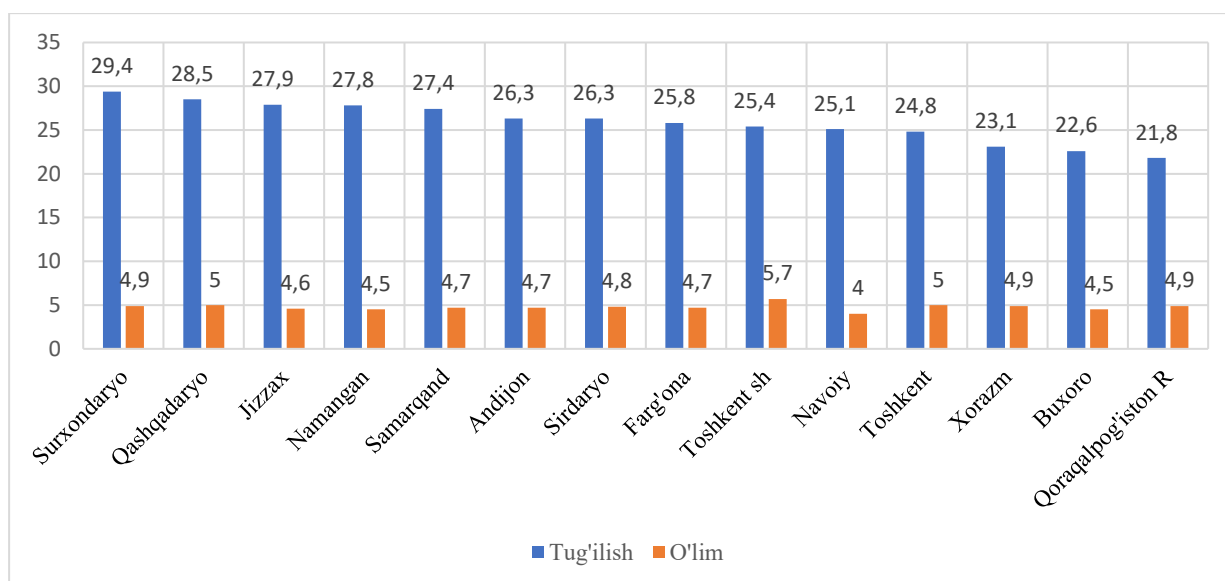
1 – rasm. O'zbekistonda doimiy aholisi eng ko'p va eng kam bo'lgan shahar va tumanlar (ming kishi hisobida, 01.01.2023.)

2023-yil 1-yanvar holatiga doimiy aholi tarkibini jinsi va yosh guruhlari bo'yicha tahlil qilinganda, erkaklar tarkibida 4 yoshgacha bo'lgan bolalar eng yuqori ko'rsatkichni, ya'ni 2160,4 ming kishini tashkil etgan. Erkaklar tarkibida eng kam aholi soni 60-64 yoshlilar hissasiga to'g'ri kelib, 641,2 ming kishini tashkil etdi. Shuningdek, ayollar tarkibida ham 4 yoshgacha bo'lgan qizlar eng yuqori ko'rsatkichni, ya'ni 2001,8 ming kishini tashkil etgan bo'lsa, eng kam ayollar soni 60-64 yoshlilar hissasiga to'g'ri kelgan, ya'ni 715,3 ming kishini tashkil etgan. 2023-yil 1-yanvar holatiga mamlakat aholisining o'rtacha umr ko'rish davomiyligi 74,3 yoshni tashkil etgan. Ushbu ko'rsatkich erkaklar uchun 72,1 yosh, ayollar uchun esa 76,6 yoshni tashkil etgan.

BMT demograflari tomonidan keksayish jarayonini baholash maqsadida uch bosqichli mezon ishlab chiqilgan. Unga ko'ra, 65 va undan yuqori yoshdagi aholi ulushi 4,0 foizdan kam bo'lsa – demografik yosh, 4,0-7,0 foiz bo'lsa – keksayish bo'sag'asida, 7,0 foizdan oshsa hudud aholisi demografik keksa hisoblanadi. 2023-yil 1-yanvar holatiga Respublika aholisida 65 va undan yuqori yoshdagilar salmog'i 5,4 foiz bo'lib, xalqaro mezonlar bo'yicha “demografik keksayish bo'sag'asida”gi mamlakatlar qatoriga kirishini anglatadi.

Geodemografik vaziyat o'rganilganda aholining hududiy joylashuvini tadqiq qilish o'rinlidir. Aholining hududiy joylashuvi – yer yuzining kishilar tomonidan o'zlashtirilishi bilan bog'liq bo'lgan juda uzoq tarixiy jarayonning natijasi bo'lib, aholi zichligi tarixiy, ijtimoiy – iqtisodiy va tabiiy omillar ta'sirida vujudga keladi. 2023-yil 1-iyul holatiga Respublika bo'yicha 1 kvadrat kilometrda 81,0 kishi to'g'ri kelib, viloyatlar bo'yicha aholi zichligining eng yuqori ko'rsatkichi Andijon viloyatida 780,0 kishi, Farg'ona viloyatida 593,9 kishini tashkil etgan bo'lsa, eng past ko'rsatkich Navoiy viloyati 9,6 kishini tashkil etgan. Tug'ilish aholi takror barpo bo'lishining demografik zamini bo'lib, unga barcha ijtimoiy-iqtisodiy va tabiiy omillar ta'sir etadi. O'zbekistonda 1950-yillarning boshida tug'ilish darajasi har ming kishiga 40 ‰ to'g'ri kelgan bo'lsa, bu ko'rsatkich 2021-yilda qariyb ikki baravar pasaygan (23,5 ‰).

2022- yilda tug'ilishlar soni 932192 (har ming kishiga 26 ‰), shundan o'g'il bolalar 482316 ming, qiz bolalar 449876 ming kishini tashkil etdi (2 – rasm):



*Uzstat ma'lumotlari asosida muallif tomonidan ishlandi.*

2 – rasm. O'zbekiston Respublikasi hududlari aholisidagi tug'ilish va o'lim ko'rsatkichlari (har ming kishiga, 01.01.2023.)

Hududlar bo'yicha tug'ilish koeffitsiyenti eng yuqori Surxondaryoda 29,4 %, Qashqadaryoda 28,5 %, Jizzaxda 27,9 %, eng kam ko'rsatkich Qoraqalpog'iston Respublikasida 21,8 %, Buxoroda 22,6 % va Xorazmda 23,1 %ni tashkil etgan. Tuman va shaharlar bo'yicha tug'ilish koeffitsiyenti eng yuqori Chiroqchi tumanida 40,5 %, Namangan shahrida 39,4 %, Sergeli tumanida 34,9 %, Navoiy shahrida 32,4 % va Yangiyer shahrida 32,2 %; eng kam tuman, shaharlardan Ohangaron shahrida 10,9 %, Bo'zatov tumanida 16,1 %, Tomdi va Boyovut tumanlarida 16,4 % hamda Buxoro tumanida 17,1 % bo'lgan.

Inson hayotining davomiyligi ko'p omillarga bog'liq. O'lim inson hayotining yakuni bo'lib, unga ta'sir etuvchi endogen va ekzogen omillar ajratiladi. Endogen omillar- inson tanasi va uning biologik xususiyatlariga bog'liq tabiiy qarish jarayonini, tug'ma irsiy kasalliklar kabi omillarni o'z ichiga oladi. Ekzogen tashqi muhit ta'siri bilan bog'liq bo'lib, baxtsiz hodisalar, infeksiyalar, zaharlanish, oshqozon, nafas olish va jarohat kabilardir. 2022- yilda vafot etganlar 172075 kishi bo'lib (har ming kishiga 4,7 %), erkaklar soni 95013, ayollar 77062 kishi, vafot etganlar soni shahar joylarda 92,0 ming kishini, qishloq joylarida 80,1 ming kishini tashkil etdi. 2022- yilda vafot etganlar yosh guruhlari bo'yicha o'rganilganda 20 yoshgacha vafot etganlar 20,0 % ni, 20-59 yoshlar orasida 24,6 % ni, 60 va undan katta yoshlilarda esa 55,4 % ni tashkil etgan.

Demografik jarayonlar, jumladan, aholi sonining ortishi mehnat resurslarining ham ortib borishiga olib keladi. Iqtisodiyotning turli tarmoqlarini mehnat resurslari bilan ta'minlaydigan alohida mexanizm - bu mehnat bozoridir. O'zbekiston mehnat bozori nisbatan demografik "yosh" aholi mavjudligi, tug'ilish sur'ati ortib borayotgan va o'limning kamayish tendensiyasi kuzatilayotgan aholiga egaligi bilan xarakterlanadi.

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## **CREATION OF A PLANTATION OF SPINY COVAR (CAPPARIS SPINOSA L...) AND IMPROVING THE QUALITY OF PRODUCTS**

*Abstract: this article covers the issues of organizing a plantation of Capparis spinosa L. and increasing the product's product quality.*

*Key words: prickly pear, seed, seedling, root, stem, flower, berry, watermelon, plantation, wire garden, medicinal plant.*

On April 27, 2011, a briefing was held at the Academy of Sciences of Uzbekistan on the issue of the production of medicinal preparations from medicinal plants growing in the conditions of Uzbekistan. Based on the goals and tasks of the briefing, the application of the technologies of research and cultivation of medicinal plants is of great economic and social importance.

One of such types of plants is kovar, all of its products can be used to prevent and treat various diseases. In the fruit processing industry, medicinal and iodine-rich canned products are used as raw materials for the preparation of various medicines for the pharmaceutical industry. Prepared products serve to supply the domestic and foreign markets and increase the export potential and economic efficiency of the industry. Today, this type of plant grows wild in the desert and steppe of some regions and districts of our Republic. The technology of cultivation and proces of cultural varieties of the plant has not been studied.

President of the Republic of Uzbekistan Sh.M. During his visit to Namangan region on July 8, 2017, Mirziyoev emphasized the need to reduce the area of cotton and grain in the districts affected by cotton and replace them with high-yielding fruits and vegetables and covar. In recent years, consistent reforms have been implemented in the republic regarding the protection of medicinal plants, the rational use of natural resources, the establishment of plantations for the cultivation of medicinal plants and their processing. 750 species of more than 4.3 thousand plants belonging to the local flora are considered medicinal, 112 of them are registered for use in scientific medicine, 70 of them are actively used in the pharmaceutical industry. In 2022, 48 million USD worth of processed medicinal plant products were exported.

At the same time, analyzes show the need to protect medicinal plants, establish their plantations, and create an additional value chain through processing of the President of the Republic of Uzbekistan on 10.04.2020 The Resolution No. PQ-4670 "On measures for the protection, cultivation, processing and rational use of available resources of medicinal plants growing in the wild" was, and the cultivation and processing of medicinal plants in order to create a favorable



environment for further development, to increase the export potential of the industry, as well as to integrate education, science and production processes:

Starting from May 1, 2020, the Ministry of Agriculture of the Republic of Uzbekistan, the Ministry of Innovative Development, the State Forestry Committee, the Agency for the Development of the Pharmaceutical Network under the Ministry of Health, proposals on the establishment of primary or deep processing clusters (hereinafter - the cluster of medicinal plants), as well as on the specialization of regions on the cultivation of medicinal plants, were approved.

In this decision, because *Capparis spinosa* L. is a drought-resistant (xerophytic) plant in the form of seeds and seedlings, its mechanical composition is suitable for light soils, mountainous and plain land areas, Bostonliq, Ahangaron of Tashkent region. It is recommended to grow in the districts of Zomin, Bakhmal, Gallaorol, Forish of Jizzakh region, Pop, Chust of Namangan region, Asaka, Buloqboshi, Andijan, Kurgantepa and Jalaguduk districts of Andijan region, Bukhara, Navoi, Kashkadarya, Surkhandarya regions.

One of the most urgent tasks of the Forest Fund is to use the unused steppe and hilly zones in the desert and hilly soil and climatic conditions, and to get economic benefits from them, to properly organize plantations. medicinal plants. Kovar cultivation is the most promising field, its establishment does not require excessive funds and resources. The reason is that the thorn bush, which grows freely on the ground, does not choose a place, it is very resistant to lack of water. Wild species grow and produce from May to October.

As an implementation of this decision, the Andijan branch of the Forestry Research Institute and the scientists of the Andijan Institute of Agriculture and Agro-Technology conducted research on the practical project on the topic "Organization of *capparis spinosa* L. plantation" is being conducted.

Within the framework of this project, 2 kilograms of seeds of Uzbekistan-20 variety of the Qovul plant, founded by scientists of the Namangan Institute of Engineering Technologies, were stratified in laboratory conditions in January. After these seeds germinated, on April 13, they were planted on a 1-hectare field in the Babur forest plot belonging to the Adijon State Forestry.

In order to establish a thorny kovar plantation, its surroundings were fenced to protect it from people and livestock. Seedlings were prepared from the collected seeds, planted and cared for in the research area. In the first year, a plantation was established on an area of 5 hectares. In two different periods - spring and autumn, the optimal periods of growing thorny kovar were studied, and cultural plantations were established from the first-year seedlings in a small area. The results of the experiment were mathematically analyzed and a scientific report was prepared based on the collected data.

Care of seeds and seedlings sown in two different periods in spring and autumn for the establishment of Kovul plantation, planting additional seedlings instead of non-germinated seeds, fertilizing the germinated plants with nitrogen and phosphorus mineral fertilizers. watering; Caring for seeds and seedlings

planted in two different periods, implementation of high agrotechnical measures in caring for planted seeds and seedlings; Watering, weeding, feeding, disease and pest control; Carrying out high-quality agrotechnical activities in Kovul plantations, paying special attention to the ripening of flower buds and cultural seed production.

Cultivated kovar plant from seeds of Uzbekistan-20 variety and planting and experimental comparison of growth, development and productivity with seedlings of wild kovar species (*Sapparis Spinoza L...*) study; Harvesting of the first crops from the kovul plantations planted in spring and autumn in two different periods. Collecting high-quality flower buds from the established Kovul plantations and using them for drying the remaining fruits for the food or pharmaceuticals industry, as well as obtaining seeds, were carried out.

Andijan State Forestry, central Andijan District, Botakora Adirlik area, Z. Babur National Recreation Park and Farij State Forestry areas of Jizzakh region were selected, and Kovul plantation was established in these three areas. scientific and research work was carried out to increase the level of marketability of its products.

Biological properties of the kovar plant; Representatives of the Kavardosh family are non-succulent grasses and shrubs. Their leaves are simple or claw-like, complex, arranged alternately, often without side leaves. The flowers are bisexual, solitary or in closed inflorescences. The calyx has 4 leaves, and the crown has 4 diagonally arranged. Paternity is infinite or 4-6, the middle 4 is derived from the division of 2. Mother has 1-2 or several fruits with leaves. The nodule is superior, with one or more cells and many seed pods. The seed pod is bent, the fruit is ovoid or rhizophorus, and when it bursts, it is a tulip-shaped fruit that is pollinated by insects.

One of the characteristic signs of the family is that the end of the flower band grows and turns into a long band genophore, which supports the mother. Such a tumor is also formed in fathers. They are similar to the flowers in their flower structure, but they differ from them in the absence of side leaves.

Since the fruits of terrestrial plants are in contact with the earth's surface, there are changes in the quality of the fruits, cases of damage by diseases and pests. This, in turn, has a serious effect on the quality of the crop and the level of the commodity, and leads to a decrease in income from the economic point of view.

In order to overcome such problems, the use and development of innovative technologies is an important issue today. During the growth and development phases of the kovar plant, raising the stem above the ground increases the marketability of the products. Based on the results of the conducted research, a construction of special 4-6 mm metal wire supports was developed for raising the plant from the ground. In the course of research, it was achieved that the quality of the fruits grown in special folk farms was increased by 85-90%. (Figure 1).

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## **SINF RAHBARINING O'QUVCHILAR BILAN O'QUV FAOLIYATIDA ISHLASHDA O'QUV SAMARADORLIGINI OSHIRISH YO'LLARI**

*Annotation. In this article, ways to increase the educational efficiency of the class leader in working with students in educational activities and some issues, problems and their solutions in the process of children's maturation, development, and education of the student are discussed. dedicated.*

*Key words: Education, education, knowledge, skill, skill, method, class, activity, school, director, deputy, teacher, student, spirituality, education, culture, event, morality, activity, knowledge, talent, ability, education, norm, incentive, punishment, discipline, responsibility, duty, class leader, student, school, director, team, assembly, conversation, parents*

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## **WAYS TO INCREASE EDUCATIONAL EFFECTIVENESS OF CLASSROOM TEACHERS WHEN WORKING WITH STUDENTS IN EDUCATIONAL ACTIVITIES**

*Annotatsiya. Mazkur maqolada sinf rahbarining o'quvchilar bilan o'quv faoliyatida ishlashda o'quv samaradorligini oshirish yo'llari va bolalarni kamol topishi, rivojlanishi, o'quvchini ta'lim-tarbiya olishi jarayonida sinf rahbarning faoliyatidagi ayrim masalalar, muammolar va ularning yechimiga bag'ishlangan.*

*Kalit so'zlar: Tarbiya, ta'lim, bilim, malaka, ko'nikma, metod, sinf, faloiyat, maktab, direktor, o'rinbosar, o'qituvchi, o'quvchi, ma'naviyat, marifat, madaniyat, tadbir, axloq, faoliyat, bilim, iste'dod, qobiliyat, tarbiya, me'yor, rag'bat, jazo, intizom, mas'uliyat, burch, sinf rahbar, o'quvchi, maktab, direktor, jamoa, majlis, suhbat, ota-ona.*

Sinf rahbari o'zi rahbarlik qilayotgan sinf o'quvchilarini tarbiyalash bilan bir qatorda o'quv yili yoki chorak davomida nimalar qilish kerakligi bolalar hayotini nima bilan band qilish va tanlangan ish turini qanday amalga oshirishni bexato aniqlash kabi ancha murakkab muammoni yechadi. Bu borada sinf rahbariga turli xil manbalar yordam beradi. Tarbiyaga kompleks yondoshishi biror o'quvchini ham e'tibordan chetda qochirmaslik sinf rahbari uchun alohida masaladir.

Tarbiyalash uchun sinf rahbari tarbiya ob'ekti bo'lgan bolani yaxshi bilish, uni yaxlit idrok etishi kerak. Ko'pchilik sinf rahbarlari bolani darsda o'quvchi, musobaqada sportchi sifatida, ya'ni har bir aniq ish sharoitida kelib chiqib idrok etadi va shunga ko'ra muomala qiladi, bola shaxsining boshqa tomonlari esa hozircha hisobga olinmaydi. Ammo har bir bolaning o'z tajribasi, o'z emotsional madaniyat darajasi, qadrlaydigan narsalar, ehtiyoatlari, talablari, umidlari, aloqalar, munosabatlari kabi butun bir dunyosi bor. Tarbiyada ana shular hisobga olinishi kerak. Sinf rahbari o'z o'quvchisining ichki dunyosini, kechinmalarini, xulqida vujudga kelayotgan holatlarining sababini, irodasini yaxshi bilsagina uning qalbiga yo'l topa oladi va bolaga ta'sir etishning to'g'ri yo'lini aniqlaydi.

Ana shunday sifatlarga e'tibor bergan sinf rahbari tarbiyada yetakchi o'rinni egallaydi. Shuni ham unutmaslik kerakki, bolaga tarbiyaviy ta'sir etuvchi omillar hozirgi davrda g'oyat darajada ko'paydi oila, keng jamoatchilik, radio, televidenie kino, teatr, kitob, jurnal, musiqa va boshqalar. Sinf rahbarining bolaga tarbiyaviy ta'sir etishda yetakchilik, birdamlik rolni tarbiyaviy ta'sirini, saqlab qolish g'oyat qiyinlashib boryapti. Ba'zan bolaga tarbiyachidan ko'ra o'rtog'i, qo'shnisi, ko'chadagi do'stlari kuchliroq ta'sir etish hollariga duch kelamiz. Chunki, har bir bolada ma'lum kurtaklar yaxshilik va poklik bilan bir qatorda salbiy, aktivlik va passivlik sifatlari mavjud. U munosabatlarga e'tibori jihatidan ham har xil sifatlarga ega. Agar tarbiyachi unga optimistik nuqtai nazardan yondashsa, bola yaxshilikka intilib, uning umidini oqlaydi va aksincha bolaga oldindan noshud, yalqov, tartibsiz deb qaralsa hamda o'jarlik va terslik bolaning sifati hukm chiqarilsa, u holda tarbiyalanuvchi o'zining xuddi shunday qilib ko'rsatadi.

Natijada u bu borada ham tarbiyachining umidini oqlaydi. Sinf rahbari bolalarni yaxshi bilishi uchun ularni o'rganish darsda, darsdan tashqari vaqtlarda umuman bolaning hayoti o'tadigan barcha sharoitlarda amalga oshiriladi. Bolani o'rganish bilan sinf rahbari uning individual xususiyatlari haqida aniq ma'lumotga ega bo'ladi. Bolaning individual xususiyati uning xulqiga, o'zlashtirishiga munosabatlariga jamoadagi o'rniga ta'sir etadi. Shu boisdan ham jamoadagi individlar tarbiyalanayotiganda alohida o'quvchini unutish yaramaydi. Chunki sinf rahbari ko'pgina tashkiliy ishlarni uyushtirishda kimga suyanish, kimga qanday vazifa yuklash, kimga mustaqillik berish va kimga muntazam yordam berish kerakligini faqat ularning individual xususiyatlarini yaxshi bilish tufayligina bexato aniqlaydi.

Demak, individual munosabat bolaga tarbiyaviy ta'sir etishning eng samarali yo'lini topish imkoniyatini beradi. Tarbiyaviy ishlar jarayonida sinf

rahbari butun sinf jamoasini ham o'rganishi kerak. Sinf rahbari o'ziga berilgan sinfni qabul qilib olish bilan bolalar haqida ko'pgina ma'lumotlarni aniqlaydi. Bu ma'lumotlar bolaning oilasidan, o'qituvchilardan, o'rtoqlaridan olinadi va tarbiyada yagona ta'sir birligi ham shu asosda vujudga keladi. Mana shu o'rinda bolalar ota-onalar va o'qituvchilar o'rtasidagi o'zaro munosabatlar masalasiga alohida e'tibor berish lozim. Bu uchlik markazida bola, ya'ni o'quvchi turadi, maktab va oila esa unga ikki tomondan ta'sir etadi.

Ayni vaqtda bola maktab bilan oilasidagi aloqani ta'minlovchi vosita rolini ham bajaradi. Lekin uning maktab haqidagi oilaga yetkazadigan ma'lumotlari hamisha ham haqiqatga to'g'ri kelavermaydi va u hatto kundalik orqali beriladigan axborotlarni ham o'ziga talqin etib boradi. Ko'pincha oila bilan maktab o'rtasida vujudga keladigan anglashinmovchilik ham mana shu tufayli ro'y beradi. O'quvchi kattalarning o'zi bilan muomala qilayotgan vaqtdagi pozitsiyasini solishtirib ko'rish orqali ma'lum xulosaga keladi va o'ziga xukm chiqaradi. Xuddi shu hol uning xulqida o'z aksini topadi va u bir gal o'qituvchining, boshqa vaqt ota-onasining tarbiyasini oladi. Hatto eng vijdonli bolada ham bu holni ro'y berishi tabiiydir. Ana shu holatning vujudga kelmasligi uchun ota-onaga yordam berish, o'qituvchi bilan ota-ona o'rtasidagi hamkorlikning to'g'ri bo'lishida oila tarbiyasiga rahbarlik qilish zarur. Buning uchun u har bir oilani guruh va har tomonlama o'rganish kerak. Sinf rahbarining oilaviy sharoitni individual munosabat uchun u quyidagilarni o'z ichiga olgan dasturga ega bo'lishi kerak.

1. Oila haqida umumiy ma'lumot, oila tarkibi, kattalarning ish joyi, kasbi, oilaning moddiy jihatdan foydalalanganlik darajasi, uy joy sharoiti.

2. Oilaning madaniy darajasi, oila a'zolarining ma'lumoti, oilaviy kutubxona bor yo'qligi, qanday matbuotga yozilishi. An'analari va oilaviy bayramlar.

3. Oilaning tarbiyaviy imkoniyatlari, ota-onaning bolaga va bolaning ota-onaga munosabati, ularning insoniy yetukligi va qiyofasi bolalarning o'z ota-onalarining kasbi haqidagi tushunchalari, oilada salbiy ta'sirning bor yo'qligi.

4. Bolaga oiladan tashqarida ko'rsatilayotgan, ta'sirlar va ota-onalarning ularda munosabati, o'rtoqlari, hovli, ko'cha, qo'shnilar, ota-onaning tanishlari, qarindoshlar va boshqalar.

Sinf rahbari tarbiyaviy ishning muvaffaqiyati ko'p jihatdan uning bolalar ichki dunyosiga chuqur singib kirishiga, ularning kechinmalari hamda xulq-atvorini tushunishiga bolliqdir. O'quvchining nima bilan yashayotganligini, uning qiziqishi va mayillari qandayligini, irodasining o'ziga xosligi, hamda xarakteri xususiyatlarini o'rganish deganimiz, uning qabliga mumkin qadar ishonchli yo'l topish, unga tarbiyaviy ta'sir etishning hamda maqbul metodlaridan foydalanish demakdir. Tarbiyachi o'quvchining individual xususiyatlarini yaxshi o'rgangach va tushungan taqdirdagina, bu o'quvchi shaxsini muvaffaqiyatli tarbiyalab yetishtira oladi.



O'quvchilarni o'rganish o'qituvchining, ayniqsa sinf rahbarining vazifasidir. U o'quvchilarni faqat darsdagina emas, balki sinfdan tashqi vaqtdan ularga tarbiya berish vaqtida ham, o'quvchilar uylariga borganda ham, har xil ekskursiyalar vaqtida ham o'rganadi. Sinf rahbari sinfni qabul qilib olgandan keyin, uning birinchi ishi, odatda, o'quvchilarni o'rganishi bilan bog'liq bo'ladi. Bu ish uning o'ziga berkitilgan sinfdagi butun ish faoliyati mobaynida davom etadi va uning tarbiyaviy ish sistemasida muhim bir tomonni tashkil etadi. O'quvchilarning o'ziga xos xususiyatlari ularning xulqlari va mayllarini.

Ular olgan tarbiya darajasini bilgan holda, ma'lum maqsadga qaratilgan va ta'sirchan reja tuzish oson bo'ladi. Ma'lumki, o'quvchi shaxsining tarkib topishi va rivojlanishi bir tekis bormaydi. Sinf rahbarining mazkur o'quvchi to'g'risida bilganlari bugunga kelib yetarli bo'lmay qolishi mumkin. To'g'ri, o'quvchilarni o'rganish ko'p vaqt va ko'p kuch talab etadi. Ammo keyinchalik bular hammasi katta natijalar beradi. Sinf rahbari o'quvchilarni, ularning xususiyatlarini bilgan holda, ular bu jarayonini muvaffaqiyatli tarzda yo'lga solib, yutuqlarga erishish mumkin bo'ladi. O'quvchilarni o'rganishga boshqa o'quvchilar, yetakchilar va ota-onalar jalb etiladi.

Bunda o'qituvchilar hamda sinf rahbarlari ishidagi o'zaro munosabat qoidalariga rioya qilish juda muhimdir. O'quvchilarni o'rganish natijalari bilan barcha o'qituvchilarni tanishtirib borish zarur. Shu bilan birga ularning har qaysi o'quvchi to'g'risida bilganlarini ham hisobga olish lozim. Bular o'quvchilarga tarbiya berish jarayonida ularga bir xilda talablar qo'yish va ularga bir xil muomala qilishga erishishga yordam beradi. O'quvchilarni o'rganish ularga individual yondashishni zarur shartidir. O'quvchilarni ularga ta'lim va tarbiya berish jarayonida har qaysi o'quvchiga individual yondashishga erishish maqsadida o'rganmoq lozim. O'quvchilar o'z xarakteriga qiziqishi va mayliga ko'ra bir xil emas.

Ulardan psixologik rivoglaishiga binoan sustkash yoki faol va uquvsiz, jasur va shijoatkor, boshqa birlari esa uyulish xissi yuqori, tortinchoq bo'lishadi. Ba'zi bir o'quvchilar o'z tashkilotchiligi va qat'iyligi bilan ajralib tursa, boshqa birlarida esa bu xususiyatlar mavjud emas. Izlanishlardan kelib chiqqan xolda shular ma'lum bo'ldiki, sinf bir biriga o'xshamagan, turli xususiyatdagi bolalardan tashkil topgan bir guruhdir. Sinfdan tashqi ko'rinish jihatidan bir-biriga o'xshash bolalar bo'lmagan singari, o'z ichki xususiyatlari jihatidan bir biriga o'xshaydigan bolalar ham bo'lmaydi. Ularning xarakteri, qiziqishlari, kayfiyatlari va xohishlari, ularning xulq-atvorlari sabablari, ko'nikma va malakalari, odatda, turlicha bo'ladi. har qaysi o'quvchi o'ziga xos, boshqalarga o'xshamaydigan xususiyatga ega bo'ladi.

U alohida shaxs sifatida kamol topib boradi. Odatda sinf rahbari sinfdagi barcha o'quvchilarga nisbatan yagona tarbiyaviy vazifalar qo'yadi va hal etadi. Masalan, u o'zining barcha o'quvchilarni mehnatsevarlikka, bir jon, bir tan bo'lishiga, haqqoniylikka o'rgatishga harakat qiladi. Ammo bu vazifalarning hal etish yo'llari, vosita va metodlari o'quvchilarning individual xususiyatlariga

qarab turlicha bo'lishi mumkin. Ularning ba'zilarini o'z vaqtida rag'batlantirish, ba'zilariga buyurish xulq-atvor qoidalarini buzgan o'quvchilarni jazolash darkor. Binobarin, o'quvchilarga to'g'ri tarbiya bermoq uchun tarbiya jarayonida ularga individual yondashishni amalga oshirmoq kerak. Buning uchun esa ularni chuqur va har tomonlama o'rganmoq zarur. Tarbiyachi o'quvchilar jamoasini tarbiyalar ekan, hech qaysi o'quvchini nazardan chetda qoldirmasligi darkor.

Xulosa o'rnida shuni aytishimiz mumkin, sinf rahbari o'quvchilardan doim xabardor bo'lib turishi kerak, o'quvchining o'zlashtirishi yomon bo'lsa, uni yaxshilash uchun sinf rahbari birinchi o'rinda doim ota onasi bilan individual suhbat qilib, muammoni bartaraf qilish chorasini zudlik bilan xal qilish kerak. Sinf rahbar, ota-onalarga Kundalik.com saytidan doim a'loqada bo'lishlarini va xabardor bo'lib turishlarini ta'kidlab turishi kerak. Ota-onalar doimiy ravishda farzandlarini nazorat qilib turgan xolda Kundalik.com dan va Monitoringdan xabardor bo'lgan xolda farzandlarini o'z nazoratiga olib turishligi kerak.

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## **O'QUVCHILARDA BILIM SIFATINI OSHIRISH VA SINFD INTIZOMNI MUSTAHKAMLASH USULLARI**

*Annotatsiya. Mazkur maqolada o'quvchilarda bilim sifatini oshirishda va sinfda intizomni mustahkamlash borasidagi usullar va tavsiyalarni, yechimiga bag'ishlangan. Maqolaning asosiy mazmun mohiyati sinf rahbarlik faoliyati qaratilgan.*

*Kalit so'zi: Bilim, mutaxassi, intizom, rivojlanish, mas'uliyat, amaliyot, sinf rahbar, vazifalar, nazariy bilim, yuksalish.*

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## **METHODS OF IMPROVING THE QUALITY OF STUDENTS' KNOWLEDGE AND STRENGTHENING DISCIPLINE IN THE CLASSROOM**

*Abstract. This article is dedicated to methods and recommendations for improving the quality of knowledge among students and strengthening discipline in the classroom. The main content of the article is focused on class leadership.*

*Key words: Knowledge, specialist, discipline, development, responsibility, practice, class leader, tasks, theoretical knowledge, promotion.*

O'quvchilarda bilim sifatini borasida yurtimizda bir qancha qarorlar va tamoyillar qabul qilidi. 2020 yil 23-sentyabir 637-sonli "Ta'lim to'g'risidagi qonun"ni qayta taxirini bunga misol bo'la oladi. Mamlakatimida bo'layotga barcha islohatlar albatta jamiyatimizni rivojlantirish va kelajak avlodni barkamol avlod qilib tarbiyalashdan ibortdir. Eng avvalo ularda bilimga bo'lgan muhabbatini uyg'otish va mustahkamlash qaratilgan. Bilimga qiziqqan o'quvchilargina o'qishga intiladilar va muvaffaqiyatga erishadilar. Bunda sinf rahbarlarining o'rni katta. Ayniqsa, o'qituvchining sinf rahbarlik faoliyatida o'quvchilar bilan ishlash borasida qo'llayotgan usul va metodlari bilan uzviy

bog‘liqdir. Bolalarni o‘z kuchiga va qobiliyatiga ishonirish, ilk yutuqlarida rag‘batlantirib borish kerak.

Sinf rahbar ish faoliyatida o‘quvchilar nazariy bilimlarini mustaqil tarzda qo‘llay bilishlari, ularning bilimga qiziqishlarini oshirishda ahamiyatlidir. Bu tajribani quidagi tarzda amalga oshirish mumkin:

Avvalo biror fan bo‘yicha o‘quvchilarga biror jihoz yoki ko‘rgazmali qurol yasab kelish buyuriladi. Bunda “Bu sening qo‘lingdan keladi, harakat qil” degan gaplarni unga uqtirish kerak. Buni o‘quvchilar oddiy topshiriq emas, balki o‘qituvchining ishonchi sifatida ham qabul qiladi. Natijada o‘quvchiga bu topshiriqni bajarishda yetarli bilim kerak bo‘ladi. O‘quvchi nazariy bilimni olishga u yoki bu fanni o‘zlashtirishga kirishadi. Bu jarayonda o‘quvchi yasayotgan narsasiga va o‘zlashtirayotgan faniga qiziqishi ortadi. So‘ngida esa har bir yasalgan narsa zamirida ulkan mehnat yotganligini his qiladi va maktab, sinf jihozlarini avaylashni o‘rganadi.

Sinf rahbarlarining o‘quvchilarda bilim sifatini oshirishdagi asosiy vazifalaridan yana biri bu fan o‘qituvchilarini o‘quvchilarning qiziqishi, moyilligi va uy sharoiti haqidagi ma’lumotlar bilan tanishtirish va ularga qanday munosabatda bo‘lishligi haqida maslahatlar berishdan iborat.

Biror fandan o‘zlashtirishi past bo‘lgan o‘quvchi bilan sinf rahbarning o‘zi bevosita ish olib borishi lozim bo‘ladi. Bunda o‘quvchiga “Bu topshiriqni ikkalamiz bajarmasdan qo‘ymaymiz” deb dalda beriladi. Kerak bo‘lganda bu topshiriqqa fan o‘qituvchisini yoki sinfdagi a’lochi o‘quvchilarni ko‘makka chaqiriladi. Bunda o‘quvchi yolg‘iz emas ekanligini tushunadi, ko‘ngli tog‘dek ko‘tarilib, topshiriqni bajarishga harakat qiladi.

**“Bilim – takrorlash mevasidir”, degan edi. Abu Rayhon Beruniy har bir** muvaffaqiyat zamirida ulkan va tinimsiz mehnat yotadi. O‘quvchilarni o‘qishga, berilgan vazifalarga mas’uliyat bilan qarashga uqtirib tarbiyalash kerak.

O‘quvchilarda o‘qishga bo‘lgan javobgarlik va mas’ullik hissi bilan tarbiyalash juda katta ahamiyatga ega. Mas’ul kishi har bir ishiga jiddiy qarab tugallamaguniga qadar hotirjamlikni sezmaydi. Chunki u shunga moslashib o‘z qadriyatlarini yaratgan. O‘quvchilarda ham ana shu hissiyot uyg‘otilsa barcha fanlardan o‘zlashtirish yuqori darajaga chiqadi. Natijada esa kelajakda yetuk va har taraflama barkamol mutaxassislar ko‘payishiga olib keladi.

Bolalarda intizomni Rivojlantirish uchun sinf rahbarlari alohida ishlaydilar. Ular darsda va darsdan tashqari ishlarda tarbiya ishlarini olib borib ichki intizom va tartiblarni o‘rnatib olishlari zarur bo‘ladi. Masalan, sinfni jihozlash, tozalik va shu kabi masalalar. Bu ishlarni bajarishda sinf rahbar bir o‘zi emas balki sinf faollari va o‘qituvchilar bilan hamkorlikda bajaradi. Sinfda intizomni saqlash uchun faqatgina sinf rahbar mas’ul emas balki butun sinf va pedagogik jamoa ham mas’ul hisoblanadi.

Sinfda intizomni o‘rnatish juda murakkab jarayondir. O‘quvchilar ba’zi darslarda intizomli bo‘lib darslarga quloq solishadi, ba’zi darslarda esa betartib o‘tirib, shovqin qilishadi. Bunda kim aybdor? Albatta o‘qituvchi. Agar

o'qituvchining pedagog mahorati yetarli bolsa, fanga bolalarni qiziqтира olsa, sinfda o'z – o'zidan intizom yuzaga keladi va o'qish sifati ham oshadi.

Intizom deganda o'quvchilarni qimirlamay, indamay o'tirishlari emas balki ongli intizomni tushunish kerak. Ba'zi o'qituvchilar o'zlaricha sinfda qosh qovoq qilib, qattiqo'llik bilan intizomni o'rnatmoqchi bo'lishadi. Bunda bolalarda adovat hissi shakillanadi. Natijada sovuqqon, juratsiz, qo'rqqoq va yolg'onchi bolalar shakillanadi.

O'quvchilarda intizomni tarbiyalamasdan turib, ularni maktabga, atrof muhitga, kishilarga, darslarga to'g'ri munosabatda bo'lishga, uy vazifalarini bajarishga, saramjonlikka o'rgatish qiyin. Ongli intizomni tarbiyalash - maktabning asosiy vazifasi hisoblanadi.

Ongli intizom va mas'ullik hissini sezish maktabda olib borilgan tarbiyaviy ishlar tizimining samarasi hisoblanadi. Bu yuqorida ko'rsatib o'tilgan ishlar bolalar maktabga ilk qadam qoygan kunlaridanoq boshlanadi. Bolalarni maktabga va maktabdagi tartib intizomlar bilan tanishtirib, moslashishiga ko'maklash zarur. Bu paytning ichida bolalarga ehtiyotkorlik bilan munosabatda bo'lish zarur, ularni maktab hayotidan sovub qolishlariga sabab bo'ladigan hatti harakatlar va muomila qilmaslik kerak.

Bolalarni sevish, ularni hurmat qilish yahshi hislatlarni yuzaga keltirishi mumkin. Agar o'qituvchi o'z o'quvchilariga nisbatan befarq, ayniqsa mensimasdan munosabatda bo'lsa bo'lsa, bunday o'qituvchini o'quvchilar hurmat qilmaydi va obro'si tushib boradi. Darslarda tartib - intizomni saqlashning eng yaxshi usuli bu o'quvchilarning ishonchini qozonishdir. Darsni qiziqarli o'tish, ko'rgazmali qurollarni ishlatish va noodatiy darsni tashkil qilish kerak. Eng muhimi har bir o'quvchini bandligini taminlash, aqliy salohiyatiga mos keladigan vazifalar berish. Shunda o'quvchilarda qiziqish bilan birga sog'lom raqobat ham vujudga keladi.

Xulasa o'rinda shuni aytishimiz mumkin, o'quvchilarda intizom nafaqat maktablarda balki turmush tarzimizda ham katta o'ringa ega. Chunki har bir joyning o'ziga yarasha tartib, intizomlari mavjud. Bolalar katta bo'lgani sari buni chuqurroq tushunib yetishadi, buni ularga o'rgatadigan insonlar pedagoglar hisoblanadi. O'quvchilarni ham ana shu tartib – intizomga o'rgatsak o'z o'zidan jamiyat taraqqiyot topadi va yuksaladi. O'quvchilarda o'quv faoliyati, bilim sifatini oshirish uchun avvalo o'quvchilarda bilimga bo'lgan qiziqishni oshirish lozim. Bu jarayonlarni esa tizimli ishlaydigan, o'z kasbiga ma'suliyat xissi bilan qaraydigan mutaxassislar darkordir. Albatta malakali, o'z ishining ustasi bo'lgan mutaxassislarni esa oliy ta'lim yetishtirib beradi.

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## **OBSERVATION OF THE PHENOMENON OF RESONANCE USING SOUND WAVES**

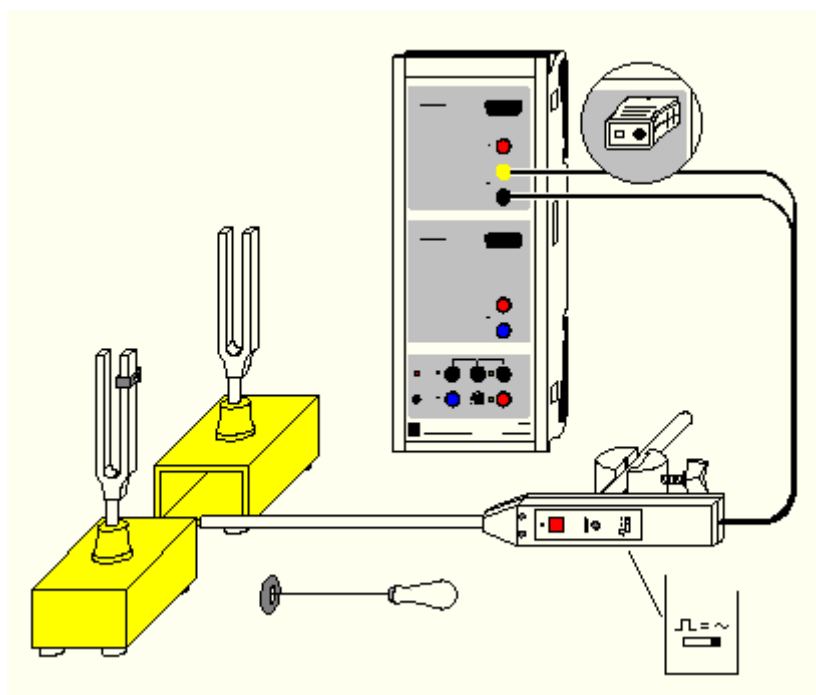
*Abstract. This experiment records a beat caused by two tuning forks having slightly different frequencies. The individual frequencies  $f_1$  and  $f_2$ , the new oscillation frequency  $f_n$  and the beat frequency  $f_s$  are determined and compared with the theoretical values.*

*Keywords: Resonance, amplitude, frequency, tuning fork, microphone.*

Resonance describes the phenomenon of an increase in amplitude that occurs when the frequency of an applied periodic force is equal to or close to the natural frequency of the system it affects. Resonance phenomena occur with all kinds of vibrations or waves: mechanical resonance, orbital resonance, acoustic resonance, electromagnetic resonance, nuclear magnetic resonance (NMR), electron spin resonance (ESR), and quantum wave resonance exist. Resonant systems can be used to create vibrations of a specific frequency (for example, musical instruments) or to select specific frequencies from complex vibrations containing many frequencies (for example, filters).

We observed the resonance phenomenon in sound waves using two tuning forks, a sound recording microphone, and the CASSY Lab2 device and software.

Two tuning forks are placed facing each other, if the mass of the tuning forks is the same, if the first tuning fork is hit with a hammer, the frequency of the sound coming out of it will increase sharply due to the frequency of the vibration of the second tuning fork, i.e. resonance will be observed. If the mass of the second tuning fork is slightly smaller, resonance is not observed. The assembly of the experimental device is shown in Figure 1.



Pic.1

In this case, the microphone records the sound coming from the tuning fork, and the CASSY program draws a resonance diagram. Pic.2. If a puck is inserted into one of the tuning forks and the mass of the stem is slightly increased, resonance will not be observed.

Experiment setup. Position the two tuning forks and the multipurpose microphone and connect the latter to input A of Sensor-CASSY (don't forget to set the microphone to "Signal" mode and switch it on). "Mistune" one of the tuning forks slightly by attaching an additional weight.

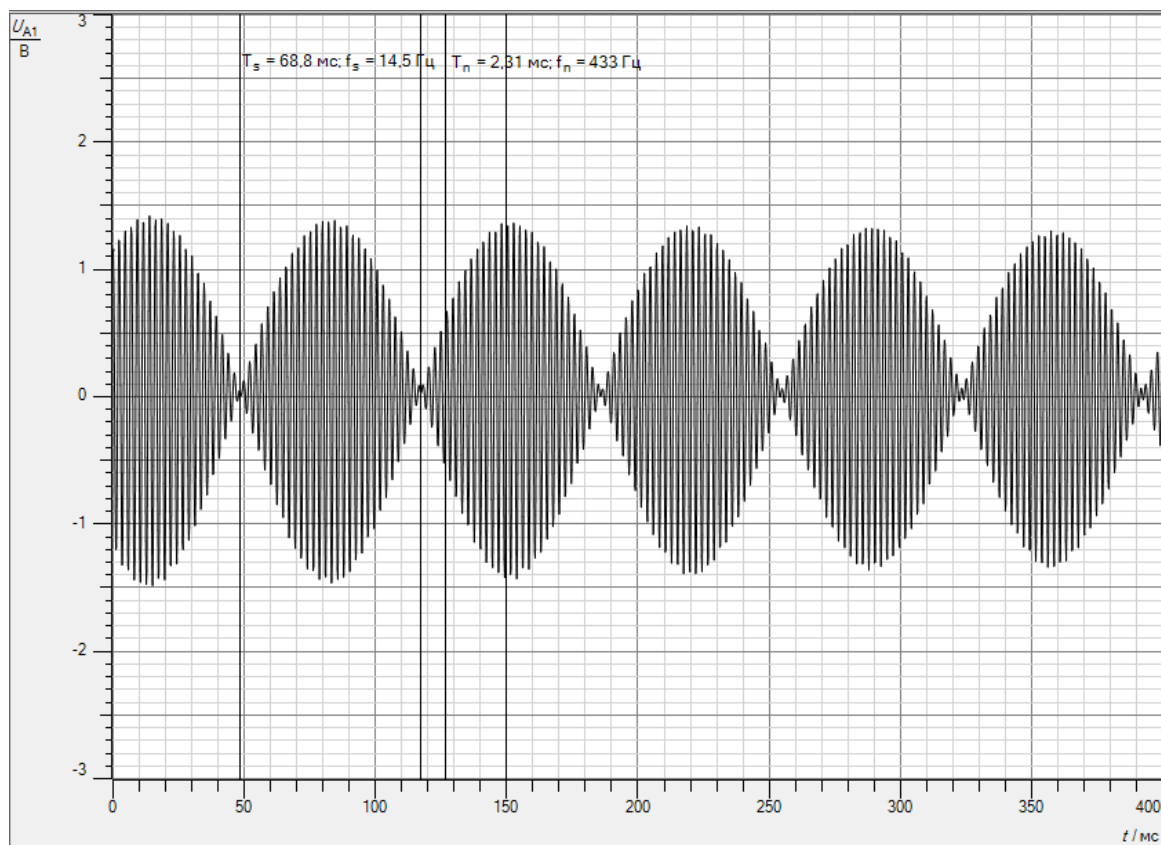
The individual frequencies  $f_1$  and  $f_2$ , the new oscillation frequency  $f_n$  and the beat frequency  $f_s$  are determined and compared with the theoretical values

$$f_n = \frac{1}{2} (f_1 + f_2) \text{ and } f_s = |f_1 - f_2|.$$

When the amplitudes of the two tuning forks are equal, the nodes and antinodes in the beat become clearly distinguished. The beat frequency  $f_s$  is determined from the interval  $T_s$  between two nodes as  $f_s = 1/T_s$ .

To ensure satisfactory accuracy in determining the new oscillation period  $T_n$ , you should average the measurements over 10 periods before determining the new oscillation frequency as  $f_n = 1/T_n$ .

In this example we obtain  $f_1 = 425$  Hz,  $f_2 = 440$  Hz,  $f_n = 433$  Hz,  $f_s = 14.5$  Hz, which closely confirms the theory  $f_n = \frac{1}{2} (f_1 + f_2) = 432.5$  Hz and  $f_s = |f_1 - f_2| = 15$  Hz.



Pic.2

Analyzing the results, the microphone recorded the sound generated in the tuning fork and turned it into an electromagnetic signal. The CASSY Lab2 program described voltage-time resonances.

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## **DETERMINATION OF VOLT-AMPERE CHARACTERISTIC OF SI-DIODE IN CASSY-LAB2 PROGRAM**

*Abstract. We know a lot of semi-conduct diodes. The diodes are used for a plenty of purpose. In this experience, the STE GE-Dioderry AA118 Diode was obtained in the Cassy-lab2 program and analyzed the characteristics of the voltap.*

*This experiment records and compares the current-voltage characteristics of various diodes (Si, Ge and light-emitting diodes).*

*Keywords: semiconductor, diod, LED, resistor, p-conducting zones, n-conducting.*

The semiconductor diodes are among the simplest semiconductor components. They consist of a semiconductor crystal in which an n-conducting zone meets a p-conducting zone. Recombination of the charge carriers, i.e. the electrons in the n-conducting and the holes in the p-conducting zones, creates a low-conductivity zone at the boundary layer. The conductivity is increased when electrons or holes are removed from the boundary layer by an external electric field. This direction of the electric field is called the reverse direction. Reversing the electric field drives the electrons and holes into the boundary layer, allowing current to flow more easily through the diode.

Types of diodes according to their purpose.

- \*designed to convert alternating current to direct current.

- \* has a short transition period and is designed for use in pulsed operating modes.

- \* Detector diodes are designed for signal detection.

- \* Mixing diodes are designed to convert high frequency signals into an intermediate frequency signal.

- \* Switching diodes are designed for use in microwave power level control devices.

- \* Parametric.

- \* Limiting diodes are designed to protect radios and household appliances from surges in the mains voltage.

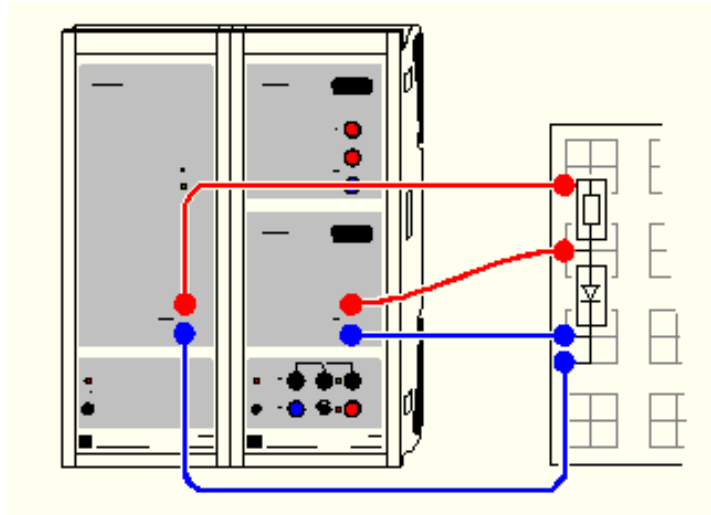
- \* Increase.

- \* Adjustment.

- \* Generator.

Experiment setup (Pic.1). Connect the circuit to Sensor-CASSY inputs A (current) and B (voltage across the diode) as shown in the drawing. The diode is protected by a 100  $\Omega$  series resistor.

When using Power-CASSY place this to the left of Sensor-CASSY to supply the circuit and measure the current.



(Pic.1)

At negative voltages the current is zero regardless of the applied voltage (reverse direction). At positive voltages, a current appears starting at a conducting-state voltage  $U$  (conducting direction).

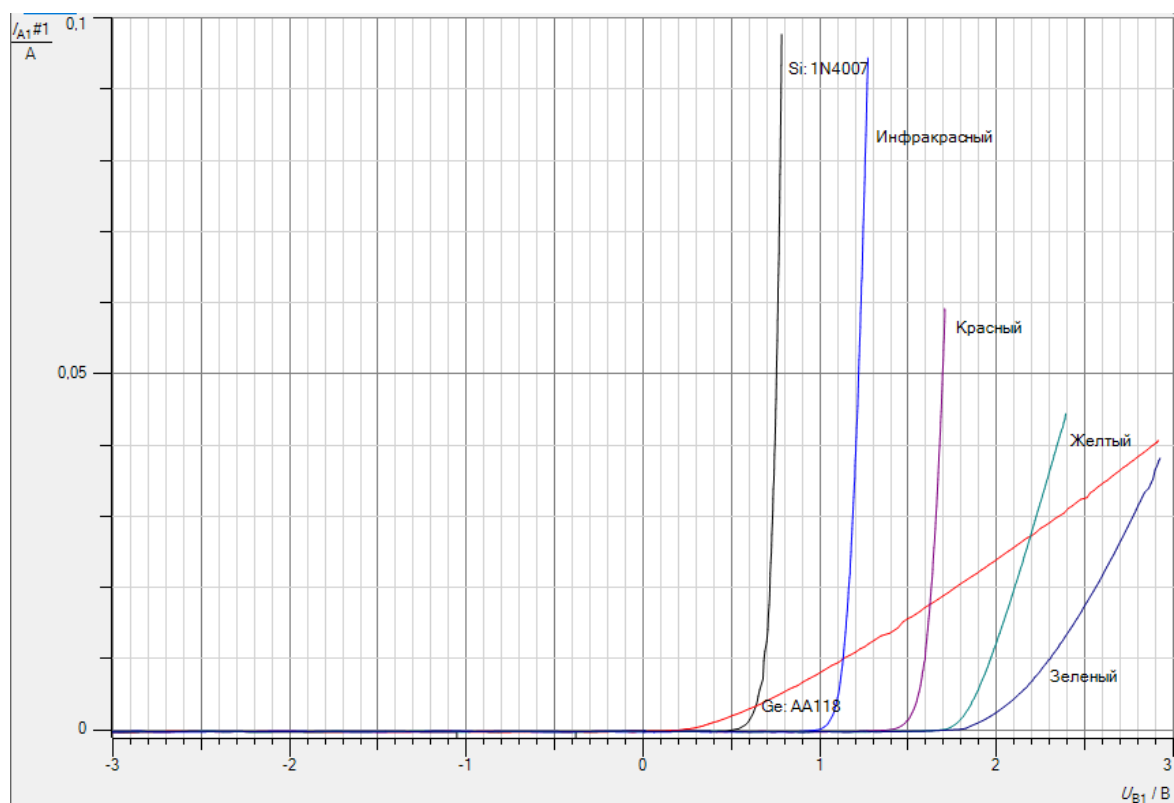
We can compare the conducting-state voltages  $U$  of various diodes. For the LEDs, we can use the equation

$$e \cdot U = h \cdot c / \lambda$$

to estimate roughly the wavelength  $\lambda$  of the emitted light. In this example the conducting-state voltage of the red LED is approx.  $U = 1.4$  V. From this we obtain  $\lambda = hc/eU = 880$  nm.

Below we have obtained the volt-ampere characteristic of the STE Si-diode 1N4007 diode. Pic(2).





Pic(2)

U [V]	-3.071	-2.940	-2.585	-1.923	-1.475	-1.055	-0.801	-0.381	-0.134
I [A]	-0.0002	-0.0003	-0.0002	-0.0003	-0.0002	-0.0003	-0.0002	-0.0003	-0.0002
U [V]	0.002	0.000	0.380	0.384	0.470	0.540	0.579	0.594	0.603
I [A]	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002	0.0002	0.0008	0.0012	0.0015
U [V]	0.617	0.626	0.633	0.641	0.647	0.651	0.659	0.678	0.683
I [A]	0.0021	0.0026	0.0031	0.0036	0.0042	0.0048	0.0057	0.0072	0.0098
U [V]	0.689	0.699	0.705	0.708	0.722	0.740	0.755	0.767	0.770
I [A]	0.0111	0.0125	0.0141	0.0161	0.0235	0.0353	0.0509	0.0655	0.0706

It is not possible to precisely determine the wavelength of light emitted by LEDs, as these emit a relatively broad frequency band that is usually filtered through a colored housing. Therefore the above wavelength determination is merely a rough estimate.

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**TA'LIMNI AXBOROTLASHTIRISH JARAYONIDA OLIY TA'LIM  
PROFESSOR-O'QITUVCHILARINING KORPORATIV  
MADANIYATINI SHAKLLANTIRISH**

*Annotatsiya. Ushbu maqolada ta'limni axborotlashtirish jarayonida oliy ta'lim professor-o'qituvchilarining korporativ madaniyatini shakllantirish borasida ma'lumotlar o'z aksini topgan.*

*Kalit so'zlar: Korporativ madaniyat, madaniyat fenomen, korporativ axborot tizimi, me'yorlar va qadriyatlar, rahbariyat xodimlari, pedagoglar, talabalar, boshqaruv a'zolari, xodimlarini rag'batlantirish.*

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**FORMATION OF CORPORATE CULTURE OF PROFESSORS-  
TEACHERS OF HIGHER EDUCATION IN THE PROCESS OF  
EDUCATION INFORMATION**

*Abstract. In this article, information on the formation of the corporate culture of professors and teachers of higher education is reflected in the process of informatization of education.*

*Key words: Corporate culture, culture phenomenon, corporate information system, norms and values, management staff, pedagogues, students, management members, employees motivation.*

***KIRISH. (Introduction)***

Mamlakatimiz taraqqiyotining asosiy dasturi hisoblangan “2017- 2021-yillarda O‘zbekiston Respublikasini rivojlantirishning beshta ustuvor yo‘nalishi bo‘yicha Harakatlar strategiyasi”da korporativ boshqaruvning zamonaviy standart va usullarini joriy etish iqtisodiyotni keyingi yillarda rivojlantirish va liberallashtirishning ustuvor yo‘nalishlaridan biri sifatida belgilangan. Bundan tashqari, O‘zbekiston Respublikasi Prezidentining 2018-yil 21-sentyabrdagi PF5544-sonli Farmoni bilan qabul qilingan “2019-2021-yillarda O‘zbekiston Respublikasini innovatsion rivojlantirish Strategiyasi”da ham korporativ huquqni rivojlantirish va korporativ boshqaruvning zamonaviy tamoyillarini joriy etish bo‘yicha chora–tadbirlar belgilanib, ular hozirda hayotga tatbiq etilmoqda.

Mazkur hukumat qarorlari asosida belgilangan vazifalarni bajarish doirasida oliy ta'lim jarayonida fanlarning uslubiy ta'minlash ham davr talabidir.

Korporativ madaniyatni o'rganish zarurati quyidagi asosiy sabablarga asoslanadi:

1) madaniyat fenomeni real va u butun jamiyat tashkilotlar, guruhlar va hattoki alohida olingan shaxs uchun muhim ahamiyat kasb etadi. Ushbu turdagi ahamiyatga ega bo'lgan har qanday hodisa o'rganilishi lozimdir;

2) shaxsning va butun bir tashkilotning ishlab chiqarish faoliyati, shuningdek, insonlarning tashkilotga bo'lgan munosabatini korporativ madaniyatisiz tushunib bo'lmaydi. Koppina tadqiqotlar bugungi kunda har qanday kompaniyaning faoliyati korporativ madaniyatning turiga yoki kuchiga bog'liqligini tasdiqlaydi;

3) korporativ madaniyat tushunchasini ko'pincha tashkiliy muhit, mafkura, falsafa, uslub yoki insonlarni boshqarish usuli tushunchlari bilan adashtirishadi. Agar ushbu hodisani jamiyat, inson va tashkilot ravnaqi maqsadida foydalanmoqchi bo'lsak, uni ushbu o'xshash tuyulgan tushunchalar qatoridan tashqarisida o'rganishimiz kerak;

4) madaniy ta'sirlar kuchli hisoblanadi, muayyan modellarga rioya qilishni, shuningdek taqlid qilishni va prognozlashni talab etadi.

Korporatsiyalar faoliyatining samaradorligi uchun muhim shartlardan biri, boshqa tashkilotlar kabi, korporativ madaniyat orqali boshqariladigan kompaniya missiyasiga erishish uchun xodimlarning sa'y-harakatlarini birlashtirishdir. Har bir korporativ madaniyatning asosiy elementi, global korporatsiyalarning korporativ madaniyatining asosiy xususiyatlarini aniqlash uchun uning asosiy qiymatlarini aniqlashdir. Global kompaniyalarning shakllanishi globallashtirish jarayoni doirasida, ijtimoiy-iqtisodiy yoki globallashtirish vositasi sifatida qaralishi mumkin.

Global korporatsiyalarning korporativ madaniyatining qadriyatlarini korporatsiyalarning korporativ madaniyatining asosiy qadriyatlarini aniqlash uchun asos bo'lgan jamiyatning qadriyatlaridan olingan bo'lib, globallashtirishning asosiy qadriyatlarini aniqlashi kerak.

Globallashtirish dunyo bo'ylab iqtisodiy, siyosiy, madaniy va diniy integratsiya va birlashuv jarayonidir.

Korporativ madaniyat funksiyalari: Korporatsiya madaniyatini shakllantirish jarayoni tizimli yondashishga asoslangan bo'lishi kerak.

Korporativ madaniyatning asosiy funksiyalari:

– korporatsiya qadriyatlarini shakllantirish, to'plash, targ'ib qilish va asrash (axloq me'yorlari, xatti-harakatlar qoidalari, muayyan tarixiy voqealar, voqealar, hamkorlar va mijozlar bilan munosabatlar);

– korporativ axborot tizimini shakllantirish, ya'ni, har bir xodimning professionalligini va malakasini oshirish, o'z texnologiyalar, mahsulotlar ishlab chiqish, korporatsiya intellektual mulkni yaratish, tadqiqot va ilmiy izlanishlar o'tkazish va boshqalar;

– korporatsiya ichki kommunikatsiya va aloqa tizimini shakllantirish (usullari va aloqa shakllari), boshqaruv tizimi va xodimlarning orasida ochiq muloqot tizimini mavjudligi, xodimlarning axloq qoidalari kodeksini ishlab chiqish kabilar kiradi;

Korporatsiyaning tashqi kommunikatsiyasi va aloqalarini yaratish, ya'ni ijtimoiy aloqalar, hamkorlar bilan aloqalar, ijobiy va jozibador obro'ni yaratish, korporatsiya usulni ishlab chiqish va ijtimoiy missiyasini amalga oshirish.

Maqsadlilik – korporatsiyasi maqsadlari va uning elementlarini belgilash, xodimlarining mehnat va uning jarayoni madaniyatini shakllantirish (masalan, ish joyini tashkil etish uchun talablar ishlab chiqish) va boshqalar...

### **KORPORATIV MADANIYAT DARAJALARI.**

Korporativ madaniyatning ikki xildagi darajasi ajratiladi: tashqi va ichki.

Korporativ madaniyatning tashqi darajasi (aniq ifoda etilgan, kuzatilgan) – qonunlar, qonunlarni tashkil etishda rasman faoliyat yurituvchi, yangi texnologiyalarni qo'llash va ishlab chiqarish, jismoniy obyektlar, mahsulotlar ishlab chiqaradigan asarlar, xulq-atvorlari, til.

Korporativ madaniyatning ichki darajasi (ko'zga tashlanadigan, yashirin) – insonlarning ichki dunyosini o'z ichiga oladi: ularning g'oyalari, fikrlari, qadriyatlar, e'tiqodi, atrof olamni his qilish yo'llari. Xulq-atvor normalari va insonlar xatti-harakatini tartibga soluvchi yashirin qoidalar o'zlashtirilgan ichki jarayonlarni aks ettiradi.

Sheynga ko'ra korporativ madaniyatning darajalari:

artefaktlar – jismoniy va ijtimoiy muhitni tashkil etishda paydo bo'ladigan, lekin ko'pincha tushunarli bo'lmagan darajada korporativ madaniyatning tashqi ifodasidir. Sun'iy ravishda ishlab chiqarilgan artefaktlar, tabiiy bo'lmagan mahsulotlar, madaniyat mahsulotlari, madaniyat, shuningdek texnologiya, ko'rinadigan va eshitiladigan, kiyim, ichki makon, jargon va boshqalar;

– qadriyatlar – bu korporatsiya madaniyatining darajasi ma'lum darajada jismoniy va ijtimoiy muhitda qabul qilingan qadriyatlar, me'yorlardir. Misol uchun, yangi sharoitlarda qaror qabul qilish zarurati yuzaga kelgan guruhga takliflar;

– asosiy e'tiqodlar – bu korporatsiya madaniyatining ko'zga ko'rinmas, idrok etilmagan darajasida birlashishi: atrofdagi dunyo bilan aloqalar, vaqtning haqiqatini anglash, makon, insoniy tabiat, inson faoliyati va munosabatlari.

### **Oliy ta'lim muassasalarida korporativ madaniyatni shakllantirish**

Zamonaviy globallashuv sharoitida oliy ta'lim muassasalarida ta'lim tizimining shakllanishi va rivojlanishi yangi innovatsion sharoitlarga va iqtisodiyot talablariga muvofiqligini ta'minlashga barcha ta'lim muassasalari amalda harakat qilmoqdalar

Korporativ madaniyat "Oliy ta'lim"ning qanchalik samarali yoki samarasiz ishlashini belgilovchi muhim tarkibiy qismi bo'lib, ta'lim sifatini ta'minlovchi asosiy vosita hisoblanadi. Shuning uchun ham oliy ta'limning korporativ madaniyatini o'rganish eng jadal rivojlanayotgan ilmiy yo'nalishlardan biridir.

Ta'lim xizmatlari bozorida yaxshi mavqega ega oliy ta'limni faol isloh qilishni boshlanishi bilan oliy ta'limlar sifat menejmenti tizimini jadal rivojlantirmoqda, iste'molchilarning talablarini hisobga olish bu faoliyat samaradorligini sezilarli darajada oshirish imkonini beradi.

Oliy ta'lim madaniyatining asosiy belgilari quyidagilar:

- oliy ta'limning ko'p funktsionalligi (gen sifatida qobiliyat zamonaviy bilimlarni olish va ularning transferlarini ta'minlash);
- ilmiy tadqiqotlarga aniq e'tibor (asosan fundamental tadqiqotlar);
- "ilg'or" ilmiy darajaga ega bo'lgan ta'lim tizimining mavjudligi, shu jumladan, magistrantlar, tayanch doktorantlar va doktorantlar sonini oshirish;
- iqtisodiyot, fan-texnologiyadagi innovatsion ilm-fanning zamonaviy yo'nalishlariga, yuqori sektor ko'rsatkichlarga e'tibor;
- keng mutaxassisliklar, fizika-matematika fanlari, ijtimoiy fanlar, gumanitar bilim va innovatsion ta'lim;
- xalqaro miqyosda ishlaydigan yuqori malakali o'qituvchilar;
- xalqaro fan va ta'lim tizimida oliy ta'lim muassasasining axborot ochiqligi, integratsiyasining yuqori darajasi;
- o'qituvchi metodologiyasining yangi yo'nalishlari dunyo tajribasi va moslashuvchanligi, ilmiy tadqiqotlar;
- talabalarni jalb qilishda tanlov va selektiv yondashuv;
- oliy ta'lim atrofida maxsus intellektual atrof-muhitni shakllantirish;
- ilm-fanga asoslangan korporativ axloqning mavjudligi, demokratik qadriyatlar va ilmiy erkinliklar;
- texnik-iqtisodiy makon, shu jumladan texno-mashinalar tuzilmalarini oliy ta'lim o'ziga xos ilmiy atrofida shakllantirish;
- jahon ilmiy va ta'lim hamjamiyatida ushbu mintaqa umuman olganda mamlakatlar ichida yetakchilikka intilish.

Oliy ta'limda korporativ madaniyatini o'rgatish zarurligi bir tomondan, ilmiy bilimlarni tarjima qilish va yuqori malakali kadrlarni tayyorlash vazifasini bajaradigan, boshqa tomondan, o'z an'analari, tarixi, g'oyasi bo'lgan madaniy hodisaning bir turi bo'lgan ijtimoiymadaniy muassasa hisoblanadi. Bundan tashqari, universitetlar oliy ta'lim tizimining markaziy aloqasi, shuningdek, bilim, axborot va xizmat ko'rsatish sanoati markazi; asosiy ishlab chiqaruvchi va eng yangi madaniy, ijtimoiy, ta'lim, ilmiy va biznes axborot texnologiyalarining birinchi iste'molchisi. Shuning uchun universitetning korporativ madaniyati doimo eng katta qiziqish uyg'otadi.

Universitetning korporativ madaniyat tashuvchilari bu professor-o'qituvchilar, talabalar, ma'muriy apparat va xizmat ko'rsatish sohasi xodimlaridir. Har bir aloqa muayyan holatlar tufayli korxonada shakllanadigan muayyan qadriyatlar va xatti-harakatlar majmuasiga ega. Ushbu korporativ madaniyat jamoaning ma'naviy va moddiy hayoti hodisalarining katta maydonini qamrab oladi: unda hukmronlik qiluvchi me'yorlar va qadriyatlar, rasmiy yoki norasmiy ravishda qabul qilingan xatti-harakatlar kodeksi va ildiz marosimlari



korxonaning har bir elementi orqali o'tadi va shu bilan uning faoliyatiga bevosita ta'sir ko'rsatadi.

Universitet darajasida tashkiliy madaniyat manfaatdor tomonlarning qadriyatlari, urf-odatlar, e'tiqodlari to'plami sifatida belgilanishi mumkin: rahbariyat xodimlari, pedagoglar, talabalar, boshqaruv a'zolari, ko'pincha korxonadan biriktirilgan xodimlar. Qadriyatlar va e'tiqodlar qarorlar qabul qilishda, shaxsiy va tashkiliy xatti-harakatlarning shakllariga katta ta'sir ko'rsatadi.

Universitet madaniyati-barcha ishtirokchilar (rahbariyat, yordamchi xodimlar va talabalar) korporativ madaniyatni shakllantirishga hissa qo'shadigan jamoadir. Bundan tashqari, jamiyatning tashqi madaniyati umuman universitetning korporativ madaniyatini shakllantirishga ta'sir qiladi. Akademik tizimning an'analari, mentaliteti, tarixini chuqur tushunish universitet faoliyatining farovonligini ta'minlaydi, bu esa tashqi va ichki o'zgarishlarni tushunishga imkon beradi.

Oliy ta'lim madaniyati mavhum tuzilish sifatida qaralishi mumkin. Oliy ta'lim korporativ madaniyatining tashqi belgilari, masalan, binolar arxitekturasi, universitet markaziga texnik xizmat ko'rsatish, talabalarning o'zaro aloqasi, kiyim uslubi, ma'muriyat va talabalar universitet madaniyati haqida ko'p narsalarni aytib berishlari mumkin. Universitetning muvaffaqiyatli rahbarlari o'z universitetida madaniyat konsepsiyasiga muhim ahamiyat berishadi.

Shakllangan korporativ madaniyat o'sishini tegishli ta'lim xizmatlari va ularning foyda sifati ta'minlaydi, oliy ta'limning raqobatbardoshligi, qo'shimcha olish uchun shart-sharoitlarni yaratadi. Yana bir yo'nalish samaradorligini oshirish xodimlarni boshqarish sifatini oshirish bilan bog'liq-ijtimoiy tadqiqotlar instituti, o'rganish va shakllantirish oliy ta'limning obro'si, boshqaruvni optimallashtirish ilmiy dasturlarni tarqatishdir. Juda qimmatbaho o'qituvchi-tajriba shuni ko'rsatadiki, dasturlar kutilgan natijani bermaydi. Quyidagi sifat mezonlari orqali uni innovatsion korporativ madaniyatini shakllantirish va universitet ichki raqobat muhiti baholanishi mumkin:

- oliy ta'lim korporativ madaniyatning innovatsiya monitoring, shakllantirish tizimining mavjudligi;
- innovatsion faoliyat xodimlarini rag'batlantirish, rag'batlantirish tizimining mavjudligi;
- kadrlar zaxirasini shakllantirish tizimining mavjudligi;
- oliy ta'lim korporativ ijtimoiy mas'uliyat tizimining mavjudligi

### ***Xulosa. (Conclusion)***

Kuchli madaniyat asosiy korporativ qadriyatlarni faol ravishda qo'llab-quvvatlab, ta'limning deyarli barcha a'zolari bilan bo'lishish bilan tavsiflanadi. Ko'proq xodimlar asosiy qadriyatlarni taniydilar, ularga qanchalik sodiq bo'lsalar, tashkiliy madaniyat kuchayadi. Shunga ko'ra, kuchli madaniyat tashkilot a'zolarining xatti-harakatlariga katta ta'sir ko'rsatadi.

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## ACUTE DISORDERS OF CEREBRAL CIRCULATION

*Abstract: at the present stage, more than 50 sources have been studied and systematized to study the problem of acute cerebral circulation. The effectiveness of rehabilitation in patients with cerebral vascular lesions was also studied. However, the data show that this pathology develops rapidly, and their fusion with other pathologies is not enough for the rehabilitation of ONMC.*

*Keywords: acute disorders of cerebral circulation, stroke, consequences.*

The effectiveness of medical rehabilitation in patients with a cerebral stroke, given the frequent combination of these pathologies and their mutually aggravating nature, there is not enough information about the complex methods of restorative treatment for COPD with a pathology that accompanies the cardiovascular system of interest to this problem. Acute cerebral circulation disorder is one of the main causes of morbidity, mortality, long-term disability and disability in society [3, 6]. They are also the second most common cause of dementia, a common cause of epilepsy found in older adults, and a common cause of depression. 5.5-6 million people suffer a cerebral stroke every year, of which 4.5 million die [6]. His research and achievements in the current field of modern medicine have solved the most acute problems of mankind. The most important was the high mortality rate from this pathology among various diseases. However, Shirokov E. A. According to data, an increase in life expectancy also led to an increase in the proportion of diseases characteristic of large age groups – diseases of the nervous system, arterial hypertension, cardiovascular diseases, diabetes mellitus, oncological diseases. In the 20th century, diseases of the circulatory system began to pose a major health problem, as well as conducting an analysis of modern large-scale international studies (tosh, Syst-EUR, Niss). The results of the study conducted showed that among cardiovascular diseases, the frequency of occurrence of stroke from the ratio to myocardial infarction began to prevail by about 30%. This phenomenon is called "paralysis paradox" [10]. For us, the most reasonable and reliable explanation for this condition is the relationship of the life expectancy of a stroke. The importance of the problem of cerebral blood vessels lies not in the disease itself, but in its consequences. Scientists from the University of Oxford have found that the mortality rate from all types of stroke during the first week is 12%, the first month – 19%, the first year – 31%. According to Russian authors, 40- 45% of patients with a cerebral stroke die within a year. In later years, every fifth develops a secondary stroke. During the first year, up to 60% – the highest mortality rate is manifested by strokes suffered in the carotid

Basin [4, 6]. According to the latest WHO data published in 2020, the death rate from stroke in Uzbekistan was 21,534 or 13.34% of the total death rate. The age-related death rate is 100,000 per 103.48 inhabitants. Uzbekistan ranks 67th in the world. It should be noted that Uzbekistan accounts for 40.9% of deaths due to diseases of the circulatory system (100% per 293.4 thousand of the population of the corresponding age). Vascular diseases of the brain are considered not only a medical, but also a social problem: such patients cause great damage to the economy, taking into account the costs of treatment, medical rehabilitation, losses in the field of production. In the US, material losses in patients with vascular diseases are spent from \$ 7.5 to \$ 11.2 billion per year, and in Russia from \$ 16.5 to \$ 22 billion per year [9]. Even for a financially prosperous family, there are serious difficulties in maintaining a patient who needs long-term or continuous care and treatment [6, 11]. In addition, there are incalculable costs, such as indirect costs associated with Labor losses, which can significantly exceed the "official" economic loss. We must not forget about the emotional losses, problems and suffering of patients and their relatives associated with the appearance of a stroke. They cannot be calculated by numbers. This process not only affects motor and emotional functions, but is also a strong risk factor for cognitive impairment and dementia [9]. The combination of physical and cognitive disorders significantly slows or even prevents the recovery of impaired functions, as well as increases the patient's dependence on others [11]. Within 2 weeks of a stroke, cognitive impairment is to some extent diagnosed in 91% of patients [12]. R. F. Gottesman argues that cognitive impairments are more common when a cranial stroke is localized to the vertebrobasillary Basin. According to some foreign authors (s. Paolussi et al.) have tried to find reasons why women's post-stroke rehabilitation efficacy is lower than that of men. In their opinion, men, regardless of age, have more muscle strength, they are more active than women. In addition, according to the authors, men are more confident in themselves, and women seek help from others. The same authors note that with increasing age of patients, the rate of results of good rehabilitation gradually decreases from 13% in patients under the age of 27 to 50% of the elderly [18]. Unlike Foreign Studies, according to a survey conducted in Uzbekistan by the Center for speech pathology and Neurorehabilitation between 100 women with focal brain damage and their relatives, women have a much higher adaptability within the framework of domestic demand, and therefore are less interested in hospitalization in a specialized rehabilitation department. In addition, the ratio of men to women among patients treated at the center is 4:1. [11]. The problem of re-stroke is becoming increasingly important, which in recent years has been ranked second in the total mortality and first among the causes of permanent disability, which is the main cause of population disability in most economically developed countries [1]. According to the authors, there is a high probability of death among people who have suffered a re-stroke. Lebedines V. V. according to, its recurrence after ischemic stroke is the highest in the first year and averages 10%. Each subsequent

year, the risk increases by 5-8%. In the first month after a temporary ischemic attack, a stroke is possible in 8% of cases. About 30% of patients die from direct subarachnoidal bleeding, and the same number dies as a result of relapse over the next three months [8]. Also during this study, it was found that the main cause of relapsed ischemic stroke in more than 50% of cases was cardiogenic embolism, about 25% – damage to small intracranial vessels, 20% – atherothromboembolism, 5% - rare causes. In addition, the risk factors for the first time and re-OBMQAB, which have the same mechanism of etiopathogenesis, were found to be almost identical. According to available statistics, the most common type of stroke is cranial infarction, accounting for 80.0% of all strokes. In 73.5% of cases, stroke developed against the background of arterial hypertension.

**Conclusion:** The analysis of the above data shows that the rehabilitation of patients with tserebrovascular pathology is one of the most pressing and complex problems of Medicine and social assistance due to rapidly growing morbidity, as well as extremely severe consequences that lead to high disability. Taking into account the frequent combination of cranial blood vessels with the pathology of the cardiovascular system, their mutually aggravating nature negatively affects the decrease in exercise tolerance, restriction of the motor mode, the ability to tolerate traditional methods of medical rehabilitation, it is necessary to more carefully seek and develop new modern methods of gentle and effective rehabilitation, diagnostics and Prevention of this pathology.

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## **THE ROLE OF WORKING CAPITAL IN DETERMINING THE KEY FACTORS FOR SUCCESSFUL PRODUCTION**

*Annotation.* This article delves into a comprehensive analysis of working capital dynamics within production enterprises, exploring their structural intricacies and status indicators. The study employs a multifaceted approach, integrating quantitative data analysis with qualitative insights to provide a holistic understanding of the working capital involved in production.

*Keywords:* working capital dynamics, production enterprises, financial stability, capital flow analysis, enterprise health, working capital management strategies, market demands, managerial decisions, economic factors, financial variables.

**Introduction:** The Crucial Role of Working Capital in Production Enterprises:

Working capital, often regarded as the lifeblood of any business, holds a pivotal role within production enterprises. It represents the operational liquidity that a company possesses to cover its daily expenses and short-term obligations. In the context of production, working capital becomes even more critical. It's the driving force behind procurement of raw materials, payment of wages, and management of inventories.

**Balancing Act:** Managing working capital in production is akin to a delicate balancing act. On one hand, having sufficient working capital ensures smooth day-to-day operations. It allows companies to seize opportunities, meet sudden demands, and navigate unforeseen challenges. On the other hand, excess working capital can lead to inefficiencies, tying up funds that could be invested elsewhere for growth.

**Factors Influencing Working Capital in Production:** Several factors influence the working capital dynamics within production enterprises:

**Seasonality:** For businesses with seasonal demand, working capital needs fluctuate significantly. Adequate reserves are essential to manage peak periods efficiently.

**Supply Chain Efficiency:** Efficient supply chains reduce lead times and enhance working capital management. Streamlining procurement and production processes directly impact working capital requirements.

**Market Demand:** Fluctuations in market demand directly impact production volumes. Working capital strategies need to be adaptive to meet changing demand dynamics.



**Production Cycles:** Understanding the production cycles is critical. Some products have longer manufacturing lead times, requiring a different working capital approach than products with rapid production cycles.

**Credit Policies:** The credit policies offered to customers and negotiated with suppliers play a vital role. Longer credit periods from suppliers can ease short-term financial pressures, while managing receivables efficiently is crucial for cash flow.

**Strategic Management and Working Capital Optimization:** Strategic management of working capital involves aligning the operational requirements with financial resources. It necessitates a keen understanding of the production process, market dynamics, and financial constraints. Businesses often employ various techniques, such as Just-in-Time inventory systems and optimizing accounts payable and receivable cycles, to optimize working capital.

**Challenges and Solutions:** Challenges in working capital management often revolve around predicting market trends, ensuring consistent cash flow, and minimizing production downtime. Leveraging technology, implementing efficient demand forecasting models, and fostering strong relationships with suppliers and clients are strategies employed to mitigate these challenges.

**Future Trends:** In the contemporary business landscape, technology is revolutionizing working capital management. Artificial intelligence and data analytics enable businesses to make data-driven decisions, enhancing the accuracy of demand forecasts and optimizing inventory levels. Additionally, the rise of sustainable practices influences working capital, with businesses focusing on environmentally friendly production methods and ethical sourcing, impacting both costs and consumer preferences.

In conclusion, the intricate analysis of working capital dynamics within production enterprises offers profound insights into the essence of financial agility in the modern business landscape. The core takeaway from this exploration is the pivotal role that working capital plays in the sustenance, growth, and adaptability of businesses, especially within the production sector.

**Strategic Balance and Adaptability:** One of the key findings underscores the delicate equilibrium that businesses must maintain. While having adequate working capital is paramount, it's equally essential not to tie up excessive funds unnecessarily. The strategic balance between ensuring liquidity for day-to-day operations and utilizing excess capital for growth initiatives defines the financial health of an enterprise.

**Navigating Market Volatility:** The research illuminates the challenge of navigating market volatility. Production enterprises, often influenced by seasonal demands and ever-changing market trends, need to adjust their working capital strategies dynamically. The ability to forecast demand accurately, optimize inventory, and streamline supply chains emerges as pivotal components in overcoming these challenges.

**Technological Integration:** Emphasizing the integration of cutting-edge technology, the study highlights the transformative potential of data analytics and artificial intelligence in working capital management. Businesses embracing these tools gain a competitive edge by making data-driven decisions, thereby enhancing efficiency and reducing operational costs.

**Environmental and Ethical Considerations:** An emerging trend in working capital management is the influence of sustainability practices. Enterprises are increasingly adopting eco-friendly production methods and ethical sourcing. This not only reflects corporate social responsibility but also impacts working capital dynamics, influencing both costs and consumer preferences.

**Resilience and Preparedness:** Perhaps the most significant revelation is the necessity for resilience. Enterprises that proactively manage their working capital, adapt to market shifts, and invest in technologies are better equipped to weather economic uncertainties and emerge stronger from challenges.

**Future Outlook:** Looking ahead, the landscape of working capital management is poised for further evolution. The continued integration of technology, focus on sustainability, and the ever-changing market demands will shape the future strategies of production enterprises. Those businesses that remain agile, innovative, and socially responsible are likely to thrive in the face of future uncertainties.

**Recommendations:** Based on the study's findings, it is recommended that production enterprises invest in robust forecasting tools, embrace sustainable practices, and stay abreast of technological advancements. Collaborations with fintech companies for innovative financial solutions and a continuous focus on optimizing supply chain efficiency can enhance working capital management.

In essence, this research underscores the pivotal role of working capital as the heartbeat of production enterprises. Its efficient management is not just a financial necessity but a strategic imperative that ensures the adaptability and resilience of businesses in an ever-changing economic landscape. As enterprises continue to embrace the lessons derived from this study, they are better positioned to navigate challenges, capitalize on opportunities, and chart a sustainable path toward long-term success.

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## **IMPROVING TRAINING EFFICIENCY OF DISABLED PARA-ATHLETES BASED ON INNOVATIVE TECHNOLOGY**

*Abstract. Physical training plays a crucial role in the development and success of para-athletes. However, individuals with disabilities face unique challenges that may hinder their training efficiency. To overcome these obstacles, innovative technologies have emerged as powerful tools in enhancing training effectiveness and optimizing performance for disabled para-athletes. This article explores the various ways in which innovative technology can be utilized to improve training efficiency, enabling para-athletes to reach their full potential.*

*Keywords: education process, training, approaches, athletes, monitor progress.*

**Introduction:** In their education process, athletes research and advance a sequence of physical, technical, tactical, and psychological capabilities which are tailored to their organic and psychological characteristics.

Therefore, the education manner can be described as an uninterrupted duration parallel to the evolutionary improvement of the athlete, in which there is no longer solely the affect of motor factors however additionally elements associated to cognitive and affective-social tactics.

When analysing the most necessary factors, Kidman viewed that dad and mom are very effective socialising agents, as they can exert a tremendous affect on their young people in relation to the recreation in which they specialise, as properly as their adherence to it. On the different hand, Martinent and Decret cited that the sports activities coaching manner and overall performance are conditioned with the aid of psychological elements and bodily fitness.

According to Mujika, psychological factors are determinant when going through a education session or a competition, whilst Sosa et al. and Williams and Krane trust that self-confidence, motivation, concentration, and the manipulate of stress and anxiousness are of integral importance, each when it comes to reaching the proposed goal and in order to attain most performance.

In the case of athletes with disabilities, there is additionally preceding lookup which shows the existence of severa elements influencing their training. Thus, Willis et al. determined that the social context has a applicable impact on this process, whilst Williamson et al. argued that the most essential component in the course of the education of athletes with a incapacity is the coach's know-how of factors associated to rehabilitation, ability level, awareness, and understanding how to grant the athlete with regular safety.

Additionally, Durstine et al. emphasised that for proper activity education of humans with disabilities, programmes ought to focal point on flexibility, balance, accessibility, safety, enjoyment, cardiovascular endurance, agility, and muscular strength. Nevertheless, athletes with a incapacity frequently have to overcome environmental, structural, social, medical, and monetary limitations in order to train, which hinders their coaching and participation in sports activities.

DePauw and Gavron, Rimmer et al., and Shields et al. also viewed that there is a variety of physical, emotional, and psychological obstacles influencing the education and participation of these. Sobiecka et al. determined that one of the constraints for recreation enterprises no longer supplying accurate education for para-athletes is the lack of funding and that, in game clubs, the coaching method is now not situation to any coordination.

Thus far, severa studies have furnished huge information on the coaching and teaching technique of non-disabled people, even though it is uncertain whether or not these findings are transferable to para-athletes, as lookup in this region is at a nascent stage. The literature attracts interest to the lack of adequate empirical lookup on the essential factors of education para-athletes at the easiest degrees of wearing prowess and the limitations they stumble upon.

There is, therefore, little perception of the mechanisms and procedures by way of which athletes with a incapacity are skilled to take part extra or much less successfully in competition-oriented bodily endeavor. In this regard, it ought to be borne in thought that each influences and constraints may additionally rely on the kind of recreation in question, which should be the focal point of future research.

For this reason, in order to enlarge information about the elements influencing the coaching procedure of para-athletes, as nicely as to perceive the boundaries encountered by using these athletes in this process, a systematic evaluation used to be carried out. The lookup questions have been the following:

What elements have the best affect on the education method of para-athletes, and what are the limitations encountered for the duration of this process? Thus, the purpose of this systematic evaluate was once to decide the elements influencing the coaching procedure of para-athletes, as properly as the obstacles they encounter.

Disabled para-athletes face unique challenges when it comes to training and improving their performance. However, innovative technology has the potential to significantly enhance training efficiency for these athletes.

By leveraging advancements in areas such as wearable devices, virtual reality, and biofeedback systems, coaches and athletes can optimize their training programs and achieve better results. In this article, we will explore how innovative technology can be utilized to improve the training efficiency of disabled para-athletes.

Wearable devices: Wearable devices offer a range of possibilities for disabled para-athletes. Through the use of sensor technology, these devices can

collect data on various aspects of an athlete's performance, such as heart rate, oxygen levels, and movement patterns. This data can then be analyzed to identify areas for improvement, adjust training programs, and monitor progress.

For example, a wheelchair athlete can use a smartwatch to track their speed, distance covered, and heart rate during training sessions. This allows for real-time feedback and adjustments to optimize their performance.

**Virtual reality (VR):** Virtual reality provides a unique opportunity for disabled para-athletes to simulate various scenarios and conditions that they may encounter during competition. VR technology can create immersive training environments that replicate specific sports arenas or terrains. For example, a visually impaired runner can use VR to experience and familiarize themselves with the layout of a track before a race. This can help them navigate the course more effectively and give them a competitive edge. Additionally, VR can be used to train athletes in mental resilience and visualization techniques, which are crucial for success in sports.

Coaches can then use this information to make data-driven decisions regarding training programs, recovery strategies, and injury prevention. This can save valuable time and resources by focusing on the most effective training methods for each individual athlete.

### ***Conclusion***

The integration of innovative technology into the training programs of disabled para-athletes holds immense potential for enhancing efficiency. Wearable sensors, virtual reality simulations, and advanced prosthetics are just a few examples of how technology can revolutionize training methodologies. By leveraging these tools, disabled para-athletes can push their limits, reach new heights in their respective sports, and inspire others with their remarkable achievements. With continued research and development in this field, the future of training for disabled para-athletes is indeed bright.

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## SIGNIFICANCE AND APPROACHES TO TEACHING ESP TO UZBEK STUDENTS

*Abstract. We know that English for Specific or Special purpose (ESP) has become an important part of teaching English as a Foreign Language (EFL) or English as a Second Language (ESL) since 1960. Nowadays, both people who write teaching materials and teachers understand that it is important to know what students need in order to teach them English for specific purposes. ESP is a wide range of English lessons for different professions like business, science and technology, engineering, and hospitality. This is a type of teaching English that has its own methods, materials, and ways of teaching. These methods have been created by taking ideas from other subjects and combining them with English teaching. This article explains different methods of teaching English for specific purposes.*

*Key words: ESP, teaching, language proficiency, approach, higher education.*

**Introduction.** ESP has had a strong influence on English language teaching (ELT) because it is focused on the teaching materials, the needs of the learners, and the learning process itself. Now, there are more different types of ESP. ESP does not happen solely because of new thoughts or ideas in any area. This is mainly because of the important needs of the current times that have shaped ESP into what it is today. The phrase "Necessity is the mother of invention" applies to how ESP originated. ESP has changed since it started because of advances in learning, business, computers, software, global economics, practical language studies, and teaching English. Hutchinson and Waters believe that there are three main reasons why ESP has been developed: the importance of a courageous world, changes in how languages are studied, and a focus on students. [6]

They also mention that ESP began because two things happened: World War II and the 1970 oil problem. First, World War II caused significant changes worldwide. Another thing that happened was that science and software got better and more advanced.

**Methods.** The economy of the world started to be more linked, and English became the primary language used for people to communicate across countries. After the shortage of oil in the 1970s, Western countries gave money and new information to countries that had a large amount of oil. So, for this research, we will be using the English language. As a result, teaching English has had to change

how it teaches, the methods it uses, and the materials it provides to better meet the needs and preferences of learners and customers. Hutchinson and Waters were right when they said that the way English is used today depends on what regular people want, need, and expect from it, rather than just what language experts think. [6]

**Research and discussion.** What makes an ESP course a truly ESP course? There are many special things that make an ESP course stand out. ESP, which is short for Extra Sensory Perception, is a subject that explores various areas of research. To truly understand ESP, it is crucial to understand how it works in different areas of study.

Reading and talking are important in a specific area or job, and it is important to know about cultural differences in both school and work. Secondly, it uses real-life objects or examples that give information rather than just focusing on the words themselves. Thirdly, ESP uses what learners already know from their past and current academic abilities and knowledge, and also their professional experience. In the class for English for Specific Purposes (ESP), the teacher may not know everything about the topic being studied, but the students do. For instance, an ESP teacher who teaches English for specific purposes might not know exactly how a business is run, but they do understand the language and how it is used in a business setting. So, the teacher of ESP needs to use what the students already know about the subject. Furthermore, the teacher needs to provide detailed information about the subject and make sure that the content is not too hard for the students. This is important for an English for Specific Purposes (ESP) course where language and subject content are taught together, so that students can have meaningful learning experiences. Fourthly, in ESP, we use a unique teaching method that is different from how we teach general English. Sometimes, when students or workers are just beginning their studies or jobs, they may need to do some pre-study or pre-work. This is an exception to the usual rules. Doniyorova Gulruh Shoniyozovna said that when science progresses, it needs new words to describe new ideas. [5] The language is changing and new groups like ESP are appearing among Uzbek teachers and university students. In classes for English for Specific Purposes (ESP), activities such as acting out situations, studying real-life examples, working on projects together, and finishing assigned tasks are commonly done. ESP is designed for a specific field or job, whether for a brief period or an extended one. It is meant for adults who already have some experience or knowledge in English.



In ESP, it is really important to use the correct words and speak in a way that is suitable for the situation. This is because ESP requires using certain English language skills in certain situations. How to confirm if something is real. According to Johns (2001), there are two ways to accomplish this task. The first option is to teach the course in a real-life setting, like an oil rig, dockyard, military or police training center, bank, factory, or another workplace. The second thing is to teach the material in a department at a university as part of a school subject. A course that relates to what you do for work or what you study can be really useful. This happens because students learn about their specific subject and future work environment, which gives them real information. Learners also get to have conversations with experts and learn more about their subject. The second tradition is all about talking or writing in a special way. This can mean acting out pretend situations, pretending that something is real, or playing make-believe games.

It is very important to understand what students need when teaching English for specific purposes (ESP). This is something that keeps happening because students come from different cultures, backgrounds, and languages, and they have different goals and levels of skills in academic language. Analyzing needs has become better because of new technology advancements. A lot of people use questionnaires, surveys, interviews, and observations to figure out what they need.

**Conclusion.** When creating an ESP course, the person in charge needs to consider what English learners want to learn, why they need to learn it, the specific skills they need, and the type of writing or speaking necessary for their success. It's important to know what students need to learn in any language program, not just in English for Specific Purposes (ESP).

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## **RELATIONSHIP OF SOIL MELIORATIVE SALINING WITH ECOLOGICAL PROBLEMS**

*Abstract. A number of scientific-research works aimed at identifying and eliminating processes that negatively affect the fertility of irrigated soil and land reclamation in the developing agricultural sector of our republic are being carried out and positive results are being achieved. That is why it is important to determine the influence of natural and anthropogenic factors on the microbiological activity of the irrigated meadow alluvial soils of the Kashkadarya oasis with varying degrees of salinity, as well as the extent to which these processes increase soil fertility and crop productivity.*

*It consists in determining the influence of various natural and anthropogenic factors, including soil salinity and salt content, on pale gray soils with varying degrees of salinity.*

*Key words. Salinity, ecology, irrigated agriculture, desertification, productivity, relief, natural, thermostat, agrophysics.*

**INTRODUCTION.** The research was carried out in field, laboratory and chamber conditions according to the standard methods generally accepted in soil science. Agrochemical and agrophysical methods were used in the research. Land reclamation has become a very serious problem at the present time, the reason for this is that, firstly, it is necessary to provide food and other agricultural products to the ever-increasing population of Kurram, and secondly, human reclamation due to the development of industry while increasing its capacity, it was felt that there is a need to develop many new lands, to expand the cultivated areas and to improve the reclamation of irrigated lands [5]. The amelioration condition, salt content, agrochemical and agrophysical properties of the irrigated oases' light-colored soils are comparatively studied, factors and indicators that have a negative effect on soil fertility and the growth and development of agricultural crops, and their optimization is defined.[7]

**MATERIALS AND METHODS.** The availability of land in irrigated agriculture limits the possibilities of increasing soil fertility and yield of cotton and other crops. The implementation of large-scale reclamation works is unable to stop the process of soil salinization. Districts (farms) studied by the scientists of our republic depend on the level and level of mineralization of ground water, the relief conditions of the area, the level of irrigation of the land, the condition of the collector-irrigation networks and the types of cultivated crops [7]. Acceleration of irrigated agriculture in the oasis activates the processes of salt accumulation, increases the secondary salinity in the soil, and the current state of

the collector-zower networks allows the mineralized seepage waters to flow and keep their level at a certain depth. Therefore, it is natural for the salt reserves to increase in the oasis if quick melioration measures are not applied to prevent the processes of secondary salinization in the soil and the factors that cause them.

**RESULTS AND DISCUSSION.** According to the formation and characteristics of climate conditions, the territory of Kashkadarya region belongs to the subtropical climate group and is separated as a separate Kashkadarya climate district of Turan province.

The existence of almost all types of minerals has been found on the Kashkadarya soil. After all, the mineral wealth, which is the result of various geological periods and processes, is related to the geological development characteristics of a certain place. It is known that until the Neogene period, the plains of the region were the eastern part of the warm sea. Therefore, it can be said that the territory of the region was part of the large oil and gas basin in the current Turan lowland. Today, the natural gas produced in the regional mines meets not only the cities and villages of our republic, but also the needs of other neighboring republics. Gas, gas condensate and oil are obtained mainly from cracks and collectors of corallite limestones, fossilized coral polyps, between the first marine deposits of the Jurassic period, at a depth of 1.5-3.5 thousand meters.

***Distribution of soils by degree of salinity.***

№	Salinity level	The amount of salts in the 0-100 cm layer	
		Dry residue	Including chlorine
1.	Not salted	<0,3	<0,01
2.	Lightly salted	0,3-1,0	0,01-0,05
3.	Medium salted	1,0-2,0	0,05-0,10
4.	Strongly salted	2,0-3,0	0,10-0,15
5.	Salted	>3,0	>0,15

Humus content is very low in pale gray soils, 1.2-1.4% in layer A. Typical gray soils contain between 1.5 and 4%, and dark gray soils contain up to 4.5%. Accordingly, the humus reserve in 1 m of soil thickness reaches 50-60 tons in light gray soils, and 140-160 tons in dark gray soils. The absorption capacity of gray soils is also small, which is directly related to the low humus condition of the soil. 80-90% of absorbed cations correspond to calcium and 10-15% to magnesium cations.

**CONCLUSION.** Conclusion From the evidence presented above, it became clear that the purpose of creating land reclamation measures is to create conditions that ensure the maximum possible yield of crops - the optimal water, salt, nutrient, and air composition in the soil, with the efficient use of running water. Salts appear everywhere and accumulate in the upper layers of the earth's surface. Nevertheless, the area of saline soils, and especially the area of salt marshes, does not occupy a very large area on the earth's surface, because the accumulation of salts in the soil requires certain conditions.



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## **ZANGIOTA TUMANI DEMOGRAFIK JARAYONLARI**

*Annotatsiya. Zangiota hududidagi demografik holatni o'rganish uning ijtimoiy-iqtisodiy rivojlanishini o'rganish uchun zarurdir. Ushbu maqolada Zangiota tumanida vujudga kelgan demografik jarayonlar o'rganiladi. Zangiota tumanidagi demografik jarayonlar aholi soni, tug'ilish, o'lim va migratsiya kabi asosiy jihatlarini hisobga olgan holda tahlil qilinadi. Tadqiqot O'zbekiston Respublikasi Statistika qo'mitasi kabi rasmiy manbalar tomonidan taqdim etilgan statistik ma'lumotlarni tahlil qilishga asoslangan.*

*Kalit so'zlar: yosh tarkibi, bandlik, demografiya, aholi soni, tug'ilish, o'lim, migratsiya.*

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## **DEMOGRAPHIC PROCESSES OF ZANGIOTA DISTRICT**

*Abstract. Studying the demographic situation in Zangiota region is necessary to study its socio-economic development. This article examines the demographic processes in Zangiota district. Demographic processes in Zangiota district are analyzed taking into account the main aspects such as population, birth, death and migration. The research is based on the analysis of statistical data provided by official sources such as the Statistics Committee of the Republic of Uzbekistan.*

*Key words: age structure, employment, demography, population, birth, death, migration.*

Aholi soni mamlakat taraqqiyoti va farovonligini belgilovchi asosiy omillardan biridir. Aholining soni va tarkibi davlatning ijtimoiy-iqtisodiy salohiyatiga, uning innovatsion rivojlanish va faoliyatning turli sohalarida yuqori ko'rsatkichlarga erishish qobiliyatiga bevosita ta'sir qiladi. Inson resurslarining miqdori va sifati mamlakatning iqtisodiy o'sish sur'atlarini, turmush darajasi ko'rsatkichlarini, jahon bozoridagi kuchi va raqobatbardoshligini belgilaydi.

Toshkent viloyatining Zangiota tumanida demografik jarayonlarni o'rganish juda dolzarb va muhim ahamiyatga ega. Buning bir necha sabablari bor: aholi soni, tuzilishi va tarkibidagi o'zgarishlarni aniqlash tuman rivojlanishini rejalashtirish, jumladan, yangi turar-joy majmualari, infratuzilma, ta'lim va tibbiyot muassasalarini qurish uchun asos bo'lib xizmat qiladi. Demografik jarayonlarni tahlil qilish, shuningdek, aholining kelajakdagi ehtiyojlarini bashorat qilish va shunga mos ravishda rivojlanish rejalarini ishlab chiqish imkonini beradi. Masalan, aholining yosh tarkibini bilib, turli yosh guruhlari - bolalar, yoshlar, qariyalar uchun qanday xizmatlar va dasturlarni ishlab chiqish kerakligini aniqlash mumkin. Bu ijtimoiy adolatni ta'minlash va aholining barcha qatlamlari ehtiyojlarini qondirishga yordam beradi

Aholi tarkibining asosiy belgilaridan biri yosh tarkibidir. Aholining yosh guruhlari bo'yicha ma'lumotlarini to'plash yoshlar, mehnatga layoqatli aholi va keksalar ulushi nisbatlarini aniqlash imkonini beradi.

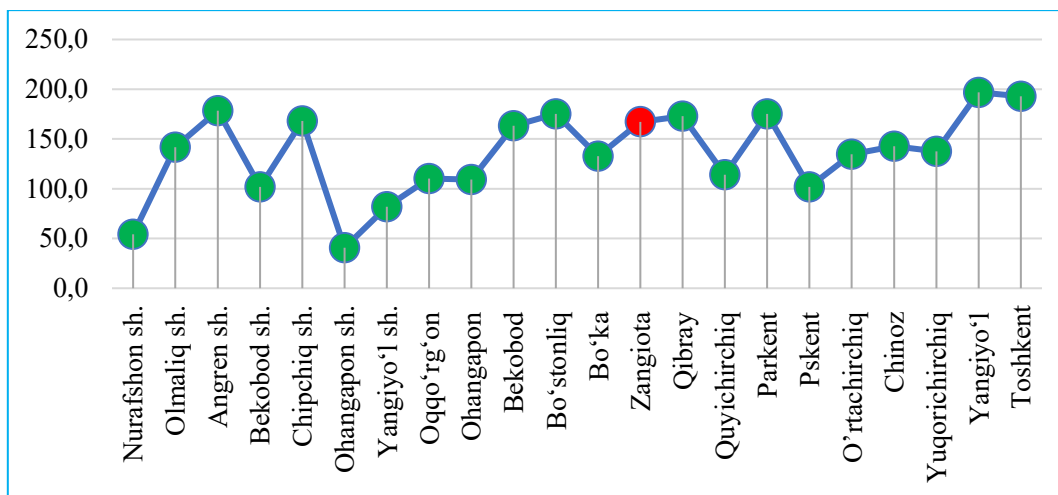
Aholining jinsiy tarkibini o'rganish erkaklar va ayollar nisbatini aniqlaydi. Bu, ayniqsa, gender tengligi bilan bog'liq omillarni va har bir jinsga xos muammolarni tahlil qilishda muhim ahamiyatga ega.

Etnik tarkib: Aholining etnik tarkibini o'rganish tumanda yashovchi madaniy guruhlar va millatlarning xilma-xilligi haqida ma'lumotga ega bo'lishga yordam beradi.

Bandlik: Aholi bandligi tarkibini tahlil qilish turli yosh guruhlari va iqtisodiyot tarmoqlarida band va ishsizlarning ulushini aniqlash imkonini beradi. Bu aholining iqtisodiy faolligi va bandlik bilan bog'liq muammolarni tahlil qilishga imkoniyat yaratadi.

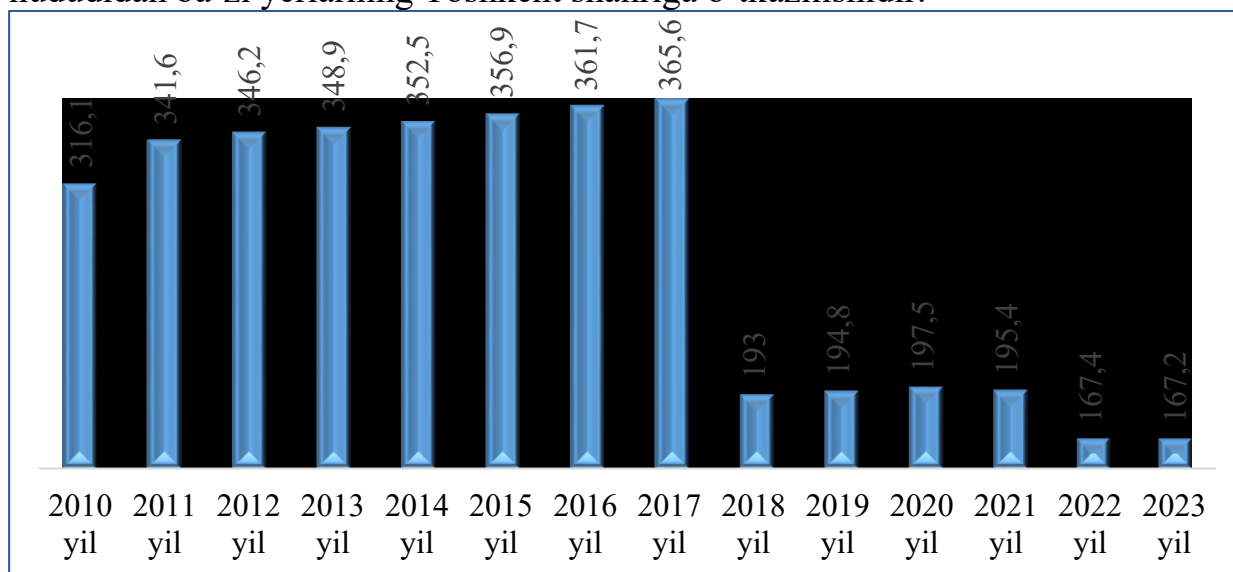
Aholi tarkibini tahlil qilish Toshkent viloyatining Zangiota tumanida aholining turli guruhlari dinamikasi va xususiyatlarini o'rganishga imkoniyat yaratadi. Ushbu bilimlar aholining ehtiyojlari va talablarini hisobga olgan holda tegishli rivojlanish strategiyalari va dasturlarini shakllantirishga yordam beradi.

Zangiota tumani doimiy aholi soni bo'yicha Toshkent viloyatida 13-o'rinda turadi. Jami viloyat aholisining 6 % i shu tumanga to'g'ri keladi.



**1-rasm. Hududlar bo'yicha jami aholi soni(yil boshiga; ming kishi).**  
Manba: O'zR Davlat statistika qo'mitasi ma'lumotlari

Doimiy aholi soni dinamikasini tahlil qiladigan bo'lsak 2010 yildan 2017 yilgacha ko'payib borgan. 2018 yilda tuman aholisi 193 ming kishi bo'lgan. 2023 yilda bu ko'rsatkich yana kamayib 167,2 kishi bo'lgan. Bunga sabab Tuman hududidan ba'zi yerlarning Toshkent shahriga o'tkazilishidir.

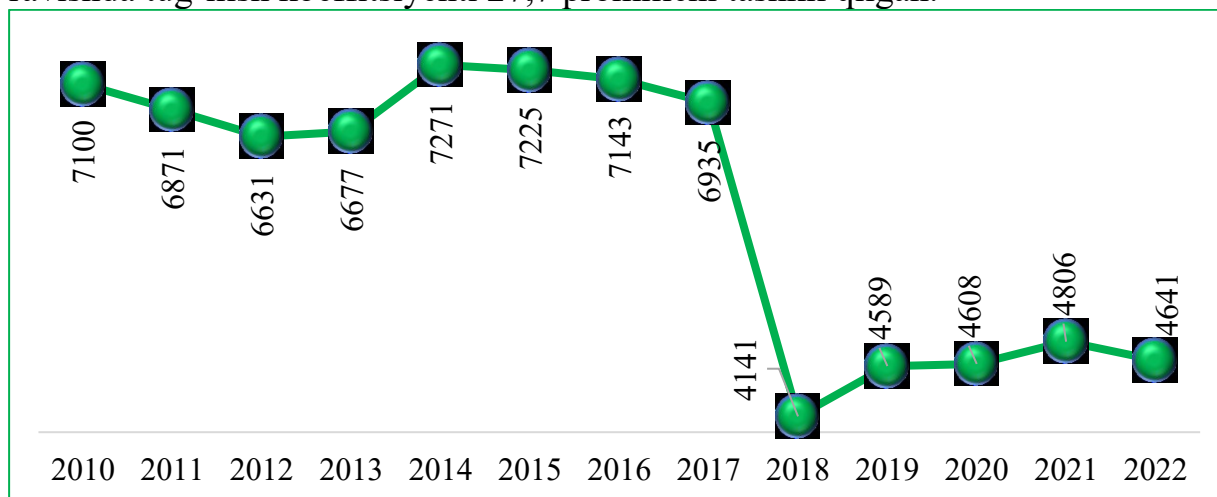


**2-rasm. Zangiota tumani jami aholi soni(yil boshiga; ming kishi)**  
*Toshkent viloyati statistika boshqarmasi ma'lumotlari.*

Tug'ilish darajasining o'zgarishi aholi tarkibiga sezilarli ta'sir ko'rsatishi mumkin. Tug'ilish ko'rsatkichi oshsa, aholi tarkibida yoshlarning ulushi ortadi. Bu o'sib borayotgan yoshlarning ehtiyojlarini qondirish uchun ta'lim, sog'liqni saqlash va boshqa ijtimoiy xizmatlarga qo'shimcha sarmoya kiritishni talab qilishi mumkin.

Tumanda tug'ilish jarayonini tahlil qiladigan bo'lsak 2010- yilda 7100 kishi tug'ilgan. Ammo 2012- yilga qadar pasaygan, 2014 yilga kelib eng yuqori ko'rsatkichga chiqqan (7271 kishi). Tug'ilishning pasayishi 2015 yildan

kuzatilgan va 2018 yilgacha davom etgan. Yuqorida takidlaganimizdek tuman huddudidan bir qismi Toshkent shahriga o'tkazilishi munosabati bilan 2018 yildan tug'ilish kamaygan, 2022 yilda 4641 kishini tashkil qilgan. 2022- yil yanvar-dekabr oylarida tug'ilganlar soni 4641 kishini tashkil qildi va 2021-yilning shu davriga (4806 kishi) nisbatan 165 taga kamaygan. Shunga mos ravishda tug'ilish koeffitsiyenti 27,7 promilleni tashkil qilgan.



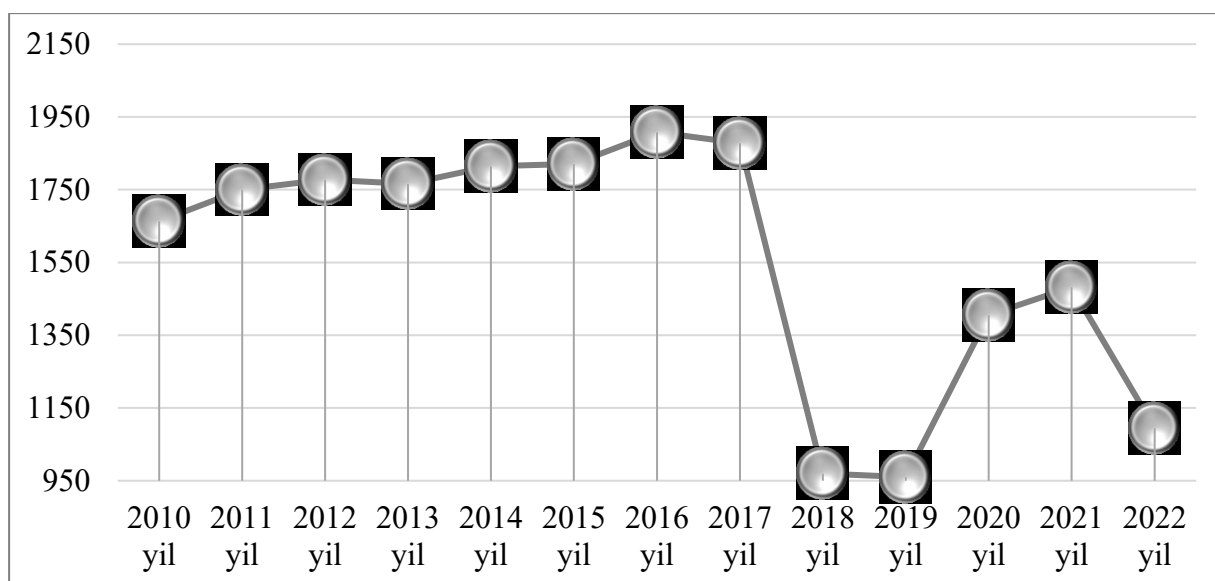
**3-rasm. Zangiota tumanida tug'ilganlar soni (yilda; kishi)**

*Toshkent viloyati statistika boshqarmasi ma'lumotlari.*

O'lim darajasining o'zgarishi ham aholi tarkibiga ta'sir qiladi. Agar o'lim darajasi pasaysa, katta yoshdagi guruhlar ko'proq miqdorda namoyon bo'ladi. Bu sog'liqni saqlash, pensiya ta'minoti va qariyalarni qo'llab-quvvatlash bilan bog'liq vazifalarni keltirib chiqaradi.

Zangiota tumanida qayd etilgan o'lim holatining asosiy qismi – qon aylanish tizimi kasalliklaridan, o'simtalardan, nafas olish a'zolari kasalliklaridan vafot etganlar hissasiga to'g'ri keladi.

2022- yil yanvar–dekabr oylarida 1095 ta o'lim qayd etilgan bo'lib, har 1000 aholiga nisbatan o'lim koeffitsiyenti 6,5 promilleni tashkil etdi. Eng kam o'lim ko'rsatkichi 2019 yilga to'g'ri keladi (960 kishi). 2020 yildagi pandemiya sababli viloyatning boshqa tumanlaridagi kabi o'lim ko'rsatkichi ancha ortgan va 1405 kishini tashkil qilgan. 2021 yilda bu ko'rsatkich yana ortib 1482 kishiga yetgan.



**4-rasm. Zangiota tumanida o'lganlar soni (yilda; kishi)**  
*Toshkent viloyati statistika boshqarmasi ma'lumotlari.*

Tumanda o'lganlarning jinsiy tarkibiga e'tibor qaratadigan bo'lsak 2022 yilda o'lganlar tarkibida erkaklarning ulushi yuqoriroq. Ayollar 460 kishi erkaklar 635 kishini tashkil qiladi.



**5-rasm. Zangiota tumanida o'lganlar soni (2022 yilda; kishi)**  
*Toshkent viloyati statistika boshqarmasi ma'lumotlari.*

O'rtacha umr ko'rish davomiyligi, oila tarkibidagi o'zgarishlar va jinslar nisbati kabi demografik tendentsiyalarni o'rganish ham aholi tarkibidagi o'zgarishlarni hisobga olishga yordam beradi.

Respublikamiz barcha hududlarida bo'lgani kabi tumanda ham meditsina xizmatini va aholining turmush darajasining yaxshilanishi, kishilarning tibbiy savodxonligining ortishi o'rtacha umr ko'rish davomiyligining ortishiga sababchi bo'lmoqda.



Migratsiya oqimlari aholi tarkibiga ham ta'sir qiladi. Boshqa mintaqalar yoki mamlakatlardan kelgan migrantlar oqimi bilan muayyan etnik guruhlarining nisbati o'zgarishi mumkin. Bu aholining hudud bo'ylab bir tekis taqsimlanishiga va ijtimoiy xizmatlarga bo'lgan ehtiyojga ham ta'sir qiladi.

Zangiota tumanidagi migratsiya jarayonlari hududning yosh tarkibi va demografik holatiga ta'sir etuvchi muhim omil hisoblanadi. Bu hudud O'zbekiston Respublikasi poytaxti Toshkent shahriga chegaradosh bo'lib, mamlakatning migratsiya uchun jozibador joylaridan biri hisoblanadi.

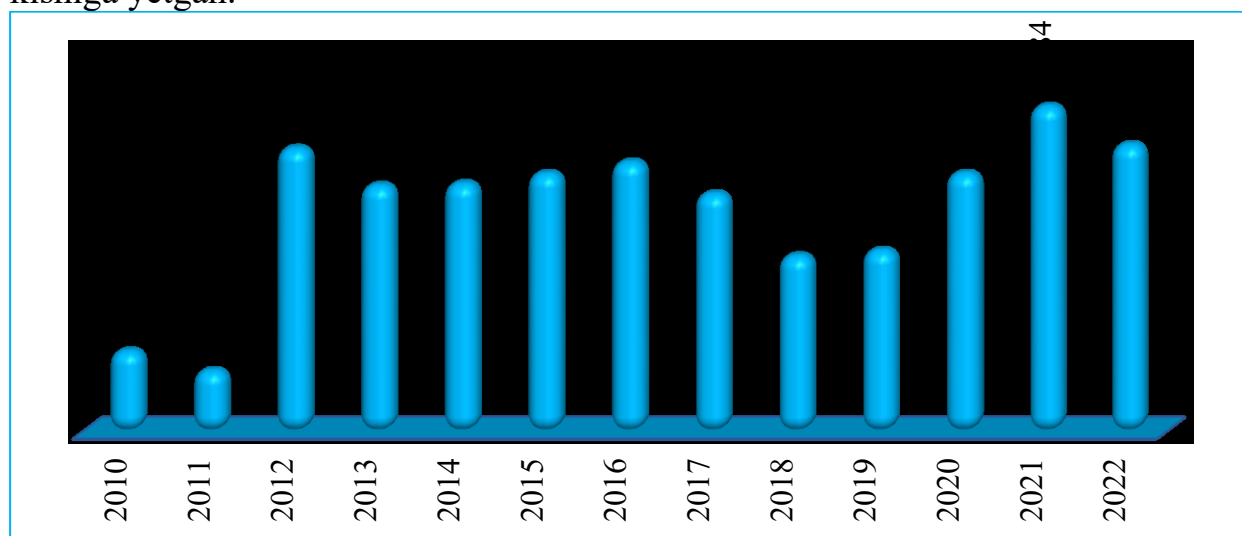
Zangiota tumaniga ko'chib kelayotganlarning asosiy qismi O'zbekistonning boshqa hududlari, shuningdek, Qozog'iston, Qirg'iziston, Tojikiston kabi MDH davlatlaridan kelganlar hisoblanadi. Aksariyat muhojirlar hududga ish izlab, yashash sharoitlarini yaxshilash maqsadida keladi.

Yoshlarning qishloqlardan Toshkent kabi shahar atrofiga ko'chishi ham tuman aholisining yosh tarkibiga ta'sir etuvchi muhim omil hisoblanadi. Buning sababi, yoshlarning katta shaharlarda bilim olishga intilishi va ish topishi qishloqlarda yoshlar salmog'ining kamayishiga olib keladi.

Bundan tashqari, migratsiya mintaqadagi demografik jarayonlarga, masalan, tug'ilish va o'limga ta'sir qilishi mumkin. Masalan, migrantlar ulushi yuqori bo'lgan hududlarda tug'ilishning pasayishi kuzatilishi mumkin.

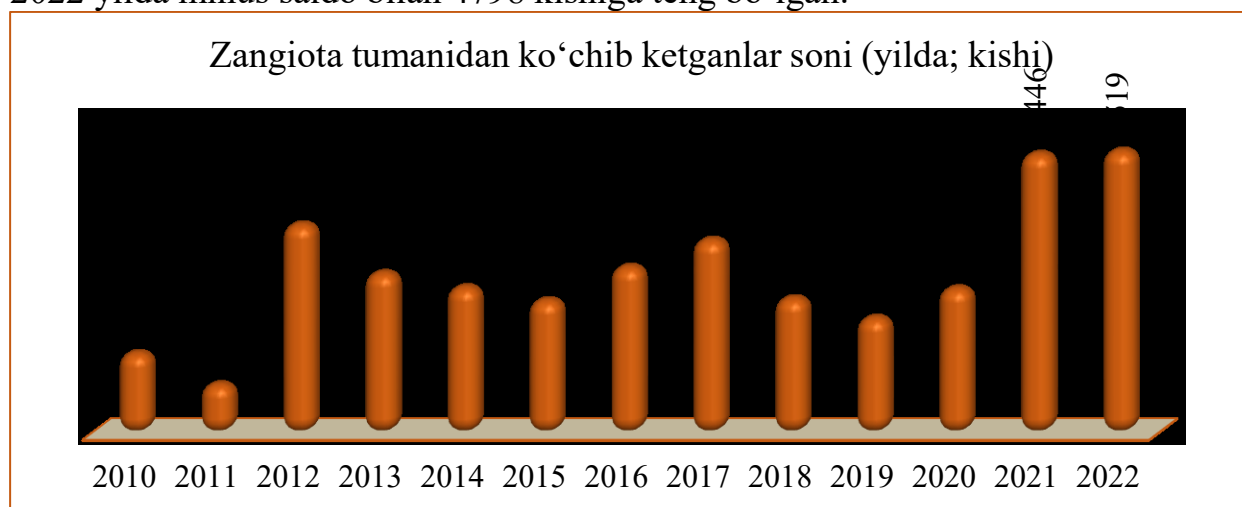
Demak, migratsiya jarayonlari Zangiota tumanining yosh tarkibi va demografik holatini tahlil qilishda e'tiborga olinishi lozim bo'lgan muhim omil hisoblanadi.

Zangiota tumani migratsiya jarayonlarini tahlil qiladigan bo'lsak tumanga ko'chib keluvchilar 2010- 2011- yillarda juda kam bo'lgan. Tumanga ko'chib keluvchilar salmog'i 2012- yilda oshgan va bu ko'rsatkich 2018 yilgacha davom etgan. 2018-2019 -yilda ko'chib keluvchilar ming kishiga kamaygan. 2020-yildan yana ko'payishni boshlagan 2021- yilda esa eng yuqori ko'rsatkichga 3084 kishiga yetgan.



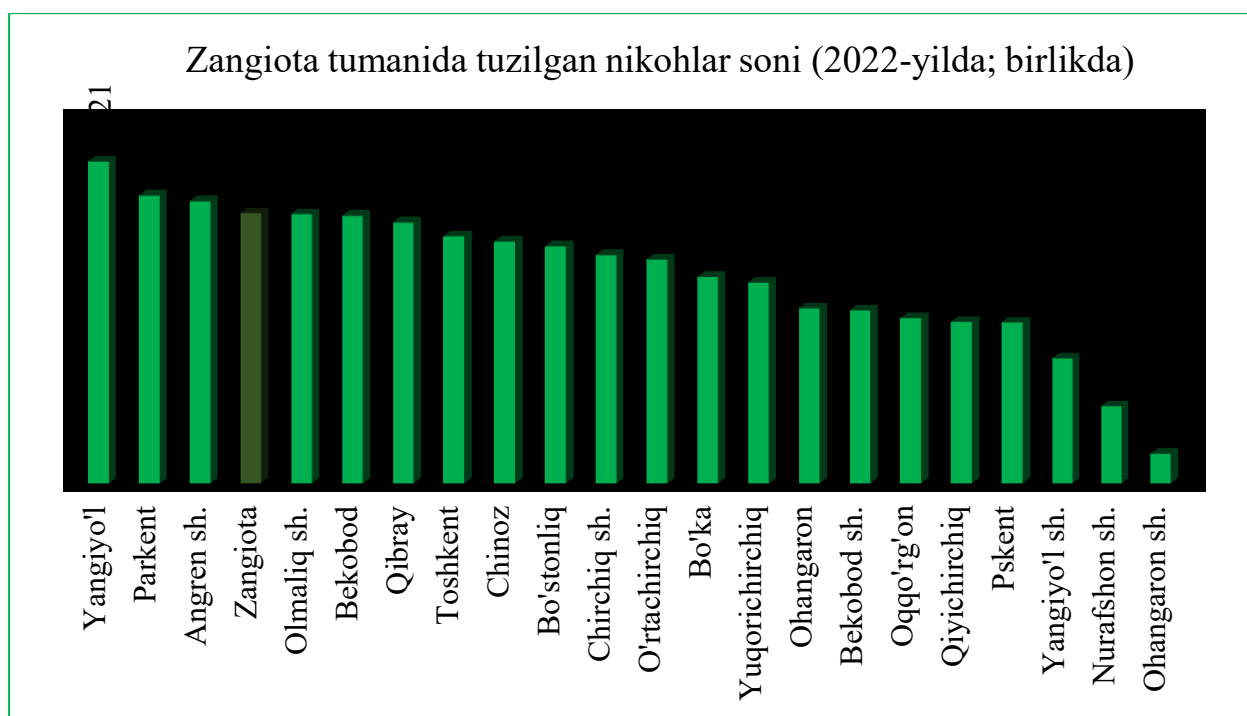
**6-rasm. Zangiota tumaniga ko'chib kelganlar soni (yilda; kishi)**  
*Toshkent viloyati statistika boshqarmasi ma'lumotlari.*

Zangiota tumanidan ko‘chib ketganlar soni ham 2012 yildan boshlab oshib borgan bu jarayon 2018 -yilda nisbatan pasaygan. 2022 -yilga kelib ko‘chib ketganlar soni 6519 kishiga yetgan. Migratsiya saldosini hisoblaydigan bo‘lsak 2022 yilda minus saldo bilan 4798 kishiga teng bo‘lgan.



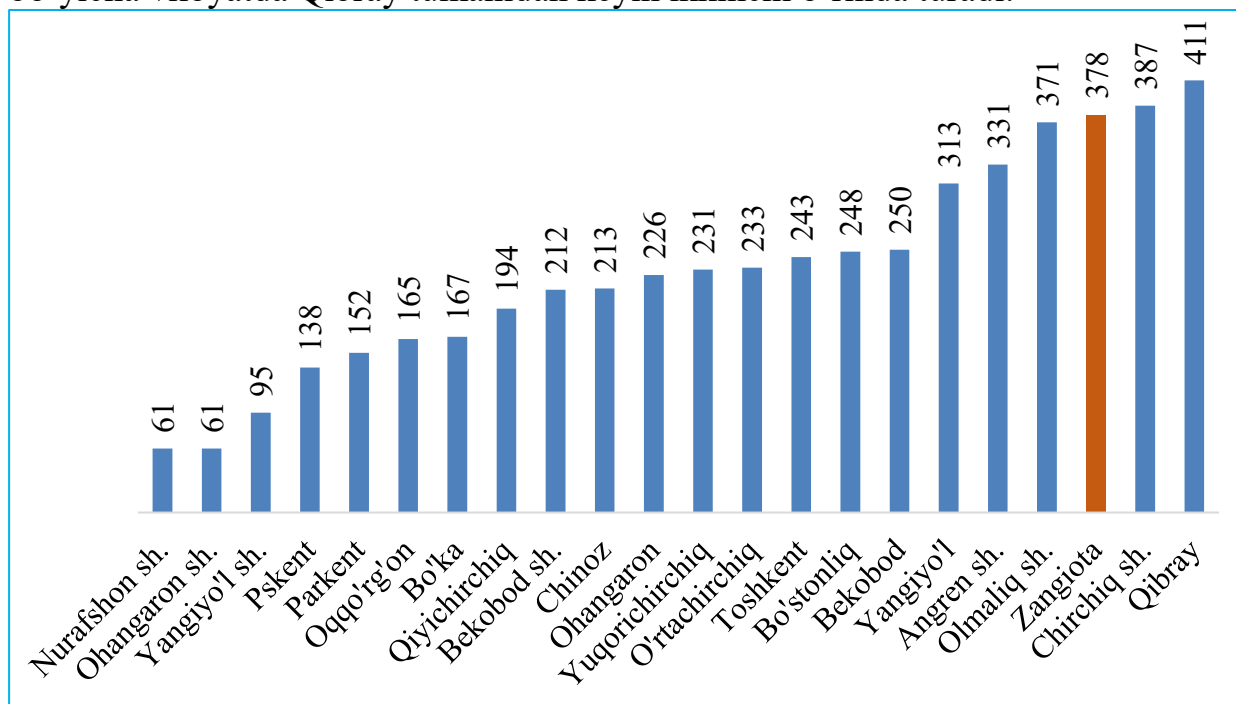
**7-rasm. Zangiota tumanidan ko‘chib ketganlar soni (yilda; kishi)**  
Toshkent viloyati statistika boshqarmasi ma’lumotlari.

Toshkent viloyati bo‘yicha nikoh tuzish koeffitsiyentining 2022 -yilda avvalgi yilga nisbatan eng ko‘p o‘sishi Nurafshon shahar (1,7 promillega) da kuzatiladi. Nikoh koeffitsiyentining eng ko‘p pasayishi Ohangaron shahar (0,5 promillega) O‘rtachirchiq tumanida 3,5 promille kuzatiladi. Viloyat bo‘yicha nikoh tuzish 7,8 promillega teng. Zangiota tumanida nikoh tuzish 8,1 promillega teng bo‘lib viloyat bo‘yicha to‘rtinchi o‘rinda. Tuman aholisining bir qismi 2018 - yilda Toshkent shahriga o‘tkazilishi bilan tuman demografiyasida o‘zgarish kuzatilgan. Shu sababdan demografik o‘zgarishlarni o‘rganish uchun 2018 yil ma’lumotlariga taqqoslaymiz. Shu yili nikoh tuzish 1591 birlikka teng bo‘lgan bo‘lsa 2022- yilda 1361 birlikka teng bo‘lgan, bu ko‘rsatkich 230 taga kamaygan.



**8-rasm. Zangiota tumanida tuzilgan nikohlar soni (2022-yilda; birlikda)**  
Toshkent viloyati statistika boshqarmasi ma'lumotlari.

2022- yil yanvar-dekabr oylarida 378 ta nikohdan ajralishlar qayd etilgan bo'lib, har 1000 aholiga nikohdan ajralishlar koeffitsiyenti 2.3 promilleni tashkil etgan hamda 2021- yilga nisbatan o'zgarish kuzatilmagan (2021- yil yanvar-dekabr oylarida 2,3 promille bo'lgan). Zangiota tumani ajralishlar ko'rsatkichi bo'yicha viloyatda Qibray tumanidan keyin ikkinchi o'rinda turadi.



**9-rasm. Nikohdan ajralishlar soni (yilda; birlikda).**  
Toshkent viloyati statistika boshqarmasi ma'lumotlari.

Tadqiqot natijalari: Tahlillar shuni ko'rsatdiki, so'nggi yillarda Zangiota tumanida aholi soni sezilarli darajada kamaygan. Tug'ilish darajasi barqaror bo'lib qolmoqda.

Tumanning iqtisodiy rivojlanishi uchun demografik jarayonlarni tahlil qilish ham muhimdir. Demografik jarayonlar haqidagi ma'lumotlar sog'liqni saqlash va ta'lim xizmatlarini rejalashtirish uchun zarurdir. Aholining tarkibi va uning ehtiyojlarini hisobga olgan holda, ushbu xizmatlarning mavjudligi va sifatini ta'minlashga qaratilgan dasturlar ishlab chiqilishi mumkin.

Umuman olganda, Toshkent viloyatining Zangiota tumanida demografik jarayonlarni o'rganish rejalashtirish va rivojlantirishning ajralmas qismi hisoblanadi. U resurslardan samarali foydalanish va odamlarning sog'liqni saqlash, ta'lim va boshqa xizmatlarga bo'lgan ehtiyojlarini qondirishga yordam beradi.

#### **Foydalanilgan adabiyotlar:**

1. O'zbekiston Respublikasi Prezidenti huzuridagi statistika agentligi ma'lumotlari. 2010-2022 yillar.
2. Toshkent viloyati statistika boshqarmasi ma'lumotlari. 2010-2022 yillar.

## DAMAGE OF PEAR TREE VARIETIES BY P. PYRI

*Abstract. Due to the damage of pear tree varieties in pear orchards by various pests, including pear sweetworm, obtaining a high-quality and abundant harvest from pear orchards causes a number of complications. It is considered appropriate to carry out effective control measures against pear sweetworm in a timely manner.*

*Key words: Sweet pear, resistant varieties, degree of damage, phytophagous, forest beauty, kulola, jaydari, winter nashwati, swallow, chust.*

Undoubtedly, pear varieties play an important role in the fight against this pest. The resistance of the variety does not necessarily mean that it is free from any pests and diseases, in turn it depends on several factors, and after a certain period of time it is possible to lose the resistance characteristics. But resistant varieties are considered to be one of the main factors of plant protection, and regular development of harmful organisms can be prevented.

Unfortunately, in our Republic, almost no selection work is carried out to create varieties resistant to sweet pear. Therefore, identifying varieties resistant to pests and their level of resistance is one of the important tasks in plant protection. In 2021-2023, for this purpose, we conducted research on different quality varieties of pear trees in three regions of the Fergana Valley (Fergana, Andijan, Namangan). The use of pesticides in evaluation and other intensive development depends on the varieties of trees.

In 2021-2023, research was conducted on pear trees to test varieties. A total of 17 cultivars and 3-4 cultivars were observed in each plot. Previously, research on sweet pear was not carried out in these places, and it was initially noted as a result of our research.

**1- Table.**

Damage of pear varieties by P. pyri pear sweetworm (various farms of Andijan, Fergan and Namangan regions) 2021-2023.)					
№	Varieties	Degree of damage to leaves and fruits			
		Leaves		Fruits	
		Leaves obtained	Damage score	Damage % of 20 fruits obtained	Damage score
1	Santa Maria	80	2	24	1
2	Kulola	80	2	16	1
3	Forest beauty	80	1	23	1
4	Tojikiston	80	3	36	2

5	Jaydari	80	2	15	1
6	Winter rush	80	1	2	1
7	Swallow	80	1	1	1
8	Lyubimitsa Klappa	80	1	0	0
9	Turkman	80	3	38	2
10	Willow leaves	80	4	55	3
11	Regel	80	3	25	1
12	Autumn red rush	80	4	48	2
13	Chust	80	2	43	2
14	Abat	80	3	35	2
15	Orta Osiyo	80	3	33	2
16	Karmen	80	4	46	2
17	Ossuri	80	3	29	2

In the establishment of pear orchards, it is necessary to take into account not only the quality of taste, fruit ripening period and the resistance of the varieties to the main pests and diseases, but also the degree of damage by the most serious phytophages. This can significantly reduce the number of treatments, while also reducing the pesticide load in the agroecosystem of the pear orchard. Also, based on the obtained data, it will be necessary to isolate cultivars and introduce cultivars resistant to *P. Pyri*.



**Summary.** 2021-2023 The research conducted in different farms of Andijan, Fargan and Namangan regions shows that the pest has managed to spread widely in the main pear growing area. In the search of all farms, absolutely resistant varieties were not found. Most of the cultivars are affected by this pest to one degree or another, and their level of resistance varies depending on the environment of the phytosanitary condition in which they are collected. Seventeen



cultivars were researched in Andijan, Fargan, and Namangan regions, and the following were identified as the least affected: Relatively P. Pyri-resistant pear cultivars Qishki Nashvati, Kaldirgoch, Ormon Gozali, Lyubimitsa Klappa were identified and may be of interest in future selection work. The most affected varieties are: Winter Nashvati, Kulola, Forest Beauty, Tajikistan, Chust, Santa Maria, Abat, Carmen, Autumn Red Nashvati, Jaydari, Central Asia, Turkman, Ossuri, Willow-leaved, Regel, Lyubimitsa Clappa, Swallow.

Organizational and agrotechnical measures of durable and relatively resistant varieties can reliably protect pear orchards from the pear blight. Therefore, the search for resistant varieties and the search for a donor against pear sweet spot is one of the urgent problems of current selection work.

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## **XOTIN-QIZLAR JAMIYAT VA DAVLAT BOSHQARUVIDA**

*Annotatsiya: ushbu maqolada hududlarda xotin-qizlarning huquq va erkinliklarini, qiynab kelayotgan muammolarni e'tiborga olgan holda o'rganish, tahlil qilish hamda kerakli taklif va tavsiyalarni ishlab chiqish zarurligi haqida ma'lumotlar keltirilgan.*

*Tayanch so'zlar: Birlashgan Millatlar Tashkiloti Bosh Assambleyasi, xotin-qizlar, ijtimoiy-siyosiy faollik, farmonlar, gender tenglik, forum, zo'ravonlik, jinoyat, elektron platforma, Startaplar, indikator, konstruktiv, onkoskrining.*

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## **WOMEN AND GIRLS IN SOCIETY AND STATE ADMINISTRATION**

*Abstract: this article provides information about the need to study, analyze and develop the necessary proposals and recommendations, taking into account the rights and freedoms of women in the regions, the problems that are bothering them.*

*Key words: United Nations General Assembly, women, socio-political activism, decrees, gender equality, forum, violence, crime, electronic platform, Startups, indicator, constructive, oncoscreening.*

Xotin-qizlarning jamiyat va davlat boshqaruvida faol ishtirok etishi bugungi kunning dolzarb masalasidir. Milliy siyosatimiz markazida turadigan eng ezgu maqsad – oilalar mustahkamligini, ayollarimizning huquqiy himoyasi va osoyishta hayotini ta'minlashdan iborat. Mamlakatimizda amalga oshirilayotgan islohotlar davrida xotin-qizlarni qo'llab-quvvatlashga doir davlat siyosatining samarali amalga oshirilishini ta'minlash, ularning huquqlari va qonuniy manfaatlarini himoya qilish, mamlakat ijtimoiy-siyosiy hayotidagi roli va faolligini oshirish, xotin-qizlar va erkaklar uchun teng huquq hamda imkoniyatlar kafolatlarini ta'minlash ustuvor vazifalardan biri bo'lmoqda.

Prezidentimiz bugungi farovon hayotimiz ham, yorug' kelajagimiz ham albatta oila va jamiyatning ustuni, hayotimizning fayzi va ko'rki bo'lgan ayollarga bog'liq ekanligini e'tirof etar ekan, ayollarning salomatligini tiklash va ularga malakali tibbiy xizmat ko'rsatish bo'yicha ham qator tadbirlar amalga oshirilishini ma'lum qildilar va bu borada amaliy ishlar amalga oshirilmogda.

Ma'lumot uchun ta'kidlash joyizki, mamlakat umumiy aholisining 50 foizini, shundan 29 foizini – 14 yoshgacha, 28 foizini – 15-30 yoshgacha, 21 foizini – 31-45 yoshlilar, 15 foizini – 46-60 yoshlilar hamda 7 foizini – 60 yoshdan katta ayollar tashkil etadi. “O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Birlashgan Millatlar Tashkiloti Bosh Assambleyasining 78-sessiyasidagi nutqida, xotin-qizlarning davlat boshqaruvidagi ulushi esa birinchi marta 35 foizga etganligini takidlab o‘tdilar”<sup>[1]</sup>.

Sizlarga ma'lumki poytaxtimizda “O‘zbekiston taraqqiyotida parlamentdagi ayollarning roli” mavzusidagi birinchi va ikkinchi forum 2020-2021 yillarda bo‘lib o‘tdi. Unda, xotin-qizlarning jamiyatdagi rolini oshirish, gender tenglik va oila masalalari bo‘yicha respublika komissiyasi, Senatning Xotin-qizlar va gender tenglik masalalari qo‘mitasi hamda EXHT bilan hamkorlikda tashkil etilgan tadbirda senatorlar va Oliy Majlis Qonunchilik palatasi deputatlari, mahalliy Kengashlar deputatlari, Yoshlar parlamenti a‘zolari, davlat organlari va jamoat tashkilotlari mutasaddilarining hamda, xalqaro tashkilot, OAV vakillari ishtirok etgan bu forum katta ahamiyatga ega bo‘ldi. Forumda xotin-qizlarning siyosiy maydondagi o‘rnini mustahkamlash, vakillik hokimiyati organlarining parlament bilan konstruktiv aloqalarini kengaytirish, mamlakatimiz taraqqiyotida parlamentdagi ayollarning o‘rnini kuchaytirish va gender tenglik masalalari muhokama qilindi. Forumda, mamlakatimizda xotin-qizlar va erkaklar uchun teng huquq hamda imkoniyatlar yaratish, jamiyat va davlat ishlarini boshqarishda ularning to‘laqonli ishtirok etishini ta‘minlash, ularni ijtimoiy-iqtisodiy hamda huquqiy jihatdan qo‘llab-quvvatlashga qaratilgan keng ko‘lamli islohotlar amalga oshirilayotganligi ta‘kidlandi<sup>[2]</sup>.

Bugungi kunda xotin-qizlarga e‘tibor davlat siyosatining ustuvor yo‘nalishlaridan biriga aylandi. Xotin-qizlarning jamiyatdagi o‘rni va ishtiroki kengayib borayotganligiga nafaqat biz, balki xorijiy mamlakatlar ham guvoh bo‘lmoqda. O‘zbekiston Respublikasi Oliy Majlisi Senatining 2021 yil 28 maydagi SQ-297-IV-sonli Qarori bilan tasdiqlangan 2030 yilga qadar O‘zbekiston Respublikasida gender tenglikka erishish strategiyasi va uni 2021-2022 yillarda amalga oshirish bo‘yicha kompleks chora-tadbirlar dasturi ijrosi yuzasidan muayyan ishlar amalga oshirilgan. Xususan, xotin-qizlar va erkaklar uchun teng huquq hamda imkoniyatlarni ta‘minlashga qaratilgan qonunchilik asoslarini takomillashtirish yo‘nalishida 41 ta normativ-huquqiy hujjat (2 ta Qonun, O‘zbekiston Respublikasi Prezidentining 2 ta farmoni va 12 ta qarori hamda hukumatning 25 ta qarori) qabul qilingan. Genderga oid audit, uning vazifalari, uni o‘tkazish va natijalarini ko‘rib chiqish tartibi belgilandi. Saylov huquqlarini amalga oshirish yo‘nalishida saylovning barcha bosqichlarida xotin-qizlar va erkaklarning teng asosda ishtirok etishini kuzatuvchi 11 ta indikator ishlab chiqildi. Mazkur indikatorlar 2021 yilda o‘tkazilgan O‘zbekiston

<sup>1</sup> Shavkat Mirziyoyevning - Ўзбекистон Президенти БМТ Бош Ассамблеясининг 78-сессиясида нутқ (2023 йил 19 сентябрь, Нью-Йорк шаҳри) Янги Ўзбекистон газетаси. 20 сентябрь 2023 йил №192(981)

<sup>2</sup> <https://uza.uz/posts/194577>

Respublikasi Prezidenti saylovi kampaniyasidan boshlab amaliyotga tatbiq qilingan. Mamlakatimizda xotin-qizlarga berilgan e'tibor va imkoniyatlar, salmog'ligi bilan bazi jahon mamlakatlaridan ilgarilab bormoqda. Misol tariqasida, Hindiston parlamenti 20 sentyabr kuni mamlakat parlamentining quyi palatasidagi deputatlik o'rinlarining 33 foizini ayollar uchun ajratilishi borasidagi qonun loyihasini ko'rib chiqdi. Quyi palataning 454 deputati qonun loyihasini yoqlab ovoz berdi. Faqat ikki nafar deputat qarshi ovoz bergan. Qonun kuchga kirishi uchun uni parlamentning yuqori palatasi hamda shtat parlamentlari tasdiqlashi lozim. Bundan tashqari maxsus komissiya quyi palatadagi umumiy mandatlar soni va ayol deputatlar vakil bo'ladigan okruglar chegarasini belgilab olishi kerak bo'ladi. Bu o'z o'rnida 2026 yildan so'ng — Hindistonda aholini ro'yxatga olish natijalari ma'lum bo'lgach ro'y beradi. Aholini ro'yxatga olish aslida 2021 yilga rejalashtirilgandi, biroq koronavirus pandemiyasi sabab noma'lum muddatga qoldirilgan edi. So'nggi milliy saylovlardan keyin Hindistondagi 778 nafar deputatlik o'rinlaridan faqat 104 tasini ayollar band qilgan. Ayol deputatlar soni 33 foizga etishi mumkin bo'lgan eng yaqin saylov esa faqatgina 2029 yildagina sodir bo'lishi mumkin. Qayd etish joiz, ushbu qonunni 1996 yildan beri amalga kiritishga olti marta urinish bo'lgan. Biroq har safar deputatlar tomonidan qarshiliklar bo'lgan. Hindistonda ayollar huquqi BMTning gender tengligi bo'yicha tashkilotiga ko'ra, Hindiston qonunchiligining 80 foizdan ortig'i tashkilot tomonidan ishlab chiqilgan barqaror rivojlanish ko'rsatkichlarga javob beradi. Biroq shu bilan birga mamlakatda gender tengsizlik saqlanib qolmoqda.<sup>[3]</sup>

Bizning mamlakatimizda xotin-qizlarga berilayotgan imkoniyatlar, davlat xizmati sohasida «Davlat boshqaruvida xotin-qizlar faolligini oshirish dasturi» tasdiqlanib, turli sohalarda boshqaruvchilik salohiyatiga ega 25 055 nafar xotin-qizning kadrlar zaxirasi shakllantirilganligi hamda ularni rahbarlikka tayyorlash bo'yicha 3 ta alohida o'quv dasturi asosida jami 14 054 nafar xotin-qiz o'qitilganligi sizlarga ma'lum. Ta'lim, ilm-fan sohasida mutaxassisligi bo'yicha kamida 5 yil mehnat stajiga ega bo'lgan xotin-qizlarni davlat oliy ta'lim muassasalariga o'qishga qabul qilish tartibi tasdiqlandi. Unga ko'ra, xotin-qizlar.uz elektron platformasi orqali tavsiyanoma olish uchun murojaat qilgan 29 531 nafar xotin-qizdan 28 664 nafariga tavsiyanoma berilgan. Startaplar bo'yicha xotin-qizlarning umumiy qiymati 20,11 mlrd so'mlik 25 ta startap loyihalari moliyalashtirilgan. «Olima ayollar» grantlari bo'yicha 2022 yilda 784 nafar olima ayol tomonidan ilmiy loyihalar kelib tushgan, shundan 196 ta loyiha moliyalashtirishga tavsiya etilgan bo'lib, buning uchun 281,6 mlrd so'm mablag' ajratilgan. Ijtimoiy-iqtisodiy sohalarda ishsiz, «Temir daftar», «Ayollar daftari» va «Yoshlar daftari»ga kiritilgan 17 930 nafar xotin-qizga tadbirkorlik faoliyatini yo'lga qo'yish va o'zini o'zi band qilish uchun subsidiyalar ajratilgan, bu ketma-ketlik bilan bajarilmoqda. Tibbiyot muassasalarida 2,6 mln nafar xotin-qiz

<sup>3</sup><https://m.kun.uz/news/2023/09/22/hindiston-tarixiy-qonun-ostonasida-parlamentda-deputatlarning-33-foizi-ayollar-boladi>

onkoskrining tekshiruvidan o'tkazildiki bu bizning mamlakatimizda, ayollar sog'ligi e'tiborli o'rinlarda turishidan dalolat beradi.

Xulosa qilib Shuni aytishim joyizki, hozirgi vaqtda mamlakatimizda turli soha va tarmoqlarda mehnat qilayotgan ishchi va xizmatchilarning 45 foizini xotin-qizlar tashkil etadi. Jumladan, davlat va jamoat tashkilotlari tizimida 1400 ga yaqin xotin-qiz rahbarlik lavozimlarida mehnat qilmoqda. Ulardan 17 nafari senator, 16 nafari Oliy Majlis Qonunchilik palatasi deputati, 1075 nafari esa xalq deputatlari mahalliy kengashlari tarkibida faoliyat yuritmoqda.

**Takliflar:** -Ayollar davlat boshqaruvida ishlashlari uchun barcha to'siqlarni olib tashlash va imkoniyatlar yaratish;

-Ayollarning huquqiy madaniyatini oshirishga qaratilgan choralarni yana bir-bor ko'rib chiqish;

-Ayollar sog'lig'iga salbiy ta'sir etishi mumkin bo'lgan soha va kasblarda ishlashni yana bir bor ko'rib chiqish;

-Tadbirkorlik bilan shug'ullanish istagini bildirgan xotin-qizlarni bepul o'qitish.

Yurtimizda xotin-qizlarni har tomonlama qo'llab-quvvatlash davlat siyosati darajasida ekanligi bilan har qancha faxrlansak arziydi. Mamlakat iqtisodiy, siyosiy va ijtimoiy hayotining barcha jabhalarida xotin-qizlarning faolligini oshirish, ularning ta'lim va kasbiy ko'nikmalar olishi hamda bandligini ta'minlashga har tomonlama ko'maklashish, tadbirkorlik tashabbuslarini yanada qo'llab-quvvatlanishi taxsinga loyiq.

#### **Foydalanilgan adabiyotlar ro'yxati:**

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2. O'zbekiston Respublikasi Prezidentining 2022 yil 1 martdagi "Oila va xotin-qizlar bilan ishlash, mahalla va nuroniylarni qo'llab-quvvatlash tizimini takomillashtirish chora-tadbirlari to'g'risida"gi PF-81-son Farmoni.
3. O'zbekiston Respublikasi Prezidentining 2022 yil 7 martdagi "Oila va xotin-qizlarni tizimli qo'llab-quvvatlashga doir ishlarni yanada jadallashtirish chora-tadbirlari to'g'risida"gi PF-87-son Farmoni.
4. Shavkat Mirziyoyevning - O'zbekiston Prezidenti BMT Bosh Assambleyasining 78-sessiyasida nutq (2023 yil 19 sentyabr, Nyu-York shahri) *Yangi O'zbekiston gazetasi. 20 sentyabr 2023 yil №192(981)*

## **THE FIRST STEP IS THE ISSUE OF EDUCATING CHILDREN OF PRESCHOOL AGE IN THE STATE PROGRAM BASED ON STEAM EDUCATIONAL TECHNOLOGY**

*Abstract. This article covers the issues of organizing development centers in preschool educational organizations based on a modern approach. Key words: modern approach, center, development, STEAM critical thinking, independent thinking, active communication, individual order.*

*Keywords: modern communication, center, development, STEAM, critical thinking, direct thinking, active meeting, single order.*

Creating conditions for comprehensive development of preschool children intellectually, morally, aesthetically and physically requires. Improvement of the educational process should be carried out on the basis of assessing the level of development of children and their readiness for general primary education, as well as their social, personal, emotional, speech, physical and creative development. special attention should be paid to the formation of respect for the national, historical, and cultural values of one's people, and a careful attitude towards the environment. In order to implement these tasks, the following is provided:

Taking into account the limited funds of the State budget of the Republic of Uzbekistan, the non-state sector is one of the driving forces of the growth of the number of preschool education organizations, and public-private partnership is the main mechanism for attracting private business entities to the preschool education system. ensuring the universality of preschool education, including in remote districts of the republic and in places where it is difficult to expand standard forms of preschool education, should be implemented at the expense of introducing new alternative forms. In order to achieve the target indicators for ensuring the inclusion of children in pre-school education, it is envisaged that the following measures will be implemented:

1) Construction of new state pre-school educational organizations and reconstruction of existing ones within the framework of state development programs of the Republic of Uzbekistan and at the expense of funds allocated from other sources;

2) creating a favorable investment environment in the field of preschool education, further encouraging and increasing the interest of the private sector in increasing the capacity of preschool education organizations;

3) further development of public-private partnership in the field of preschool education, including its following forms: on the condition of reconstruction and equipping of existing state preschool education organizations,



land plots or existing state schools for organizing the activities of non-state preschool education organizations to a private partner provide buildings of educational organizations free of charge; placing a state order for builders of multi-apartment residential buildings; transfer of state pre-school education organizations to a private partner for trust management; allocating a plot of land or a building for construction, reconstruction and equipping based on the concept; sponsorship etc.;

4) methodical support of citizens and business entities in organizing the activities of non-state preschool educational organizations;

5) transfer of vacant state-owned objects and non-working buildings of former preschool educational institutions in order to organize the activities of preschool educational institutions;

6) introduction of a single system of free compulsory one-year preparation of children for general primary education everywhere;

7) introduction and development of the following alternative forms of preschool education, which include a flexible work schedule and a wide range of developmental, corrective services and activities: short-term preschool education groups for children of different ages - "Play-groups "; the program of providing preschool education services to preschool children at home - "Name visits"; corporate groups of pre-school educational organizations, etc.;

8) development of projects of new buildings of preschool educational organizations, which will be built in accordance with the requirements of comfort and environmental safety, using light construction structures and modern energy-efficient materials and technologies (including elements of a barrier-free environment for children with physical and mental disorders in development taking into account);

9) taking into account the need to expand and effectively organize the network of pre-school educational organizations, provide the residential complexes and other objects under construction with the necessary social infrastructure;

10) step-by-step provision of drinking water, heating network, electricity and natural gas to all pre-school educational organizations of the republic, including through the introduction of modern energy-saving technologies;

11) increasing the scope of preschool education coverage of children with physical or mental disorders in their development due to the variety of educational services;

12) conducting explanatory events about the role and importance of preschool education in the formation of a child's personality, actively involving non-governmental non-profit organizations, mass media, the public and parents in this activity.

This is the logical result of combining theory and practice. STEAM was developed in America. Some schools took into account the careers of graduates and decided to combine subjects such as science, technology, engineering and

mathematics, and this is how the STEM system was formed. (Science, Technology, Engineering and Mathematics). Later, Art was added here, and now STEAM was finally formed. Teachers believe that knowledge of these subjects, or more precisely, these subjects, will help students become highly qualified specialists in the future. After all, children want to get good knowledge and apply it immediately.

**Principles of pedagogical process design.** The success of the activities of preschool children first of all depends on how well they implement didactic principles (laws). Educational laws are a set of requirements for the teaching process. The principles of education are the laws and regulations that are the basis for teaching all the stages of education and all subjects. The laws of education reflect the most important internal relationship between the student and the teacher.

President of Uzbekistan Sh. Mirziyoyev with his decree of February 7, 2017 approved the Action Strategy for five priority areas of Uzbekistan's development in 2017-2021. In this regard, the draft Strategy was developed based on the results of a comprehensive study of current issues of concern to the population and entrepreneurs, analysis of legislation, law enforcement practice and foreign experience. The document was published on the Internet and was widely discussed by experts and the public. In the development of social spheres, on the basis of the principles of national independence and the priority of the nation's rich intellectual heritage and universal values, to develop the spiritual and moral qualities of learners at all levels and stages of education, to improve the education management system, and to develop forms of public administration., attention is focused on the regionalization of educational institutions. It is known that regularity is a stable, necessary balance and important connection between one or another events and processes. Social needs and conditions legally determine the nature of the educational process, its tasks, content, forms: methods and tools. If education does not take into account the demands of society, then it must be revised and improved. Therefore, it is necessary to implement education, upbringing and general development of students as a whole. How can STEAM technologies be included in preschool education organization?

The principle of scientific education is aimed at providing students with scientific knowledge in accordance with the current level of science and technology development and introducing young people to scientific knowledge during school education. The scientific principle of didactics is It is not only related to the content of education, but also related to teaching methods. It requires the improvement of teaching methods aimed at using scientific and technical achievements in the process of school education. Also, the general preparation and level of students and requires introduction to the simplest form of scientific research methods suitable for age characteristics. In particular, it requires students to independently observe the environment, things, events, and phenomena,

conduct experiments, and familiarize them with preliminary scientific research methods.

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## **MORPHOLOGY AND MODERN TAXONOMY OF THE SPECIES OF THE GENUS SCHIZOTHORAX HECKEL 1836 IN THE WATER BODIES OF UZBEKISTAN**

*Abstract.* This article provides information on the morphology and modern taxonomy of species of the genus *Schizothorax* Heckel 1836 in the water bodies of Uzbekistan, their habitats, their important ecological role in their habitats, and their adaptation to geographical conditions.

*Key words:* water bodies of Uzbekistan, *Schizothorax* Heckel 1836, morphological structure, taxonomy, fast-flowing waters, ecological conditions, Johann Jacob Heckel.

*Schizothorax* Heckel 1836, also known as schizothorax fish, is a genus of fish in the family Cyprinidae. It is a freshwater fish found in rivers and lakes of Central and South Asia. The fish *Schizothorax* Heckel 1836 was named in 1836 by Johann Jacob Heckel. *Schizothorax* species are known for their adaptation to cold water environments and are often found in mountainous areas with fast flowing rivers.

The species *Schizothorax* Heckel 1836 is also common in freshwater ecosystems in Uzbekistan. They live especially in Amudarya and Syrdarya and their tributaries. These species are considered an important trade and food source by the local population. *Schizothorax* species in Uzbekistan usually prefer cold water conditions. Their morphological characteristics may be similar to species found in other regions, but they may show adaptation in certain geographical conditions. That is, their morphological structure depends on the environment they live in.

Research on the presence and distribution of schizothorax species is being conducted in Uzbekistan. As a result of studying these, it is possible to gain more information about the ecology, taxonomy and conservation of the species.

Their morphological structure is covered with skin scales. He has three pairs of whiskers, one pair is located in the nose area. They can use their right or left wings and have right or left color spots. They prefer cold, flowing and clean waters. *Schizothorax* fish also show active heartbeats, gill movements, and rapid blood pumping when frightened. These fish have a laterally compressed body shape and are usually olive-brown or gray in color. They are known for their strong swimming abilities and are well adapted to life in fast flowing water.

They have long tails, streamlined bodies, and strong fins that help them move in fast currents. *Schizothorax* species feed mainly on herbivores, aquatic plants, and algae. However, some species also eat small invertebrates and insects.

They play an important ecological role in their habitats by controlling plant growth and contributing to nutrient cycling. These fish are ecologically and economically important in many regions where they are found. They are usually intended for meat, which is considered by local fishermen to be of good quality. Conservation efforts are underway to protect their habitat and ensure sustainable fishing practices.

Modern taxonomic methods and genetic studies on the species of *Schizothorax* provide more information about these species. These data provide additional information on their zoological classification, new subspecies and related relationships.

Types of schizothorax in Uzbekistan are classified as follows:

1. *Schizothorax intermedius*: This species is usually found in Amudarya and Syrdarya. The morphology and ecological preferences of this species are similar to other schizothorax species.

2. *Schizothorax cfr esocinus*: This species lives in some freshwater lakes and streams in the mountains of Uzbekistan. Morphologically, it is similar to other types of schizothorax, but genetically it differs from others.

3. *Schizothorax kessleri*: This species is found in some rivers of the Fergana Valley. Like other species of schizothorax, it also prefers cold stream waters.

Taxonomic classifications are often based on information obtained through a combination of morphology, genetic analyses, and ecological data. However, new studies and analyzes may reveal more precise taxonomic details in the future, and we may learn more about these taxa.

### **Conclusion:**

*Schizothorax* Heckel 1836 is a freshwater fish known for its adaptation to cold water environments and its importance in Central and South Asian ecosystems.

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## **SOME MEDICINES USED FOR FUNGAL DISEASES**

*Abstract. Mycoses are a broad group of diseases united by one characteristic - they are all caused by pathogenic fungi that parasitize the skin, mucous membranes and other human tissues.*

*Key words: mycosis, fungus, lichen, antibiotic, polyene.*

Among all skin infections, they rank first in prevalence, but despite this, many sick people cannot recognize the disease in time and see a doctor, which is why dermatologists often have to deal with advanced forms of pathology.

Classification of mycoses is carried out according to various signs of diseases: by the genus and type of fungi, the depth of their penetration into the affected tissues, and their preferential localization.

The following types of fungal skin diseases are distinguished:

1. Keratomycosis (for example, pityriasis versicolor). Keratomycosis refers to fungal skin diseases in which the fungus affects only the stratum corneum of the epidermis and does not cause an inflammatory reaction of the skin.

2. Dermatophytosis. These include epidermatophytosis inguinalis, epidermatophytosis of the feet, rubrophytosis, trichophytosis, microsporia, favus.

3. Candidiasis is a disease of the skin, mucous membranes and internal organs caused by fungi of the genus *Candida*. *Candida* fungi are considered opportunistic microorganisms, as they are widely distributed in the external environment. The optimal temperature for their growth is 21-27 degrees, but they can grow at a temperature of 37 degrees. The depth of penetration of fungi into the affected tissue is different and depends on the location of the disease: for example, when affecting the vaginal epithelium, fungi penetrate into all its layers, including the basal one, and in the oral cavity they affect only superficial epithelial cells.

Deep mycoses, including North American and keloid blastomycosis, sporotrichosis, chromomycosis. This group of diseases is mainly common in the countries of South America, Africa, and the USA. Infection occurs due to skin injuries, scratches, cracks. The clinical picture is different: tubercles and nodes appear on the skin, prone to decay with the formation of ulcers. They can affect the deep layers of the skin, subcutaneous tissue, underlying muscles and even bones and internal organs. This causes severe general symptoms, which does not exclude death.

Pseudomycoses are classified into a separate group: erythrasma, actinomycosis. Initially, these diseases were classified as fungal, but a more detailed study of their pathogens made it possible to classify them as microorganisms that occupy an intermediate position between fungi and bacteria.

Mycoses (Greek "mices" - fungus) are diseases caused by various fungi. Fungi can damage the skin, mucous membranes and internal organs. Mycostatic and mycocidal substances are used against superficial and deep-seated fungi to stop their reproduction. These substances are divided into 3 groups:

1. Substances used for deep mycoses.
2. Substances used for superficial mycoses-dermatomycosis.
3. Substances used for candidiasis.

Deep mycoses include actinomycosis, blastomycosis, coccidiosis, etc., antibiotics and amphotericin are used for their treatment.

When treating mycoses, nystatin, levorin, griseofulvin, clotrimazole, syncundan, undecine, nitrofungin, amphotericin and other drugs are used.

Nystatin is an antifungal drug from the group of polyenes. By binding to sterols in the cell membrane of fungi, it disrupts its permeability, which leads to the release of the main components of the cell. Has a fungistatic effect.

Active against yeast-like fungi of the genus *Candida*.

Levorin is a polyene antifungal antibiotic. Due to the large number of conjugated double bonds, it has a high tropism for sterol formations of the cell membrane of fungi. By binding to them, inducing membrane permeability, it leads to cell lysis. It exhibits the greatest activity against *Candida albicans* and some protozoa (*amoeba*, *leishmania*, *trichomonas*).

Griseofulvin - Antifungal antibiotic. Has a fungistatic effect. Active against dermatophytes of the genera *Trichophyton*, *Microsporum*, *Epidermophyton*. Inhibits cell division of fungal cells in metaphase, disrupting the structure of the mitotic spindle. Griseofulvin accumulates to varying degrees in skin, hair and nail cells, which are the precursors of keratin, making keratin resistant to fungal invasion. As the infected keratin is shed, it is replaced with healthy tissue.

Amphotericin is a polyene macrocyclic antibiotic with antifungal activity. Produced by *Streptomyces nodosus*. It has a fungicidal or fungistatic effect depending on the concentration in biological fluids and the sensitivity of the pathogen. Binds to sterols (ergosterols) located in the cell membrane of a fungus that is sensitive to the drug. As a result, the permeability of the membrane is disrupted and the release of intracellular components into the extracellular space and lysis of the fungus occurs.

Active against most strains of *Histoplasma capsulatum*, *Coccidioides immitis*, *Paracoccidioides braziliensis*, *Candida* spp., *Blastomyces dermatidis*, *Rhodotorula* spp., *Cryptococcus neoformans*, *Sporothrix schenckii*, *Mucor mucedo*, *Rhizopus* spp., *Absidia* spp., *Basidiobolus ranarum*, *Aspergillus fumigatus*.

Moderately active against some protozoa: *Leishmania braziliensis*, *Leishmania mexicana*, *Naegleria fowleri*.

The following are usually resistant to amphotericin B: *Pseudallescheria boydii*, *Fusarium* spp. Ineffective against bacteria, rickettsia, viruses.

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## THE SIGNIFICANCE OF STUDYING THE BIOGEOCHEMICAL MIGRATION OF SULFUR COMPOUNDS IN THE LIGHT COLORED GRAY SOILS OF THE SOUTHERN REGIONS

*Abstract. Today, in the agricultural sector of our republic, including in the fields of protection and rational use of land resources, scientific and practical work has been systematically launched and certain results are being achieved. In this regard, research was conducted on the scale of our republic on the effects of industrial waste, man-made substances, chemical compounds called heavy metals on the soil and all types of vegetation on different soil types, and on the removal of petroleum products from the soil. developments have been developed, technologies for reducing and purifying the movement of heavy metals in the composition of irrigated soils have been created. At the same time, insufficient attention has been paid to the measures to reduce the environmental impact of various chemical compounds that are distributed in the atmosphere, suitable for the soil and climate conditions. The global and regional circulation of sulfur results from the fact that it is in the same group as O<sub>2</sub>, H<sub>2</sub>, C, N among the elements that form chemically active gases. We noted that the sulfur gases coming under the ground as a gas are absorbed into the underground water due to internal movement. In this process, a large part of sulfur is captured by microorganisms and takes place in a proper microbiological cycle. It is clear from this. Sulfuric gases moving towards the atmosphere encounter chemical and biological, biochemical filters.*

*Key words. Vegetation, terrain, plant, salinity, soil, growth, development, heavy metal.*

**INTRODUCTION.** Sulfate as a reserve source of energy, controls the synthesis of sulfur-containing organic compounds (cystine and cysteine), accelerates the nutrition process, and resists aging. The reduced form of sulfur is found mainly in proteins in the plant body. Sulfur plays a very important physiological role in the biological cycle of organic matter and especially proteins in the composition of plants belonging to the leguminous family, potatoes, corn, and especially in the formation of crops [1,5]. A large amount of sulfur is lost every year as a result of the leaching of sulfur from the soil and its removal with crops. Experiments have shown that plants cannot get enough sulfur from the atmosphere. Therefore, in recent years, in different regions of our country, more attention has been paid to determining its amount in the soil and searching for its simple forms for agriculture [3,4,7]. Sulfur and its compounds are added to the soil as a nutrient element for the purpose of amelioration (plastering) of soils, improving the physical properties of the soil, reducing the reaction of the soil solution, and accelerating the assimilation of iron, phosphorus and other nutrients

contained in the soil. The main source of sulfur for plants is its various salts in the soil, sulfur compounds in the atmosphere, and sulfur-containing mineral fertilizers [1,8,9].

**MATERIALS AND METHODS.** 130 million tons of sulfur compounds fall to the surface of the earth every year, including 0.5 million tons annually to the regions of the central part of Russia. It was determined that tons of sulfuric acid will be added. Most of the sulfur compounds are washed into the deep layers of the soil and precipitate the compounds of heavy metals - lead, cadmium, zinc, iron, and aluminum in the soil profile. It is absorbed through the roots of many plants and has a fatal effect on their growth and development [3,7,9]. According to the data, the SO<sub>4</sub> form of sulfur in the driving layer of some soils ranges from 50 mg to 100 g/kg, but its average amount in the soil profile does not exceed 10 mg/kg [11,14]. The consumption of sulfur depends on the amount and nature of rainfall, the topography of the place, and the condition of the soil. Part of the sulfur contained in the soil is removed with the crop, and part of it enters the circulation through soil alkalization. Sometimes this indicator averages 14.6 kg per hectare. It has been proven to reach up to 20 kg per hectare. Depending on the amount of water-insoluble sulfates, this number may change [3,11]. Levels and coefficients of chemical pollution of soils were adopted for various elements and compounds. When classifying the levels of chemical pollution of the soil, it is not determined the same for all types of chemical pollution, but it is determined separately according to the chemical composition of a specific pollutant, its amount in the soil, the accepted norm (QKM), the level of toxicity and other characteristics. Soil pollution level (on a 5-point system) is weakly unpolluted, moderately strongly polluted, very strongly polluted. and the pollution coefficient is defined as 0 to 2.0 [11,15].

Sulfur pollution of the environment due to human activity is twice as much as natural pollution. The total amount of aerosol emissions into the atmosphere under the influence of anthropogenic factors is 60 mln. more than tons. Carbon, sulfur and nitrogen compounds make up 80-90% of emissions released in the gaseous state [11].

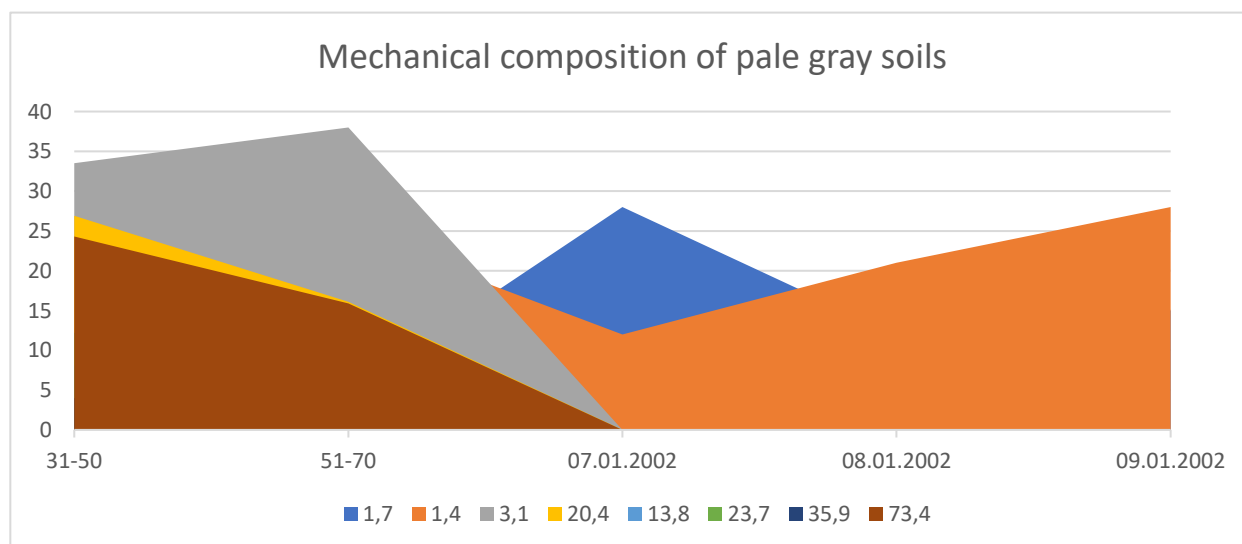
**RESULTS AND DISCUSSION.** The climate of the Kashkadarya region reflects all the features of a sharply continental, dry subtropical climate. The continental dry subtropical climate of the Karshi desert, located in the center of the Central Asian region, the northern part of the Turanian plain, has the following characteristics: the continuation of plant vegetation even in winter; in the summer season, clear (cloudless) days prevail and the average temperature fluctuates around 30 °C; a big difference in day and night temperatures and diurnal regime; Predominance of atmospheric precipitation in winter and spring, almost no precipitation in summer; It is a bright expression of a wet and warm spring and a very dry summer, which actively affects the flora and fauna and the process of soil formation.

### Air temperature change (Data from karshi weather station).

years	januatr	febre ayr	mar ch	april	ma y	june	july	August	september	october	novemb er	decem ber	yearly avera ge
1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>karshi</b>													
2021	0,9	6,3	12,4	20,7	27,4	30,2	29,5	27,3	21,6	15,2	11,2	6,5	
2022	5,4	7,1	12,5	10,6	22,3	28,4	29,6	29,1	23,0	19,0	11,0	-0,6	
2023	4,8	6,6	9,4	15,4	20,4	26,8	30,4	28,0	22,7	18,2	9,4	4,8	

Studies on the vegetation cover of the desert region (zone) have shown that the relief and geomorphological structure of the place, as well as the climate, have a direct effect on the color and diversity of the flora. [11]. The natural flora of Kashkadarya region consists of about 1,200 species of higher plants, 106 of which are used as food and livestock feed, 138 are valuable medicinals, 26 are essential oils, 61 are honey-producing, 62 types are flavoring, 53 types are coloring, 19 types are saponinous plants. The vegetation of Kashkadarya region is mainly composed of ephemerals (annual plants with short-term vegetation), ephemeroids (perennial plants with short-term vegetation, but regenerating through the roots), xerophytes (resistant to long droughts desert plants), halophytes (salt-loving plants that grow in salt marshes and salt marshes) and psammophytes (plants that grow in sands). For the interior plains of the Karshi desert, ephemeral and ephemeroid plants - cherkaz, incense, white chitir, shrubs - yulgun, karasaksovul and other plants are typical. In addition, pashmak, shora, tereskan, dastarbosh are found in low salinity areas of the desert, and black shora, sarsazan, shorajriq, lizilymia and akbosh are found in highly saline areas.

**CONCLUSION.** While organic sulfur is the main part of sulfur compounds in the soil, sulfur oxide in the form of acid, which is the main component of the composition of factory wastes, chemically reacts with bases in





the soil to form various toxic and non-toxic (useful) salts, neutralizing the soil solution, slowing down microbiological processes to a certain extent. 'secret shows. However, the strong buffering properties of soils do not allow the solution environment to deviate to the acidic side. It should be noted that in a relatively short period of time after irrigation, significant changes have occurred in the soil cover. Due to the semi-hydromorphic regime, the light-colored gray soils developing under automorphic conditions, i.e., the evolution of the soil cover, have shifted their evolution towards meadow-gray and gray-meadow soils. Changes in the process of soil formation, irrigation, of course, led to the emergence of a water regime characteristic of newly developing soils.

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## **SOME DRUGS USED TO TREAT CANCER**

*Abstract. Medicines occupy an important place in the treatment of malignant neoplasms. Many drugs have entered medical practice that are effective not only for blood diseases (hemoblastosis), but also for true tumors. Unfortunately, the available antitumor drugs are not sufficiently advanced.*

*Keywords: cancer, antimetabolites, blastoma, antibiotics, leukemia.*

As a rule, they provide only remission and only in some tumor diseases (for example, uterine chorionepithelioma, acute lymphocytic leukemia in children, lymphogranulomatosis, malignant testicular tumors, skin cancer without metastases) can a complete cure be achieved through the use of a number of drugs. One of the limiting aspects in the drug treatment of malignant neoplasms is the addiction of tumor cells to the drugs. The process of addiction can be slowed down to a certain extent by the combined use of drugs with different structures and different mechanisms of action. A significant drawback of most modern drugs is also their low selectivity of action against tumor cells. Typically, the use of cytotoxic drugs is accompanied by serious side and toxic effects. In this case, actively proliferating tissues (bone marrow, intestinal mucosa) are particularly affected. Many drugs also have a negative effect on the gonads (they can cause sterility). A number of antibiotics with antitumor activity have a cardiotoxic effect. Platinum drugs have a pronounced nephrotoxic effect. Cytotoxic drugs often cause nausea and vomiting. However, when the drugs are used in therapeutic doses, side effects are usually reversible. Antiblastoma cytotoxic drugs also have immunosuppressive, mutagenic and teratogenic effects. In some cases, to reduce the toxic effect and increase the effectiveness of drugs, they are administered intra-arterially directly to the tumor. In this case, it is advisable to reduce the venous outflow from the affected tissues, which increases the duration of contact of substances with tumor cells and reduces the severity of adverse effects associated with the resorptive effect of substances. For the same reasons, sometimes they resort to perfusion with solutions of anti-blastoma drugs of the area where the tumor is localized. Contraindications to the use of most antitumor drugs are inhibition of hematopoiesis, acute infections, and severe impairment of liver and kidney function. In recent years, immunostimulating agents (interferons, etc.), interleukins and other auxiliary agents have begun to be included as components of combination chemotherapy for tumor diseases. In some cases this has a beneficial effect. Naturally, anticancer drugs are prescribed in cases where

this method of treatment can give a better effect than others. Modern chemotherapy of tumor diseases is based on the combined use (simultaneous or sequential) of antitumor drugs from different groups. Chemotherapy is often combined with surgical removal of the tumor and radiation therapy. Substances used as anti-blastoma agents can be represented by the following groups.

Alkylating compounds. Chlorethylamines - embiquine, sarcolysine, dopan, chlorobutine, cyclophosphamide, prospidine, ethylenimines - thiophosphamide, methanesulfonic acid derivative - myelosan, nitrosourea derivatives - nitrosomethylurea, lomustine, carmustine, nimustine, triazines - dacarbazine, procarbazine, platinum compounds - cisplatin, carboplatin, oxaliplatin.

Antimetabolites 1. Folic acid antagonists - methotrexate, purine antagonists - mercaptopurine, pyrimidine antagonists - fluorouracil, florafur, cytarabine.

Antibiotics with antitumor activity. Actinomycins - dactinomycin, anthracyclines - rubomycin, doxorubicin, carminomycin, phleomycins - bleomycin, bleomycetin, aureolic acid derivatives - olivomycin, of different chemical structures - bruneomycin, mitomycin.

Herbal preparations. Vinca rosea alkaloids - vinblastine, vincristine, yew tree alkaloids (taxanes) - taxol, taxotere, podophyllotoxins isolated from thyroid podophyll - etoposide, teniposide, alkaloids of the splendid crocus - colchamine, colchicine.

Thus, the number of drugs with antitumor activity is very large. The clinician's task is to select the most appropriate drugs for each individual patient and determine the necessary course of treatment. Most anti-blastoma drugs cause a number of side effects that limit their use. In order to neutralize these complications to some extent or prevent them, a whole range of auxiliary agents is used for chemotherapy of tumor diseases. These include the following groups: agents that stimulate hematopoiesis: colony-stimulating factors, leukopoiesis stimulants: leukomax, molgramostim, filgrastim; stimulants of erythropoiesis - erythropoietin, antiemetics: ondansetron, tropisetron, metoclopramide, agents that increase the body's immune defense: interferons, interleukins, thymus preparations, levamisole; drugs that suppress the manifestations of carcinoid syndrome in malignant neuroendocrine tumors: octreotide.

In addition, cardioprotective, cytoprotective agents, substances that protect the urinary tract from damage by certain antitumor drugs (their metabolites), etc. are used.

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## AMINOGLYCOSIDE ANTIBIOTICS

*Annotation. Aminoglycosides are a group of antibacterial drugs widely used in clinical practice for the treatment of infectious diseases. However, their use is associated with a number of problems: toxicity, pharmacokinetic characteristics and microbial resistance. The drug in this group includes streptomycin, produced by the radiant fungus. Subsequently, its derivatives were obtained.*

*Keywords: bacteria, aminoglycoside, antibacterial, antibiotic, toxicity.*

The drugs have a wide spectrum of action, have a detrimental effect on most gram-positive and some gram-negative microorganisms, acid-fast (the causative agent of tuberculosis) and penicillin-resistant bacteria, some strains of *Proteus*, *Pseudomonas aeruginosa*, *Brucella*. They act bacteriostatically, less often bactericidally as a result of inhibition of protein synthesis in the ribosomes of microbial cells. Usually by the end of a month of treatment, but possibly within a few days, addiction to streptomycins develops. When administered parenterally, they are well absorbed and distributed in organs and tissues. The therapeutic concentration is maintained for 8-12 hours. It is excreted in the urine; if renal function is impaired, excretion slows down.

Streptomycin sulfate - Streptomycini sulfas. White powder. Easily dissolves in water. Stable in a slightly acidic environment, does not collapse in an alkaline environment and when heated. Prescribed for brucellosis, leptospirosis, tularemia, diplococcal infections, mastitis, endometritis, endocarditis, meningitis, wound and postpartum sepsis, erysipelas and edematous disease of pigs, actinomycosis of cattle and other diseases caused by microorganisms sensitive to it. It is administered mainly deep intramuscularly, sometimes used intratracheally and externally.

Pasomycin - Pasomycinum, powder, easily dissolves in water, is destroyed by heating, in acidic and alkaline environments and under the influence of light. Prescribed for tuberculosis, pneumonia, purulent processes. Microbial resistance to the drug develops more slowly than to other aminoglycosides. They are usually used for severe infections, as well as when other antimicrobial drugs are insufficiently effective. Side effects include nephrotoxicity and ototoxicity, as well as the ability to increase the toxicity of other drugs. With long-term use, candidomycosis may develop.

Neomycin sulfate (colimycin, etc.) - Neomycini sulfas. White powder, easily soluble in water, hygroscopic. Effective against many gram-positive (staphylo- and pneumococci, etc.) and gram-negative microbes, including those resistant to other antibiotics. It does not affect pathogenic fungi, viruses and anaerobic microflora. Resistance develops slowly. When administered orally, it is almost not absorbed and has a detrimental effect on the intestinal microflora. It is excreted mainly in feces and partly in urine. Prescribed for colibacillosis, pasteurellosis, gastroenterocolitis and other diseases of the gastrointestinal tract. Externally used for skin diseases caused by staphylococci and escherichia. Neomycin is included in the ointments "Sinalar-N" and "Locacorten-N" and eye and ear drops "Sofradex". Monomycin - Monomycinum. A mixture of organic base sulfates produced by actinomycetes. Powder or mass. Easily dissolves in water. It has a bactericidal effect on staphylococci, dysentery bacilli, Escherichia, Klebsiella, and some protozoa (Leishmania, Toxoplasma, dysenteric amoebas). Weak effect on pneumococci and streptococci. Does not affect anaerobes, fungi and viruses. When taken orally, it is poorly absorbed; when administered intramuscularly, it penetrates well into organs and tissues. Prescribed mainly for colibacillosis, dyspepsia, dysentery, salmonellosis, and urinary tract infections.

Kanamycin - Kanamycinum. Produced in the form of salts of kanamycin monosulfate for oral administration and kanamycin sulfate for parenteral administration. White crystalline powders, easily soluble in water. The drug has a broad spectrum of action, has a detrimental effect on microbes resistant to penicillin, tetracycline, chloramphenicol and erythromycin. Kanamycin monosulfate is prescribed for dysentery, enterocolitis, as well as for intestinal sanitation in preparation for operations on the gastrointestinal tract.

Gentamycin sulfate (Amgent, Garamycin) - Gentamycini sulfas. White powder with a creamy tint. Easily dissolves in water. Like other aminoglycosides, it has a wide spectrum of action and also has a bacteriostatic effect on mycoplasmas, Proteus, E. coli, salmonella and staphylococci resistant to penicillin. When administered intramuscularly, it is quickly absorbed, a therapeutic concentration in the blood is created approximately 1 hour after application and persists for 8-12 hours. Prescribed for many severe infectious diseases, such as bronchopneumonia, peritonitis, septicemia, wound infection and especially for diseases of the gastrointestinal tract in young animals and birds. It is good to combine with ampicillin, carbenicillin.

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## **ABOUT BIATHLON SPORTS AND ITS DEVELOPMENT**

*Annotation: this article aims to increase the popularity of sports, increase their competitiveness and develop comprehensively. This article explores the various reforms currently implemented in the biathlon world.*

*Keywords: physiology, shooting, training, speed, high performance.*

To achieve success in biathlon, it is necessary to shoot accurately and quickly, while simultaneously recovering from high-intensity skiing. Many different factors, including body vibration, motion-triggering behavior, and even psychology, affect the effectiveness of gravity. Thus, the complexity of the biathlon deserves more attention to areas such as racing tactics, skating techniques or the shooting process.

Biathlon, an Olympic sport combining rifle shooting and skating techniques with rifle carrying, involves serious physiological requirements similar to those associated with competitive skiing, and also requires fine motor control for rapid and precise shooting under mental pressure. In addition, this difficult endurance sport involves alternating between different small techniques that require the relative work of the upper and or lower part of the body while skiing on different terrain.

While the duration of biathlon races varies from 20 minutes (sprint) to 50 minutes (individual race), seven of the 11 Olympic events (including Relay) involve mass starts, which increases the importance of tactics and the result is often decided. the last stage of shooting and / or the final ski run.

The overall biathlon performance is complex, and skiing is determined by several components such as speed of flight, distance time (time spent on the shooting ramp), shooting time, and accuracy of shooting. Usually, elite biathletes and shooting distances and times in different competitions are similar to each other and therefore have little effect on the final result. On the contrary, the speed of ski flying and the accuracy of shooting are the most important factors that determine the final result.

Top biathletes practice 700-900 hours of physical education each year, including 80% low, 4-5% moderate, and 5-6% high intensity, with 10% strength and Speed Training (Table 2; personal contact with Swedish biathlon coaches). This training size is slightly less than previously stated for XC skiers, probably due to the time spent on training shooting. Low intensity training has been proposed to improve overall ability and exercise efficiency, as well as "tolerance" to higher training loads by accelerating recovery.

While most low-intensity training is designed to develop aerobic ability and/or specific motor skills, the inclusion of some semi-or non-specific training

(e.g. cross-training) allows for general training. Moderate intensity training (e.g., directly below the anaerobic threshold) can be extended while providing sufficient aerobic energy. Such training usually involves a short recovery period or a long exercise interval, surrounded by continuous exercise for 30-60 minutes. Such training for intensity control is carried out on relatively stable terrain.

Moderate intensity training takes place once or twice a week during the preparation period, and less frequently during the competition season. Although the best athletes focus on extensive low-intensity training, the beneficial effects of high-intensity training have been proven several times.

Improved competition format: in recent years, biathlon has made changes to the competition format to make it more interesting and more spectator friendly. This includes the introduction of mass start races, pursuit races and mixed relay events that add excitement and variety to the sport.

Expanded television coverage: an attempt was made to improve television coverage of key events to increase Biathlon's visibility. This includes the use of multiple camera angles, the inclusion of athlete profiles, and in-depth analysis of races. Improved broadcasting will help to attract more audiences and generate more interest in sports.

Technological advances: ongoing technological changes have had a significant impact on biathlon. Advanced rifle designs, electronic sights, and tracking systems have improved accuracy, fairness, and real-time data analysis. The integration of technology increases the overall experience for participants and viewers.

Youth development programs: several initiatives have been established to promote youth participation to ensure the future of biathlon. These programs offer training and development opportunities to aspiring athletes, allowing them to traverse different levels and improve their skills. Ensuring the strong development of youth ensures the continuous development of sports.

Anti-doping measures: strict anti-doping measures have been implemented to maintain the integrity of biathlon. Athletes are regularly tested to prevent the use of effectiveness enhancers, ensure fair play and an equal playing field. These measures are aimed at maintaining the prestige of the sport and protecting the health and well-being of athletes.

Sustainability initiatives: biathlon also recognized the importance of environmental responsibility. Work is underway to minimize the environmental impact of the sport, such as reducing emissions, introducing environmentally friendly infrastructure, and promoting sustainable practice in competition venues. These actions are in line with global sustainability goals and demonstrate the sport's commitment to environmental protection.

Strengthening international cooperation: collaborative efforts between biathlon associations and federations from different countries have played an important role in the development of the sport. The exchange of advanced experience, the organization of joint training meetings and the holding of

international competitions will help to strengthen friendship, exchange knowledge and experience. By implementing these reforms, biathlon sports seeks to continuously improve its quality, global attractiveness and sustainable growth. These efforts ensure that the sport is fun, fair and open to participants and fans.

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## NEW FORMATS AND APPROACHES FOR LEARNING LANGUAGES

*Annotation. The world we live in is a dynamic, ever-expanding place. It is hard to imagine our lives without the advantages of modern technology and advancements in technology. Innovations now permeate every aspect of our lives. The innovations in language learning and the advantages and disadvantages of incorporating new technologies into foreign language education programs will be covered in this article.*

*Key words: modern technology, innovations, watching videos, specific mental processes and brain activity.*

Watching videos is one of the new technologies used in language learning. They can be used by the instructor in foreign language classes to help the students' listening comprehension. This is because when someone watches a movie, their visual and auditory memories are engaged.

Furthermore, if the students watch the video in Russian beforehand, a third factor will come into play: a person's muscle memory, which kicks in when he starts to subtly comprehend the language and actions in the video. All of this immerses students in the language environment and adds appeal to the learning process. As a result, students comprehend the situational nature of various communication styles considerably better. Regrettably, not all textbooks come with a video accompaniment, and traditional educators view all forms of innovation—particularly the ability to learn a language by watching your preferred TV show or film—with a certain amount of suspicion.

### **Why are videos used in the classroom necessary?**

The primary benefits of this innovation will be able to respond to the following query:

1. a thorough examination of both the spoken language's characteristics and the nation where it is spoken;
2. encourages an entirely new level of comprehension of audio texts;
3. the speech apparatus's motivation;
4. the effect on students' emotions, which stimulates their desire to learn more languages;
5. the improvement of cognitive abilities like memory and focus.

Even the most forgetful students are able to absorb the information when they are watching the videos because of the audience's general sense of interest. Students must use specific mental processes and brain activity to comprehend the film's content. This helps them move from involuntary memorization of material

to arbitrary memorization, which in turn improves the dynamics of language learning.

There are two types of tasks in listening instruction: speaking and preparation. Preparatory classes are intended to create listening mechanisms while also helping to ease some personal difficulties. First and foremost, speech is a controlled speech activity because, in the words of A.A. Leontiev, words like "provide the practice of listening on the basis of complex overcoming of auditory difficulties" [1, p. 108] and "aim to both achieve a certain level of understanding and improve the process of semantic perception" [2, p. 249].

Students must memorize and retain new information in addition to comprehending the text's meaning and the narrator's intention when completing these speech exercises. Additionally, this information may be used in the future to other learning contexts or to real-time communication. Mnemonics are another future technology that is intended to maximize language learning. A mnemonic is a collection of unique approaches and strategies that facilitate the memorization of important information. Information and boosting memory capacity through associations (connections): substituting abstract concepts and facts with representations that are kinesthetic, auditory, or visual; connecting objects with previously stored information in memory of different kinds of modification to make things simpler memorization.

Mnemonic strategies offer a way to add interest and productivity to the training program, especially when it comes to vocabulary study. Mnemonics give learning a gaming element that fosters critical thinking and creativity. Put another way, pupils develop a subconscious interest in learning. Ancient Greeks employed mnemonic devices to help them learn new words and improve their language skills. Simonides created the technique of remembering through visual perception. He calculated that the strongest human sense is sight. In the 20th century, Dr. Horst Sperber of the Goethe Institute suggested in 1990 that mnemonic devices be used in German language instruction.

His colleagues were very interested in such a proposal. Mnemonic strategies are important because learning a foreign language makes it difficult to memorize vast amounts of vocabulary.

It becomes particularly crucial to employ a variety of techniques for memorization of vocabulary when teaching a foreign language. Mnemonic techniques, or a collection of strategies that support learning and offer a high potential for assimilation and subsequent use of information, are thought to be among the most effective ways to comprehend language and speech content. They can also significantly expand the boundaries of memory through additional integration of thought and different associations. Many researchers (including A.V. Blokhin, E.A. Guzeeva, I. Y. Matyugin, T.B. Nikitina, G. A. Chepurnoy, etc.) claim that using mnemonic devices in foreign language instruction allows for the successful development of lexical skills. It is well known that many people find it difficult to recall words with ambiguous or abstract meanings.

Furthermore, it is not really possible to retain a word in memory for an extended period of time. However, you can quickly and effectively remember the correct word for a long period of time by employing mnemonic devices, such as packing the word with meaning and associating it with specific sounds and visuals. For example, Dr. Sperber employed color-coding to help his patients memorize articles; that is, each color was associated with a specific article based on the genus and number. In his practice, he mostly used vivid colors. Vibrant hues can appeal to a variety of senses. An increasing number of senses are being used in the learning process, which helps students better assimilate the information and memorize a vast amount of lexical units. We can make use of our natural memory reserves when learning foreign languages by employing mnemonic devices. To put it briefly, associative memory facilitates the process of learning new vocabulary.

Though many educators remain dubious about new approaches to teaching a given subject, times are changing, and more students are receiving an education that incorporates contemporary techniques. Stated differently, the integration of students' interests is a feature of foreign language instruction.

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## **ANDIJON VILOYATI IQTISODIY TARMOQLARIDAGI TARKIBIY VA HUDUDIIY O'ZGARISHLAR, HAMDA „O'SISH QUTBLARI”**

*Annotatsiya. Ushbu maqolada Andijon viloyatining iqtisodiy o'sishi va rivojlanishi, iqtisodiyot tarmoqlaridagi salmog'i haqida ma'lumot beriladi. O'zbekistonning xususan, Andijon viloyatining 2030-yilgacha iqtisodiy rivojlantirish konsepsiyasida makroiqtisodiy barqarorlikni va iqtisodiy o'sish barqarorligini ta'minlash, iqtisodiyot tarmoqlarining raqobatdoshligini oshirish maqsadidagi fikrlar, yangiliklar va islohotlar ham kiritilgan. Iqtisodiy o'sish jumladan iqtisodiy mintaqalar boshqacha qilib aytganda „o'sish qutblari” to'g'risida ham yetarlicha ma'lumot keltirilgan.*

*Kalit so'zlar: „O'sish qutblari”, makroiqtisodiyot, mikroiqtisodiyot, Yalpi ichki mahsulot, iqtisodiy islohot, konsepsiya, iqtisodiy o'sish, eksport, import.*

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## **STRUCTURAL AND TERRITORIAL CHANGES IN THE ECONOMIC NETWORKS OF ANDIJAN REGION, AND "POLES OF GROWTH"**

*Abstract. This article provides information about the economic growth and development of Andijan region, its importance in economic sectors. In the concept of economic development of the Andijan region of Uzbekistan until 2030, ideas, innovations and reforms aimed at ensuring macroeconomic stability and stability of economic growth, increasing the competitiveness of economic sectors have also been included. Sufficient information is provided about economic growth, including economic regions, in other words, "growth poles".*

*Key words: "Growth Poles", macroeconomics, microeconomics, Gross Domestic Product, economic reform, concept, economic growth, export, import.*

**Asosiy qism:** Iqtisodiy o'sish, qolaversa uning sifati to'g'risidagi masala mamlakat, uning viloyatlari umuman biror-bir ijtimoiy tizimning rivojlanish istiqbollari aniqlash uchun ham juda muhim. Aslida iqtisodiy o'sish-ishlab chiqarishni takomillashtirish, iqtisodiyotda progressiv o'zgarishlarning muhim shart-sharoitlaridir. Mamlakatning qolaversa uning viloyatlarini iqtisodiy rivojlanishi uning sanoati va qishloq xo'jaligida namoyon bo'ladi. Mamlakatimizning sharqiy viloyati bo'lgan Andijon respublika iqtisodiy tarmoqlari jadal rivojlangan hududlar sirasiga kiradi. Andijon viloyatida sanoatning deyarli barcha tarmoqlari tez suratlar bilan rivojlanmoqda. Andijon viloyatida sanoatning asosiy tarmoqlari: mashinasozlik, avtomobilsozlik, elektroenergetika, yengil sanoat, oziq-ovqat sanoati kabilar rivojlanib kelmoqda. Viloyatda sanoat yuqori darajada rivojlangan. Mustaqillik yillarida milliy iqtisodiyotning hududiy jihatdan muvozanatlashganligini taminlash va mintaqaviy nomutanosibligini kamaytirish O'zbekiston davlat siyosatining ustuvor vazifasi hisoblanadi. Keyingi yillarda viloyatimizda sodir bo'layotgan tarkibiy o'zgarishlarda hududlarning roli sezilarli darajada oshdi. Andijon viloyatining iqtisodiy salohiyati va raqobatbardoshligini oshirishga yo'naltirilgan bir qator chora-tadbirlar amalga oshirildi. Andijon viloyati hududlarining ijtimoiy, iqtisodiy rivojlanish darajasi va iqtisodiy o'sish suratlaridagi tafovutlar bir qator obyektiv sabablar bozor islohotlarining dastlabki davridagi hududiy rivojlanish darajasi, hududning jozibadorligi, iqtisodiy geografik rivojlanishi, infratuzilmaning rivojlanganlik darajasi, innovatsion salohiyat va boshqa ko'pgina omillar bilan izohlanadi. Bugungi kunda iqtisodiyoti jadal rivojlanib kelayotgan Andijon viloyati 1941-yil 6-martda tashkil etilgan. Maydoni 4,2 ming km kv. Aholisi 2023-yil 1-aprel holatiga ko'ra 3338200 viloyatlar orasida 4-o'rinni egallaydi. Andijon viloyati 14 ta tuman, 2 ta shaharni o'z tarkibiga oladi. 14 ta tuman sanoatning yoki qishloq xo'jaligining u yoki bu sohasiga iqtisoslashgan. 2022-yilning yanvar-sentabr oylarida viloyatda 830 ta yangi sanoat korxonalari tashkil etilib, jami sanoat korxonalari 9798 taga yetdi. 2023-yilning yanvar-sentabr oylarida jami 35945.3 mlrd so'mlik sanoat mahsulotlari ishlab chiqarilib, o'sishi suratlari 124.8%ni tashkil etdi. Eng yuqori o'sish suratlari Asaka (154,3%), va Paxtobod (135,3%) tumanlarida qayd etilgan bo'lsa, Baliqchi (95,1%), Ulug'nor (96,7%), Izboskan (98,5%) tumanlarida ishlab chiqarilgan mahsulot hajmi 2021-yilning mos dacriga nisbatan kam bo'ldi. Ishlab chiqarilgan jami sanoat mahsulotlari hajmining 70,8% I Asaka tumani (22%), va Andijon (15,2%) hissasiga to'g'ri keladi. YAHM tarkibida sanoat ulushi 23,5% ni tashkil etib, 2021-yil yanvar-sentabr oylariga nisbatan 3,8 punktga o'sgan. Andijon viloyatida aholi jon boshiga ishlab chiqarilgan jami sanoat mahsulatlari hajmi 10962.7 ming so'mni tashkil etib, aholi jon boshiga sanoat mahsulotlari ishlab chiqarish taqsimlanishi bo'yicha yirik sanoat korxonalari joylashganligi hisobiga Asaka tumani (58.289 ming so'm), Xonobod (38.338.1 ming so'm) va Andijon (11834.0 ming so'm) shaharlarida o'rtacha viloyat darajasi ko'rsatkichidan (9988.7 ming so'm) yuqoriligini ko'rsatmoqda. Viloyat bo'yicha aholi jon boshiga

istemol mahsulotlari ishlab chiqarilishi 8231.8 ming so'm bo'lgan holda, Asaka tumanida 56444.4 ming so'mni, Xo'jaobod tumanida 12076.1 ming so'mni, Andijon shahrida 3026.6 ming so'mni Xonobod shahrida 9827.0 ming so'mni tashkil etdi. Andijon viloyati sanoat ishlab chiqarishi tarkibida eng katta ulush ishlab chiqaradigon sanoat hissasiga (97.6%) to'g'ri kelgan bo'lsa, tog'-kon sanoati ulushi-0,5%, elektr taminoti, gaz, bug' yetkazib berish va sun'iy iqlim hosil qilish ulushi-1,7%, suv ta'minoti, oqava suv, chiqindilarni yig'ish va utilizatsiya qilish -0,2% ni tashkil etadi. Viloyat ishlab chiqaradigon sanoat tarkibidagi avtotransport vositalari, treyler va yarim pritseplar ishlab chiqarish (64%), to'qimachilik mahsulatlari ishlab chiqarish (11%), kiyim ishlab chiqarish (10%) va oziq-ovqat mahsulatlari ishlab chiqarish (6%) yo'nalishlari eng yuqori ulushga ega.

### **Andijon viloyati va tumanlarining ixtisoslashuvi, o'sish qutblari quyidagi klassifikatsiya bo'yicha**

**-Andijon viloyati:** Mashinasozlik, avtomobilsozlik, elektr energiya, yengil, oziq-ovqat sanoatlari.

**-Asaka tumani:** Mashinasozlik, avtomobilsozlik, qurilish sanoati, yengil, oziq-ovqat sanoatlari.

**-Shahrixon tumani:** Qishloq xo'jaligi, yengil sanoat, oziq-ovqat sanoati.

**-Marhamat tumani:** Elektrotexnika, qurilish sanoati, yengil va oziq-ovqat sanoatlari.

**-Xo'jobod tumani:** Qishloq xo'jaligi (chorvachilik, bog'dorchilik, donchilik), qurilish materiallari sanoati.

**-Buloqboshi tumani:** Qishloq xo'jaligi (paxtachilik, bog'dorchilik), yengil sanoat (poyabzalchilik), qurilish sanoati.

**-Paxtobod tumani:** Qishloq xo'jaligi (g'allachilik, chorvachilik, paxtachilik).

**-Baliqchi tumani:** Qishloq xo'jaligi (paxtachilik, g'allachilik, baliqchilik), yengil sanoat, oziq-ovqat.

**-Bo'ston tumani:** Yengil sanoat, qishloq xo'jaligi (sabzavotchilik, donchilik, paxtachilik).

**-Izboskan tumani:** Yengil sanoat, oziq-ovqat sanoati, qishloq xo'jaligi (paxtachilik, donchilik).

**-Jalaquduq tumani:** Qishloq xo'jaligi (sholichilik), yengil sanoat (tikuvchilik, to'qimachilik, pyabzalchilik), oziq-ovqat sanoati.

**-Oltinko'l tumani:** Mebel sanoati, yengil sanoat, oziq-ovqat sanoati.

**-Qo'rg'ontepa tumani:** Qishloq xo'jaligi, yengil sanoat, oziq-ovqat sanoati.

**-Ulug'nor tumani:** Qishloq xo'jaligi (paxtachilik, polizchilik, pillachilik).

**Xulosa va takliflar:** Ushbu maqolada shuni xulosa qilish mumkinki har bir viloyat xususan Andijon viloyatidagi o'sish mintaqalari sonini oshirish chora tadbirlarni amalda joriy qilish, viloyat iqtisodiyotini yildan yilga oshirish lozim ekanligi muhim masala. Birinchi navbatda qishloq xo'jaligiga ixtisoslashgan

tumanlar: Paxtaobod, Ulug'nor, Jalaquduq, Qo'rg'ontepa, Bo'ston singari hududlarda xomashyodan tayyor eksportga yaroqli mahsulotlar ishlab chiqaruvchi sanoat korxonalari qurilishi bilan Andijon viloyati iqtisodiyoti yanada rivojlanadi. Yuqorida qayd qilingan qishloq xo'jaligiga ixtisoslashgan tumanlarda ham sanoat tarmoqlari jumladan: yengil sanoat, oziq-ovqat sanoati kabi tarmoqlarni rivojlantirish bilan tumanlar orasidagi tafovut kamayishi mumkin.

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## **2-TIP QANDLI DABET BAVORLARDA. YURAK RITMINING BUZILISHI**

*Изоҳ. Qandli diabet (QD) bilan og'rigan bemorlarda boshqa bemorlarga qaraganda ritm buzilishlarini rivojlanish xavfi ko'proq. Qandli diabet bilan og'rigan bemorlarda aritmiya uchrashi ushbu toifadagi bemorlarda tromboembolik asoratlari va o'limning yuqori ko'rsatkichini keltirib chiqarishi alohida ahamiyatga ega. Qandli diabet va yurak ritmining buzilishi o'rtasidagi bog'liqlik hali ham keng muhokamalarga sabab bo'lmoqda. Fibrozning rivojlanishi va yurak mushaklarida xolesterin birikmalarining cho'kishi tufayli atriya miyokardning qayta tuzilishi, qon glyukoza darajasining o'zgarishi va elektrofiziologik hujayra buzilishlari yuzaga kelishi mumkin. Qandli diabet bilan og'rigan bemorlarda insult va emboliya xavfini arterial gipertenziya va yurak etishmovchiligi kabi boshqa xavf omillariga qaraganda ko'proq oshiradi. Antikoagulyantlar beriladi ular bemorlarda tromboembolik asoratlarning oldini olish uchun samarali dorilardir.*

*Aritmiya bilan og'rigan bemorlarni boshqarish bo'yicha umumiy qabul qilingan tavsiyalarga qaramay, og'iz orqali antikoagulyantlarni buyurish bilan bog'liq muammolar saqlanib qolmoqda. Statinlarning haqida etarlicha ishonchli ma'lumotlar olingan bemorlarning turli toifalarida aritmiyaning ayrim turlarida yaxshi samara bergan.*

*Kalit so'zlar: Qandli diabet, tromboembolik asoratlari, yurak ritmining buzilishi, fibrozning rivojlanishi.*

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## **TYPE 2 DIABETES IN INFANTS. DISORDER OF HEART RHYTHM**

*Abstract. Patients with diabetes mellitus (DM) have a higher risk of developing rhythm disorders than other patients. Arrhythmias in patients with diabetes are of particular importance, causing a high rate of thromboembolic complications and death in this category of patients. The relationship between diabetes and heart rhythm disorders is still widely discussed. Due to the development of fibrosis and the deposition of cholesterol compounds in the heart muscle, remodeling of the atrial myocardium, changes in blood glucose levels, and electrophysiological cell disorders are possible. Diabetes increases the risk*

*of stroke and embolism in patients with diabetes more than other risk factors such as arterial hypertension and heart failure. Anticoagulants are given, they are effective drugs to prevent thromboembolic complications in patients.*

*Despite generally accepted recommendations for the management of patients with arrhythmias, problems with prescribing oral anticoagulants remain. Statins have been shown to be effective in certain types of arrhythmias in different categories of patients for whom reliable data have been obtained.*

*Key words: diabetes, thromboembolic complications, heart rhythm disorder, development of fibrosis.*

## **Kirish**

Yurak aritmiyalarining tuzilishi va xarakterini hamda davolashning ayrim jihatlarini baholash maqsadida ADTI klinikasi endokrinologiya bo'limiga yotqizilgan qandli diabet bilan og'rigan bemorlarning kasallik tarixidan olingan ma'lumotlarni baholash o'tkazildi. Miqdoriy xususiyatlarning taqsimlanish xususiyatini baxolandi.

M - o'rtacha arifmetik, SD - standart og'ish.

Oddiy bo'lmagan taqsimot natijalarini tavsiflashda median ( Me ) va kvartallar aro diapazon ishlatilgan. Natijalar Me [25r; 75r].

Mustaqil namunalarni taqqoslashda  $<0,05$  p-qiymati statistik jihatdan ahamiyatli deb hisoblanadi.

## **Asosiy natijalar.**

Shahar viloyat klinik shifoxonasining endokrinologiya bo'limiga yotqizilgan qandli diabet bilan kasallangan (n=309) bemorlarning barcha tibbiy ma'lumotlarini tahlil qilgandan so'ng. Andijonda 2021 yilda 31 ta (10%) yurak ritmining buzilishi bilan kasallangan.

Bemorlarning o'rtacha yoshi 67 (61;73,75) yil; erkaklar 40%, ayollar 60%. Ayollarning o'rtacha yoshi 69 (63;74,75133) yosh, erkaklar 62,5 (58;68) yoshni tashkil etdi.

Bemorlar yashash joyiga qarab quyidagicha taqsimlanadi: Andijon sh.- 29%, viloyat shaharlari - 26%, qishloq joylari - 45%.

Umumiy namunada diabet tajribasi 12 (8;17) yilni tashkil etdi. Erkaklar (13 (8; 17,5) yosh) va ayollar (11 (8; 17) yosh) o'rtasida farq qilmadi. 0Ayollar orasida bemorlarning 67 foizi insulinga bog'liq diabetga chalingan, erkaklar orasida - bemorlarning 74 foizi. Qandli diabetning irsiy tarixi erkaklarning 48 foizida va ayollarning 40 foizida kuzatilgan.

Barcha (100%) bemorlarda birga keladigan arterial gipertenziya, bemorlarning 70% koronar arteriya kasalliklarining turli shakllari (bemorlarning 35% miyokard infarkti), 79% bemorlarda surunkali yurak etishmovchiligi namoyon bo'lgan.

Bemorlarning 54 foizida qalqonsimon bezning birga keladigan kasalliklari aniqlangan: eutiroidizm bilan bezning o'choqli lezyonlari - 82%, hipotiroidizm - 12%, gipertiroidizm - 6%.



Bemorlarning umumiy guruhida yurak ritmining turli xil buzilishlari orasida aritmiya ustunlik qilgan (53%), 23% da supraventrikulyar ekstrasistol (SVE), 12% da qorincha ekstrasistolasi (QE), SVE, va aritmiya kombinatsiyasi aniqlangan. bemorlarning 10% da qayd etilgan, Paroksismal supraventrikulyar taxikardiya bemorlarning 4% da qayd etilgan (1-rasm).

Aritmiya ayollarda (47%) va erkaklarda (52%) deyarli teng chastotada sodir bo'ldi. Qandli diabet bilan og'rigan bemorlarda AFning asosiy shakli doimiy (43%), doimiy shakli bemorlarning 41% da, paroksismal shakli esa 16% bemorlarda o'rnatildi. Doimiy shakli ustunlik qilgan (58%), ayollarda u kamroq tarqalgan (38%). Ayollarda doimiy aritmiya tez-tez uchraydi (47%). Statistik jihatdan ahamiyatli farqlar olinmadi. Qandli diabet va qalqonsimon bez kasalliklarining kombinatsiyasi bo'lgan bemorlarda etakchi yurak ritmi buzilishi AF (54%) edi. Qalqonsimon bez kasalligi bo'lmagan bemorlarda aritmiya faqat 44% hollarda sodir bo'lgan. Shu bilan birga, qalqonsimon bezning birgalikdagi shikastlanishi bo'lgan bemorlarda aritmiyaning ustunligi to'g'risida xulosa chiqarishga imkon beradigan sezilarli statistik farqlar aniqlanmagan. Qandli diabet bilan og'rigan bemorlarning ko'pchiligida yurak ritmining buzilishining davomiyligini aniqlash qiyin edi, chunki bemorlarning ko'pchiligi yurakdagi uzilishlarni qondagi glyukoza darajasining o'zgarishi bilan bog'lashdi va bu alomatlariga e'tibor bermadilar. Ba'zi bemorlar, ritm buzilishi mavjudligini bilishlariga qaramay, sub'ektiv ravishda buni qayd etmadilar. Qandli diabet bilan og'rigan bemorlarning 15 foizida aritmiya belgilari yo'qligi (1-sinf) qayd etilgan, "engil simptomlari" bo'lgan bemorlarning 35 foizi 2A va 2B sinflariga tegishli, III va IV sinflariga mos keladigan "og'ir va nogironlik belgilari " bemorlarning 50% da. 40 foizi amiodaronni olganligi aniqlandi. 4 % har biri verapamil va 2% etatsizin oldi. Biroq, ba'zi bemorlar yuqoridagi dorilarning kombinatsiyasini oldilar. Bizning tadqiqotimizda diabet va aritmiya bo'lgan barcha bemorlar (100%) yuqori kardioembolik xavf sifatida tasniflangan. Aritmiya va diabet bilan og'rigan bemorlarning atigi 46 foizi ushbu guruhdan dori-darmonlarni qabul qildi (2-rasm). Ulardan 62% dabigatran, 24% warfarin va 14% rivaroksaban oldi. Warfarin qabul qilgan bemorlarning atigi 22 foizi maqsadiga erishdi. Lipidlarni kamaytiradigan terapiyaning yurak aritmiyalarining birlamchi va ikkilamchi profilaktikasidagi ijobiy roli to'g'risidagi ishonchli ma'lumotlarni hisobga olgan holda, bemorlarimizdagi tegishli dori guruhlari uchun retseptlar ham baholandi. Statinlar (atorvastatin yoki rosuvastatin) buyurilganligi aniqlandi, ammo kasalxonaga yotqizishdan oldin ambulatoriya bosqichida bemorlarning atigi 64 foizi ushbu guruhning dori-darmonlarini qabul qilgan, kasalxonada 4 foiz bemorlarga buyurilgan. fibratlar (fenofibrat), kasalxonaga yotqizishdan oldin ma'lumotlar bemorlar tomonidan hech qanday dori ishlatilmagan.

Bemorlarning 100% da lipid spektri tekshirildi. Bemorlarning 52 foizida lipid metabolizmining maqsadli darajasiga erishilmaganligi qayd etilgan.

**Xulosa.** Ushbu tadqiqot shuni ko'rsatdiki, diabet bilan og'rigan bemorlar yurak ritmi buzilishining turli shakllaridan aziyat chekishadi.

Bizning tadqiqotimizda supraventrikulyar yurak ritmining buzilishi aritmiya eng yuqori chastotada sodir bo'ldi qon tomir patologiyasi (koronar arteriya kasalliklarining turli shakllari, yurak etishmovchiligi, arterial gipertenziya) bo'lgan bemorlarning namunasida ustunlikni hisobga olgan holda, AR ritm buzilishlari tarkibida etakchi o'rinni egalladi. Ko'pgina bemorlarda aritmiyalarni idrok etish chegarasi pasaygan, shuning uchun ritm buzilishi belgilariga, shu jumladan AR ga tolerantlik ko'p hollarda qoniqarli. Boshqa tomondan, asemptomatik sharoitlar yoki ritm buzilishining kichik sub'ektiv ko'rinishlari aritmiyaning jiddiy asoratlarni rivojlanishiga yordam beradi. Antiplatelet agentlarini buyurish, hatto ikkita preparatni bir vaqtda qo'llashda ham, AR va diabet bilan og'rigan bemorlarda tromboembolik asoratlardan etarli darajada himoya qilmaydi, shu bilan birga hayot uchun xavfli qon ketish xavfini oshiradi.

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## **LOGISTICS AND THE PROBLEM OF LOGISTICS SYSTEMS**

*Abstract. The article gives the basis of the logistics system and the definition of logistics, as well as the class of problems to be solved. An analysis of the logistics problems being solved was carried out. The following is devoted to transport and production logistics, the class of the problem is given as a minimum problem*

*Key words: logistics, logistics systems, transport logistics, production logistics, warehouse, material, information, flow of the PPP algorithm.*

**Introduction.** Logistics is a set of tasks related to the management of materials and related management of materials and information flows with them. Before defining logistics, let's visualize the process of managing material flow.

As a physical example, let's take a stream of water flowing from a tap. You can control this flow using various actions - closing or opening the tap, adding hot or cold water. You can soak the shower mixer tap, or you can use a flexible hose to direct the flow of water in any direction [1].

As a result of the above actions, the intensity of the flow and its direction change; the qualitative characteristic changes - temperature, when the jet is sprayed through the shower net, the structure changes despite the diverse material flows circulating in economic systems, their control is, in principle, similar to the control of a water jet:

“opened the tap” more - increased supplies; “closed the tap” - stopped supply. You can change the recipient - the flow will go along a different path, you can change the qualitative composition of the flow, change the range of goods supplied, etc.

As a science, logistics poses and solves the following problems [2].

- 1) Demand forecast and inventory planning;
- 2) Determination of the required production and transport capacity;
- 3) Development of scientific management of finished products based on optimal management of material flows;
- 4) Development of scientific foundations for managing transshipment processes and transport and warehouse operations at production points and at consumers;
- 5) Construction of various variants of mathematical models of the functioning of logical systems;
- 6) Development of methods for joint planning, sales and shipment of finished products and other tasks.

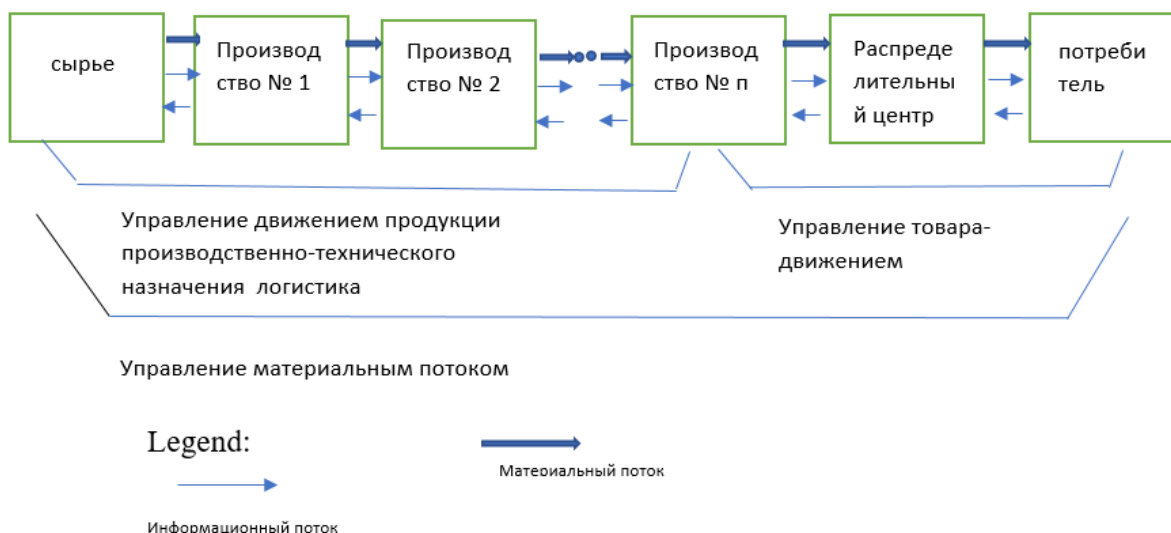
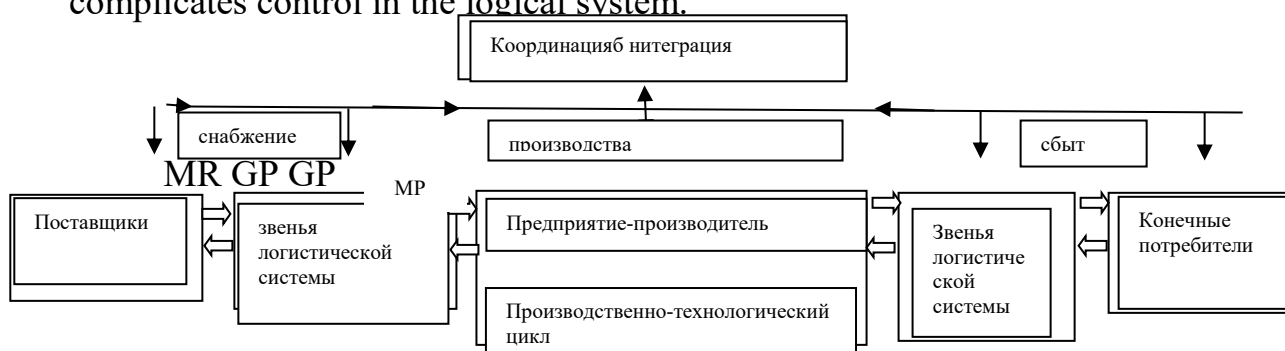


Рис. 1

### Subject to placement of experience options:

The main goal of the logistics system is to deliver goods in the right quantity and assortment and to the greatest possible extent ready for production or personal consumption to the place required by consumers (the right product at the right time and in the right place) at a given level of logistics costs. The elements of the links are enterprises - suppliers of material resources, manufacturing enterprises and their divisions, sales, intermediary organizations, transport and forwarding enterprises, exchanges, banks, information and computer service enterprises. Most links of the logical system are a synthesis of subjects and objects of control with their own criteria for optimizing functioning, which significantly complicates control in the logical system.



BМII	BМII	BМII
- procurement -Transportation -Inventory Management -Storage - Cargo handling -collection of returnable waste, containers	management production procedures - intra-factory transportation - Inventory Management - maintaining GP production quality standards - protective packaging - cargo handling - warehousing - pricing	management of order procedures - transportation Protective packaging - cargo handling - warehousing - Inventory Management - provision of spare parts and service - support for the return of GP collection of returnable waste and containers - support of customer service standards - pricing
Logistics operations (functions)		
Information and computer support		

### Pic.2 Micro-logistics system

⇒ --- material flows; - → information and financial flows; MR – material resources; GP – finished products; VMP – returnable material flows

We accept the following interpretation

$i$  is the number of the point of origin of the material flow.

$j$  - consumer destination number

$A_j$  – volume of material sent to  $i$  – point.

$B_j$  - required volume of material  $j$  – consumer

$C_{ij}$  –  $i$  - consumption costs per unit of cargo from the sender's point to the consumer's point.

$X_{ij}$  is the volume of necessary material transferred from point  $i$  to point  $j$  of the consumer.

It is necessary to determine the value of  $X_{ij}$  so this function  $F$  should be minimal.

$F = \sum_{i=1}^{\Pi} \sum_{j=1}^m C_{ij} X_{ij} \rightarrow \min$  and fulfillment of the following conditions.

- $\sum_{j=1}^m X_{ij} = A_i (i = 1 \div \eta)$

The transported volume of material must correspond to the volume of the produced material and product.

- $\sum_{i=1}^{\Pi} X_{ij} = B_j (j = 1 \div m)$

The transported material, or cheese, must satisfy the consumer's needs.

$$3. X_{ij} \geq 0 (i = \overline{1, n}); (j = \overline{1, m})$$

These are conditions of non-negativity. It can also be identified as follows.

Find values  $X_{ij}$  so that the resulting function is

$$F = C_{ij}X_{ij} + C_{12}X_{12} + \dots + C_{mn}X_{mn} \rightarrow \min$$

and must fulfill the following conditions

$$1) X_{ij} = A_i$$

$$2) X_{ij} = B_j$$

$$3) X_{ij} \geq 0 (i = \overline{1, n}); (j = \overline{1, m})$$

The right sides of the equation are equal, so the following are true:

$$\sum_{i=1}^n A_i = \sum_{j=1}^m B_j$$

The solution to this model of transporting material flow in the logistics system chain is solved by different methods.

Accordingly, there is a solution algorithm and a computational package of application programs.

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## **DEVELOPMENT OF PROFESSIONAL PERSONAL QUALITIES OF FUTURE TEACHERS - AS A PEDAGOGICAL PROBLEM**

*Abstract. Today, developing preschool education institutions require special conditions for development and implementation of innovations, new modern technologies and methods of working with children. In such a situation, professional competence is especially important, the basis of which is the personal and professional development of pedagogues.*

*Key words: personal, professional, creative, educator, value, information, foreign, process, thinking, methodical, pedagogical, competence, foreign countries, social, personal qualities.*

The more quality our teachers are and the more they love their profession and educate preschool teachers, the brighter the future of our youth will be. No matter what profession a person is engaged in, if he approaches his work and training diligently and lovingly, he will perfectly master its secrets, at the same time, he will realize himself and find perfection in this field.

Competency assessment should not be understood as a single level of competence, but rather a complete set of competencies that are manifested in various process situations during the long time spent by a person to achieve his goals of personal importance. On the initiative of the President of the Republic of Uzbekistan Sh.M. Mirziyoyev In our republic, the monthly salaries of pedagogues are increasing year by year, and their living conditions are improving. Scientific-methodological centers for improving the qualifications of pedagogues are being expanded, the demand for their political training is increasing, conditions are being created for them to undergo retraining every 4-5 years.

Therefore, a special educator is considered to be a well-educated and high-quality person in terms of pedagogical, psychological and specialty. In this case, the specific situation faced by a person has a direct impact on his development, the formation of values and the acquisition of new competencies. The existence of competence is determined by the result of human labor, tested in practice. Among these types of education, there are opportunities for professional education, higher education, training of personnel and improvement of their qualifications for our personnel. In particular, according to the law, secondary special professional education is provided in technical schools on the basis of general secondary, secondary special, primary professional and secondary professional education based on the state order or payment contract based on the complexity of professions and specialties. A system of education in the form of

full-time, evening and part-time education with a duration of at least two years has been established. It includes state management bodies in the field of education, as well as organizations under their jurisdiction.

The economic, political, social and cultural stability of any country depends on the level of moral, moral, intellectual and professional quality of its citizens. Therefore, a person who has not fully formed these aspects will have a shallow sense of pride in his homeland, nationality, and profession. An educator performs an important, proud and responsible task of preparing the young generation to become worthy children of our nation.

The political maturity of an educator helps to realize his responsibility to the people and society for the quality of raising children, to approach educational tasks creatively, to constantly improve his skills, and to grow his friendships at work. The economic, political, social and cultural stability of any country depends on the level of moral, moral, intellectual and professional quality of its citizens. Therefore, a person who has not fully formed these aspects will have a shallow sense of pride in his homeland, nationality, and profession.

An educator performs an important, proud and responsible task of preparing the young generation to become worthy children of our nation. The political maturity of an educator helps to realize his responsibility to the people and society for the quality of raising children, to approach educational tasks creatively, to constantly improve his skills, and to grow his friendships at work. Today's educator should have in-depth knowledge of his specialty and work tirelessly on himself. Our parents trust and entrust their children to educators. Therefore, educators should know the basics of preschool education pedagogy and psychology, physiology, and organize activities taking into account the age and psychological characteristics of children in the educational process, and carefully form the knowledge base. necessary.

In today's process of globalization, the development of modern technologies depends primarily on the intellectual potential of society, including the development of the education sector. The issues of content and quality of education are considered as the main direction in the society. In the developed and developing countries of the world, attention is being paid to the need for technologyization of education.

Ways to develop education and increase its effectiveness are being sought, and the introduction of pedagogical technologies is at the center of reforms in the field of education. Taking into account the fundamental changes taking place in the pre-school education system, pre-school education organizations should further develop their professional potential, taking into account the level of professional competence of pedagogues and educators, i.e., the existence of sufficient opportunities to work on themselves. Professional competence of the pedagogue is formed as a result of gradually increasing pedagogical experience gained in practice together with theoretical knowledge. The pace of its development is based on the results of the pedagogue's work on himself and

constant research. First of all, the psychological-pedagogical competence of the pedagogue appears through his professional and personal qualities.

However, mastering the skills of professional and creative activity is not only the integration of practical skills and qualifications, the development of methods and tools for the effective organization of activities as a specialist, but also awareness of the methodology of professional creativity, the development of creative thinking and creative it requires sufficient mastery of personal qualities of character. The formation of a creative person can be defined as the development of a person in terms of the creation of creative activities and creative products performed in a mutually compatible way. The pace and scope of this process depends on biological and social factors, the activity and creative qualities of a person, as well as existing conditions, important vital and professional events.

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## **EFFECT OF DEEP LOOSENING OF THE SOIL OF PRODUCTIVE VINEYARDS ON ROOT REGENERATION AND PRODUCTIVITY**

*Abstract. In deep loosening of the soil, higher order branched roots, new roots increase in total length, the absorption system of the rhizome is strengthened and it is closer to the trunk. As a result of the rejuvenation of the root system and the strengthening of the active part, as well as the improvement of the physical properties of soil and water, the vine develops well and its productivity increases.*

*Key word: Deep plowing is adopted as the main method of soil preparation before planting for the establishment of vineyards. This method helps the development, growth and productivity of young vines.*

**Introduction.** We conducted our experiments in the Andijan branch of Akademik Makhmud Mirzaev horticultural viticultural experimental station and in the vineyards of the Koziboy ota seedling farm in Izboskan district. According to the researches, vine roots have a great regeneration ability in the conditions of Uzbekistan.

Observations show that as the diameter of the roots increases, their regeneration ability improves. Roots with a diameter of 30-44 mm have a good regeneration ability. The indicators of regeneration ability indicate the need to periodically cut old thick roots to rejuvenate the root system and increase their absorption surface. It can be seen from the given data that when the roots close to the trunk of the vine are cut, their regeneration ability improves by 17.3% on average. In addition, in this case, thicker roots are cut, which have a better ability to regenerate than thin roots. In deep loosening of the soil, branched roots of the higher order make up 70-81.4% of the total length of newly formed roots, that is, the absorption system of the rhizome is strengthened and closer to the trunk.

**Table 1****In deep softening, the process of regeneration of roots cut at different distances from the vine trunk takes place differently.**

The distance behind the trunk of the vine with deeply softened ground, cm	Cut roots diameter, mm		New roots total length, m	%
50	5		17,3	100
	11		27,8	
	17		33,6	
125	5		13,7	81.4
	11		22,3	
	17		28,2	

For example, in deep softening, the total length of branches increases by 3.9-14.4% in the first year, by 11.6-32.4% in the second year, and the leaf surface, respectively. It expands by 5.5-11.4 and 10.6-21.1%. Productivity data are shown in Table 3.

**Table 2****Vine productivity in deep loosening between rows. (nimrang variety)**

The distance between the trunk of the vine and the deep softening line, cm	Average weight of one head of grapes, g	Harvest	
		s/ga	Control relatively %

**Table 3****In the first year after deep softening**

50	505,6	139,7	107,5
125	499,3	131,4	101,5
25-30 cm of soil			
Control in depth work	491,9	130,1	100

**Table 4****In the second year after deep softening**

50	507,8	131,9	111,4
125	503,3,	134,2	103,3
25-30 cm of soil			
Control operation in depth	491,9	130,1	100

As it can be seen from the given data, when the soil is deeply softened near the vine bushes (0.5 m), it has a positive effect on productivity than when it is softened in the middle of the row. In the first year, productivity increases by 7.5% compared to the control, and in the second year by 22.4%.



**Picture 1. Deep plowed and its appearance in the summer months.**



Productivity increases due to an increase in the number of grape heads, as well as an increase in the average weight of a grape head. Due to deep softening, the productivity of Bayan Shirey variety increased by 17.2% in the first year and by 39% in the second year. Determining the best periods for deep loosening is one of the important issues. Deep loosening is associated with root damage, so it is necessary to study the ability of damaged roots to regenerate at different phases of the vegetative period (Table 4).

Digging and washing the roots showed that the roots regenerated better when cut in late September. Good regeneration of cut roots after harvest is explained by the fact that new roots start to grow in autumn under conditions of favorable soil moisture and temperature.

Damaged roots do not grow well in April and August. The data show that productivity is directly related to deep thinning periods at which roots are cut. When the soil is deeply softened in November and March, a good development of



the above-ground part of the vine is observed. Deep loosening carried out during budding and fruit ripening has a negative effect on vine productivity. In deep loosening, the growth of active roots increases and their number increases in all layers of the soil. They are the most in the layer of 25-50 cm, which is 4 times more than in the case of normal tillage. As a result, the number of active roots in the 0-100 cm layer increases 3 times compared to the previous treatment.

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## **GENERAL CONCEPTS ABOUT THE DEVELOPMENT OF CYCLING**

*Annotation: in this article, the history of the origin and development of cycling is considered. The key or oldest history of cycling is explained according to what era, where and under what circumstances they played matches, what factors are important to the development and proper origin of the sport.*

*Keywords: cycling, Origin, Development, History, Games, Olympic, change of development, sports organizations.*

Cycling is understood as reaching from one destination to the next, which is a technical vehicle that is drilled from the surface of the Earth using muscle power. Cycling has been the main physical qualities: speed, strength, endurance and agility provide opportunities for development and improvement. It is impossible to achieve success in any type of cycling without developing the above-mentioned quality. A special area with a material and technical background in cycling sports is aimed at designing, building, repairing and technical inspection of the bike, which increases the technical knowledge and skills of the cyclist.

The skill of a cyclist depends on several factors, the main of which are physical, technical and tactical training. These factors will be closely related to each other from the very first steps of learning the technique of cycling beginners. The training of a cyclist is organized on the basis of didactic laws and rules developed in pedagogy-awareness, exhibitionism, activity, regularity, understanding and consistency. Applying this rule of law, which expresses the main requirement for the pedagogical process, the coach will have the opportunity to properly organize the pedagogical process, arm himself with special knowledge and skills, whether it is a student.

Cycling, also known as cycling, is a sport that includes cycling and walking. The history of the sport dates back to the previous centuries. Because of its variability and simplicity, bicycles are a sport with a large number of participants in the Olympics.

Today, cycling is common in the world and is among the favorite sports. Cycling supporters will have the opportunity to test yourself on mountain and quad bikes in particular, to conduct marches and as well as to negotiate.

The history of the origin and development of cycling continues widely and further development of the sport is expected. It is a game that is very interesting and mandatory for those who love sports with sports, variations and sweets.

Cycling, cycling, is a sport that involves buying and using a bicycle, requiring the proper use of external physical and coordination capabilities. The history of cycling has ancient and modernist manifestations.

Today, high-level cycling competitions are held everywhere in the world through large events and annual organized tours. Over the years of the sport's unique progress and tremendous admiration, track and field athletes have been challenging each other to win at the highest level.

Several pieces of literature are devoted to analyzing the history and development of cycling. For example, a book called the development of bicycle racing: a socio-cultural analysis, provides information about the history of cycling, the Olympics and the games with young people about important events, athletes and Team conditions.

Others have published literature related to cycling support, athlete advocacy, and the development of the sport. A book, "The Science of Cycling", details the physical and material foundations of cycling, walking strategies, and tactics. In this case, the development of cycling and the necessary scientific knowledge of athletes to achieve a high level of efficiency are regulated.

The history and development of cycling, and the social, economic and political aspects of the sport are also seen extensively. The public popularity of cycling, the mediatic spread, and the sports sponsorship problem have also been explored in specific literature.

These are examples from only a handful of literature, and the number of literature analyzing the history and development of cycling is large and extensive. It helps to explore literature, high-level sports discussions, and athletes, community environments, and social flows. Literature analysis of cycling, which helps to achieve academic and scientific discussions of the sport.

Figure skating on a bike is a very emotional sport according to its description. Elements (movements) of Figure Skating are important in training an athlete and improving his technical skills. They develop an athlete's muscular sense, as well as a quality that is important to a cyclist, such as determining direction in places.

Academic and scientific discussions of cycling: the history and development of Cycling, allows achieving academic and scientific discussions of the sport. Literature analysis helps to study the history, development, physical and material foundations of cycling, walking strategies, tactics and social, economic and political aspects of sports.

The problem of public popularity and sponsorship of cycling: the public popularity of cycling, the mediatic prevalence and the problem of sponsorship are also factors that have influenced the origin and development of the sport. The mass use of cycling and the significant contribution of sponsors to the sport are important to the development of the sport.

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## **REGIONAL CHARACTERISTICS OF POPULATION EMPLOYMENT IN SERVICE NETWORKS OF KASHKADARYA REGION**

*Annotation. This article describes service networks of Kashkadarya region, opportunities of service networks, population employment in service networks, regional characteristics of service facilities and problems of increasing population employment by increasing them.*

*Key words: service networks, service facility, guest houses, tourist and recreational potential, tourist organization, population, infrastructure, social service, communication, transport, medical service.*

In our republic, an active socio-economic policy is being carried out to ensure the employment of the able-bodied population in the conditions of the market economy, to eliminate the problem of unemployment, and to regulate the labor market. The reason is that increasing the efficiency of the use of labor potential, developing the national economy, raising the standard of living of the population, and joining the ranks of highly developed countries is one of the most important tasks facing every country. From this point of view, studying the demographic situation in the country and its various regions is an urgent issue. In Kashkadarya region, one of such regions, a number of works are being carried out to increase the employment of the population in the service sectors, and to make effective use of labor resources. But despite the reforms being carried out in this regard, it is noticeable that there are some problems. In our opinion, based on the experience of the developed countries of the world, in order to gradually eliminate the existing problems, it is necessary to study in-depth such issues as the analysis of demographic factors, the territorial characteristics of the population, its demographic development at the scale of districts, and the rational use of natural resources.

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 structure and amount of the population living in it. For example, in industrially underdeveloped countries, the majority of the population is rural, on the contrary, in industrially developed countries, the number of urban residents is large. Due to the low level of industrial development in the Kashkadarya region until the 70s of the last century, the majority of its population were rural people. After the 1970s, industries developed due to the exploitation of the Karshi desert and the use of underground reserves. This seriously affected the living conditions and structure of the population [1].

The formation and development of villages depends on the natural and economic conditions of the region, the location of agriculture, transport and national economic sectors. Therefore, in Kashkadarya region, there are sufficient natural, economic and geographical opportunities for the solution of the rural problem. In particular, the climatic conditions of the region are favorable for the development of irrigated and dry farming, vegetable farming. This influenced the fact that the majority of the population was engaged in agriculture in historical times [2].

Villages are, first of all, the place where people live, that is, the social environment. Therefore, it is important to provide services to the population and improve the service sector. In turn, the development of these areas, the opening of wide opportunities for small entrepreneurship and business will help to further increase the employment of the population by creating new jobs [3].

26.3% of the region's population lived in cities in 1990, 25.4% in 2000, and by 2022, this figure was 42.8%.

It should be noted that the population's natural mobility indicators are different in urban and rural areas, the birth rate in rural areas is somewhat higher than in urban areas. There are several objective and subjective reasons for this. In particular, the low level of employment of women in social life in rural areas, the existence of the need for labor force in agriculture, where manual labor is highly demanded, and national traditions have led to a high birth rate over time. Among the urban population, the activity of women in social life, housing problems depending on economic and social factors and other reasons lead to a slightly lower birth rate.

Features such as high population growth rate and large number of children are characteristic features of our research region. According to the data of 2022, the annual growth rate of the population of the republic is 1.9%, including the urban population by 1.8%, while the rural population grew by an average of 2.2% per year. In Kashkadarya region, this indicator is equal to 1.7%. About 50% of the population of the republic lives in villages. In Kashkadarya region, this indicator was 57% in 2022. If we consider the composition of families in the region, the average number of people in the republic is 5.4 people, in the Kashkadarya region it is 5.8 people. In villages, this figure is 7 or more people. The high rate of natural growth of the rural population and the low level of migration create a difficult socio-economic situation in the village.

Due to the improvement of people's material and household life and health care, the death rate has decreased sharply, and the rate of natural population growth has accelerated. The low rate of annual population growth in Kashkadarya compared to the republic is due to the low development of production forces in the region and the low population movement from abroad.

According to the data of 2022, 92.9% of the population of the region are Uzbeks; Tajiks 4.05%, Turkmen 1.09%, Russians 0.61%, Tatars 0.24%,



Ukrainians 0.07%, representatives of other nationalities live mainly in cities and towns.

The correct and rational use of labor resources allows to increase the efficiency of social production. Correct and rational use of labor resources is the most important component of social production. Therefore, the number, level of growth, qualification of labor resources has a great influence on the specialization and territorial organization of production on the scale of the whole republic and especially within the regions.

Labor resources include working-age men aged 16 to 59, women aged 16 to 54, pensioners employed in socially useful work, and teenagers aged 14 to 16 working under privileged conditions.

With the growth of the population in the region, its working age is also increasing. In 1970-1990, the number of working-age population increased 2.4 times. In 1991, there were 825,200 people of this age. In 2022, 26,400 people will be part of labor resources in the province, and the total number of labor resources will be 1808,700 people. [80].

Another peculiarity of the distribution of the population employed in social production in the region in economic sectors is the high weight of the population employed in agriculture. In 1991, the population employed in agriculture made up 28.2% of the economically active population [79].

The employment of a large part of the economically active population in agriculture shows that until now labor productivity in agriculture is not very high and manual labor is used a lot. The role of science and technology development is increasing in agriculture, as in other sectors of the economy. As a result, it was possible to attract part of the population employed in agriculture to other sectors of the economy. Due to this, it will be necessary to increase vocational-technical and secondary specialized educational institutions and universities, which will prepare qualified workers from rural youth to industrial and service sectors: engineers and technicians.

Between 1989 and 2022, the population of the region increased rapidly: the average annual increase in Mubarak district was 5.7%, in Koson 4.75%, and in Kitab and Nishon districts 4.1%.

Relatively lower demographic growth was observed in Dehkanabad (2.40%), Karshi (2.50%) and Kasbi (2.50%) districts. At this point, it should be recognized that according to these indicators, Mubarak District occupies the first place in our republic. Such a rapid growth of the district's population is not only due to natural reproduction, but also to population migration (as a result of the development of natural resources, many people moved here). Taking into account that industrial enterprises will be built mainly in rural areas in our country in the future, the development of the urbanization process will be observed in the next ten years. The increase in the population of this village will also 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 become towns and cities [4].

In terms of population, Chirakchi District is leading in the region (432,000 people in 2022). 12.67% of the population of the region live in this district. In 2022, the population of Kasbi District was 309,600. About 1/4 of the population of the region lives in Chirakchi and Kasbi districts. Among rural districts, Koson district (297,500 people in 2022) ranks third after the districts mentioned above. The average population density in the district is 158.2 people per 1 km<sup>2</sup>, and in the region according to this indicator, Kasbi (309.6 people), Karshi (281.4 people), Shahrisabz (221.5 people) and It ranks fifth after Yakkabog Districts. According to the population, the second place after Koson district is occupied by Kitab district with a population of 297,500 people (2022). About 20% of the district's population lives in the administrative center of the district - Kitab city.. 289,500 and 283,700 people live in Qamashi and Yakkabogh districts, respectively. However, the average population density (256.6 people per 1 km<sup>2</sup>) in Yakkabog district (1.43 thousand km<sup>2</sup>), which is twice smaller than Qamashi district (2.9 thousand km<sup>2</sup>) in terms of area, is twice as high. According to the data of 2022, Kashkadarya region ranks 10th in the republic in terms of population density.

Despite the increase of labor resources in districts with high natural reproduction, the indicator of their use is relatively low. In 2010, labor resources amounted to 1493.4 thousand, in 2016 to 1758.1 thousand, in 2020 to 1809.6 thousand, and by 2022 to 1808.7 thousand.

The high employment rate of the population also depends on the location of the districts. According to the location of the population of the studied area, it can be divided into mountain and plain regions. The main part of the population is located in districts specializing in agriculture, around the city of Karshi, around the Kashkadarya river and its tributaries. 43.8% of the rural population and 66.7% of the total population live in Dehkanabad, Kitab, Shahrisabz, Chirakchi, Yakkabog, Qamashi, Guzor, Nishan and Mirishkor districts in the mountain and sub-mountain regions.

Paying attention to the increase in the number of labor resources in the region, in 2010 it was 1,493,400 people, and by 2022, this indicator will reach 1,808,700 people. In other words, it can be seen that the number of labor resources increased by 21.1% during 2010-2022 (Table 1).

Table 1

**Labor resources in Kashkadarya region (per thousand people).**

Indicators	Years							Growth in 2010-2022, %
	2010	2012	2014	2016	2018	2020	2022	
Permanent population	2616,1	2777,8	2895,3	3025,6	3148,4	3280,4	3335,4	27,4
The number of labor resources	1493,4	1612,7	1692,5	1758,1	1806,8	1809,6	1808,7	21,1
Number of working age population	1030,9	1094,9	1172,5	1247,0	1353,3	1317,9	1339,5	29,9

Source; It was compiled by the author based on the data of the Kashkadarya Regional Statistics Department.

When we analyze the status of economically active and inactive labor resources in the Kashkadarya region, we can see that the working-age population in the region is increasing year by year, and most of them live in villages. We can see that the economically active population will increase from 1,039,000 in 2010 to 1,339,500 by 2022. Most of them are located in rural areas, and a large part of the economically inactive population lives in these settlements. In this place, the economically inactive population is 471,400 people as of 2022, which has decreased by 20,500 people compared to last year (491,900 people in 2020), the number of unemployed people in urban areas is 177,900 people, and in rural areas it is 293,500 people.. We can see that the number of unemployed people will decrease compared to last year due to the reforms being carried out in the province, the jobs being created, and the activity of the centers helping to find a job (table 2).

Table 2

**Distribution of labor resources in Kashkadarya region according to economic activity and inactivity (thousand people).**

№	Indicators	2010	2012	2014	2016	2018	2020	2022
1.	Economically active population	1030,9	1094,9	1172,5	1247,0	1353,3	1317,9	1339,5
2.1	City	533,4	528,7	568,1	596,9	603,6	660,6	614,5
2.1	Village	497,5	566,2	604,4	650,1	749,7	657,3	725,0
2.	Economically inactive population	462,5	517,8	520,0	511,1	453,5	491,9	471,4
3.1	City	166,5	214,0	201,8	196,9	210,5	171,3	177,9
3.2	Village	296,0	303,8	318,2	314,2	243,0	320,6	293,5

Source: Compiled by the author based on the data of the Kashkadarya Regional Statistics Department.

As of January 1, 2022, 36.0% (1,227,000) of the permanent population of Kashkadarya region are below the working age, 52.2% (1,779,000) are of working age, and 11.8% (402,000) corresponds to the share of people older than working age.

One of the most important indicators of the level of socio-economic development of any country is the education system. This field is especially important in the current conditions, when intellectual factors are strong. The conduct of the educational process in preschools and schools, their territorial organization is formed taking into account the national composition of the local population. At the same time, the educational process in schools is moving to a more one-shift system. Much attention is paid to the education system in Kashkadarya region, as in all regions of our republic. Today, as of the 2022-2023 academic year, there are 557 preschool educational organizations, 1220 general education schools, 1 Presidential creative school, 35 vocational schools, 16 vocational colleges, 12 there are technical schools, 7 academic lyceums and 9 higher education institutions, where thousands of students are educated [9].

More than 841,000 students study in these educational institutions. They are taught by more than 71,000 teachers in the main state. In the academic year 2022-2023, the total number of educational organizations of Kashkadarya region is 1857, and there are 841702 pupils and students studying in them, and 71068 professors and teachers are working in educational institutions.. We can see that 3.9% of the population of working age is employed in educational organizations.

In particular, the largest concentration of educational institutions is in large cities and district centers of the region. Higher education institutions are located in the cities of Karshi and Shahrisabz, the largest cities of the region, where 57,400 students will study in the 2022/2023 academic year.

Catering is the basis of gastrotourism and is a popular type among tourists. Tourists are usually interested in getting to know the national cuisine of the country they are in. Uzbek cuisine is famous for the most diverse and colorful dishes in the world, including pilaf, shashlik, tandoori kebab, spicy lagman, somsa and other dishes. Gastronomic tourism, famous for more meat dishes, has always attracted tourists with its unique national dishes, mainly in Chirakchi, Dehkhanaabad, Guzor and Koson districts of the region with well-developed animal husbandry [7].

It is safe to say that the Kashkadarya region is known throughout the country and the world for its national dishes. We all know that the people of the region eat a lot of meat. We can see that there are enough conditions for the development of food and gastro-tourism, as the majority of visitors from all regions of our republic come to the region to taste Guzor tandir-kebab, Chirakchi yakhni and jiz.

Today, more than 400 catering establishments are operating in Kashkadarya region, and they are unevenly distributed across regions.

Chirakchi district, Karshi city and Koson district are the leaders in terms of the number of catering establishments, on the contrary, Karshi, Mirishkor and Mubarak districts have a much lower indicator. Also, they have a very low level of service. These, in turn, have a negative impact on the flow of tourists.

Education system and health care are the two main pillars of any society. It is these areas, together with the indicators of the gross domestic product, that are the main indicators of the level of socio-economic development of countries. In fact, the state of society is characterized by the level of education of the population, employment, its general mortality rates, child and maternal mortality, and life expectancy.

The role of small business and private entrepreneurship in the development of this system is significant. In particular, dentistry, pharmacies, and private clinics are gaining importance in this regard. Also, the healthcare system requires the development of the pharmaceutical industry. Therefore, it will be necessary to prepare high-quality medicines and use the available opportunities. For example, there are many medicinal plants in Surkhandarya, Namangan, Tashkent and Samarkand regions. About 36-38% of such plants are located in Surkhandarya region alone. The use of local medicinal plants, at the same time, the development of traditional folk medicine is also important in health care.

The analysis of the above data shows that the total number of medical workers operating in the region is 45,000, of which 38,400 are secondary medical workers and 6,600 medical workers, 75.3 people compared to the total population. there is one medical worker per population. In 2010, the total number of medical workers was 32,900, and one medical worker was 79 people, including: 27,800 medical workers (94 ), the number of medical staff was 5.1 thousand people (513 people), this indicator increased to a total of 35.4 thousand people (83.6 people) in the region in 2015, secondary medical staff number of 30.2 people (98 people), the number of medical staff is 5.2 thousand people (569 people). If we look at the section of cities and districts, at the beginning of 2022, the lowest number of medical workers per capita was contributed by Mirishkor, Mubarak, Dehkanabad and Nishon districts (the number of medical workers in Mirishkor district is 1, There are 1,000 people, the number of medical workers is 1,000, and there is 1 medical worker for every 121.5 inhabitants. The number of medical workers is 100 for every 1,215 inhabitants. 1 doctor of the highest category was correct), the highest rate was recorded in the city of Karshi, Kitab, Chirakchi and Karshi districts, the number of secondary medical personnel is 8000, of which 1 secondary medical personnel per 35 inhabitants and It was determined that there is 1 medical worker per 132 inhabitants (2.1 thousand). Providing medical services in mountainous and sub-mountainous districts of the province becomes a problem especially in the winter season, which in turn has a negative impact on the development of medical services for the population. We can see that the medical service networks are very poorly developed in districts



located in the mountainous region far from the district center (Chirakchi, Dehkhanaabad, Qamashi and Yakkabog districts).

Analyzing the above information, we can say that it is appropriate to pay special attention to the training process of medical workers. Because in order to establish medical control in places, doctors must work tirelessly on their knowledge and skills. In Kashkadarya region, there are regional differences in the activity of medical service networks. Taking into account such regional differences has gained great scientific and practical importance in the reform of the health care system in the republic, social protection of the population, creation of socio-economic development programs of various regions, and implementation of the regional policy of our state [4].

The impact of tourism on the economy of the region is also increasing in Kashkadarya region. Of course, the role of tourism companies, organizations, and travel agents is invaluable. It should be noted that in Kashkadarya region special attention is paid to the field of tourism, the quality of services provided to local and foreign tourists visiting the region, and small shortcomings in the organization of hotel services are visible.

The number of hotels and similar accommodations in the region was 23 in 2010, 44 in 2016, and 43 by 2022. Compared to 2020, the number of hotels and similar places decreased by 2 in 2022 [5].

In 2010, 5 in 2016, and 7 in 2022, the region is in the last place in the republic. If we analyze the numbers, compared to 2010, in 2022, the number of organizations engaged in tourism activities has not changed for almost 10 years [Appendix 5]. The above information is certainly not a good indicator for the Kashkadarya region, which has a high demographic potential, the results of the analysis show that it is necessary to create sufficient conditions for the development of tourist marketing and the improvement of the activities of tourist organizations in each district, and through this, it is possible to increase the employment of the population. we came to the conclusion that

In 2011, the number of theaters in the region was 4, and in 2021, the total number of theaters was 5. We can see that the number of theaters in the region has increased by 1 in 10 years. It is interesting that in the region there are 4 theaters in the city of Karshi and 1 in the city of Shahrisabz, and there are no theaters in the rest of the districts. From the figures given above, we can conclude that it is not difficult to estimate the level of population coverage of the regional theater. It is certain that similar numbers will appear in the province's theaters as well. These sad indicators indicate that many young people of the region are growing up completely deprived of this type of art.

Information-resource and information-library centers are one of the branches of the spiritual and educational sphere operating in the province. In 2021, the total number of information-resource and information-library centers in the region was 23. This indicator is not a good indicator for the region, although the head of our country is conducting a lot of practical work to increase the



number of information-resource and information-library centers in every region of the republic, and to increase the interest of young people in books.

Museums are one of the service industries that provide spiritual nourishment to the population: according to the statistics department of Kashkadarya region, in 2011, 2 museums were operating in the region, and in 2019, the number of museums reached 3, but in 2022 The number of museums increased by 10. 1 of the 10 museums operating in the region is located in Karshi, and 9 are located in Shahrisabz.

In the process of analyzing the territorial characteristics of the service networks of Kashkadarya region, territorial problems were highlighted due to insufficient development of service facilities in some districts. As you move away from the district centers, the type and quality of services decreases. To provide the population with high-quality services through the organization of first-class service facilities for the population, tram transport, medical, educational, trade, household, communication and other types of services in the regions located far from the district centers, but also to provide the population with quality services in the service networks it will be possible to increase employment.

Through the development of small business and private entrepreneurship, each person will engage in business activities that he is interested in, first of all, he will ensure his own employment, and it will also create new jobs and reduce the level of unemployment in the region.

In conclusion, we can say that in order to show the role of service networks in meeting the needs of the population, it is necessary to analyze them quantitatively and qualitatively.

In the process of analyzing the employment of the population in the service industries of the Kashkadarya region, the following was found: if the population in the developed countries of the world chooses a job based on their interests, there is an abundance of labor resources, the number of large enterprises and organizations, and the lack of jobs in the studied area. because of this, we have seen that the population is self-employed and the majority of the employed population is in the service sector, and the highest salary (monthly) is also in the service sector was determined.

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## **SELECTION OF ROOTS RESISTANT TO DIFFERENT DISEASES FOR CHERRY FROM PINE FRUITS**

*Abstract. Cherries are one of the most famous and loved grain fruits in the world. They love it for its unique taste and sweetness. Also, cherry has many useful properties, so it is not for nothing that scientists have included it in the ranks of excellent products. It has been found that cherries contain anthocyanins, which can be used to treat cancer. That is, a growing cancer cell needs regular nutrition. And the anthocyanins in cherries block the path of the nutrient channels in the body and cause cancer cells to die.*

*About a hundred varieties of cherries are known, and the most cultivated in Uzbekistan are Black cherry, Samarkand cherry, Yellow cherry, Revershon, Yellow dragona, Klon Eltona, Sarvi surkhani, Bahar and other varieties.*

*Key words: Cherries, varieties, cultivation, soil, climatic conditions, useful aspects, agrotechnics, characteristics, productivity, water demand.*

Honorable President Shavkat Mirziyoyev, in his address to the Oliy Majlis on December 29, 2020, specifically emphasized that the factor that gives the fastest results in reducing poverty and increasing the incomes of rural residents is a sharp increase in productivity and efficiency in agriculture. they did.

By increasing the attention of farms specializing in horticulture and viticulture to fruit and grape products in our country, opportunities will be created to increase their productivity, raise the quality of products, store fruit and grape products and export them to foreign countries.

Cherry fruit ripens early - late May-early June. The fruit contains 12.2% sugar, 0.23% various acids, vitamins C, group V vitamins, RR, biotin, flavonoid glycosides, dyes, essential oil, amygdalin, coumarin, calcium, iron, magnesium, phosphorus, potassium., contains sodium minerals. Oil and amygdalin were found in the seeds.

If food is eaten after cherries, it is difficult to digest and weakens the stomach. Dried cherries are constipating. A decoction of leaves prevents colds and treats swelling. Tree glue helps with cough, shortness of breath, spitting up blood, stomach ulcer. If the resin of the tree is dissolved in wine and drunk, it dissolves the urinary tract stone.

Cherry (*Prúnus avíum*) is a type of tree belonging to the plum family. The fruit is sweet and useful. Its sugar is in the form of glucose and fructose. Cherry fruit is rich in pectins, iron, anthocyanin and other substances necessary for

humans. According to the consistency of the flesh of the cherry fruit, it is divided into two types: soft, sweet, and bigarro-khoraki, with dense, tight cartilage.

There are many varieties of cherries, and they are mainly divided into two groups. There are cherries with juicy flesh and pulp, as well as with dense flesh, canning and pulp. Cherry is a light and heat demanding tree. That is why the cold often has a negative effect on its flower buds, seedlings and branches in nurseries.

Cherry is very demanding on soil and climatic conditions. It grows well in soft soil and adapts to some gravelly soil. It does not like saline, over- or under-moistened soil, it grows well in strong and medium gray soils, formed on loose, well-permeable layers. It grows slowly and weakly in the areas near the gravel layer, gives a low yield, and is severely damaged by gum disease.

Along with local varieties, European varieties are also common in Uzbekistan. There are few local cherry varieties. Most of the European varieties in the conditions of Uzbekistan in the winter-spring period, especially in February, due to sudden changes in daily temperature, the bark and the base of the branches get sunburned. Varieties of Black Goshe, Blackberry, Francis, Zolotaya, Yellowberry, Volove serdtse are resistant to sunburn. Whitening of cherry trees two or three times in the winter-spring period with a solution containing 1% copper sulfate in slaked lime will start the harvest in the 3-5th year after planting, but in the 5th-9th year an economically effective harvest ( 10 kg per tree). Black cherry and Negrityanka varieties are especially early-harvesting.

SPRING. It is known that fruit size and size are very important among the industrially important quality indicators of cherries. That is why gardeners are paying attention to the creation of orchards mainly due to large-sized cherry varieties in the following years. The fact that one piece of cherry fruit weighs from 8 to 10 grams or more can be the basis for its large fruit. Among the varieties available in the collection, it was not determined that the size of the fruit is equal to the Valove serdtsa variety. The weight of one fruit of this variety was 9 grams. Nevertheless, among the varieties with large fruits, we can include the varieties Napoleon (7.2 g) and Bahar (7.9 g).

VOSHKOD. The variety was created at the Scientific-Research Institute of Irrigated Horticulture of Ukraine. Entered into the State Register of Tashkent region. The tree is strongly growing, with wide pyramidal branches. The leaf is large, oblong-oval in shape. The flower is white, diameter - 39 mm, 5-6 petals, size - 17-16 mm, wide oval. The fruit is large - 20-22-23 mm, weight - 7.7 g, heart-shaped, round top.

The skin is hard to separate, dark red in color. The pulp is red cherry in color, ripe and juicy, high sugar content, medium acidity. Chemical composition of the fruit: dry matter - 22.3%, total sugar - 11.74%, titratable acid - 1.0 ml/g, Vitamin C (ascorbic acid) - 3.74 mg/%. The kernel is moderately separated from the core, the color is light cream, the size is 9-8-7 mm, the weight is 0.53 g. Fruit band - 47 mm, tightly attached to the fruit, flowering period - April 8-17. Ripening

time - May 10-20. The yield is 68 kg/tree, and the average yield per hectare is 141.4 tons/ha.

**BLACK CHERRY.** A local variety created by the people. Entered into the State Register of the Republic. The height of the cherry tree is high, it begins to harvest in the 3-4th year after planting. Productivity is 88.8 t/ha, the highest yield is 118.9 t/ha. The fruit is medium, dark red, with a unique taste, juicy. The fruit ripens in the first ten days of June. The average weight of the fruit is 5.6 g, the taste rating at the time of ripening is 4.0 points. If the cross-pollination of varieties is taken into account when organizing cherry orchards, high cherry yield will be ensured. For most cherry varieties, 10-15% pollination is sufficient. 3rd tree of every 3rd row.

The fruit is grainy, consisting of a fruit band. Oval, heart-shaped, ball-shaped, from dark red, there may be relatively changed colors. The stem is spherical or slightly elongated, with a flat surface. The seed consists of skin, pulp, and endosperm. The color of the skin is from yellowish brown to dark red.

In Uzbekistan, the trunk of a cherry tree is damaged by heat, the bark cracks. There are few buds in the dormant state, so the branches do not recover well when the main parts dry out. Some cherry trees live 80-100 years. In our conditions, 150-300 kilograms of cherries are harvested from one bush.

Cherry is propagated by seeds and grafting. Wild cherry seeds are used for growing as grafts. All cultivated cherry varieties are suitable for wild cherry grafting.

It was concluded that the effectiveness of mineral fertilizers in feeding cherries depends on the rate, duration, method of application, the level of provision of mobile forms of nutrients in the soil, the heredity and age of the plant. More potash and nitrogen fertilizers are important for cherry productivity, and phosphorus fertilizers are more effective only in soils with an acidic environment. The most effective standards are 90-180 kg of nitrogen, 45-90 kg of phosphorus, and 60-120 kg of potassium per hectare.

Since cherry blossoms intensively in a short period of time and enters the harvest, it is required to create a reserve of nutrients for it in advance. The depth of fertilization should not be less than 15 cm. It has been found that mineral fertilizers are more effective if they are given dissolved in water.

Keep in mind that fertilizing under the trunk of a cherry tree will not work. Because the roots near the body do not absorb food. Cherries cause soil impoverishment because they require a large amount of nutrients. That is why cherries are fed at the right time. Feeding is carried out gradually.

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## **THE CONTENT OF THE SYSTEM OF PHYSICAL EDUCATION AND SPORTS OF OUR REPUBLIC**

*Annotatsiya. Physical education and mass sports are recognized as one of the main directions for the organization of a healthy lifestyle for all segments of the population of our republic, and the reforms carried out in this regard in recent years are important for our developing country. This article describes the distribution of the number of sports groups (sections) in physical education, sports in our republic by region Section, their location (city and village) and the analysis of the main statistical indicators of physical education and sports based on the results of the observation of the data on the gender distribution of those who play sports in the sports section, parts.*

*Key words: sports section (circle), sports sections, physical education, sports, professional sports, mass sports, extreme sports, competition, national championship, sports training, sports facilities, physical health.*

### **Introduction**

**Relevance.** Currently, in every town, village, Ovul in our country, as well as in every neighborhood in cities, towns, villages and Ovul, there is a large-scale work on popularizing sports among the population, especially children and young people, organizing large-scale work on mass sports and wide involvement in maintaining a healthy lifestyle, attracting them to regularly engage in sports, improving and digitizing, the creation of a reserve of high-performing athletes in sports has been raised to the level of Public Policy. In addition to these, the development of sports infrastructure, including the growth of sports facilities in rural and remote areas, the development of sports marketing, the effective management of sports facilities on the basis of public-private partnerships and the gradual full digitalization of the industry, the expansion of the network of non-state sports facilities and institutions, their state support, the development of professional sports in, the introduction of modern technologies into the process of sports training, increasing the level and quality of national championships in all sports, organizing international and regional competitions, ensuring systematic measures against unhealthy sports are important for our developing state today.

At the moment, the development of professional sports in our country, including Team, winter and extreme sports, the introduction of modern technologies into the process of sports training, improving the level and quality of national championships in all sports, organizing international and regional

competitions, ensuring systematic measures against unhealthy sports, The formation of a healthy lifestyle in our republic, the creation of conditions in accordance with the requirements of the time for the regular participation of the population, especially the younger generation in physical education and mass sports, the strengthening of confidence in their will, strength and capabilities in youth through sports competitions, courage and patriotism, the maturation of feelings of loyalty to the motherland, as well, large-scale work is carried out aimed at the systematic organization of the selection of talented athletes among young people and the further development of physical education and mass sports. Especially noteworthy are the high performance of representatives of our country at the Olympic Games, World Championships, Asian Games and championships, international competitions, the growing prestige and sports potential of Uzbekistan in the world, the construction of magnificent sports facilities in accordance with world templates in the regions of the Republic, the growing popularity of three-stage sports games “sprouts of Hope”, “perfect generation”, “Universiade”. At the same time, in all regions of our country, there are important and significant tasks set out to promote the importance of mass sports in the life of a person and a family, promote physical education, sports are the basis of physical and spiritual health, protect young people who are stepping into the future with high hopes from various harmful habits, provide the necessary conditions for The further development of physical education and mass sports in all regions of the Republic, the involvement of all segments of the population, especially young people, in regular physical education and sports, and the increase in the effectiveness of the effective use of conditions created in this direction in our country are one of the goals set out.

**The object of study** – people who actively participate in physical education, sports training during extracurricular and extracurricular activities in sports sections and sections operating in different regions of the Republic of Uzbekistan are selected as the object of study.

**The subject of the study** – The main statistical indicators of physical education and Sports obtained in the sections and sections of Sports operating in different regions of the Republic of Uzbekistan on the gender distribution of those who are engaged in sports at the time of class, off-duty, and the distribution of sports facilities operating in our republic by section of Regions and their location (urban-rural) are the main subjects of the study.

**Purpose of the study** – Based on the information received about the gender distribution of those who are engaged in sports at the same time in the sports section and sections on physical education and sports training in our republic, in addition to work, as well as the distribution of working sports facilities in the cross-section of Regions and their location(urban-rural), the main statistical indicators of physical education and In addition, in the article, the development of physical education and mass sports and its promotion to the general public, arming all segments of the population, especially the younger generation, with healthy

lifestyle skills, improving educational institutions among student-student youth, wide segments of the population, organizing physical education, mass sports activities, conducting complex sports competitions, choosing talented athletes from among young people., it is emphasized that it is important to develop and develop continuously in this area, expand the coverage of the population living in different regions of the Republic to sports sections in all sports, and improve and ensure the material and technical base of sports facilities for all sports.

**The task of the study:** Based on the analysis of the data obtained on the gender distribution of those who are engaged in sports outside of class and outside of work in sports sections and departments in our republic, as well as the distribution of working sports facilities in the region and their location (city-rural) to study their attitude to physical education and sports training, to determine to what extent they follow a healthy lifestyle, to critically assess the effectiveness or ineffectiveness of the activities of sports groups in which region of our republic, the number of sports sections, their location and The main task of the research is to determine the gender distribution of the participants in the sports sections, and to analyze the data based on the results of the observation, and to assess the level of physical development and physical fitness of the population based on this.

#### **Methods of organizing research**

The occurrence of the COVID-19 coronavirus pandemic in the world has shown that, among the countries of the world, Uzbekistan has a weak level of health, physical health, healthy living of the population. The COVID-19 coronavirus infection had a negative impact primarily on cardiovascular and respiratory and on the health level of the layer of the population affected by obesity (overweight). As a result of this, citizens in the population were observed to turn a blind eye from the untimely world. In a serious conclusion from all this, it is one of the main issues that it is necessary to constantly engage in mass sports, adhere to the principles of rational eating procedures, in particular, not to consume pastries and sweets, bakery products in excess of the established norm, to live perfectly correctly and turn a healthy lifestyle into everyday life. To ensure the emergence of abilities and strong immunity in each citizen, able to fight various diseases by regularly engaging in physical education and mass sports and the formation of vital knowledge, skills, skills in a healthy lifestyle, to give up various harmful habits existing in the population, to follow the rules and norms of rational nutrition and enrich it with quality products., in order to establish a systematic and effective organization of rehabilitation work and mass physical activity activities, as well as to create appropriate infrastructure and other necessary conditions in this regard, the main directions of effective implementation of a healthy lifestyle in the life of the general public and further development of mass sports are established. Also in our republic, walking, running, mini-football, cycling, streetball, "Workout" (neighborhood and street fitness) are defined as the Priority Sports in the development of physical education and mass sports among the population and the widespread promotion of a healthy lifestyle. In particular, in

order to promote the population to increase movement activity, strengthen the level of Health, daily walks and jogging, in 2021 “healthy lifestyle” (www.1hls.uz) platform was created. On this platform, persons whose citizenship belongs to Uzbekistan aged 18 and above who have walked ten thousand or more steps in the territory of Uzbekistan for one day are financially encouraged. In the same year, a statistical analysis of the results of the physical health of the population and their participation in physical activities on the scale of different regions of the Republic can be said as proof of the above points.

Data obtained for January-December 2021 on the gender distribution of sports participants in sports sections operating in our republic (2017-2021) shows that in 2017, the total number of sports participants in sports sections and sections during the extracurricular and extracurricular period amounted to 2,624.3 thousand. In terms of Gender distribution, 1,592.4 thousand of it were male and 1,031.9 thousand were female. In 2018, this figure reached a total of 2,656.0 thousand. Its share of 1,605.9 thousand is male and 1,050.1 thousand is female. In 2019, the total number of participants in sports sections reached 2727.4 mintgta. Of this, 1,653.4 thousand were made up of men and 1,074.0 thousand were made up of women. In 2020, the number of men participating in physical education and sports sections according to gender distribution reached 1486.3 thousand, while in the same year the number of women participating in physical education and sports sections decreased to 874.2 thousand. As of 2021, the total number of people participating in sports in sections and sections during their extracurricular and extracurricular hours has reached 2,478.6,000. From it, the share of women was 918,0 thousand, and the share of men was 1560,6 thousand.

**Table 1**

**Gender distribution of those who are engaged in sports at the time of classes and extracurricular activities in sports sections and sections**  
(for January-December of the corresponding year, thousand units)

	<i>Year</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
1	<b>2017</b>	1592,4	1032,9	<b>2624,3</b>
2	<b>2018</b>	1605,9	1050,1	<b>2656,0</b>
3	<b>2019</b>	1653,4	1074,0	<b>2727,4</b>
4	<b>2020</b>	1486,3	874,2	<b>2360,5</b>
5	<b>2021</b>	1560,6	918,0	<b>2478,6</b>

**Table 2**

**The distribution of gender distribution of those who play sports in sections and sections during the extracurricular and extracurricular hours by region**

(for January-December of the corresponding year, thousand units)

<i>Area</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
<b>Andijan</b>	113,6	66,3	<b>179,9</b>
<b>Tashkent c</b>	97,1	59,0	<b>156,1</b>
<b>Tashkent</b>	137,2	60,6	<b>197,8</b>
<b>Namangan</b>	116,4	74,0	<b>190,4</b>
<b>Fergana</b>	123,5	77,9	<b>201,4</b>
<b>Syrdarya</b>	49,1	24,1	<b>73,2</b>
<b>Surkhandarya</b>	155,8	106,4	<b>262,2</b>
<b>Kashkadarya</b>	182,9	118,2	<b>301,1</b>
<b>Samarkand</b>	104,2	68,7	<b>172,9</b>
<b>Jizzakh</b>	105,4	58,9	<b>164,3</b>
<b>Bukhara</b>	87,7	43,5	<b>131,2</b>
<b>Khorezm</b>	136,3	85,2	<b>221,5</b>
<b>Navoi</b>	55,0	27,6	<b>82,6</b>
<b>Republic Of Karakalpakstan</b>	96,4	47,6	<b>144,0</b>
<b>TOTAL</b>	1560,6	918	<b>2478,6</b>

### **Research results and discussion**

The results of statistical analysis of the data studied show that the number of participants in sports sections operating in different regions of the Republic varies from region to region. Based on the data given in the table above, an analysis of the gender distribution of those engaged in sports sections shows that the proportion of men in this indicator is higher than that of women.

The analysis of statistical data obtained in the cross section of the regions is a pleasant situation when the conditions for the further development of physical education and mass sports in all regions of the Republic are sufficiently organized and all age groups of the population are able to actively participate in this. However, if the highest of the indicators falls on the territory of the Kashkadarya region (301.1 thousand) in total, then this figure is due to the insufficient number of people engaged in physical education and mass sports, and this is not a significant indicator for the further development of physical education and sports in the country. The area with a total of 73.2 thousand physical education, sports activities is the Syrdarya region, which means that there are not enough sports facilities and sports sections in the area for the population to engage in physical education and mass sports. Or the fact that physical education and sports in the same area are not sufficiently promoted.



**Table 3**

**Distribution of working sports facilities by location (urban-rural)**  
(thousand units)

	<b>Location (%)</b>	<b>2017-y</b>	<b>2018-y</b>	<b>2019-y</b>	<b>2020-y</b>	<b>2021-y</b>
1	Rural	27,6	27,6	27,6	27,9	28,2
2	City	23,7	24	24,1	24,2	24,2
3	<b>Total</b>	<b>51,3</b>	<b>51,6</b>	<b>51,7</b>	<b>52,1</b>	<b>52,4</b>

**Table 4**

**Capacity of working sports facilities**  
(thousand people/day)

	<b>Location (%)</b>	<b>2017-y</b>	<b>2018-y</b>	<b>2019-y</b>	<b>2020-y</b>	<b>2021-y</b>
1	Rural	1020,7	1028,6	1037	1049,2	1101,7
2	City	1040,5	1047,7	1099,8	1105,1	1160,3
3	<b>Total</b>	<b>2061,3</b>	<b>2076,3</b>	<b>2136,8</b>	<b>2154,3</b>	<b>2262</b>

**Table 5**

**Distribution (number) of sports facilities in area cross section and their capacity**

<b>N_</b>	<b>Location</b>	<b>Number of working sports facilities (thousand units)</b>	<b>Capacity of working sports facilities (thousand people/day)</b>
1	<b>Andijan</b>	4,3	209,6
2	<b>Tashkent c</b>	2,2	128,4
3	<b>Tashkent</b>	4,6	197,1
4	<b>Namangan</b>	3,7	162,7
5	<b>Fergana</b>	5,8	237,1
6	<b>Syrdarya</b>	1,6	76,7
7	<b>Surkhandarya</b>	4,2	151
8	<b>Kashkadarya</b>	5,2	221
9	<b>Samarkand</b>	5,6	223,3
10	<b>Bukhara</b>	3,5	140,4
11	<b>Khorezm</b>	3,4	144,4
12	<b>Jizzakh</b>	3,2	138,8
13	<b>Republic of Karakalpakstan</b>	3,3	145,4
14	<b>Navoi</b>	1,8	86,1
	<b>Total</b>	<b>52,4</b>	<b>2262</b>

The results of statistical analysis of the data show that, according to the results of a study on the different regions of the Republic, the number of currently operating sports facilities and their capacity are higher in the Fergana region than in the rest of the regions, leading in our republic. The smallest indicator in terms of the number and capacity of working sports facilities falls on the territory of the

Syrdarya region. (1,6; 76,7) in fact, these indicators are important for our developing state, that is, the number of sports facilities and their adequate service capacity for the population. The reason is that through physical education and sports we prepare the younger generation for homeland protection and labor. It is through physical education that the professional educates and develops the physical qualities that exist in him. To do this, the activities of sports facilities for physical education and sports activities in each area must be sufficiently established and their capacity must be determined based on the population of that area.

### **Conclusion**

As a conclusion, it can be said that strengthening the health of the population of our republic, rational living, increasing the coefficient of longevity, ensuring active participation in physical education training and mass sports, and the effective use of their capabilities and the conditions created are decisive in the development of physical education and mass sports. These tasks ensure that the reforms and achievements carried out today are sustainable. Increasing the number and capacity of sports facilities for mass physical education and sports activities, physical education and mass sports will help improve the physical health, physical fitness and spiritual life of the population.

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## FINAL PHASE “*TO STOP*” AND THEIR EXPRESSIONS IN UZBEK LANGUAGE

*Abstract. It is noticeable that the final phase is first of all connected with the concept of "end" of any process. This concept is variable and includes different meanings. It can be expressed by indicators of the end of the process, the result, transition to a new state*

*Key words: phase verbs, verb polysemy, final phase schema, final phase situations, syntactic models, continuous finitive component, causative meaning.*

Meanings of the final phase in the English material and means of their expression S.P. Tiunova, N.V. Dardikova, D.M. Nasilov, B.H. Rizaev and others in the Uzbek language material analyzed in the research of linguists. Based on these works, the purpose of this article is to determine the methods of giving the meaning of the final (finitive) phase in Uzbek based on the analysis of examples with the verb ***to stop*** in English and their translation into Uzbek.

The meaning of final phase in English is *to stop, to finish, to terminate, to halt, to conclude, to wind up, cease, quit, end, culminate, complete, close, pass, wear away/off, break, interrupt, falter, arrest, pause, check, drop, give up; an end to, bring to an end, put an end to give up* can be expressed by phasic verbs and conjunctions such as Tiunova, Kirilenko and Dardikova. This is the verb ***to stop***, which is the most used in the texts of the finitive means of phase.

The verb ***to stop***, except for the meanings *to 'xtamoq, to 'xtatmoq, tugamoq*, can also mean like as *jim bo'lmoq, kesmoq, to'qinlik qilmoq, oldini olmoq*. *There is no* doubt that all the mentioned meanings are directly or indirectly connected with the final stage. Therefore, in the semantics of the verb ***to stop***, the final stage can be considered dominant. According to the analysis, the final phase situations with the verb ***to stop*** can be expressed mainly through the following three syntactic models:

- I. to stop + gerund form of main verb
- II. until stop + noun form
- III. to stop + pronoun form

The examples that we have found, the most common model is (I), that is, *to stop + the gerund form of the main verb*. For example:

"You can stop counting," she said. She opened the fingers of one hand slightly and in the palm of the hand was a single slender object. [Fahrenheit 451, 6]; U yog'ini sanamay qo'yaqoling, — dedi ayol va barmoqlarini yozdi, uning kaftida kaltagina, ingichka cho'p ko'rindi. [Farengeyt bo'yicha 451 daraja,42].

Books, so the damned snobbish critics said, were dishwater. No *wonder* books stopped selling, the critics said. [Fahrenheit 451, 55]; Shuning uchun kitoblar kasodga uchragan, bunga ajablanmasa ham bo'ladi deyishadi quruq olifta, kalondimog' tanqidchilar. [Farengoyt bo'yicha 451 daraja, 62].

**To stop** in this model participates as a constant finitive component, and the gerund form takes place as a variable, representing process component. This model can be expressed in the Uzbek language through various means. In most examples, it is reflected by the verb *to 'xtamoq*, *to 'xtatmoq* and the noun of the action that represents various processes.

I- Model: *stop* + gerund form of the main verb.

1. Stop + action name (to 'xtamoq, to 'xtatmoq)

(1) "You can stop counting," she said. [Fahrenheit 451, 36] – (1a) U yog'ini sanamay qo'yaqoling, — dedi ayol. [Farengoyt bo'yicha 451 daraja, 11];

(2) She had stopped talking at the same time; a miraculous coincidence [Fahrenheit 451, 57] – (2a) Xuddi shu daqiqalarda dil sezganidek Mildredning lablari ham qimirlashdan to'xtadi [Farengoyt bo'yicha 451 daraja, 65];

(3) The public itself stopped reading of its own accord. [Fahrenheit 451, 83] – (3a) Odamlarning o'zlari, o'z xohishlari bilan kitob o'qimay qo'yganlar. [Farengoyt bo'yicha 451 daraja, 92];

(4) The room was blazing hot, he was all fire, he was all coldness; they sat in the middle of an empty desert with three chairs and him standing, swaying, and him waiting for Mrs. Phelps to stop straightening her dress hem and Mrs. Bowles to take her fingers away from her hair. [Fahrenheit 451, 96] - (4a) Xonada nafas olib bo'lmasdi, Montegga goh sovuq, g'oh issiq tuyulardi. Mehmonxona taqir cho'lni eslatar, o'rtada uchta stul hamda u, omonat turib missis Felps ko'yagini tuzatib bo'lishini, missis Bauels esa turmaklangan sochidan qo'lini olishini kutib turardi. [Farengoyt bo'yicha 451 daraja, 106];

2. Give up + action name (voz kechmoq)

(5) But then the dancing stopped. [Tuesdays with Morrie, 17] – (5a) Biroq tez orada raqs tushishdan voz kechishga to'g'ri keldi [Morrining seshanba darslari, 4];

3. End + the name of the action (nihoyasiga yetmoq)

(6) I stopped renting [Tuesdays with Morrie, 24] – (6a) Ijarama-ijara yurishlarim nihoyasiga yetdi [Morrining seshanba darslari, 10];

4. Calm down + subject (tinchimoq)

(7) Mildred stopped screaming as quickly as she started [Fahrenheit 451, 73] – (7a) Mildred kutilmaganda qanday baqirgan bo'lsa, shunday tinchidi-qoldi. [Farengoyt bo'yicha 451 daraja, 80];

The given translation also uses the verb *to stop* (*to 'xtamoq*) instead of *to stay calm* (*tinchiq qolmoq*) can be used, for example, if we translate close to the given text: *Mildred stopped screaming as quickly as she had started*. Mildred qichqirishni boshlaganidek tezda to'xtadi.

5. To be pressed + a noun denoting the process (bosilmoq)

(8) The yammering voices stopped yelling in the parlor. [Fahrenheit 451, 50] – (8a) Mehmonxonadagi shovqin bosildi [Farengeyt bo'yicha 451 daraja, 56].

Instead of *the verb to be pressed (bosilmoq)*, *the verb to stop (to'xtamoq)* can be used - *The shouting voices (noise) stopped in the hotel. Mehmonxonada baqir-chaqir ovozlar (shovqin) to'xtadi.*

Completion (stopping) of different sounds (noises) can be expressed by stop in English, and in Uzbek it can be expressed by the verbs *to'xtamoq*, *uchmoq*, *jim bo'lmoq*, *tinchib qolmoq*, *bosilmoq* (see the examples given above).

6. Put (qo'ymoq) in the form of a command + a component representing the process;

(9) Let's laugh and be happy, now, stop crying, we'll have a party!" [Fahrenheit 451, 97] - (9a) «Qarindoshlar»ni qo'yib, chaqchaqlashib dam olamiz. Qo'ysang-chi, endi ko'z yoshingni! Hozir bazmi jamshid qilamiz. [Farengeyt bo'yicha 451 daraja, 108]. The verb *to put (qo'ymoq)* is used in the imperative form here to mean "to stop" (bas qilmoq).

7. To take a break + the name of the action (tanaffus qilmoq)

(10) Occasionally, he had to stop to use the bathroom, a process that took some time [Tuesdays with Morrie, 46] - (10a) Vaqti-vaqti bilan hojatxonaga borish uchun tanaffuz qilishimizga to'g'ri kelardi: bu jarayon anchagina vaqt olardi [Morrining seshanba darslari,27];

8. Throw + action name (tashlamoq)

(11) Had he so desired, they would have stopped what they were doing to be with their father every minute of his final months. But that was not what he wanted [Tuesdays with Morrie, 77] – (11a) Agar u xohlaganida ikki o'g'il ham barcha ishini tashlab, so'ngi oylarning har lahzasini otasining yonida o'tkazgan bo'lardi [Morrining seshanba darslari, 50]..

So, the I-model representing the meanings of the finitive phase in English, i.e. *to stop + the gerund form* of the main verb in Uzbek is mainly through the following models, i.e.;

1) "pure" phasic verbs *to stop* + the name of the action;(to'xtamoq, to'xtatmoq);

2) polysemy verbs and combinations with them: *to calm down*, *to put down*, *to suppress*, *to overcome*; *tinchimoq* (*tinchib qolmoq*), *qo'ymoq*, *bosilmoq*, *yengmoq*;

3) noun + verb combinations with finitive meaning: *to give up*, *to end*, *take a break to be silent*, *to be silent*; *voz kechmoq*, *nihoyasiga yetmoq*, *tanaffus qilmoq*, *jim bo'lib*, *jim bo'lib qolmoq*;

4) is expressed by the method of negation.

Instead of a variable component, there are gerund forms of verbs that denote various actions, mental and physical states of the subject, natural phenomena, for example: *laughing (kulish)*, *talking (gaplashish)*, *screaming (qichqirish)*, *yelling (baqirish)*, *counting (hisoblash)*, *mourning (zorlanish)*, *crying (yig'lash)*, *chanting (koylash)* *breathing (nafas olish)*, *renting (yurish)*, *rolling (dumalsh)*,



*dancing (raqsga tushish), being (aqldan ozish), blushing (qizarib ketish), burning (yonish), etc.*

Model representing the finitive phase in English	Ways of giving in Uzbek
<b>I. to stop + gerund</b> form of the main verb	1) "pure" finite verbs + name of action; 2) verbs with polysemous finitive + noun of action and combinations with them; 3) noun with finitive sema + verb combinations + name of action; 4) way of negation: words with -ma- adverbs.

The analysis showed that **to stop** in most situations reflects a temporary stop or suspension of some process (movement, state, medical events). They are expected to continue. In rare cases, the meaning of bringing (delivering) to the end of the process can be expressed.

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## THE IMPORTANCE OF SOUNDS IN GERMAN

*Abstract. The word is one of the basic building blocks of the language. Man speaks and writes in words. When someone makes a linguistic utterance, they string forms of words together. He links them to larger units. In the written language, these are sentences and texts, functional units in the spoken language, conversation contributions and conversations.*

*Keywords: the word, pronunciation, dictionary, loan word, meaning.*

Words play a special role not only for speaking and writing themselves, but also for dealing with language and, moreover, for imparting knowledge. If someone translates something from one language to another, he must know which words correspond to each other. If someone wants to find out about something, he looks it up in a dictionary or lexicon. No linguistic unit is as aware of the speakers of a language as the word. The word is considered a linguistic unit par excellence.

Each word has a form page and a content page (meaning). The form side can be regarded in the spoken as a sequence of sounds. In written form, in languages with an alphabet, it consists of a sequence of letters. The task of grammar is to describe the form and meaning of words. The grammar explains which regularities the construction of the forms and the construction of the meanings follows and how form and meaning are related to each other. It is only when one knows the regularities that it becomes understandable that the speakers effortlessly master the many thousands of words in their vocabulary.

The words of the German are not built according to a uniform, hasten scheme. The vocabulary itself is changing, but the regularities that determine the construction of the words are also changing. This is the case for all languages. German is also in contact with many other languages by which it has been influenced and which it has influenced itself. The simplest form of influence is the borrowing of words or parts of words. German has borrowed and still borrows mainly from Greek, Latin, French and English.

Other words are also striking, but few speakers know what languages their constituent parts are from. Rhythm falls orthographically out of the frame, elative (the highest, absolute level of increase in the adjective, along with a case of languages such as Finnish) has a little-known meaning, and pteranodon also has a difficult-to-pronounce sequence of sounds, which does not occur in German at the beginning of syllables.

A speaker of German can thus recognize words as foreign, even if he does not know where they come from. He recognizes such words by certain features of their form or meaning side, comparing them with the properties of German words. However, it is not so that all borrowed words have such peculiarities. Anyone who does not have special knowledge will hardly suspect that windows come from Latin, start from English and furniture from French. These words, with all their properties, are integrated into the vocabulary of German. They do not require special attention.

On the other hand, since the words mentioned above is not fully integrated. They have characteristics that identify them as foreign. To understand their construction, one must look beyond the regularities that apply to the vocabulary in the core area of German. In *Dudengrammatik*, such words are meant outside of today's core area when we are talking about foreign words or non-native words.

It is not always easy to decide which words and thus which regularities in a language belong to the native (native) vocabulary. After all, the core area also includes words that were originally borrowed once (windows, start, furniture). In their properties, they no longer differ from other words of the native vocabulary. That is why the distinction native / non-native (native/foreign) in this book refers primarily to the current characteristics of the words and not to their origin. The sound structure as well as the written structure of words can be represented in a simple and plausible way if one distinguishes the basic regularities in the core area from the special regularities in the outer areas (the periphery).

The smallest components of the spoken word are the sounds. Most speakers only become aware of the fact that his word form can be regarded as a result of sounds when they learn to write and read. From the sequence of letters of the written word, you can deduce the sequence of sounds of the spoken word, even if an assignment is not always possible in a simple way.

The description of the sounds themselves is guided by how they are articulated. The description must be at least so accurate that each sound of the language is distinguishable from each other. Only those articulatory differences are taken into account, which one also hears, because the ear must be able to distinguish every sound of a language from every other sound of that language. The words *rudder* and *luder* differ by exactly one sound. If a speaker cannot articulate the difference between *l* and *r* or if a listener cannot hear it, communication difficulties arise.

For its orthography, German, along with many other languages, uses the Latin alphabet. For example, in order to clearly repeat the pronunciation of the words of the German out loud for out loud, the alphabet should have more letters. German has more sounds than letters in the alphabet. So you can clearly hear a difference between the *o* in *oven* and the *i* in *open* but both correspond to the same letter.

In order to record the sound structure of words, it is therefore necessary to reproduce their pronunciation more accurately than is possible with the Latin

alphabet. In addition, one wants to present the pronunciation in such a way that it becomes comparable to the pronunciation of words of other languages. Special phonetic scripts (phonetic scripts / phonetic alphabets), which contain many more characters than the alphabet of German orthography, serve this purpose. The International Phonetic Alphabet (IPA) has found the widest distribution among phonetic scripts (IPA 1996). The IPA is reproduced in its entirety in the Duden Pronunciation Dictionary (2000).

The IPA provides a sign for every conceivable speech sound. This phonetic transcription can therefore be used to write all words from all languages, regardless of the orthography of the respective language. The o in oven, for example, is written as [o] after the IPA, that in open as [ɔ]. In order to distinguish the phonetic characters from the bookstands of the alphabet, they are placed in square brackets.

When studying the history of the German language, special attention is paid to the development of grammatical laws. The following must be observed:

1. The grammatical structure of the language develops very slowly.
2. The new, as a rule, arises on the basis of the further development of the already existing elements of the language, for example, the adjective arose from the noun, the article from the demonstrative pronoun, etc. It follows from this that the grammatical structure of the language in its development forms a unified, internally ordered whole.

3. The development of grammatical gender proceeds gradually and evenly.

a) The cases in the Old High German period

The Old High German declension, like the New High German declension, has four fully developed cases: nominative, genitive, dative and accusative. In addition, in the oldest linguistic monuments one can find remnants of the instrumentalis. In the preliterary period, the case system was much more complicated in the Indo-European languages, and the following cases existed:

1. Nominative case
2. Genitive case
3. Dative
4. Accusative
5. Accusative case of the place (where to go?)
6. Locative (where?)
7. Instrumentalis (with what?)
8. Ablative (from where?)

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## **GRAMMATIK TUSHUNCHALARNI O'ZLASHTIRISHNING LINGVOPSIXOLOGIK ASOSLARI**

*Annotatsiya. Ushbu maqolada darslarni ijodiy tashkil etish, yangi axborot texnologiyalaridan, multimedialardan unumli foydalanish, mavzuni izchil o'rganish uchun yangi tushuncha va bilimlarni xotirada uzoq saqlovchi mashg'ulotlarni tayyorlashda katta mahorat talab etilishi, fanni bilish shu fanga oid termin va tushunchalarni bilish, tushunish, ularni to'g'ri qo'llay olish masalalari yoritilgan.*

*Kalit so'zlar: Tushuncha, grammatik termin, grammatik tushuncha, grammatik bilim, lingvopsixologiya, o'quv material va topshiriq.*

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## **LINGUOPSYCHOLOGICAL BASIS OF MASTERING GRAMMATICAL CONCEPTS**

*Abstract. In this article, creative organization of classes, effective use of new information technologies, multimedia, preparation of new concepts and long-remembering activities for consistent learning of the subject, knowledge of science, knowledge of terms and concepts related to this science, understanding, the issues of being able to use them correctly are highlighted.*

*Key words: Concept, grammatical term, grammatical concept, grammatical knowledge, linguistic psychology, educational material and task.*

Ona tili darslarida o'quvchilarning grammatik termin va ular bilan bog'liq tushunchalarni o'zlashtirishlarini yuqori samara bilan ta'minlashda muayyan psixologik asoslarga amal qilish muvaffaqiyat garovi ekanligi shubhasizdir. Bu narsa bugungi kun nuqtayi nazaridan ham metodik izlanishlarning jahon andozalariga mos kelib, olib borayotgan tadqiqotimizning muhim jihati hisoblanadi. Biz bu o'rinda maxsus psixologik izlanishni da'vo qilmagan holda, til o'qitish ruhshunosligida tushunchalarni o'zlashtirish mexanizmlari haqidagi ma'lum darajada o'z isbotini topgan ma'lumotlar, qarashlar, qoida va qonuniyatlarni belgilab chiqish va chiqarilgan xulosalardan nazariy asoslar sifatida foydalanishni o'z oldimizga maqsad qilib qo'ydik. Bu ma'lumotlarsiz metodik masalalarni hal etish uchun to'g'ri yo'l topish qiyinligi aniqdir.



Shuningdek, bu ma'lumotlar o'quvchilarning nima uchun termin va unga bog'liq grammatik tushunchalarni o'zaro qorishtirishlari, yanglishishlarining tub sabablarini ochib berishiga ishonchimiz komil. Bir qator ruhshunos olimlar terminlarni o'zlashtirish jarayoni haqida so'z yuritganlar. A.A.Leontev, A.N.Leontev, A.A.Smirnov, N.I.Jinkin, A.N.Jdan, A.V.Smirnov, S.F.Juykov, D.N.Bogoyavlenskiy, N.A.Menchinskaya, M.G.Davletshin, M.Vohidov, E.G'oziyevlarning asarlarida termin va u anglatgan tushunchani idrok etish muammolari yoritilgan.

Ta'kidlash joizki, termin va tushuncha bir-biridan farqli hodisalardir. "O'zbek tilining izohli lug'ati" da termin va tushunchaga shunday ta'rif berilgan: "Termin. Fan, texnika, kasb-hunarning biror xohasiga xos muayyan bir tushunchaning aniq va barqaror ifodasi bo'lgan so'z yoki so'z birikmasi; termin".<sup>4</sup> Ma'lum bo'ladiki, grammatik termin tushunchaning ifodasi bo'lib, ayni paytda u til hodisasiga qo'yilgan nomdir. Til hodisasitushuncha reallashib, termin bilan yuritiladi. Atama asosida aytiladigan gaplar til hodisasiga taalluqli bo'ladi.

"Tushuncha. 1. Predmet va hodisalarning mantiqan ajratilgan muhim belgilarini umumlashtirib, birlashtirib aks ettiruvchi umumiy tasavvur".<sup>5</sup> Demak, grammatik tushuncha – til hodisasining muhim belgilari haqidagi tasavvur. Grammatik tushuncha terminga berilgan ta'rifda (lug'atda-izoh) o'z ifodasini topadi. Grammatik termin va tushuncha aks etgan ta'rif (izoh) til hodisasining xossalari, uni boshqa til hodisalaridan farqlash uchun xizmat qiladigan belgilar, xususiyatlarni o'zida mujassamlashtiradi.

A.V.Tekuchev grammatik tushunchalar haqidagi o'z tavsiyalarini psixologiya ma'lumotlariga asoslanib yoritadi. U bunday deydi: "Psixologiya aqliy faoliyat bilan bog'liq mexanizmlarni ochib berib, ularning grammatik tushunchalarni ongli qabul qilish, ongli tafakkurning o'rni va olgan bilimlarini analiz va sintez qilish operatsiyalarini kuzatadi".<sup>6</sup>

Tushuncha terminning ma'no-mazmuni ekan, o'zlashtirish termini eslab qolishga qaratilgan chora-tadbirlardangina iborat bo'lib qolmasligi, aksincha, butun diqqat-e'tibor ma'no-mazmuni chuqur anglab yetishga yo'naltirilishi kerak degan xulosa chiqarishimiz to'g'ri bo'ladi. Ona tili darsliklarida grammatik tushuncha terminning ta'rifi, belgi va xususiyatlari aks etgan qoidalar orqali tushuntiriladi. Bundan anglashilnadiki, tushunchani o'rganish ta'rif va qoidalardan bayon etilgan belgi va xususiyatlarni anglab yetish mazmunida bo'lishi zarur. Grammatik vositalar va ularning ma'nolarini bolalarga tushuntirishning asosiy prinsipi o'rganilayotgan qonuniyatni nutq tarkibida tahlil qilishdir. Grammatik tushuncha, - deb ta'kidlaydi D.N.Bogoyavlenskiy, - shakl va mazmun o'rtasidagi mavjud aloqadorlikni anglash orqali o'zlashtiriladi."<sup>7</sup> Grammatik bilim nutqda obyektiv mavjud bo'lgan qonuniyatlarning yozma nutq

<sup>4</sup> O'zbek tilining izohli lug'ati. Ikki tomli. Z. Ma'rufov tahriri ostida. II. S.-H.-M. Rus tili, 1981.-165

<sup>5</sup> O'zbek tilining izohli lug'ati. Ikki tomli. Z. Ma'rufov tahriri ostida. II. S.-H.-M. Rus tili, 1981.-240

<sup>6</sup> Текучёв А.В. Грамматический разбор в школе. – М.: Изд-во АПН, 1963. 60-б

<sup>7</sup> Bogoyavlenskiy D.N. Psixologiya uspoyniya orfografiya. N 4.-M.: Prosvesheniye, 1966.-S.215

vositasida faollashtirilgan, umumlashgan ifodasidir, grammatik tushuncha esa nutqimizda obyektiv mavjud bo'lgan qonuniyatlarning ongli ko'rinishidir. A.A.Smironovning ta'kidlashicha, tushuncha borliqdagi narsa va hodisalarning umumiy hamda muhim xossalarning aks etishidir. N.A.Menchinskaya tushunchaning muhim xususiyatini umumlashganlik deb hisoblaydi. A.A.Smironov ham, N.A.Menchinskaya ham tushunchani egallash belgilarni o'zlashtirish va ushbu belgilar orasidagi bog'lanishni aniqlash bilan tugamaydi; uni egallash ushbu tushunchani qo'llashni ham ko'zda tutadi,"<sup>8</sup> deb hisoblaydilar. Ruhshunoslar V.V.Davidov va D.B.Elkoninglar, - deb yozadi Y.K.Babanskiy, - ilmiy tushunchalarni shakllantirishda o'quv materiali mazmunining shunday mantiqiy tuzilishini izlaydilarki, bunda o'quvchilar, eng avvalo, ana shunday tushunchalar butun majmuining yaxlit strukturasi aniqlovchi genetik o'xshashlikdagi umumiy aloqani aniqlaydilar".<sup>9</sup> T.V.Gabay bilimlar subyektning o'zida bo'lishi yoki u axborotning tashqi tashuvchilariga saqlanishi mumkinligiga e'tiborni qaratadi. Uning xulosalariga ko'ra, subyekt faoliyatni bajarishning turli usullarni va u yoki bu usul orientrlarning qaysi aniq bir to'plamiga kirishini ham bilishi kerak. Madomiki, biror axborot subyekt tomonidan qo'llanar ekan, bunday axborot faoliyatning mo'ljal olish asosini tashkil etadi. Basharti, faoliyat subyekt tomonidan mustaqil bajarilsa, faoliyatning mo'ljal olish asosi bo'lmish axborot, avvalo, subyektning uzoq muddatli xotirasida o'z moddiy tashuvchisiga ega bo'ladiki, bunday axborot shu yerdan tegishli timsollarni dolzarblashtirish va faoliyatni qurush uchun operativ xotiraga kelib tushadi. Agar faoliyat uning algoritmiga mos tashqi tashuvchilarga tayanib bajarilsa, u holda faoliyatning mo'ljal olish asosi bo'lmish axborot subyektning operativ xotirasida mavjud bo'ladi: u bevosita tashqi moddiy tashuvchilardan o'qish yo'li bilan olinadi.<sup>10</sup>

Ona tili darslarida axborotning moddiy tashuvchilari bular darsliklar, izohli lug'atlar, grammatik ma'lumotnomalar, o'zbek tilshunosligiga doir ilmiy va ommabop risolalardir. O'quvchining uzoq muddatli xotirasida bilim, masalan, -da yuklamasining imlosi haqidagi qoida bo'lmasa, u hamma vaqt shu qoida mavjud bo'lgan tashqi tashuvchilarga murojaat etib turadi. Grammatizmdan qochilib, maboda bolalarga qoidalar o'rgatilmagan ekan, ularning qo'llarida shu qoida mavjud bo'lgan manbalar bo'lishi shart. Bunday sharoitda ona tili ta'limining asosiy vazifasi o'quvchilarni zarur qoidalarni kitoblardan tez topa bilishga o'rgatish, tegishli malaka hosil qilishdan iborat bo'ladi. Lekin nutq uchun o'ta zarur qoidalarni o'quvchilarning uzoq muddatli xotiralariga ko'chirish ona tili o'qitishning maqsadlaridan biri sanaladi.

Bilimlarni o'zlashtirish borasida I.Y.Lerner olib borgan tadqiqotlar ham muhim ma'lumotlar beradi. Uning ta'kidlashicha, tashqi ifodalanish va hissiy qabul qilishiga yo'l beradigan faktlar idrok qilish, anglash va esda olib qolish

<sup>8</sup> Жуйков С.Ф. Психологические основы повышения эффективности обучения младших школьников родному языку.-М.Педагогика. 1979.16

<sup>9</sup> Babanskiy Y.K Hozirgi zamon umumiy o'rta ta'lim maktabida o'qitish metodlari. T.:O'qituvchi,1990.166-230

<sup>10</sup> Габай Т.В Учебная деятельность и ее средства.-М. Изд-во МУ.1988.18-19

jarayonida o‘zlashadi. Keyingisi, ya’ni esda olib qolish bo‘lmasa, biror darajadagi o‘zlashtirish ham sodir bo‘lmaydi. O‘quvchining xotirada olib qolinadigan mazmun bilan ko‘rsatadigan faoliyati qanchalik jadal va har tomonlama bo‘lsa, yodda qoldirish shunchalik yaxshi va mustahkam bo‘ladi.<sup>11</sup> Bizningcha ham, o‘quvchi imlo va tinish belgilariga, grammatik vositaning qo‘llanishiga doir qoidalardan tez foydalanib o‘z xatolarini jadal tuzatishga o‘rgansa, bunday amaliy faoliyat orqali ana shu qoidalar uzoq muddatli xotirada o‘rnatib qoladi.

Yangi ona tili darsliklarida til hodisalarini berilgan matndan qidirish va mustaqil holda tahlil orqali anglash vaziyatiga soladi. I.Y.Lernerning fikricha, qidirish jarayoni bilan bog‘liq ravishda sodir bo‘ladigan o‘zlashtirish topilganlarni yaxshiroq esda olib qolishga olib keladi. Turli xil vaziyatlarda bilimlarni qo‘llash ularni yod olishga qaraganda xotirada yaxshiroq mustahkamlaydi (garchi ayrim holatlarda yod olish ham zarur). Bilim tartibga solingan, ya’ni boshqa bilimlar bilan qonuniyatlilik asosida bog‘langan bo‘lsa, muayyan bilimlar tizimining bir qismi hisoblansa, shu paytdagina to‘laqonli o‘zlashtiriladi.<sup>12</sup> Metodist olimi M.Omilxonova o‘zining “Maktab ona tili sintaksisini o‘rganish” degan qo‘llanmasida ruhshunoslarning ma’lumotlariga asoslangan holda grammatik bilim, grammatik tushuncha va grammatik terminlarni o‘zaro qiyoslab chiqadi va o‘qituvchilarda ular o‘rtasidagi farqlar haqida yaqqol tasavvur paydo qilish uchun quyidagi jadvalni keltiradi:<sup>13</sup>

Grammatik bilim	Grammatik termin	Grammatik tushuncha
1. Til hodisalarining yozma nutq vositasida formallashtirilgan ifodasi.	1. Grammatik bilim chegarasini ko‘rsatish vositasi.	1. Til hodisalarining ongimizdagi in’ikosi.
2. Ongimizda aks etgan real narsa-hodisalarining o‘zgalarga tushunarli bo‘lishini ta’minlaydigan vositalar (so‘z, gap)ni abstraksiyalash, umumlashtirishning hukm shaklidagi natijasidir.	2. Tildagi umumiy so‘zlarning bir qismi bo‘lib, fikrlash vositasi sanaladi.	2. Tushunchaning bir ko‘rinishi bo‘lib, fikrlash formasi hisoblanadi.
3. Gap shaklida ifodalangan bo‘lib, o‘ziga muvofiq til faktlarining hammasiga tatbiq etiladi.	3. Grammatik bilimlar tarkibida ishlatiladi, tilde zuxur etadi.	3. Grammatik bilimlarning hosilasi sifatida inson ongida hosil bo‘ladi.
4. Tarkiban so‘z, so‘z birikmasi, termin, bog‘lovchi vositalardan tuziladi.	4. Tarkiban so‘z, so‘z birikmasi, bog‘in va tovushlardan tuziladi.	4. Til qonuniyatlariga oid faktlarni abstraksiyalash, umumlashtirish mahsulidir.
5. Ma’lum til qonuniyatiga oid faktlarning hammasi uchun umumiy		

<sup>11</sup> Лернер И.Я. Процесс обучения и его закономерности.-М. Знание.1980.30

<sup>12</sup> Лернер И.Я. Процесс обучения и его закономерности.-М. Знание.1980.30-31

<sup>13</sup> Omilxonova M. Maktabda ona tili sintaksisini o‘rganish.-Т.: O‘qituvchi,1991.159

bo‘lib, grammatik tushunchani shakllantiradi. 6. Til qonuniyatlarining Yozma nutq orqali konkretlashtirilgan modeli bo‘lib, uni o‘qiymiz, yozamiz, eshitamiz.	5. Grammatik termin nutqni, binobarin, tafakkurni o‘stiradi.  6. Grammatik tushunchaning termini bo‘lib, uni aytamiz, eshitamiz, o‘qiymiz.	5. Grammatik fikrlashni taraqqiy ettiradi.  6. Grammatik tushunchani anglaymiz.
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Grammatik tushunchani o‘zlashtirishning psixologik xususiyatlarini quyidagicha ochib berishga harakat qilgan: Til qonuniyatlari, grammatik tushunchalarni o‘zlashtirishda "...ularning umumlashtiruvchilik xususiyati nazarda tutiladi, bunda formalar asosiy o‘lchov hisoblanadi".<sup>14</sup> Chunonchi jo‘nalish kelishigining asosiy funksiyalaridan biri gap tarkibidagi so‘zlarning o‘zaro munosabatini ifodalashdir. Tabiat, jamiyatdagi negativ hodisalar o‘rtasidagi makon (uyga kirdi), zamon (kuzga qoldirildi), sabab-natija (o‘qiganimga xursandman), maqsad (ukamga olmoqchiman) kabi turli bog‘lanishlarning ongimizdagi in‘ikosini yuzaga chiqarishda bu kelishik qo‘shimchasi –ga vosita bo‘ladi. Yana shuni ham ta’kidlash kerakki, grammatik vositaga grammatik tushunchani bog‘lab qo‘yish ba’zan mumkin emasligiga M.Omilxonova e’tibor qaratgan. Yuqorida keltirilgan qo‘shimchalarning bir nechta ma’nosi borligini aytgan bo‘lsak, -n,-in,-l,-il qo‘shimchalari ham majhul, ham o‘zlik nisbatini ifodalaydi. Demak, ko‘rishimiz mumkinki, bu o‘rinda grammatik vositaga grammatik tushunchani bog‘lab o‘rgatishda o‘z qiyinchiliklari bor.

O‘quv materiallarini o‘rganish jarayonida turli aqliy operatsiyalarni bajarish natijasida, birinchidan, o‘quvchi bilimi taraqqiy etadi, ikkinchidan, uning analitik-sintetik faoliyati shakllana boradi. Shu sababli ruhshunoslarimiz o‘quv materialining mazmuniga o‘quvchining "psixik faoliyatini taraqqiy ettirishning mazmuni"<sup>15</sup> deb ham qaraydilar. Grammatik bilimlarni o‘zlashtirish natijasida o‘quvchilarda grammatik tushuncha hosil bo‘ladi. Hosil bo‘lgan grammatik tushuncha bundan keyin o‘rganiladigan grammatik bilimlarni o‘zlashtirish uchun o‘zlashtirilgan grammatik bilim yangi tushunchalar hosil qilish uchun asos bo‘ladi. "Grammatik tushuncha – harakatdagi bilim, o‘zlashtirilgandagi bilim – grammatik tushuncha".<sup>16</sup>

Pedagogikada qaror topgan ko‘p tomonlama nazariy, amaliy, tarixiy hamda metodologik jihatlardan in‘ikosini topgan tushuncha terminga aylanadi. Endigina paydo bo‘lgan va yetarlicha chuqur asoslanmagan, to‘laligicha ochib berilmagan va hozircha keng tarqalmagan yangi tushunchalar tushunchaligicha qolib ketadi. Ruhshunos olim S.L.Rubinshteyn ham ona tili ta’limida ongli tafakkur mahsuli

<sup>14</sup> Rustamov H.R. Sintaksis va punktuatsiyani o‘qitish metodikasi. Toshkent -1960.19

<sup>15</sup> Razbayeva E.M va boshqalar.Nutq o‘stirish metodikasi.-Toshkent.O‘qituvchi,1978.12

<sup>16</sup> Roziqov O.O‘zbek tili dars tiplari.T.:O‘qituvchi,1976.154-165

(tushuncha, hukm va xulosa chiqarish)ning tarkib topishi va rivojlanishi to'g'risida umumlashtirishning uch turi mavjudligini ta'kidlaydi: empirik, nazariy va deduktiv umumlashtirishlar. Bu umumlashtirishlar yordamida ish tutilsa, S.L.Rubenshteyn mulohazasiga ko'ra topshiriq yo asta-sekin (empirik), yoki birdaniga (nazariy) hal qilinishi mumkin. Ona tili darslarida o'quvchilarning o'zlashtirgan bilim, ko'nikma va malakalarini abstraksiyalashtirishda, umumlashtirishda, hamda xulosa chiqara olishida fiziologik jihatdan qo'zg'otgich – tilning aniq grammatik materiali sanalsa, qo'zg'otish vositasi – o'quv materiali mazmuniga muvofiq tanlangan o'qitish metodi sanaladi. Shunday qilib, shakl va mazmun o'rtasidagi mutanosiblikni o'rganish, kuzatish, turli grammatik shakllarning ma'nosini matnlarda ochib o'rganish, o'quv materialining asosiy belgilariga rioya qilish, grammatik bilimlarga oid materiallarni izchil kursda tahlil qilish, turli usullarda takrorlash natijasida o'quvchilar grammatik tushunchalarni puxta o'zlashtiradilar.

Darslarda o'quvchilarning ijodiy fikrlash qobiliyati qancha taraqqiy ettirilsa, ular o'z oldiga qo'yilgan muammoli topshiriqlarni shuncha qiynalmay bajara oladilar. O'quvchi topshiriqlarni ishlash sir-asrorlarini o'rgana borgan sari unda ijodiy fikr yuritish faoliyati shakllana boradi. Ijodiy fikr yuritish o'quvchilarda evristik layoqatni o'stiradi. Darslarni ijodiy tashkil etish, yangi axborot texnologiyalaridan, multimedialardan unumli foydalanish, mavzuni izchil o'rganish uchun yangi tushuncha va bilimlarni xotirada uzoq saqlovchi mashg'ulotlarni tayyorlash o'quvchilardan zo'r mahorat talab etadi.

Yangi mavzuni o'zlashtirishda o'quvchi yangi fikrni signallar orqali qabul qiladi. Signallar uch turkumga ajratiladi: 1) signal-indekslar – tabiat hodisalaridan olingan signallar; 2) signal-timsollar – fototasvirni ko'rib, tanish kishini esga tushirish; 3) aloqa signallari yoki shartli belgilar – harflar, raqamlar, formula, terminlar.<sup>17</sup> So'z yoki termin signal vazifasini o'tab, o'tilgan darslardagi grammatik terminlarni aytilishi bilan unga oid tushunchani xotiraga keltira olish mavzuni tahlil va sintez qila olishiga ko'mak beradi. Fanni bilish shu fanga oid termin va tushunchalarni bilish, tushunish, ularni to'g'ri qo'llay olish demakdir. Shunday ekan, o'quvchining bilimiga o'z malaka va ko'nikmalarida grammatik tushunchani anglay olishi va uni nutqda to'g'ri qo'llay olishiga qarab baho beriladi. Ona tili darslarida maktab o'quvchilarining mantiqiy fikrlash malakalari muntazam taraqqiy ettirib boriladi, oqibatda, ular o'z fikrlash faoliyatlarini takomillashtirib, mantiqiy amallarni ham bajaradigan bo'ladilar. Mustaqil fikrlash o'quvchilarning grammatik hodisalarini o'z shaxshiy kuzatishlari, shu kuzatishlar asosida ularni tahlil va sintez qilishlari faktlarni taqqoslashlari, solishtirishlari va ma'lum xulosaga kela bilishlarida namoyon bo'ladi. Bunday fikrlash ongli kechadi. O'quvchilarni ongli fikrlashga o'rgatish muammolari yuzasidan ilmiy-izlanishlar bir qator olib borilgan. O'quvchilarning ongli fikrlash malakalarini

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<sup>17</sup> Кондратов А. Звуки и знаки.-М.Знание.1966.111



takomillashtirish imkoniyatlari ona tili o'qitishning hamma bosqichlarida, har bir darsda kuzatilishi haqida metodist olim A.G'ulomov ta'kidlab o'tgan:

a) bilib olish kerak bo'lgan har bir grammatik hodisaning eng muhim belgilari haqida xulosa chiqarilganda;

b) til hodisalarini o'rgana borib, grammatik shakllarni toifaviy belgilariga ko'ra bir-biridan o'zaro farqlashda, guruhlashda;

c) mashqlar bajarish orqali so'z, so'z shakli, so'z birikmasi va gaplarning o'ziga xos xususiyatlarini ajrata boshlaganda.<sup>18</sup>

O'quvchi har bir dars jarayonida grammatik tushunchaga ega bo'lar ekan, avvola, shu tushunchaning muhim belgisini ajratib olishi va uni anglashi, boshqa tushunchalardan farqlashi, anglagan tushunchasini berilgan topshiriqlar asosida mustahkamlab borishi hamda uning tahlilini o'rganib borishi zarur. Shundagina lingvistik bilimga ega bo'lib borishda bo'shliqlar yuzaga kelmaydi.

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## **TECHNOLOGY FOR DEVELOPING THE EFFECTIVENESS OF SHOOTING AMONG UNIVERSITY STUDENTS INVOLVED IN BIATHLON**

*Abstract.* Biathlon, a combination of cross-country skiing and rifle shooting, is a demanding sport that requires a high level of physical fitness and shooting accuracy. At the university level, it is crucial to provide students with the necessary tools and resources to enhance their shooting skills. This article explores the role of technology in developing the effectiveness of shooting among university students involved in biathlon.

*Keywords:* technology, measures, potential strategies, information, effects, timing.

**Introduction:** Technology plays a crucial role in enhancing the effectiveness of shooting among university students involved in biathlon. Biathlon, a combination of cross-country skiing and rifle shooting, demands precision and accuracy in shooting. By leveraging advanced technology, athletes can improve their marksmanship skills, track their performance, and make data-driven adjustments to enhance their overall shooting effectiveness. Here are some technologies that can be utilized:

**Electronic Scoring Systems:** Electronic scoring systems provide instant feedback on shot accuracy and timing. These systems use sensors to detect bullet impacts on the target and display the results on digital screens. This real-time feedback enables athletes to analyze their shots, identify areas for improvement, and adjust their shooting technique accordingly.

**Laser Training Systems:** Laser training systems simulate shooting scenarios without the need for ammunition. These systems use laser beams and targets to replicate the shooting experience. Athletes can practice their shooting skills in a controlled environment, tracking their accuracy and consistency. Laser training systems often come with software that provides detailed data analysis and performance metrics, helping athletes analyze their shooting technique and identify areas for improvement.

**Biomechanical Analysis Tools:** Biomechanical analysis tools, such as motion capture systems and force plates, help athletes understand the mechanics of their shooting technique. These tools capture data on body movements, joint angles, and forces involved during shooting. By analyzing this data, athletes can identify inefficiencies or flaws in their technique and make adjustments to enhance their consistency and accuracy.

**Virtual Reality Training:** Virtual reality (VR) training can provide an immersive shooting experience, allowing athletes to practice in various

environments and scenarios. VR technology can simulate different weather conditions, shooting ranges, and shooting positions. This technology helps athletes develop adaptability, decision-making skills, and muscle memory in realistic shooting scenarios.

**Data Analytics and Performance Tracking:** Utilizing data analytics tools and performance tracking systems can offer valuable insights into an athlete's shooting performance. By tracking shooting accuracy, shot patterns, and other relevant metrics, athletes can identify trends, monitor progress, and make data-driven adjustments to enhance their effectiveness. These tools can also provide personalized training programs based on individual strengths and weaknesses.

**Mental Training Apps:** Shooting demands mental focus, concentration, and resilience. Mental training apps can assist athletes in developing their psychological skills. These apps offer techniques for visualization, goal setting, relaxation, and mindfulness. By incorporating mental training into their routine, athletes can improve their focus, manage stress, and enhance their shooting performance.

The demanding sport of biathlon, which combines cross-country skiing and rifle shooting, requires precision and accuracy on the shooting range. University students involved in biathlon must develop their shooting skills to excel in this sport. Fortunately, technology offers various tools and resources to help enhance the effectiveness of shooting among biathlon athletes.

#### Biomechanical Analysis

Biomechanical analysis plays a crucial role in improving shooting effectiveness. By utilizing motion capture technology and high-speed cameras, students can gain insights into their shooting technique and body mechanics. This analysis helps identify areas for improvement, such as posture, stability, and aiming precision.

#### Virtual Reality Training

Virtual reality (VR) training provides an immersive shooting experience for biathlon students. Through VR simulations, students can practice shooting in different scenarios, enhancing their decision-making abilities and honing their shooting skills in a controlled, yet realistic environment.

#### Precision Tracking Devices

The use of precision tracking devices allows students to monitor and analyze their shooting performance with precision. These devices provide data on shot placement, stability, and aiming consistency, enabling students to make data-driven adjustments to their technique.

#### Mental Performance Apps

Technology also offers mental performance apps designed to help students develop focus, concentration, and mental resilience during shooting sessions. These apps employ techniques such as mindfulness and visualization to enhance the psychological aspect of shooting, thus improving overall effectiveness.

#### Customized Training Software

Customized training software tailored for biathlon shooting allows students to work on specific aspects of their shooting technique. These programs provide personalized drills, feedback, and progress tracking, enabling students to address their individual weaknesses and refine their shooting skills effectively.

Apart from that, shooting is a crucial component of biathlon as it directly impacts an athlete's performance. Accurate shooting is essential for achieving high scores and minimizing penalties. University students involved in biathlon must undergo extensive training to develop their shooting skills.

They learn to control their breathing, focus their concentration, and maintain steady aim under pressure. Regular practice sessions and competitive events allow them to refine their shooting techniques and improve their overall performance. Secondly, shooting in biathlon requires a combination of physical and mental abilities.

Athletes must possess excellent hand-eye coordination, steady nerves, and concentration skills. University students involved in biathlon often engage in physical conditioning exercises that improve their stability and overall body control. This physical training enhances their shooting capabilities, enabling them to maintain a steady shooting position and execute precise shots even after strenuous skiing.

Moreover, shooting in biathlon also reinforces discipline and self-control among university students. To excel in this sport, athletes need to adopt a strict training regimen and lead a disciplined lifestyle. This may include adhering to a healthy diet, maintaining a regular sleep schedule, and managing their time effectively. Such discipline translates into their academic pursuits, as they learn how to balance their studies with their training commitments. Another aspect of shooting in biathlon is the mental component. The ability to remain calm and focused during shooting is crucial for success. University students involved in biathlon develop mental resilience and learn how to cope with pressures and distractions. These skills can be applied beyond the sport, helping them deal with stress and challenges in other areas of their lives.

Furthermore, shooting in biathlon fosters a sense of responsibility and safety awareness among university students. As firearms are involved, strict safety protocols are followed to ensure a safe environment for all participants. Students learn the importance of adhering to rules, handling firearms responsibly, and understanding the potential consequences of their actions. This knowledge contributes to their overall personal development and sense of maturity.

### ***Conclusion***

Technology plays a crucial role in developing the effectiveness of shooting among university students involved in biathlon. The integration of target analysis systems, virtual reality simulators, and biomechanical tracking devices can significantly enhance shooting skills and overall performance. By utilizing these technological advancements, students can improve their shooting accuracy,

increase chances of success, and ultimately excel in the demanding sport of biathlon.

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## **UZUN TUMANIDA SUV RESURSLARIDAN OQILONA FOYDALANISH**

*Annotatsiya. Ushbu maqolada Uzun tumanidagi suv resurslarining hosil bo‘lishi, taqsimlanishi va ulardan oqilona foydalanish masalalari yoritilgan.*

*Kalit so‘zlar: suv resurslari, suv resurslarining taqsimlanishi, yillik yog‘in miqdori, daryo terrasalari, nasos stansiyalari.*

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## **RATIONAL USE OF WATER RESOURCES IN UZUN DISTRICT**

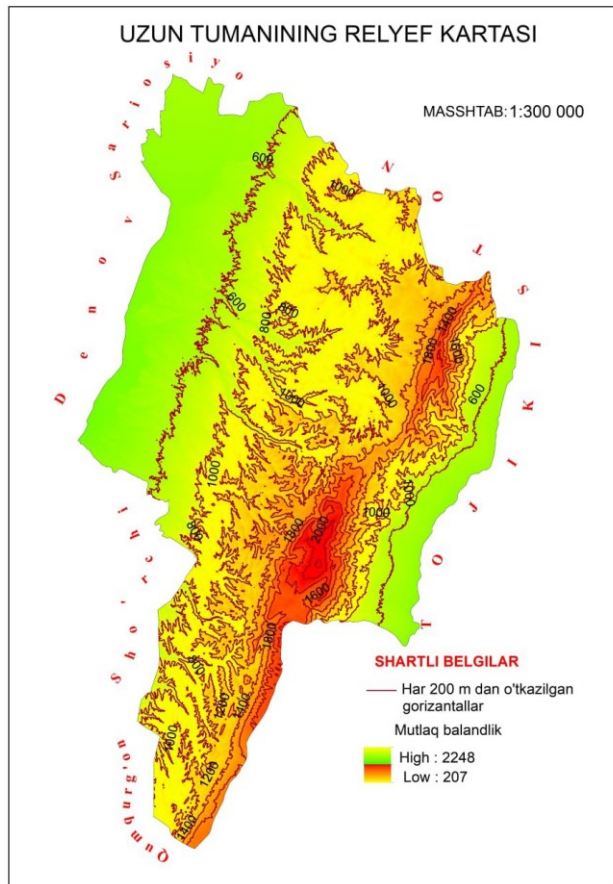
*Abstract. This article covers the issues of formation, distribution and rational use of water resources in Uzun district.*

*Key words: water resources, distribution of water resources, annual precipitation, river terraces, pumping stations.*

Sayyoramizda jadallik bilan sodir bo‘layotgan global iqlim o‘zgarishi jarayoni, shu bilan birgalikda aholi soni va iqtisodiyot tarmoqlarining o‘sishi suvga bo‘lgan talabni tobora oshirmoqda. Yog‘ingarchilik yil fasllari va hududlar bo‘yicha notekis taqsimlangan arid iqlimda joylashgan O‘zbekistonda ham suv resurslariga talab juda yuqori.

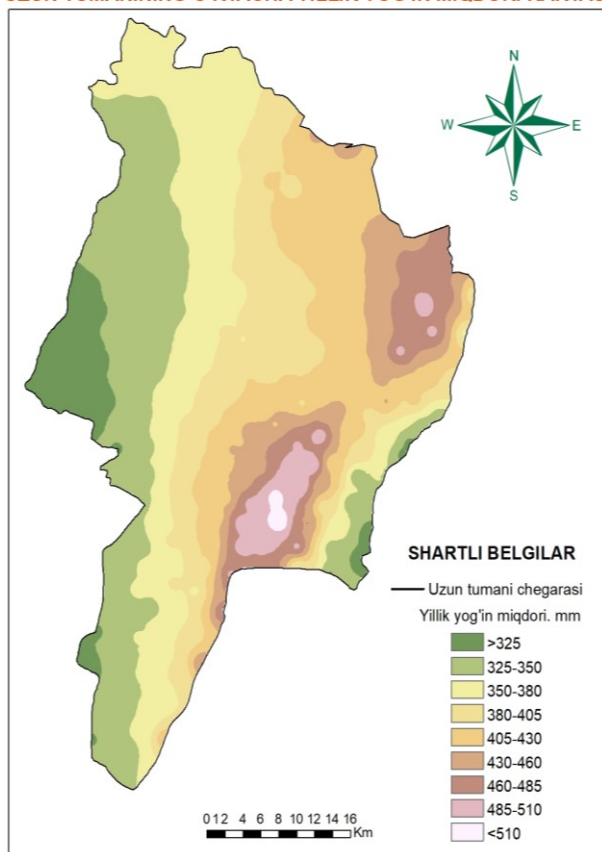
Uzun tumani suv resurslarining taqsimlanishi birinchi navbatda iqlimga va relyefga bog‘liq. Tuman hududining katta qismi Bobotog‘ va uning tog‘ oldi hududlariga to‘g‘ri keladi. Bobotog‘ning tuman hududdidagi g‘arbiy yonbag‘irlari uzun va sekin-asta pasayib borib Surxondaryoga tutashib ketadi. Bobotog‘ning sharqiy yonbag‘irlari qisqa va nishablik yuqori, Kofirnihon daryosiga tutashadi, shu bilan birgalikda Shimoldan janubga borgan sari relyef nishabligi pasayib borib, Qumqurg‘on tekisliklariga tutashib ketadi. Tuman hududining 2/3 qismi Bobotog‘ va tog‘ oldi hududlarga to‘g‘ri keladi. Hududning qolgan qismi Surxondaryo va Kofirnihon daryolarining terrasalarida joylashgan.





a)

UZUN TUMANINING O'RTACHA YILLIK YOG'IN MIQDORI KARTASI



b)

1-rasm. a) Uzun tumanining relyefi,  
b) Uzun tumanida o'rtacha yillik yog'in miqdori

Uzun tumanida yog'in miqdori tekislikdan tog'ga tomon ortib boradi(1-rasm). Nam havo massalari tog'larga ro'paro bo'lib, yog'ingarchilikka sabab bo'ladi. Yog'inlarning oylar bo'yicha notekis taqsimlanganligi uchun qish, bahor fasllarida Bobotog'dan boshlanadigan ko'plab soylar yoz va kuzda qurib qoladi.

Natijada suv resurslarining taqchilligi yildan-yilga kuchayib boryapti. Shu bois, keyingi yillarda mamlakatimizda yer va suv resurslaridan samarali foydalanish, ularni boshqarish tizimini takomillashtirish, suv xo'jaligi obyektlarini modernizatsiya qilish va rivojlantirish bo'yicha izchil va keng ko'lamli islohotlar amalga oshirilmoqda.

Bundan tashqari, suv manbalari O'zbekistondagi ko'plab ekotizimlar, jumladan, daryolar, ko'llar va suv omborlari uchun muhim ahamiyatga ega. Suv resurslariga ehtiyotkorlik bilan munosabatda bo'lish va ularni boshqarish biologik xilma-xillikni saqlashga, suv sifatini yaxshilashga olib keladi va ekoturizmni saqlash va rivojlantirish imkonini beradi.

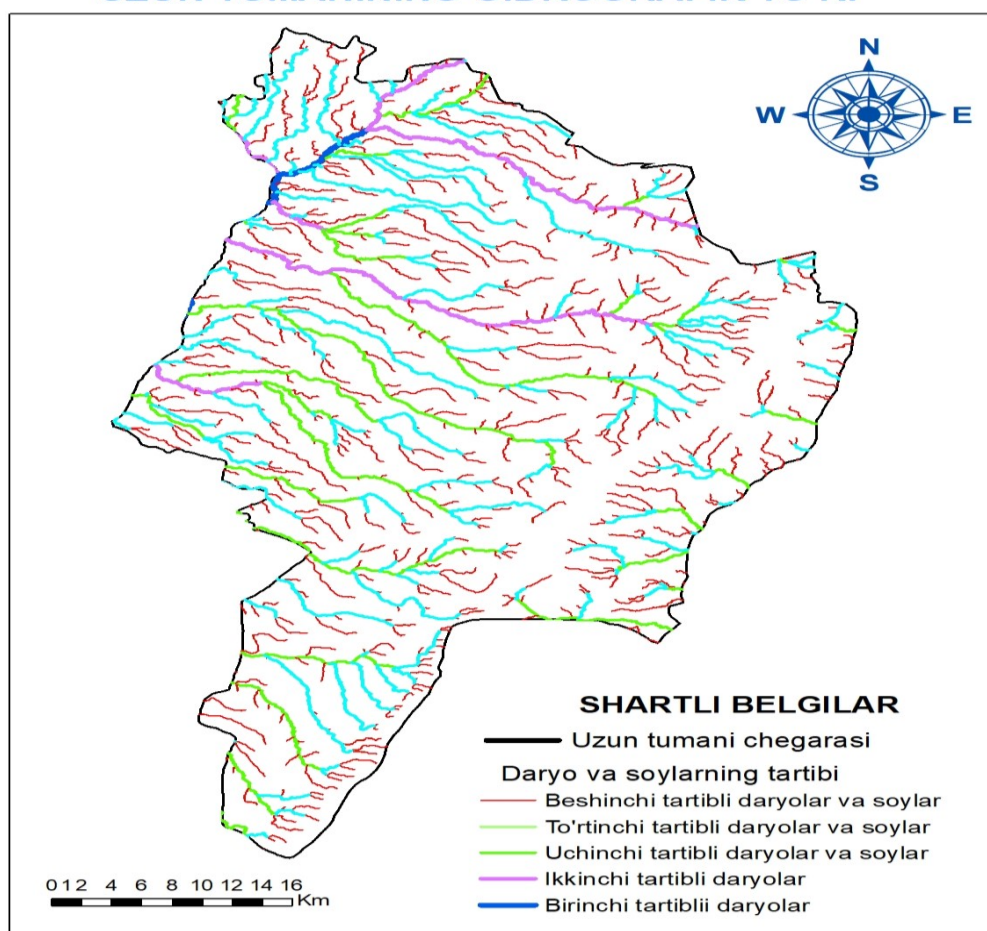
Xayotni suvsiz tasavvur etib bo'lmaydi, shuning uchun suv tabiatda eng qimmat tabiiy resur hisoblanadi. Tabiat hosilasi bo'lgan suv qishloq xo'jalik ekinlari, sanoat korxonasi va insonlar uchun eng muhim boylikdir. Suv modda va energiyaning tabiatda aylanishida va o'simliklarning fotosintiz jarayonida ham

suv faol qatnashadi. Tirik organizmlarni ko'p qismini suv tashkil qilib, shuningdek ularni o'sish va rivojlanishida asos vazifasini o'taydi. Tirik organizmlarda suv almashuvini buzilishi bajarayotgan turli funksiyalarini o'zgarishiga sabab bo'ladi ( Shodimetov 1994).

Tumanning asosiy suv resurslar manbai daryolar, soylar, kanallar, yer osti suvlari hisoblanib, ular qishloq xo'jaligining turli tarmoqlarini rivojlanishida hamda aholining ichimlik suvi bilan taminlashda katta ahamiyatga egadir.

Tuman hududidan To'polondaryo, Obizarang, Qoratog', Qorasuv, Surxon daryolari oqib o'tadi. Uzun tumani hududida jami kanallar soni 9 ta bo'lib, ularning uzunligi 98,2 km ni tashkil etadi. Kanallarning asosiy qismi Qoratog', Surxon va Kofirnihon daryolaridan suv oladi. Aholi va xo'jaliklar ekin maydonlarini suv bilan ta'minlashda shu daryo va kanallardan foydalaniladi.

#### UZUN TUMANING GIDROGRAFIK TO'RI



**2-rasm. Uzun tumanining gidrografik to'ri.**

Tuman ekin yerlarini sug'orishda daryolar, kanallar hamda kanallardagi nasoslar sug'oriladigan yerlarni suv bilan taminlaydi. Sug'oriladigan yerlarni sug'orishda asosiy daryolarga Qoratog', To'polon, Surxondaryo va Kofirnihon daryolari kiradi. Kanallardan Astan, Astan-1, Astan-2, Fayzova, MP-1, Goros, Xatib kanallari hisoblanadi. Surxondaryoning qayir usti I terrasasidagi sug'oriladigan yerlar daryolarning o'zidan suv oladi. Surxondaryoning qayir usti

II, III terrasalaridagi sugʻoriladigan yerlar kanal va nasos stansiyalaridan suv oladi. Kanallarning asosiysi qayir usti II, III terrasalar oraligida joylashgan. Kanallar insonlarning qoʻl mehnati asosida qazilgan, Surxondaryoning qayir usti II, III terrasalar chegarasida togʻ jinslari yumshoq hisoblanadi, shuning uchun asosiy kanallar II, III terrasalar oraligʻida joylashgan, hamda daryo oqimi tomon nishablik boʻladi. Kanallar ichida Astan kanali muhim hisoblanadi. Astan kanali Qoratogʻ daryosidan toʻgʻonsiz suv oladi.



**3-rasm. Qoratogʻ daryosidan toʻgʻonsiz suv oluvchi Astan kanali**

1974- yil Uzun tumani “ Vodhoz ” boʻlimiga foydalanishga topshirilgan, kanalning vazifasi Aston-1, va Aston-2 kanallariga suv etkazib Serharakat hududining 3606 gektar ekin maydonlarini suv bilan taʼminlaydi.

Uzun tumanidagi ekin maydonlar 15094 gektarni tashkil etib, sugʻoriladigan yerlar maydoni 10808 gektarni tashkil etadi. Hozirgi kunda iqlim issiq va quruq kelishi insonlar va qishloq xoʻjaligida suvga boʻlgan ehtiyochoq ortib bormoqda. Soʻngi 3-4 yil ichida daryolar suv sathining kamyishi va insonlarni suvga boʻlgan ehtiyojining oʻsishi yaqqol namayon boʻlmoqda. Sugʻoriladigan ekin maydonlar va tomorqa yerlariga suvdan foydalanish uchun qishloq xoʻjalik vazirligi tomonidan viloyatlar va tuman kesimida bir yildan qancha suvdan foydalanish boʻyicha limit ajratilib quyidagi jadvalda keltirilgan.

Surxondaryoning qayir usti III terraslardagi sugʻoriladigan ekin maydonlarga nasos stansiyalari orqali suv chiqarilib ekin dalalari sugʻoriladi, Surxondaryoning qayir usti III terrasada ekin ekiladigan yerlar katta qismini tashkil etadi.

**Uzun tumaniga 2021- yil oylar kesimida ajratilgan suv limitidan foydalanishi**

T/R	Oylar nomi	Oylar bo'yicha suv miqdori, mln m <sup>3</sup> da		
		Belgilangan me'yor	Amalda suv resurslaridan foydalanish miqdori	Belgilangan me'yor va suvdan amalda foydalanish o'rtasidagi farq
1	Yanvar	00	1,55	-1,55
2	Fevral	11	11,9	-0,9
3	Mart	25,1	3,68	21,42
4	April	15	14,5	0,5
5	May	16	24,72	-8,72
6	Iyun	24,30	29,55	-5,25
7	Iyul	30,50	30,21	0,29
8	Avgust	16,80	24,28	-7,48
9	Sentyabr	9,80	18,57	-8,77
10	Oktyabr	9,8	16,97	-7,17
11	Noyabr	9,6	15,99	-6,39
12	Dekabr	00	9,63	-9,63
	<b>Jami</b>	<b>168</b>	<b>201,5</b>	<b>-33,5</b>

Bu yerlarga paxta va g'alla ekinlari almashlab ekiladi. Paxta 1 gektariga 18-20 sentner beradi. Paxta ekinlari yoz oylarida suv tanqisligidan hosil darajasi pasayadi. Bu hududlarga g'alla ekinlarini ekish va suvni kam talab qiladigan ekinlar yoki ko'p yillik ekinlar misol uchun beda o'simligi ekilsa maqsadga muvofiq bo'ladi, asosan tipik bo'z tuproqlar hosil bo'lgan bo'z tuproqlarning ona jinsini, lyoss va lyossimon jinslar tashkil etadi. Lyoss va lyossimon jinslar tarqalgan hududlarda, eroziya va jarlanish jarayoni tezlashadi. Surxondaryoning qayir usti III terrasasida joylashgan Xalqobod, Qo'shqoq, Yuqori namuna, Yangi sharq qishloqlaridagi paxta ekin dalalari atrofida jarlanish jarayonini ko'rish mumkin.

Aholini toza ichimlik suvi bilan ta'minlash masalasi ham har qachongidan dolzarb bo'lib, bu borada muayyan chora-tadbirlar hayotga tatbiq etilyapti.

**Uzun tumanidagi suv chiqaradigan asosiy nasos stansiyalari**

№	Nasoslar nomi	Yer maydoni (ga)
1	Cherishli	175
2	Jonchekka 1-2	300
3	Dazara-2	189
4	Dazara-3	98
5	Qarg'ali	287
6	Otchopar-1-2-3	202
7	Astana-1	413
8	Astana-2	1220



9	J.Pirnazarov	167
10	Serharakat-1-2	347
11	Malik	84
12	Oq tumshuq	98
13	Jonchekka	675
14	Yer osti quduqlari	290
	<b>Jami</b>	<b>4545,0</b>

Xulosa qilib aytganda, Uzun tumanida suv resurslari uch xil maqsadda: 1) Aholi uchun toza ichimlik suvi maqsadida; 2) Ishlab chiqarish korxonalarini ta'minotida; 3) Qishloq xo'jaligi yerlarini sug'orishda foydalaniladi. Mazkur sohalarning hammasi muhim va dolzarb ahamiyatga ega.

“Xo'jalik uchun yetarli bo'lgan suv resurslari qanday shakllanadi?” degan savol tug'iladi. Daryolarda to'planadigan suvlar, tabiiy yog'ingarchilik, yer osti suvlari — bizning suv manbalarimizdir. Demak, o'z-o'zidan asosiy maqsad ana shu manbalarni to'liq nazoratga olish, ulardan ishlab chiqarilayotgan toza suv miqdorini ko'paytirish, eng muhimi, suv iste'molida yuzaga kelgan tartibsizlik va isrofni yo'q qilish lozimdir.

Umuman olganda, suvni tejash iqlim o'zgarishiga moslashish va ichimlik suvining kamayishi, yong'in va qurg'oqchilik xavfining oshishi kabi salbiy ta'sirni yumshatishda muhim omil bo'ladi.

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## **BIOLOGY AND DAMAGE OF THE FIG MOTH**

*Abstract.* Some researchers say that the fig moth develops by giving 3 generations in a season. But according to the results of the conducted research, it became clear in our laboratory and field observations in 2020-2021 that in the conditions of Andijan and Fergana regions, the fig moth developed by giving 5-6 generations.

*Key words:* fig fruit, fig moth, *Choreutis nemorana*, damage, phenogram, egg, worm, mushroom, imago.

Fig (*Ficus carica* L.) is a woody shrub that has been cultivated since ancient times. Figs have been known to mankind for 5-6 thousand years. The fruits of figs are rich in various vitamins and sugar. That is why it is eaten as a medicinal fruit, and its leaves are used to prepare medicines such as "Kafiol", "Regulax".

It is known that there are 18 varieties of figs in Uzbekistan. Among them, the most common are: Uzbekistan yellow fig, Karshi fig, Kadota, Smirin black fig and others. In the conditions of Uzbekistan, sufficient light and heat, as well as artificial irrigation and soil conditions are favorable for growing figs. Therefore, it can be found in the courtyards of all regions and in special plantation-gardens [1].

It is necessary to protect these trees and their fruits from various harmful organisms in order to obtain a high and quality harvest from figs, which are the gifts of the garden, and to meet the needs of the population.

It became clear from our inspections carried out in different regions of our Republic in different years and from the studied literature that there are 14 types of pests that have a nutritional connection with figs, 13 of them are insects and one type is a common spider mite [3].

The fig moth belongs to the family Choreutidae in systematics (previously it was in the family Glyphipteridae). Butterfly wings have a unique shape and color. When the wing is folded, its size reaches 15-17 mm. The body is dark brown. The forewings are brownish-brown, while the hindwings are dark brown. The edges of the wings are covered with flowing hairs. Mustaches are long, stringy. Eggs are oval-flat, runny-yellow, 0.5 mm.

We tested laboratory-grown trichogramma from eggs laid on fig leaves in microsacs. In this case, no ratio was studied: the goal was to find an answer to the question of whether the trichogram stings at all. To do this, we released about 1:10 ratio (that is, 10 trichograms per egg) to the counted moth eggs in a Petri dish. The result obtained after seven days showed that the eggs of the fig moth were found to be infected by Trichogramma. In the control variant, only 72% of the worms were not damaged, and the rest remained sterile. Out of 74

eggs offered in the experiment, 41 were infected, 11 had worms, and 22 were destroyed.

Some researchers say that the fig moth develops by giving 3 generations in a season [3]. But according to the results of the conducted research, it became clear in our laboratory and field observations in 2020-2021 that in the conditions of Andijan and Fergana regions, the fig moth developed by giving 5-6 generations.

The fig moth only damages figs. In the spring, it mainly eats the young leaves and makes them rot. As a result, the branch and tree lag behind in development, and the yield decreases. The pest spends its 3-4th generations during the "second" harvest period of the fig bush.



**Figure 1. Pest damage to fig leaves**

We learned how the fig moth butterfly lives and lays eggs. For this, 1 pair (male and female) mushrooms were placed in a small (capron mesh) box on tree branches. The sex of the butterfly was distinguished based on the location of the genital lines at the end of the abdomen.



**Figure 2. Damaged fruits**

Each female lives from 9 to 20 days. At this time (butterflies with additional feeding) each breed can lay up to 105 eggs on the underside of a leaf singly or in clusters of 10-14. Embryonic development of eggs lasts 4-6 days, worms hatch, 25-35 out of every 100 eggs remain sterile. Newly hatched caterpillars first feed

on the remains (shell) of the egg in which they lived, and then begin to gnaw on the green soft tissue of the leaf. Adult caterpillars hide themselves by twisting the edge of the leaf with thin and soft threads that they weave.

According to the results of our research, 8 kg (-12.8 tons per hectare) were lost from each of the bushes less affected by the pest, and 14.4 kg (-23 tons per hectare) from each of the heavily damaged bushes. Thus, it turned out that the damage of the fig moth is high.

Based on the obtained results, it was calculated to determine the IZMM to fight the fig moth. It gave the following result.

In the experiment mentioned above, if the average of the results obtained in both options is taken, if 1 out of every 200 fruits present in woody bushes is infected (0.5%), 55 kg of fruits per hectare can be lost. Taking into account that the experimental trees were also infested with a spider mite, if half of the damage is attributed to this pest, the fig moth itself can be considered as 1% of the IZMM. This means that only then the money spent on chemical treatment of 1 hectare of garden can be justified. For even more profit, it may be economically viable to start mothproofing fig bushes when an average of 1.5-2 out of every 100 fruits (1.5-2%) are infested.

1. Protection of figs against fig moth should be started only when 1.5-2 out of 100 fruits (1.5-2%) are affected (IZMM). Then the processing can be economically effective, in addition to paying for itself.

2. If the fig is infected with a spider mite in addition to the moth, it should be treated with 1% single-acting drugs (Karate, Tsiperfos, etc.) when the fruit is damaged.

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## **PRIORITY DIRECTIONS OF PEDAGOGICAL - PSYCHOLOGICAL CHARACTERISTICS IN THE EDUCATION OF CHILDREN IN THE FAMILY**

*Abstract. In the family, the responsible task of raising the young generation to become a perfect person is on the shoulders of parents. There is a saying that a child can be raised by seven neighborhoods and a father like a mother. In fact, the formation of human personality begins with the family. In particular, the child develops will, habits, character, behavior, attitude to the environment, beliefs and views. It is not for nothing that the saying that the homeland begins at the threshold can have a positive or negative effect on the child's psychology and upbringing. In this article, you can get acquainted with the priorities of how to educate the young generation.*

*Key words: Family, parents, social, moral, economic basis, pedagogical and psychological.*

The family is a complex social group, which is formed as a result of the combination of biological, social, moral, ideological and spiritual relations. Therefore, the changes in marriage and the relations of family members are directly related to the changes in its material, household and economic basis. The issue related to the education of youth in the society should always be the main task of the state policy. Since time immemorial in the East, education and training have been extremely sensitive.

The atmosphere in the family is stable when parents feel their responsibilities. In order for children to grow up to be polite, the neighborhood, along with the parents, is a great school of example. It is not for nothing that our people say that "birds do what they see in their nests". A parent raising a child should be able to show noble qualities in every movement, posture, behavior and interaction with others. Because the child is extremely imitative and observant by nature. Therefore, the people around him influence them with their habits, sometimes without realizing it. Rough relationships in the family, a lot of lying, unpleasant behavior create an unhealthy environment that negatively affects the upbringing of a child.

Parental behavior plays an important role in raising a child. If a child grows up hearing harsh words from his parents and being beaten, this will have a negative effect on his nature. This, in turn, creates "spiritually sick" people from children raised in an unhealthy environment in the family. They also have a negative impact on the morale of society. In the family, parents are influenced by "mass culture", which has a negative impact on the education of children.

Family is the foundation of development, family is the center of education, Family is the foundation of society. It is an environment where all human qualities, good intentions, professions, values formed in the mind of every person from early childhood are perfected, ideological and spiritual education is carried out. The Hungarian sociologist M. Komleji, who studied the interaction of family members, identified four factors of the family environment (situation, conditions, situation) that directly affect the attitude of schoolchildren aged 10-14 to study and work. divides into groups:

1) public activities of parents (their ideological views and attitudes towards work):

2) relations within the family (parental relations, relations of parents with grandparents, mutual relations of brothers and sisters):

3) educational-pedagogical activities of parents (their educational problems, interests, cooperation with the school, help of parents during lesson preparation for students, their educational significance:

4) student's activities in the family (student's daily schedule, certain obligations in household chores), etc.

Today, the public is concerned about the following urgent problems. Who are raising boys and girls in the family and in what spirit and manner are they raised?

- Is the education of the family carried out in a planned and orderly manner? What level of prestige do parents, older relatives, and birth parents have in the eyes of students? In what way are the methods of encouragement and punishment used in the family and so on. Also, in interpersonal relations, the nervous system of family members (its strength, balance, docility, instability), temperament (its choleric, sanguine, phlegmatic categories), ideological content, its interest, feeling, ideal, belief, worldview, personal position) moral character, attention, its strength, dispersion, distraction, support) memory, will (independence, determination, boldness, fearlessness), speech (meaningful, logical, melodic, speed, roughness and softness), emotional internal experiences (mood, exhilaration, tension, excitement, hunger, bitterness, joy) very interesting.

The approximate scheme of the structure of relations between family members is as follows:

1) relationship between grandparents and all other family members:

2) mutual relations of parents:

3) communication between parents and children:

4) order of mutual relations of their children:

5) relations of the bride with all family members:

6) such as the way brides (ovsins) communicate with each other.

The family plays a very important role in the consistent and orderly implementation of moral education. The foundation of a person's moral, spiritual and spiritual image is laid in the family. That is why famous scholars paid great



attention to family education and wrote a number of valuable works dedicated to this issue.

The Uzbek people have a centuries-old rich culture and history. This cultural heritage includes the total spiritual wealth of society. In particular, the pedagogy, spiritual and cultural history of the peoples of Central Asia has a rich heritage, and their essence and meaning are reflected in the folk art and the works of advanced thinkers. In particular, the work of studying the heritage of the peoples of our republic in the fields of pedagogy and psychology is still waiting for many of its researchers. Even a few centuries ago, the masterpieces of scholars such as At-Tirmidhi and Ismail Bukhari enriching the human spiritual world, in particular, the complex of hadiths that illuminate the content of the "Quran-Karim" are the life-giving sun of the Muslim world. The opportunity has come for our youth and children to enjoy its rays.

The family, along with being a fortress of society, is a cell that provides worthy citizens and specialists for society and the state. It is precisely this concept of the family and the negative and positive aspects of globalization affecting child upbringing that have been analyzed, and the importance of our national mentality has been theoretically shown. The family has its own rules for raising a child, and parents should use them appropriately. In particular, they are as follows:

1) creating emotional harmony, mental peace and a warm climate in the family:

2) maintaining the reputation of parents:

3) unity of demands between parents and adults in education:

4) education of the child's personality in work:

5) family, school and community cooperation:

6) to love and honor the child:

7) establishing a strict regime and routine in the family:

8) taking into account the age and personal characteristics of children in upbringing:

9) to determine the child's development:

10) inculcating entrepreneurial qualities in the child, among others.

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## **ATMOSFERA HAVOSINI IFLOSLANISHI NATIJASIDA INSONLARGA BO'LAYOTGAN TA'SIRI**

*Annotasiya. Ushbu maqolada O'zbekiston respublikasida atmosfera havosini antropogen omillar ta'sirida ifloslanib borayotganligi, buning natijasida turli salbiy oqibatlar yuzaga kelayotganligi bo'yicha ma'lumotlar berilgan. Shuningdek, qishloq hududlari aholisining atmosfera havosini ifloslanishi va ularni oldini olish imkoniyatlari bo'yicha savodxonlik darajasini aniqlash borasidagi olib borilgan izlanish natijalari keltirilgan.*

*Kalit so'zlar: Troposfera, azot dioksidi, ozon, oltingugurt dioksidi, havoning ifloslanishi, karbonat angidrid, zarralar bilan ifloslanish, ultrabinafsha nurlanishining kuchayishi, kislotali yomg'ir.*

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## **EFFECTS OF ATMOSPHERIC AIR POLLUTION ON PEOPLE**

*Abstract. This article provides information about the increasing air pollution in the Republic of Uzbekistan under the influence of anthropogenic factors, resulting in various negative consequences. The results of a study conducted to determine the level of literacy of rural residents on issues of air pollution and the possibilities for their prevention are also presented.*

*Key words: Troposphere, nitrogen dioxide, ozone, sulfur dioxide, air pollution, carbon dioxide, particle pollution, increased ultraviolet radiation, acid rain.*

**Kirish.** Havoning ifloslanishi atmosferada odamlar\_\_va boshqa tirik mavjudotlarsog'lig'iga hamda iqlimga zarar yetkazuvchi moddalarning mavjudligi sababli kelib chiqqan ifloslanish. Gazlar (shu jumladan ammiak, karbon monoksit, oltingugurt dioksidi, azot oksidi, metan, karbonat angidrid va xlorftorokarbonlar, qattiq zarralar (organik va anorganik) va biologik molekulalar kabi havoni ifloslantiruvchi moddalarning har xil turlari mavjud. Havoning ifloslanishi odamlarni kasalliklarga yo'liqtirishi, ularda allergiyalarni paydo qilishi va hatto o'limga olib kelishi mumkin; u hayvonlar va oziq-ovqat ekinlari kabi boshqa tirik organizmlarga hamda tabiiy muhitga (masalan, iqlim o'zgarishi, ozon qatlamining yemirilishi yoki yashash muhitining buzilishi) yoki atrof-muhitga (masalan, kislotali yomg'ir orqali) zarar yetkazishi mumkin. Atmosferaning ifloslanishiga inson faoliyati ham, tabiat hodisalari ham sabab bo'la oladi.

**Mavzuning dolzarbligi:** Havoni ifloslantiruvchi moddalar inson va ekotizimga salbiy ta'sir ko'rsatishi mumkin bo'lgan havodagi materialdir.<sup>[65]</sup> Modda qattiq zarralar, suyuq tomchilar yoki gazlardan iborat bo'ladi. Ifloslantiruvchi tabiiy kelib chiqishi yoki texnogen bo'lishi mumkin. Ifloslantiruvchi moddalar birlamchi va ikkilamchi deb tasniflanadi. Birlamchi ifloslantiruvchi moddalar odatda vulqon otilishi natijasida hosil bo'luvchi kul kabi jarayonlar natijasida hosil bo'ladi [1]. Boshqa misollar orasida avtoullov chiqindisidan chiqadigan uglerod oksidi yoki fabrikalardan chiquvchi oltingugurt dioksidi kiradi. Ikkilamchi ifloslantiruvchi moddalar to'g'ridan-to'g'ri hosil bo'lmaydi. Aksincha, ular asosiy ifloslantiruvchi moddalar reaksiyaga kirishganda yoki havoda o'zaro ta'sirlashganda hosil bo'ladi. Troposferik ozon ikkilamchi ifloslantiruvchi moddalarning yorqin namunasi. Ba'zi ifloslantiruvchi moddalar ham birlamchi, ham ikkilamchi bo'lishi mumkin [2].

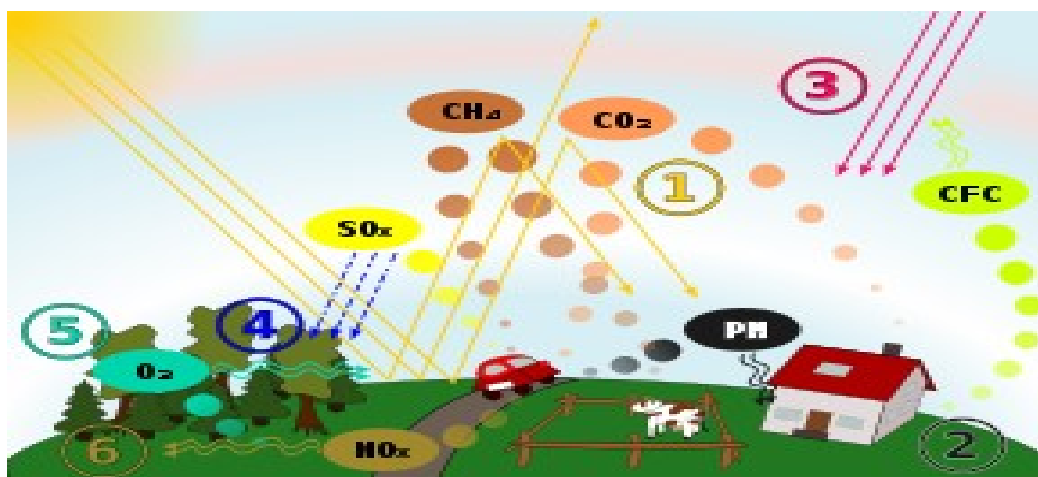
Amerika Qo'shma Shtatlari regulyatorlari tomonidan xavfsiz deb hisoblanganidan havo ifloslanishining uchta komponenti bo'lmish mayda zarrachalar, azot dioksidi va ozonning ta'siri yurak va nafas olish kasalliklari bilan bog'liq. 2020-yilda ifloslanish (shu jumladan havoning ifloslanishi) Yevropada har sakkizinchi o'limning sababi bo'lgan va ifloslanish bilan bog'liq kasalliklar, shu jumladan yurak kasalliklari, insult va o'pka saratoni uchun muhim xavfli omil edi. Havoning ifloslanishi natijasida kelib chiqadigan sog'liqqa ta'siri nafas olish, xirillash, yo'tal, astma va mavjud nafas olish va yurak kasalliklarining yomonlashishini o'z ichiga olishi mumkin. Ushbu ta'sirlar dori vositalaridan foydalanishning ko'payishiga, shifokor yoki tez yordam bo'limiga tashrif buyurishning va kasalxonadagi bemorlarning ko'payishiga hamda erta o'limga olib kelishi mumkin [3]. Havoning yomon sifati inson salomatligiga ta'siri katta bo'lib, asosan tananing nafas olish tizimi va yurak-qon tomir tizimiga ta'sir qiladi. Atmosfera ifloslanishining eng keng tarqalgan manbalariga zarrachalar, ozon, azot dioksidi va oltingugurt dioksidi kiradi. Rivojlanayotgan mamlakatlarda yashovchi besh yoshgacha bo'lgan bolalar ichki va tashqi havoning ifloslanishi bilan bog'liq jami o'limlar bo'yicha eng zaif aholi hisoblanadi.

Jahon sog'liqni saqlash tashkilotining 2014-yilgi hisob-kitoblariga ko'ra, har yili havoning ifloslanishi dunyo bo'ylab 7 millionga yaqin odamning bevaqt o'limiga sabab bo'lgan. 2019-yil mart oyida chop etilgan tadqiqotlar bu raqam 8,8 million atrofida bo'lishi mumkinligini ko'rsatgan. 2022-yilgi tahlil havoning ifloslanishi 2019-yilda 6,67 (5,90-7,49) million erta o'limga sabab bo'lgan degan xulosaga keldi. O'lim sabablari orasida qon tomirlari, yurak kasalliklari, o'pka saratoni va o'pka infeksiyalari mavjud.

Shahar havosining ifloslanishi har yili dunyo bo'ylab 1,3 million kishining o'limiga sabab bo'ladi. Ayniqsa, bolalar nafas olish organlari tizimining yetilmaganligi tufayli xavf ostidadir. 2015-yilda tashqi havoning, asosan, PM<sub>2,5</sub> bilan ifloslanishi, dunyo bo'ylab Osiyoda yiliga 3,3 (95 % CI 1,61-4,81) million erta o'limga olib kelishi taxmin qilingan. 2021-yilda JSST tashqi

havoning ifloslanishi 2016-yilda dunyo bo'ylab 4,2 million erta o'limga sabab bo'lishi taxmin qilinganini ma'lum qilgan. 2020-yilgi tadqiqot shuni ko'rsatadiki, 2015-yilda havo ifloslanishidan umr ko'rish davomiyligining qisqarishi 2,9 yilni tashkil etgan, bu to'g'ridan-to'g'ri zo'rvonlikning barcha shakllaridan 0,3 yildan sezilarli darajada ko'proq ekanligini ko'rsatadi.

2022-yilda GeoHealthda chop etilgan tadqiqot shuni ko'rsatdiki, Qo'shma Shtatlarda energiya bilan bog'liq qazib olinadigan yoqilg'i chiqindilarini yo'q qilish har yili 46,900-59,400 erta o'limning oldini oladi va PM2.5 bilan bog'liq kasalliklar va o'limning oldini olish uchun 537-678 milliard dollar foyda keltiradi



Sxematik chizma, havo ifloslanishining sabablari va oqibatlari: (1) issiqxona ta'siri, (2) zarralar bilan ifloslanish, (3) ultrabinafsha nurlanishining kuchayishi, (4) kislotali yomg'ir, (5) troposferik ozon konsentratsiyasining oshishi, (6) yuqori daradagi azot oksidi

Toshkent havoning ifloslanish darajasi bo'yicha dunyoda uchinchi o'ringa ko'tarildi  
Toshkent havoning ifloslanish darajasi bo'yicha 23-yanvar kuni dunyoda uchinchi o'ringa chiqdi.  
AQSHning Havo sifati indeksi platformasi reytingiga ko'ra, poytaxtdagi PM2.5 chang zarralari JSST havo sifati bo'yicha yillik yo'riqnoma qiymatidan 26,2 baravarga oshdi.  
Bunday paytda niqob taqish, derazalarni yopish va havo tozalagichlardan foydalanish tavsiya etiladi.

1		Dhaka, Bangladesh	301	244.6K	
2		Delhi, India	270	1.5M	
3		Tashkent, Uzbekistan	190	7.3K	
4		Lahore, Pakistan	181	436.2K	
5		Wuhan, China	174	200.7K	
6		Kathmandu, Nepal	172	132.3K	
7		Kolkata, India	169	1.5M	
8		Chongqing, China	165	30.7K	
9		Bishkek, Kyrgyzstan	165	81.7K	
10		Kabul, Afghanistan	159	18.9K	

**Muammoni yechish usullari.** Hozirgi vaqtda havo ifloslanishining asosiy sabablariga amaliy alternativalar mavjud:

1. Jamoat transporti turlaridan, velosipeddan hamda infratuzilmalardan foydalanish (shuningdek, masofaviy ish, ishlarning qisqarishi, boshqa joyga ko'chishi bilan almashtirish va mahalliyashtirish)

2. Yoqilg'i vositalaridan bosqichma-bosqich voz kechish barqaror transportga o'tishning muhim tarkibiy qismidir; Biroq, elektr transport vositalari kabi shunga o'xshash infratuzilma va dizayn qarorlari ishlab chiqarish, shuningdek, ko'p miqdordagi zarur akkumulyatorlar uchun kon va resurslardan foydalanish ifloslanish bilan bog'liq bo'lishi mumkin.

3. Kema harakatini tabiiy gaz kabi toza yoqilg'iga o'tkazish mumkin.

4. Qazib olinadigan yoqilg'ilarning yonishi natijasida hosil bo'ladigan elektr energiyasi yadro va qayta tiklanadigan energiya bilan almashtirilishi mumkin. Mintaqaviy havoning ifloslanishiga sezilarli hissa qo'shadigan isitish va uy pechlari rivojlanmagan mamlakatlarda tabiiy gaz yoki qayta tiklanadigan energiya kabi toza yoqilg'i bilan almashtirilishi mumkin.

5. Shahar havosining ifloslanishining asosiy omili bo'lgan qazib olinadigan yoqilg'i bilan ishlaydigan avtotransport vositalarini elektr transport vositalari bilan almashtirish mumkin.

6. Umumiy avtotransportlarni faoliyatini yanada kengaytirish.

Xulosa qilib aytish mumkinki tadqiqotlar atmosfera havosini ifloslanishi natijasida insonlarga bo'layotgan ta'siri shuni ko'rsatdiki, astma va surunkali obstruktiv o'pka kasalligi (KOAХ) rivojlanish xavfining ortishi transport bilan bog'liq havo ifloslanishiga ta'sir qiladi. KOAХ surunkali bronxit va amfizem kabi kasalliklarni o'z ichiga oladi. Havoning ifloslanishidan kelib chiqqan o'pka kasalliklari xavfi quyidagi odamlar guruhlari uchun eng yuqori sanaladi: chaqaloqlar va yosh bolalar, ularning normal nafas olishi kattaroq bolalar va kattalarnikiga qaraganda tezroq; qariyalar; tashqarida ishlaydigan yoki ko'p vaqtini tashqarida o'tkazadiganlar; va yurak hamda o'pka kasalligiga chalinganlar. Atmosfera havosini ifloslanishi natijasida insonlarga bo'layotgan ta'siri hozirgi kunda eng dolzarb muammolardan biri hisoblanadai

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## **EFFECT OF AN EFFECTIVE FUNGICIDE ON RUST DISEASE OF WINTER WHEAT**

*Annotation. Yellow rust of winter wheat is the most dangerous disease in the Andijan region and spreads in conditions of high humidity. In recent years, the disease has spread to the country's irrigated grain fields, causing significant damage to the quality and quantity of grain grown, as well as effective fungicidal action against it.*

*Key words: rust, pustule, leaf blade, chemical fight.*

Satisfying the demand of the population of Uzbekistan for winter wheat grain is considered the main issue of the day. With the improvement of the intensive technology used in modern agriculture, it is possible to achieve a high yield of agricultural crops, including winter wheat. For this, first of all, the elimination of pests and diseases is an important indicator.

In the climatic conditions of Uzbekistan, grain crops are damaged by pests such as aphids, grain aphids, thrips, slimyworms and about 10 types of diseases. It is observed that these harmful organisms have spread to the irrigated grain fields of our republic in the following years, causing significant damage to the quality and quantity of the cultivated grain. It has been determined that this group of harmful organisms can cause 15-20% annual crop loss, and 45-50% when the climate is favorable for their growth [6].

Although it is considered that the development of grain production and higher yields depend on the measures used, some of the harvested crops are dying due to the spread of diseases.

Rust, the main disease of winter wheat, is the most dangerous, and its development becomes more active as the temperature of the disease-causing air rises. The importance of modern active fungicides remains important in reducing its effect on the disease. Taking this into account, Alto super 33% k.e. of the fungicides applied to production by a number of our scientists in the following years, the biological efficiency was 100% when cyproconazole 80 g/l + propiconazole 250 g/l at 0.3 l/ha was used against rust [3].

The development of the disease depends on the external environment, the more favorable conditions are for the pathogen to infect the plant, the easier it is to damage the plant. As long as this is the case, it is the main important factor for it to be able to fully use this environment in order to be iatrogenic. According to long-term information about this, the rust disease was observed from the second half of April, when the average daily air temperature was +15-20°C, and the

relative humidity was 60-65%, and there was more precipitation. Air temperature higher than +25°C practically completely stops the life activity of spore-forming fungi [4].

According to the experiments conducted by another researcher, Tiltol, used against yellow rust, is 25% k.e. In comparison with the control variants, the disease incidence of plants decreased by 12.3%, while the disease development was 7.9% [2].

One of the important factors of crop protection is the rational planning and proper organization of chemical treatments of grain against rust disease. In particular, in the conditions of Andijan region, the achievement of the set goal will be ensured by developing the optimal period and standards for protection against the rust disease of winter wheat in naturally damaged areas.

**Table 1**  
**Effects of DRUNK-300 ES fungicide on germination, growth and development of wheat**

Experience options	Dynamics of seed germination %			The thickness of seedlings is million pieces	The height of the plant stem, cm	Illness		Disease development
	28.04	01.05	03.05			piece	%	
Назорат	54,1	68,8	74,9	4,6	49,8	30,4	77,4	14,3
DRUNK-300 EC	63,7	76,2	83,2	4,5	84,5	32,6	68,3	12,9
DRUNK-300 EC	71,9	85,3	92,9	4,5	93,1	21,3	12,7	6,1
Фолекур БТ22% (ЭТАЛОН)	64,4	78,6	81,3	4,5	86,7	32,9	58,9	11,0

According to the data on the growth and development of winter wheat of the new DRUNK-300 ES substance, the best growth was recorded in wheat seedlings of option 3. While the height of the wheat seedlings of this variant was 93.1 cm, this appearance was characterized by 86.7 cm in the plants of the reference variant. When we looked at the difference between them, it was found that the wheat of option 3 was 6.4 cm taller. In the experiment, the norm of seedling thickness of 4.5-4.6 million pieces is considered to be a factor of obtaining a high yield from the experiment.

**Table 2**  
**Effect of DRUNK-300 ES fungicide on winter wheat rust**

Experience options	The spread of rust disease			Incidence %	The degree of development of the disease	Biological efficiency %
	05.05	10.05	15.05			
Назорат	1,9	6,3	11,2	17,2	96,1	-

DRUNK-300 ES	0,4	1,9	2,3	3,6	11,7	79,0
DRUNK-300 ES	0	0	0	2,4	9,5	86,0
Фолекур БТ22% (эталон)	0	1,3	1,2	2,5	10,1	83,4

The value of our experiment is that it was found that this new chemical has a significant effect not only on rust disease, but also on septoria disease. In the case where DRUNK-300 ES was used (table-3), the incidence of rust in young seedlings was 12.7% in the calculations of May 15, while in this period, 58.9% of autumn wheat stalks in the standard variant were infected. This can be explained in such a way that the development of the rust fungus and the increase in pathogenicity for the plant depend on external factors.

In the variant treated with DRUNK-300 ES fungicide at the rate of 0.2 l/ha, biological efficiency was 79.0% after 20 days, while 96.1% of seedlings in the control variant were damaged. In the variant treated with DRUNK-300 ES fungicide at the rate of 0.3 l/ha, the biological efficiency was 86.0% with disease development at 0.5%.

According to the results of the studies, it was found that DRUNK-300 ES has an effect on the development of the rust fungus and the reduction of the amount of pustules on the leaf, and it has been found that the development of uredospores on the leaf plate of the plant has decreased by 75-80%, and the pustule has dried with a change in its tension and color.

It can be concluded that DRUNK-300 ES k.e. Application at the rate of 0.3 l/ha from 2 to 8 days caused a decrease in the ability of the pathogen to affect the plant, as well as a decrease in the disease and an increase in the yield of winter wheat.

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## **GENERAL UNDERSTANDING OF PHARMACOLOGICAL PREPARATIONS**

*Abstract. This article provides a comprehensive overview of pharmacological preparations, covering various aspects related to their development, use, and safety. It discusses drug formulations, pharmacogenetics, adherence and compliance, drug safety, rational drug use, over-the-counter medications, drug development and research, and more. The article emphasizes the importance of healthcare professionals in guiding the appropriate use of pharmacological preparations and highlights the need for personalized medicine and pharmacovigilance. Key concepts such as drug interactions, polypharmacy, and herbal and alternative medicines are also explored. The aim is to enhance understanding of pharmacological preparations and their role in healthcare.*

*Keywords: pharmacological preparations, drug formulations, pharmacogenetics, adherence, drug safety, rational drug use, over-the-counter medications, drug development, pharmacovigilance, drug interactions, polypharmacy, personalized medicine, herbal medicine, alternative medicine.*

### **Introduction:**

Pharmacological drugs play a critical role in the prevention, treatment, and management of various medical conditions. They are designed to interact with specific targets in the body, modulating physiological processes and restoring health. This article provides an overview of pharmacological drugs, exploring their classification, mechanisms of action, therapeutic uses, and considerations for their safe and effective use.

Pharmacological drugs encompass a wide range of substances, including prescription medications, over-the-counter drugs, and herbal supplements. They are developed through a rigorous process of research, preclinical testing, and clinical trials to ensure their efficacy and safety. Understanding the fundamental principles and characteristics of pharmacological drugs is essential for healthcare professionals, researchers, and individuals seeking knowledge about these medications.

The classification of pharmacological drugs is based on various criteria, including their mechanism of action, therapeutic class, and route of administration. Different drug classes target specific biological systems or receptors, such as the central nervous system, cardiovascular system, or immune system. Understanding these classes and their mechanisms of action allows

healthcare professionals to select the most appropriate drug for a particular condition.

Therapeutic uses of pharmacological drugs are diverse and encompass a wide range of medical conditions. They can be used for acute or chronic diseases, infections, pain management, mental health disorders, and many other conditions. The efficacy and safety of drug therapy depend on appropriate prescribing practices, dosage adjustments, and patient compliance.

Safety and adverse effects are important considerations when using pharmacological drugs. While drugs are designed to provide therapeutic benefits, they can also have side effects and potential interactions with other medications. Adverse drug reactions can range from mild to severe, and in some cases, may require immediate medical attention. Monitoring for adverse effects and understanding drug interactions are crucial for optimizing patient safety.

Moreover, individual variability in drug response is an important aspect of pharmacological drugs. Factors such as age, gender, genetics, and comorbidities can influence a person's response to medications. Pharmacogenetics, the study of how genetic variations affect drug response, allows for personalized medicine and tailored treatment approaches.

In conclusion, pharmacological drugs are essential tools in modern medicine, providing effective treatments for various health conditions. This article aims to provide an overview of pharmacological drugs, including their classification, mechanisms of action, therapeutic uses, and considerations for safe use. Understanding these concepts is crucial for healthcare professionals and individuals seeking knowledge about the medications they use or prescribe.

#### **Literature Analysis and Methods:**

Research on pharmacological preparations and the classification of various drug groups has a long history. Early works established categories of drugs and their mechanisms of action (Paracelsus, 1938). Subsequent literature analyzed drug development processes and regulations (Kefauver, 1962). More recent works examine new drug delivery systems and precision medicine approaches (Peppas, 2013; Chen et al., 2018).

To provide a comprehensive understanding of pharmacological preparations, this article incorporates a thorough analysis of existing literature from various sources. Relevant peer-reviewed research articles, textbooks, guidelines, and authoritative publications were reviewed to gather information on the topic. Electronic databases such as PubMed, Google Scholar, and academic libraries were utilized to access a wide range of literature. The search terms included "pharmacological preparations," "drug development," "drug safety," "pharmacovigilance," "drug interactions," "polypharmacy," and other related terms.

The literature analysis focused on identifying key concepts, recent advancements, and important considerations related to pharmacological preparations. Emphasis was placed on gathering information from reputable



sources and incorporating current evidence-based practices. The analysis aimed to provide a balanced and comprehensive overview of the field, considering both theoretical concepts and practical applications.

### **Methods:**

The methods used in this article involved a systematic approach to gathering and analyzing relevant literature. The process included the following steps:

1. Identification of Research Questions: The research questions were formulated to guide the literature search and analysis. These questions revolved around the general understanding of pharmacological preparations, their development, use, and safety.

2. Literature Search: A comprehensive search was conducted using electronic databases and academic libraries. The search terms were selected based on the research questions and encompassed various aspects of pharmacological preparations.

3. Selection of Relevant Literature: The retrieved articles were screened based on their relevance to the research questions and the quality of the information provided. Only peer-reviewed articles, textbooks, guidelines, and authoritative publications were included.

4. Data Extraction and Analysis: The selected literature was thoroughly read and analyzed to extract relevant information. Key concepts, definitions, mechanisms, and considerations were identified and organized into coherent sections.

5. Synthesis and Compilation: The extracted information was synthesized and compiled to create a cohesive and informative article. The sections were structured to provide a logical flow of information, ensuring a comprehensive understanding of pharmacological preparations.

It is important to note that this article does not present original research but rather serves as a synthesis and analysis of existing literature. The aim is to provide a reliable and informative resource for readers seeking a general understanding of pharmacological preparations.

### **Limitations:**

While efforts were made to gather relevant and up-to-date information, it is important to acknowledge the limitations of this literature analysis. The scope of the analysis may not cover every aspect of pharmacological preparations, and some recent developments or emerging research may not be included. Additionally, the interpretation and synthesis of the literature depend on the author's understanding and judgment, which introduces a degree of subjectivity.

Despite these limitations, the methods employed in this article aimed to provide a comprehensive and reliable overview of pharmacological preparations based on the available literature.

## **Discussion:**

Pharmacological preparations play a crucial role in modern healthcare, offering a wide range of options for disease prevention, treatment, and management. This article has provided a general understanding of pharmacological preparations, covering key aspects such as drug formulations, pharmacokinetic parameters, drug metabolism, pharmacovigilance, and considerations for special populations. In this discussion section, we will further explore the implications and significance of these concepts.

One of the fundamental aspects discussed is drug formulations. The development of different drug delivery systems has revolutionized the field, allowing for improved drug efficacy, targeted delivery, and enhanced patient convenience. Transdermal patches, inhalers, nanoparticles, and other systems offer unique advantages in terms of controlled release, localized action, and improved bioavailability. The continued advancements in drug formulation technologies hold great promise for optimizing therapeutic outcomes and patient adherence.

Understanding pharmacokinetic parameters is essential for effective drug dosing and individualized treatment. Factors such as bioavailability, half-life, clearance, and volume of distribution influence drug concentrations in the body and determine their duration of action. Clinicians can utilize this knowledge to tailor dosing regimens, adjust medication schedules, and optimize therapeutic outcomes. Additionally, pharmacokinetics plays a crucial role in the development of extended-release formulations and personalized medicine approaches.

Drug metabolism is another critical aspect that affects drug response and safety. The liver primarily metabolizes drugs, but other organs also contribute. Genetic variations in drug-metabolizing enzymes can lead to interindividual variability in drug response and susceptibility to adverse effects. Understanding these genetic factors can help identify individuals who may require dose adjustments or alternative medications. Furthermore, drug-drug interactions and the potential for drug metabolism-based drug interactions must be taken into account to avoid adverse reactions and therapeutic failures.

Pharmacovigilance and post-marketing surveillance are essential for monitoring the safety of pharmacological preparations. Adverse drug reactions and other drug-related problems need to be systematically collected, analyzed, and reported to regulatory authorities and healthcare professionals. The timely identification and management of drug-related risks contribute to the ongoing safety of medications. The engagement of healthcare professionals, pharmaceutical companies, and patients in reporting and monitoring adverse events is crucial for maintaining a robust pharmacovigilance system.

Special populations, such as pediatric and geriatric patients, require specific considerations when it comes to pharmacological preparations. Differences in drug absorption, metabolism, and elimination can impact drug response and safety in these populations. Adjustments in dosing, careful monitoring, and the

development of age-specific formulations are necessary to ensure optimal therapeutic outcomes while minimizing the risk of adverse effects. Furthermore, the potential for drug dependence and withdrawal symptoms should be carefully managed when discontinuing certain pharmacological preparations.

Importantly, the field of pharmacological preparations is continually evolving. Ongoing research and advancements in drug discovery, formulation, and safety monitoring are expanding our understanding and improving patient outcomes. The integration of pharmacogenomics and personalized medicine approaches holds promise for tailoring drug therapy based on individual genetic profiles, optimizing treatment effectiveness, and minimizing adverse reactions.

In summary, a general understanding of pharmacological preparations encompasses various concepts and considerations. The development of advanced drug formulations, the knowledge of pharmacokinetic parameters, the impact of drug metabolism, the importance of pharmacovigilance, and tailored approaches for special populations all contribute to safe and effective medication use. As the field continues to evolve, it is crucial for healthcare professionals and individuals to stay updated with the latest research and guidelines to ensure optimal pharmacological therapy and patient care.

### **Results:**

The results section of this article provides an overview of key information related to pharmacological drugs, including their classification, mechanisms of action, therapeutic uses, and considerations for safe and effective use. The following subsections present the results of the analysis:

#### **1. Classification of Pharmacological Drugs:**

Pharmacological drugs can be classified based on various criteria, including their mechanism of action, therapeutic class, and route of administration. Common classes include analgesics, antibiotics, antihypertensives, antidepressants, anticoagulants, and antidiabetic medications. Each class targets specific biological systems or receptors, exerting their therapeutic effects through diverse mechanisms.

#### **2. Mechanisms of Action:**

Pharmacological drugs exert their effects through various mechanisms. For example, analgesics may work by inhibiting pain receptors or reducing inflammation, while antibiotics act by targeting specific bacterial processes. Understanding the mechanisms of action is crucial for selecting appropriate medications for specific conditions and optimizing therapeutic outcomes.

#### **3. Therapeutic Uses:**

Pharmacological drugs have a wide range of therapeutic uses. They can be used for acute or chronic diseases, infections, pain management, mental health disorders, cardiovascular conditions, and many other medical conditions. Understanding the specific indications for each drug class is essential for appropriate prescribing and treatment decisions.

#### **4. Considerations for Safe and Effective Use:**

Safe and effective use of pharmacological drugs requires consideration of several factors. Adherence to prescribed regimens, appropriate dosage adjustments based on patient characteristics, and monitoring for adverse effects are important considerations. Special populations, such as pediatric and geriatric patients, may require specific dosing adjustments and monitoring. Awareness of potential drug interactions and contraindications is also crucial to ensure patient safety.

#### 5. Emerging Trends and Developments:

The results also highlight emerging trends and developments in the field of pharmacological drugs. Personalized medicine, pharmacogenomics, and the integration of genetic information into treatment decisions are gaining prominence. The development of targeted therapies and biologics, as well as advancements in drug delivery systems, are expanding the possibilities for precision medicine.

It is important to note that the results presented in this article are based on a synthesis and analysis of existing literature. The aim is to provide a comprehensive overview rather than presenting new empirical findings. The information gathered serves as a foundation for understanding pharmacological drugs and their applications in healthcare.

Overall, the results demonstrate the diverse range of pharmacological drugs, their mechanisms of action, therapeutic uses, and considerations for safe and effective use. This knowledge is essential for healthcare professionals, researchers, and individuals seeking a general understanding of pharmacological drugs and their role in medical treatment.

#### **Summary:**

Pharmacological drugs play a vital role in modern medicine, providing effective treatments for a wide range of medical conditions. This article has provided an overview of pharmacological drugs, covering their classification, mechanisms of action, therapeutic uses, and considerations for safe and effective use.

The classification of pharmacological drugs is based on various criteria, including their mechanism of action, therapeutic class, and route of administration. Different drug classes target specific biological systems or receptors, enabling healthcare professionals to select the most appropriate medication for a particular condition.

Understanding the mechanisms of action is crucial for optimizing therapeutic outcomes. Pharmacological drugs exert their effects through diverse mechanisms, such as inhibiting pain receptors, reducing inflammation, or targeting specific bacterial processes. This knowledge helps guide treatment decisions and ensures the appropriate use of medications.

Pharmacological drugs have a wide range of therapeutic uses, addressing acute or chronic diseases, infections, pain management, mental health disorders, cardiovascular conditions, and more. The specific indications for each drug class

are important considerations for healthcare professionals to ensure the best treatment outcomes.

Safe and effective use of pharmacological drugs requires careful consideration. Adherence to prescribed regimens, appropriate dosage adjustments, and monitoring for adverse effects are crucial for patient safety. Special populations, such as pediatric and geriatric patients, may require specific dosing adjustments and monitoring. Awareness of potential drug interactions and contraindications is also essential to prevent adverse reactions.

The field of pharmacological drugs is continuously evolving. Emerging trends and developments, such as personalized medicine and pharmacogenomics, are revolutionizing treatment approaches. The development of targeted therapies, biologics, and advanced drug delivery systems holds great promise for precision medicine.

In summary, pharmacological drugs are essential tools in modern medicine, offering effective treatments for various medical conditions. This article has provided an overview of pharmacological drugs, including their classification, mechanisms of action, therapeutic uses, and considerations for safe use. Understanding these concepts is crucial for healthcare professionals and individuals seeking knowledge about the medications they use or prescribe. By staying informed about the latest research and developments, healthcare professionals can optimize treatment outcomes and ensure the safe and effective use of pharmacological drugs.

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## **ANALYSIS OF THE CONTINUITY OF THE GROWTH PERIOD OF PROSPECTIVE APPLE ROOTS**

*Abstract. In this article, in Andijan region, research was conducted on the study of the duration of growth phases in introduced clone grafts of apple, which are propagated vegetatively, and grafts with different annual growth strength and transition speed of vegetation phases were identified.*

*Key words: graft, genotype, temperature, clone graft, vegetation period.*

Among the external environmental factors, light, temperature, air, the condition of absorption of nutrients from the soil, and the method of watering are the most important in plant life. All plant organisms have the ability to express their genetic traits differently during ontogeny through the interaction of genotype and environmental conditions. These factors can strongly influence the productivity of cultivated plants, change their morphological and biological characteristics and some genetic characteristics.

In this scientific research, the role of the main external environmental factors is studied in relation to the agrotechnics of growing seedlings and apple cuttings. In the historical development of plant forms, the consistent period of changes in environmental conditions and soil formation processes causes them to adapt to the annual change of external conditions.

In the temperate and neighboring regions, two periods are clearly expressed in the annual framework of the life of fruit plants - the period of vegetation and relative rest. The first, i.e., the vegetation period, with its favorable temperature, is suitable for plants, during which the above-ground and underground parts of plants grow rapidly and produce crops. This period starts from spring and lasts until autumn. The second period is characterized by a decrease in temperature, and it begins in the late autumn months, continues throughout the winter season, and ends in spring. Based on the above, in 2016-2019, studies were conducted at the research and training station of Tashkent State Agrarian University, and in 2019-2021 at the Andijan research station, to study the duration of growth phases in the introduced clone grafts of apple that reproduce vegetatively. In the research, grafts with different annual growth rate and transition speed of vegetation phases were identified.

Studies by H. Buryev and others [2014], I.M. It was implemented based on the recommendation of scientists such as Vasilchenko [1982] and I.P.Gulko [1982]. The data of phenological observation during the transition of vegetation phases in grafts showed that there are certain differences in the annual

development of plants. In particular, in grafts MII, MVI, MVII and MIX, budding began almost at the same time as the control option (Sievers apple) planted from the seeds of the writing phase, with a difference of one to two days. The budding phase started 5 days later in the MV graft and 16 days later in the MX graft. The final phase of plant vegetation - leaf shedding was completed in the main part of the graft collection on November 29-30, only in the MM101 graft on December 5, that is, four to five days later than in other grafts (Table 1). It was observed that the completion of the vegetation period is 230-235 days in most plants in the experiment. However, this period was shorter by 15 days in the MX graft. In this case, there is a correlation between the total length of the vegetation period and the beginning of the vegetation phase, that is, it was found that the vegetation phases started a little later in this graft. In this plant, it was observed that the processes of preparation for the dormant period start first and the duration of the dormant period is 154 days (Table 2). The shortest, i.e., 135-day rest period was observed in the MIX graft.

In this case, the difference between grafts according to this indicator was 20 days. In MII and MV types of welds, this period was somewhat shorter, i.e. 138-140 days. In most grafts, the initial phase of vegetation begins at the same time as Sievers apple, only in MV and MX grafts it is delayed by 5-16 days compared to the control.

Table 1

The effect of growth vigor on the total length of branches in vegetatively propagated graft-type plants, 2019-2021.

Total length of branches, m							
№	Options	Difference from arbitrary start (X-A)				Total by options	№
		I	II	III	IV		
1	Sievers apple - control	50,9	49,7	47,9	49,9	198,4	49,6
2	M II	55	56	59	58	228,0	57,0
3	M III	28,5	30,1	29,1	29,5	117,2	29,3
4	M IV	32,9	33,6	34	33,1	133,6	33,4
5	M V	50,1	50,7	49,9	49,7	200,4	50,1
6	M VI	55,7	56,2	54,8	54,5	221,2	55,3
7	M VII	51,5	51,1	52,1	52,1	206,8	51,7
8	M VIII	12,2	11,5	11,9	12	47,6	11,9
9	M IX	11,5	11,9	12	11,8	47,2	11,8
10	M X	53,9	54,1	53,5	54,5	216,0	54,0
11	M XIII	126,4	127,1	125,1	125,8	504,4	126,1
12	M XVI	59,9	60,5	61,3	61,1	242,8	60,7
13	M XXV	88,9	87,8	86,9	89,2	352,8	88,2
14	MM 101	154,1	153,9	153,5	153,3	614,8	153,7
15	MM 104	50,1	51,1	49,9	48,5	199,6	49,9
16	MM 105	58,7	57,7	59	57,8	233,2	58,3
17	MM 106	47,5	47,4	47,4	48,1	190,4	47,6
18	MM 109	76,1	76,9	75,8	76	304,8	76,2
19	MM 110	67,5	66,9	67,2	67,6	269,2	67,3
Жами		1131,4	1134,2	1130,3	1132,5	4528,4	59,6

Table 2

The difference from the arbitrary starting point is A=54.7						
№	Options	Difference from arbitrary start (X-A)				Total by options
		I	II	III	IV	
1	Sievers apple - control	3,3	2,3	0,3	3,3	9,2
2	M II	23,3	20,3	22,3	23,3	89,2
3	M III	-12,7	-13,7	-11,7	-12,7	-50,8
4	M IV	-1,7	-0,7	0,3	-0,7	-2,8
5	M V	17,3	14,3	16,3	17,3	65,2
6	M VI	-16,7	-13,7	-12,7	-15,7	-58,8
7	M VII	-15,7	-16,7	-18,7	-15,7	-66,8
8	M VIII	-28,7	-25,7	-23,7	-24,7	-102,8
9	M IX	-26,7	-28,7	-30,7	-28,7	-114,8
10	M X	-5,7	-2,7	-4,7	-1,7	-14,8
11	M XIII	-3,7	-5,7	-6,7	-2,7	-18,8
12	M XVI	-16,7	-12,7	-15,7	-13,7	-58,8
13	M XXV	1,3	-1,7	-2,7	0,3	-2,8
14	MM 101	17,3	18,3	21,3	20,3	77,2
15	MM 104	6,3	7,3	6,3	5,3	25,2
16	MM 105	21,3	25,3	24,3	22,3	93,2
17	MM 106	1,3	2,3	1,3	4,3	9,2
18	MM 109	20,3	21,3	19,3	20,3	81,2
19	MM 110	9,3	12,3	8,3	11,3	41,2
Жами		-7,3	1,7	-7,3	11,7	-1,2

The duration of the vegetation period in the main part of the investigated grafts is 230-235 days. This biological indicator is shorter for 15 days in MX graft, and 20 days in MII and MIX, respectively. This situation is related to the relatively late start of vegetation in these types of plants.

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## **RAQAMLI IQTISODIYOT SHAROITIDA BANK TIZIMINI ISLOH QILISHNING YO'LLARI**

*Annotatsiya. Mazkur maqolada raqamli iqtisodiyot sharoitida bank tizimini isloh qilish, bank innovatsiyalari hamda uni yo'llari haqida bayon qilingan.*

*Kalit so'zlar: Bank innovatsiyalari, sektor, virtual bank xizmatlari, Anorbank, TBC bank.*

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## **WAYS TO REFORM THE BANKING SYSTEM IN THE DIGITAL ECONOMY**

*Abstract. This article describes the reform of the banking system in the context of the digital economy, banking innovations and their ways.*

*Keywords: Bank innovations, sector, virtual banking services, Anorbank, TBC bank.*

So'nggi yillarni sarhisob qilsak, iqtisodiyotni rivojlantirishda ilg'or texnologiyalar va innovatsiyalarning ahamiyati oshib bormoqda. Eng yangi texnologiyalar ishlab chiqarish va biznes jarayonlarining samaradorligini oshirishi mumkin. Eng yangi texnologiyalar inson faoliyatining barcha yangi sohalari va sohalariga kirib borishi bilan bir qatorda, an'anaviy yondashuvlar va ish uslublari o'zgaradi.

Bank sohasi bu iqtisodiyotning yangi texnologiyalar juda keng qo'llanadigan sohasidan biri hisoblanadi. Oxirgi vaqtlarda yangi kompyuter texnologiyalari, kredit kartalari va pul-moliya bozorida muhim innovatsiyalarni joriy etish davri bo'ldi. Tadqiqotlar shundan dalolat beradiki, banklar ijtimoiy tarmoqlarga, mobil internetga va hattoki, onlayn o'yinlar e'tiborini tortadigan yangi reklama kanallarini juda faollik bilan rivojlantirib bormoqda.

Bank — tijorat tashkiloti bo'lib, bank faoliyati deb hisoblanadigan quyidagi faoliyat turlari majmuini amalga oshiradigan yuridik shaxsdir:

yuridik va jismoniy shaxslardan omonatlar qabul qilish hamda qabul qilingan mablag'lardan tavakkal qilib kredit berish yoki investitsiyalash uchun foydalanish;

to'lovlarni amalga oshirish.



Banklar o'z faoliyatlarida quyidagi bank operatsiyalarini amalga oshiradilar:

jismoniy va yuridik shaxslarning, shu jumladan vakil banklarning hisobvaraqlarini ochish va yuritish, hisobvaraqlar bo'yicha hisob-kitob qilish;

omonatlarni jalb etish;

kreditlarning qaytarilishi, foizlilik va muddatlilik sharti bilan o'z mablag'lari va jalb etilgan mablag'lar hisobidan o'z nomidan kreditlar berish.

Banklar boshqa turdagi operatsiyalarni ham amalga oshirishlari mumkin, chunonchi:

mablag' egasi yoki mablag'ni tasarruf etuvchi bilan tuzilgan shartnomaga binoan pul mablag'larini boshqarish;

chet el valyutasini naqd pul va naqd bo'lmagan pul shakllarida yuridik hamda jismoniy shaxslardan sotib olish va ularga sotish;

pul mablag'lari, vekselar, to'lov va hisob-kitob hujjatlarini inkasso qilish;

uchinchi shaxslar nomidan majburiyatlarning bajarilishini nazarda tutuvchi kafolatlar berish;

uchinchi shaxslardan majburiyatlarning bajarilishini talab qilish huquqini olish;

qimmatli qog'ozlar chiqarish, xarid qilish, sotish, hisobini yuritish va ularni saqlash, mijoz bilan tuzilgan shartnomaga binoan qimmatli qog'ozlarni boshqarish, qimmatli qog'ozlar bilan boshqa operatsiyalarni bajarish;

bank faoliyati yuzasidan maslahat va axborot xizmati ko'rsatish;

jismoniy va yuridik shaxslarga hujjatlar va boshqa boyliklarni saqlash uchun maxsus binolar yoki ular ichidagi po'lat sandiqlarni ijaraga berish;

moliyaviy lizing;

xalqaro bank amaliyotiga muvofiq, litsenziyada maxsus ko'rsatilgan boshqa operatsiyalar.

Prezidentimiz Shavkat Mirziyoyev 2020-yil 12-may kuni "2020–2025 yillarga mo'ljallangan O'zbekiston Respublikasining bank tizimini isloh qilish strategiyasi to'g'risida" gifarmonga imzo chekdi. Farmon bilan tegishli strategiya va uni amalga oshirish bo'yicha yo'l xaritasi ham tasdiqlandi. Hujjat asosida kelgusidagi 5 yil davomida bank sohasini o'zgartirishning konseptual asoslari, tamoyillari va yo'nalishlari belgilab olindi. Unga ko'ra, bank sohasida o'rta muddatli islohotlarning asosiy yo'nalishlari etib quyidagilar belgilandi:

✓ sektorni qayta qurish – banklarni o'zgartirish va xususiylashtirish;

✓ bank nazorati bo'yicha Bazil qo'mitasi standartlarini, moliyaviy hisobotlarning xalqaro standartlarini va boshqalarni joriy etgan holda qonunchilik bazasini takomillashtirish;

✓ mijozlargayo'naltirilgan xizmatlar, kreditlash mexanizmlari va biznes jarayonlarini avtomatlashtirish orqali xizmat ko'rsatish sifatini yaxshilash va kengaytirish;

✓ kadrlar malakasini oshirish.[1]

Bank innovatsiyalari - yangi bank mahsulot va xizmatlarining yig'indisi sifatida mijozlarga foyda olishda yordam beradigan yangiliklar kiritishni joriy qilish orqali resurslar salohiyatini shakllantirish va joylashtirish uchun qulay shart-sharoitlarni yaratish jarayonida qo'shimcha daromad olishga qaratilgan yangi texnologiyalar sohasida bank faoliyatining maqsadi va natijasi haqida sintetik tushunchadir.

Aksariyat global banklar raqamli yoki mobil shaklga o'tishni qo'llab – quvvatlamoqda. Bugungi kunga kelib, banklar mijozlarining salmoqli qismini online dunyoga to'laqonli moslashgan va busiz hayotini tasavvur qilolmaydigan yosh avlod tashkil etadi. Shunisi qiziqki, dunyo aholisining 90 foizini 30 yoshgacha bo'lganlar tashkil etishini hisobga olsak, bank xizmatlarini raqamlashtirish banklar uchun hayotiy zaruratga aylanib bormoqda.

1980-yillar oxirlariga kelib, Angliyaning National Westminster Bank telefon aloqasi asosida mijozlarga masofadan turib xizmat ko'rsatishning kashfiyoti amaliyotga joriy etilgan. 1995-yil "to'g'ridan-to'g'ri banking" muvaffaqiyatlari dastlabki virtual banklar paydo bo'lishiga olib keldi. Banklarning aksariyati global tarmoqda o'z saytlariga ega, lekin ular asosan reklama va axborot berish maqsadlarida foydalaniladi. Ayrim banklar qimmatli qog'ozlar xarid qilish va sotishga talabnomalar berish imkonini beradigan dasturiy mahsulot xarid qildi, internet orqali bank hisob raqamlarini boshqarish tizimi – uy bankingini ishlab chiqdilar. Bu tizim valyutani konvertasiya qilish, kommunal xizmatlar uchun pul to'lash, pul o'tkazmalarini uydan turib o'tkazishga imkon beradi.

Virtual bank xizmatlari bir onda bajariladigan va kamxarjliligi bilan an'anaviy banklardan alohida ajralib turadi. 24/7 formatda faoliyat olib boradigan raqamli banklar mijozlar potensialining kattagina qismini egallagan desak, aslo adashmagan bo'lamiz.

2000 - yillarda online banking e-savdoda namoyon bo'la boshladi. Osiyodagi dastlabki litsenziyalangan raqamli banklar Xitoy, Singapur, Janubiy Koreya, Yaponiya, Tayvan va Gong Kongda joriy etilgandir. Prezidentning - O'zbekiston Respublikasi Markaziy banking faoliyatini tubdan takomillashtirish chora-tadbirlari to'g'risidagi Farmoni imzolanganach, bank tizimiga chakana bank xizmatlariga ixtisoslashgan —raqamli banklar va bank bo'linmalarini tashkil etish hamda innovatsion bank texnologiyalaridan foydalangan holda mijozlarga xizmat ko'rsatish sifatini yanada kengaytirish vazifasi yuklatilgan. [2]

Shundan kelib chiqib, Respublikamizda 2020-yilda Anorbank va TBC banklar dastlabki raqamli banklar sifatida ro'yxatdan o'tkazilgan.

Anorbank va —TBC banklar o'z mijozlariga mobil ilovalar yoki statsionar kompyuterlar orqali to'liq raqamli xizmatni taqdim etmoqda. Bu shundan dalolat beradiki, raqamli bank mijozlari 24/7 tizimida bank xizmatlaridan foydalanishi mumkin. Ya'ni bunda, raqamli bank tizimida mijozga mobil dasturi, mobil

dasturga asosan esa yuqori texnologiyali IT-infratuzilma bilan ta'minlangan bank operatsiyalarining yuqori moslashuvchanligi taqdim etiladi.[3]

O'zbekistonda davlat ishtirokidagi banklar anchani tashkil etadi. Shuning uchun ularni raqamlashtirish mamlakat YAIM o'sishiga bevosita ta'sir ko'rsatadi. Davlat banklarining raqamli transformatsiyasi O'zbekistonda iqtisodiy o'sishning muhim drayverlaridan biri bo'la oladi.

Xulosa qilib aytganda, tijorat banklarining transformatsiya jarayoni va raqamli bank tizimida ishlashga o'tishi bu – yangi axborot texnologiyalarini rivojlanishi hamda butun dunyo raqamlashtirish poygasiga munosib javob hisoblanadi. Raqamli texnologiyalar nafaqat mahsulot va xizmatlar sifatini oshiradi, balki ortiqcha xarajatlarni ham birdek kamaytiradi. Boshqacha qilib aytganda, raqamli moliyaviy xizmatlarni rivojlantirish mamlakat bank-moliya tizimi ravnaqining muhim yo'nalishi bo'lib xizmat qiladi.

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## **KARAKALPAKSTAN TOWARDS GREEN ECONOMY AND SUSTAINABLE DEVELOPMENT GOALS**

*Annotatsion. The Sustainable development goals are the outlines to achieve a better and more sustainable future for all. They address the global challenges we face today, known as SDG 12, is a global initiative that emphasizes responsible consumption and production. It is important that Uzbekistan responds to all these goals, but in this article we show some actions to achieve SDG 12, particularly in Karakalpakstan.*

*Key words green economy, Clean Energy, Sustainable development goals, Responsible consumption and production, recycling.*

The Sustainable development goal 12 focuses on ensuring responsible consumption and production patterns. This goal recognizes the critical need to address the environmental impacts of our consumption habits and production processes. By promoting efficient resource utilization, reducing waste, and minimizing the negative effects on the environment, SDG 12 aims to create a more sustainable and resilient future for all. The purpose of this research is to reveal the works how deal with plastic reduction and renewable energy in Karakalpakstan.

A broad use of plastic goods everyday life and brings many facilities for people. But plastic waste has become a pervasive problem, polluting various ecosystems such as soil, waterways, and streets. Shockingly, Dick Vethaak, an ecotoxicologist at Vrije Universiteit Amsterdam in the Netherlands have even found traces of plastic particles in human blood<sup>19</sup>. Furthermore, countless animals suffer accidental deaths due to ingesting plastic waste. To address this issue, several measures can be taken. Firstly, governments should establish regulations governing the production, disposal, and recycling of plastic.

It's worth mentioning that steps are already being taken to tackle this issue. For instance, in Kungrad district of Karakalpakstan, the production of paving stones using plastic waste has commenced, along with the manufacturing of ropes in Muynak district of Karakalpakstan. These initiatives mark important strides toward reducing plastic pollution and promoting sustainable practices.

The following plastics are suitable for recycling, depending on their use once they have been recycled:

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<sup>19</sup> A.D. Vethaak, J. Legler Microplastics and human health. Science, 371(No 6530) 2021

Polyethylene terephthalate (PET), which has unique properties such as lightness, high flexibility, resistance to extreme temperatures or to steam and various gases. It is also transparent, which makes it ideal for food preservation and marketing. It is the most widely used type of plastic in the world.

Polyvinyl chloride (PVC), which is rigid and hard. As such, it is mainly used to package materials and ensure their protection. It contains a toxic substance called nonylphenol.

High-density polyethylene (PE-HD), which is characterized by good moisture resistance and, like PVC, is quite strong. It is widely used in the sanitary sector and in beverage factories.

Polypropylene (PP), which is quite flexible yet tough. It is used to produce disposable material or, for example, to make kitchen utensils.

Polystyrene (PS), which is highly moldable. As a result, it is used to make packaging foam or in industries such as electronics.

Low-density polyethylene (LDPE), which is very flexible and withstands heat quite well. It is the essential element for producing bags for the food industry. One of the problems it suffers from is that it contains some toxic substances, such as aldehydes, ketones or carboxylics.

#### **The dynamics of waste plastic recycling in Karakalpakstan, tons**

	<b>Types of plastic recycling</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
1	Polyethylene terephthalate (PET)	412	528	576	610	720
2	Polyvinyl chloride (PVC)	-	-	-	-	-
3	High-density polyethylene(PE-HD),	-	-	-	-	-
4	Polypropylene (PP)	358	478	502	550	624
5	Low-density polyethylene (LDPE),	305	346	398	414	438
	<b>TOTAL:</b>	<b>1 075</b>	<b>1 352</b>	<b>1 476</b>	<b>1 574</b>	<b>1 782</b>

One of its key facets revolves around renewable energy. As the world grapples with the urgent need to reduce carbon emissions and mitigate climate change, our response to SDG 12 regarding renewable energy in Karakalpakstan, in collaboration with foreign investors from the United Arab Emirates, China, and France, is making significant efforts towards transitioning to green energy. We are witnessing transformations where our medical and educational institutions are actively participating. These buildings are becoming symbols of this change, with solar panels appearing on their rooftops. Meanwhile, our streets are being illuminated by the energy of sunlight, making our roads safer and more environmentally friendly. This collaboration with investors from different parts of the world brings us technologies and resources to shift towards more sustainable energy sources.

It's not just a commitment to Sustainable Development Goal 12; it's our collective aspiration to improve our world. Together, we are crafting a cleaner and greener future where energy is not only power but also responsibility. We are the architects of our future, and with renewable energy, we're building a nation that thrives, sustains, and flourishes.

**Conclusion:**

As a conclusion of the realms of Sustainable development goals in Karakalpakstan: Reducing plastic waste and embracing renewable energy is not just our response to a global challenge; it's our legacy for future generations. These showed to us how our country respond to SDG 12 from globally to minimally.

Worldwide communities are beginning to enact regulations to control plastic production and promote recycling. In our region, we see promising initiatives like the use of plastic waste in paving stones, rope manufacturing and solar panels on a buildings solar-powered street lighting being tangible evidence of our progress to sustainable practices. This is not the end; it's just the beginning of a brighter, cleaner, and greener future.

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## **ABOUT THE TRAINING OF TRIATHLETES AND THEIR DEVELOPMENT**

*Annotation: in this article, scientific research on the development of the sport of triathlon was studied by sports historians, coaches, sports scientists and triathletes. These studies look at the origin of triathlon, its first competitions, the popularity of sports and the sporting impact of technological advances.*

*Keywords: Triathlon sport, wellness culture, physical activity, Asian Games, new technologies in sports.*

Physical education and sports are the physical and moral, spiritual and rights of the person of the younger generation, and the problem of integration is expressed in national traditions, traditions, values, as a power that has many people. Therefore, in the current period, when the development of democratic changes in our country and the formation of the foundations of civil society is rapidly gaining momentum, the issue of maturation from our youth, harmony, solidarity has been established as a priority in our republic. Today, during a period of rapid development of the Olympic Movement, special attention is also paid to the development of the sport of triathlon.

The experience of many countries of the world shows that the development of triathlon sports serves to form a culture of healthy living among the population, especially among young people, to protect health. Factors that negatively affect human health are increasing day by hour. The work of the organs and systems of the entire body of each person who is engaged in the exercise of walking, running, jumping and throwing in the sport of triathlon improves, impaired activities are restored, mental and physical activity increases. As a result of regular training of the triathlon with walking and running exercises, the structure of the bones is strengthened, the joints are mobile, increased muscle strength and improved metabolism.

Triathlon races usually start with a swimming stage in open water or in a pool. The swimming distance usually varies from 750 meters to 3.8 kilometers. The cycling stage then begins and the Racers ride the bike for a certain distance. The bike path is usually between 20 and 180 km. Finally, the race ends with a running stage. The running distance is usually between 5 and 42.2 kilometers.

Triathlon is suitable for athletes of any age and level. Races are often classified according to different age groups and skill levels. This makes it a sport in which everyone can participate and compete.

Triathlon is a sport that requires endurance, discipline and strict training. To succeed in competitions, athletes must perform well in all three disciplines.

Therefore, triathlon is a sport that makes athletes difficult both physically and mentally.

Triathlon continues to attract worldwide attention with its annual international races. These competitions give athletes the opportunity to compete and showcase their talents. In addition, the sport of triathlon has many advantages in terms of endurance, health and lifestyle.

Triathlon-Olympic sport is an all-round complex sport that aims to develop endurance and strength. Competitions are held in three stages: first, swimming - all participants from the shore, pontoon or direct water, often a mass start is held on calm water lakes, rivers, then a bicycle race, often consisting of several circles, followed by running, often held in a circle, like any other species-its length depends on the distance. Compliance with the procedure for changing between stages is strictly regulated, athletes should not interfere with other participants (when preparing their bikes or changing clothes). The athlete must have time to perform the exercise (swimming, cycling, running) at the specified intervals for each stage.

Triathlon began its Olympic program debut at the 2000 Sydney Olympic Games in the Olympic triathlon distance (1500 m swimming, 40 km cycling, 10 km running). Triathlon is an Olympic sport that develops endurance and strength qualities and has recently become very popular among men and women, professional and amateur athletes. In addition to these, in modern sports, technologies are widely used that determine the physical condition of the athlete in the process of training and competition. Cardiographs and accelerometers mounted on a watch or shoe for triathletes. Devices for tennis players that indicate the impact force and direction that are mounted on a tennis racket. Examples of these are the pulsometers currently used in all sports.

Thanks to technological progress and international organizations of the sport, the riveting of the triathlon has developed rapidly. Innovations in cycling technology, swimming and running equipment, and various tools and equipment used to improve the performance of triathletes have been developed. In addition, the International Triathlon competition and organizations are taking place, which also serves the growth and popularity of the sport.

These scientific studies study the history, development and impact factors of triathlon and assess the future possibilities of the sport. Triathlon is a complex multi-sport that requires endurance, speed, coordination and strategy. With technological progress and increasing interest, triathlon is expected to increase in popularity and increase the number of participants.

In conclusion, it can be said that in the current period, the training processes of athletes are developing and perfecting. The introduction of new technologies has led to a huge change in sports. The sport of the present period is very different from the sport in Ancient Greece. The performance of the athletes was not solely dependent on fitness. Inventions made in the last hundred years left New modern drawings in the field of sports.

We are now so accustomed to such devices that we consider the use of devices that calculate millimeters and milliseconds in sports as a simple case. It is not only the demonstration of television or sports competitions, but also for athletes and coaches, computer programs are actively developing, which are designed to effectively control sports training and master exercise techniques well.

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## **OPTIMIZATION OF TRAINING LOADS OF YOUNG TRIATHLETES IN THE ANNUAL TRAINING CYCLE**

*Annotation: training plays an important role in the development of young triathletes and ensures that they are ready to achieve the best result during the race. However, optimization of training loads requires careful planning and consideration. This article explores effective strategies for optimizing training loads for young triathletes, with an emphasis on the annual training cycle.*

*Keywords: health, periodicity, intensity, simultaneous training, fatigue, quantification, monitoring, nutrition.*

Triathlon is characterized by multidisciplinary sports, in which swimming, cycling and running are completed consecutively in various competitions such as sprint, Olympic, long-distance and Ironman formats. A large number of training and total volume to improve physical fitness and performance by triathletes can increase the risk of injury, illness or excessive fatigue.

Short and medium-term individualized training plans, periodization strategies, and work rest balance are necessary to minimize interruptions in training due to injuries, illness, or adaptation. Although there are no health and well-being problems, it is not clear whether cellular signals triggered by several learning stimuli that lead to adaptation to training every day interfere with each other.

The distribution of training intensity within and between different activities is an important aspect of training. When observing the training load, it is necessary to take into account internal (perceived stress) and external loads (objective indicators). The inclusion of strength training to complement the large-scale endurance work in triathlon can help avoid excessive injury.

The different formats and distances of triathlon racing have separate requirements for different competition schemes. For example, in the main triathlon Olympic Games, a high level of stable performance is required throughout the season, as the World Triathlon Series (eight events in 2019) awards the most stable high-scoring athlete with the title of World Champion. In contrast, long-distance events, notably Ironman, require that a triathlete typically have a single star performance of the day, given the very small number of races in a year and the strenuous physical demands of a long-running race.

Finally, the newest addition to the Tokyo 2020 Olympic program is the mixed relay race, where two male and two female athletes will finish before competing in the triathlon (300 m swimming, 6.6 km cycling and 1 km running). teammate. A short and intense performance demonstration called a endurance athlete.

The complexity of triathlon goes beyond the multidisciplinary nature of sports and covers aspects of the athlete's physical and mental health, training monitoring, nutrition strategies and many others.

Carefully combining the available and emerging factors that contribute to performance results should help adapt to training, reduce the risk of injury and illness, and optimize training and competition preparation.

Triathletes hold high training loads with various combinations of exercise intensity and volume, expressed in power output measured in Watts, such as cycling (external load) and associated perceptual measures and physiological reactions (internal load). perceived voltage and heart rate, blood lactate and oxygen consumption.

The separation of internal and external loads is used to assess the state of fatigue of the athlete. For example, using the aforementioned bicycle external load, the power output can be maintained for the same amount of time; however, depending on the state of fatigue of the athlete, this can be achieved with a high or low heart rate or a high or low perception of movement.

To achieve the best racing performance, various training load monitoring tools have been developed to help athletes and coaches assess training readiness, risk of illness and or injury, and readiness to return to play from injury in order to achieve optimal training progress.

These athlete training monitoring tools can highlight specific imbalances between internal and external loads and help the coach identify any problems that may arise before they occur or become significantly aggravated.

In triathlon, as in many other sports, experience, anecdotal reports and scientific facts are combined to make sound decisions regarding the training recipe. However, translating research results into individual training plans can be difficult because each athlete is different and can respond to training stimuli in different ways. The ratio of work to rest, injury and disease episodes, and the degree of adaptation to training stimuli affect the coach's decisions on individual training for training and competitions.

Often, the best source of basic training optimization information for athletes is feedback provided by the athletes themselves. Systematic monitoring of the athlete, anecdotal experience and evidence-based knowledge provide the coach with information about the development of an integrated training plan, individualized for each athlete.

For young triathletes, optimizing training loads during the annual training cycle is essential for their long-term development as athletes. Balancing the intensity, volume, and recovery periods of training can help prevent injury, improve efficiency, and improve overall health and well-being.

We bring some key points on how to optimize the training loadings of young triathletes during the annual training cycle:

Individualized approach: each young triathlete is unique in terms of physical abilities, maturity and goals. It is very important to adapt training loads

to their specific needs and abilities, taking into account factors such as their age, physical development, training history and competitive goals.

**Progressive overload:** progressive overload is a gradual increase in training loads over time to generate physiological adaptation in young triathletes. To prevent excessive stress and fatigue, it is very important to develop training programs that gradually increase the intensity and volume of training. Consider the implementation of the principle of periodization, which involves dividing the learning cycle into different stages with specific educational directions and goals.

**Multisport approach:** Triathlon includes three different disciplines - swimming, cycling and running. Training loads must be evenly distributed across these three sports to ensure balanced development and reduce the risk of excessive injury. Periodization can also be used in every sport, with a focus on different aspects such as endurance, speed and technique during training.

**Rest and recovery:** weekends and recovery periods are important components of the training cycle. Young triathletes need enough time to allow their bodies to adapt to the stress of training and recover physically and mentally. Including regular weekends, easy workouts, and active recovery exercises can help prevent overtraining and optimize performance.

By taking these factors into account and implementing a comprehensive and individual approach, coaches and coaches can optimize the training loads of young triathletes during the annual training cycle. This approach not only increases their effectiveness, but also contributes to long-term physical and mental development as successful triathletes.

### *Conclusion*

*For young triathletes, optimizing training loads during the annual training cycle is critical to their overall development and success. By using transition words, maintaining an active voice, using different sentence structures, and applying arrows, this article provided valuable insights into optimizing training loads for young triathletes. Following these strategies will undoubtedly contribute to their growth and achievement in sports.*

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## **O`ZBEKISTON RESPUBLIKASI SANOATIDA KICHIK BIZNES VA XUSUSIY TADBIRKORLIKNI TUTGAN O`RNI**

*Anotatsiya. Maqolada Respublikamizda mavjud vaziyatda kichik biznes va xususiy tadbirkorlikni rivojlanish tendensiyalarini yillar davomida o`zgarishi hamda uning istiqbolli yo`nalishlari haqida so`z yuritilgan.*

*Kalit so`zlar: global, demografik jarayon, hududiy joylashuv, ekispor, import, subyekt, aksiyodorlik, tijorat.*

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## **THE PLACE OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP IN THE INDUSTRY OF THE REPUBLIC OF UZBEKISTAN**

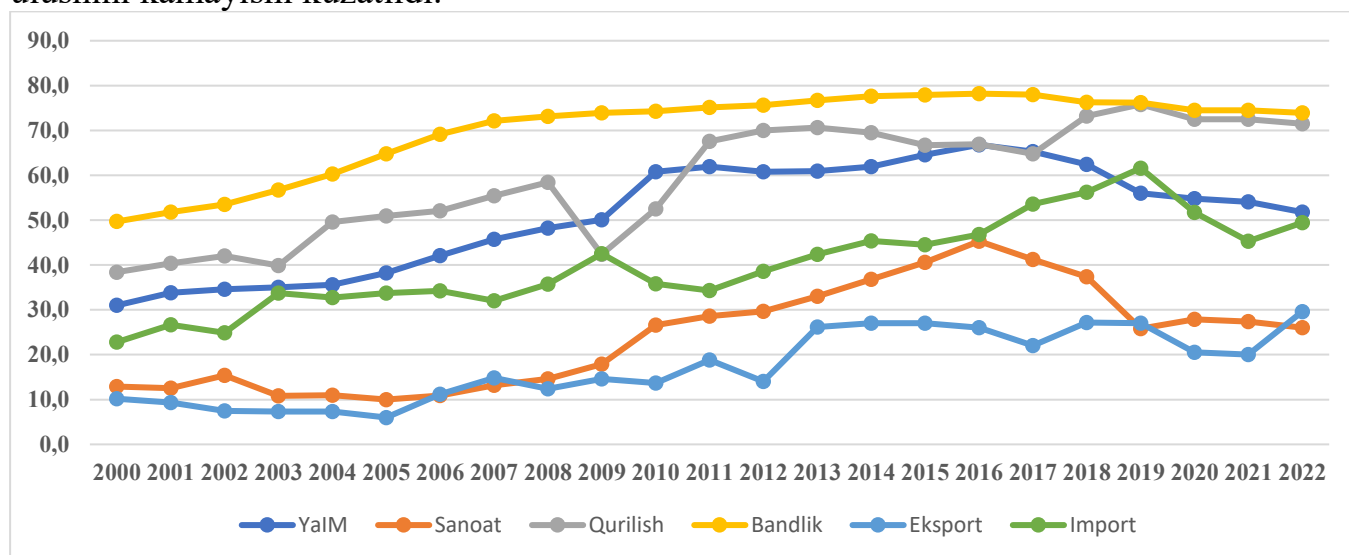
*Abstract. The article talks about changes in the development trends of small business and private entrepreneurship in the current situation in our Republic and its promising directions.*

*Key words: global, demographic process, territorial location, export, import, subject, shareholding, commerce.*

Jahonda global o`zgarish va keskin rivojlanish bo`layotgan bir vaqtida Respublikaning barcha sohalarda jadallik bilan o`zgarib bormoqda. Bunday o`zgarishlar yurtimizni barcha hududlarida o`ziga xos ravishda shakllanmoqda. Jumladan barcha sohalar, yo`nalishlarda hududiy va ishlab chiqarish jarayonlarini tashkil etilgan. So`nggi yillarda mavjud barcha yo`nalishlarda keng qamrovli va keng ko`lamli strategik ishlar olib borilmoqda. Bunday yo`nalishlar hozirgi kunda iqtisodiyotimizni rivojlanishiga, aholi turmush tarzini yaxshilash va aholining ish bilan bandligini yildan-yilga oshirib borishiga katta ta`sirini ko`rsatmoqda. Hududiy ko`lamda samarali ishlarni olib borishda iqtisodiyotimizni yangi yo`nalishlardan biri bo`lgan kichik biznes va xususiy tadbirkorlik ham o`ziga xos ravishda shakllanib kelmoqda. Mustaqillik yillarida bozor iqtisodiyotiga

bosqichma-bosqich o'tish davrida ko'plab kichik biznes va tadbirkorlik subyektlari tashkil etildi. Bunday subyektlarni soni yildan yilga ortib bormoqda.

Respublikada barcha sohalar va yo'nalishlar yillar mobaynida turli ko'rsatkichlar bilan turlicha shakllanib kelgan (1-rasm). Ammo barcha yo'nalishlar o'ziga xos shaklda shakllanib kelmoqda. Bunga misol qilib aytganda 2000-yilda yalpi ichki mahsulotni umumiy hajmini 31,0 foizini tashkil qilgan bo'lsa bu ko'rsatkich 2005-yilda 38,2 foiz, 2010-yil 60,8 foiz, 2015-yil 64,6 foizga oshgan. Eng yuqori ko'rsatkich esa 2016-yil 66,8 foizni tashkil qilgan. Keyingi yillarda ham kichik biznes va tadbirkorlikni hajmi yildan yilga ko'payib borgan. Ammo boshqa sohalarni ulushi ham ortib umumiy yalpi ichki mahsulotdagi ulushi qisqarishiga sabab bo'lgan. 2016-yilga nisbatan 2022-yilda kichik biznes va tadbirkorlikning ulushi 15 foyizga qisqargan. 2022-yilda bu ko'rsatkich 51,8 foizni tashkil etgan holda yalpi ichki mahsulotda mavjud bo'lgan ulushini kamayishi kuzatildi.



**1-rasm. Kichik biznes va xususiy tadbirkorlikning ulushi umumiy hajmga nisbatan % da.**

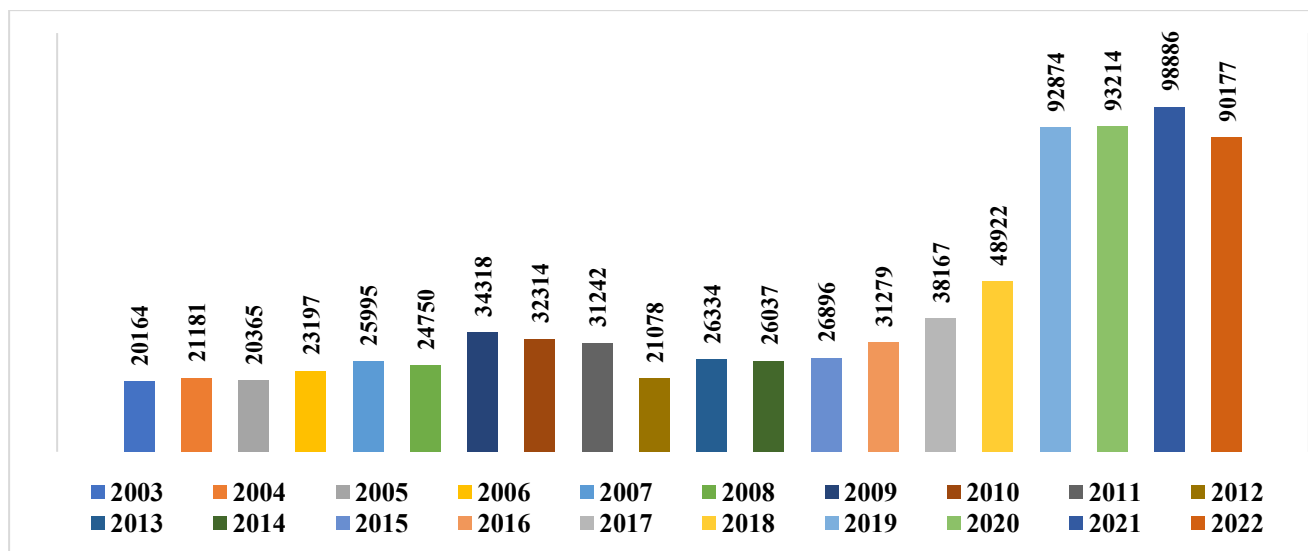
*Manba: O'zR Davlat statistika qo'mitasi ma'lumotlari muallif tomonidan qayta ishlangan.*

Mavjud satatistik ma'lumotlarni tahlil qilsak kichik biznes va tadbirkorlik subyektlarini sanoat sohasidagi umumiy ulushi yillar davomida turlicha ko'rsatkichlar bilan ajralib turadi. Bunda 2000-yil yalpi ichki mahsulotda kichik biznes va xususiy tadbirkorlini sanoatdagi umumiy hajmini 12,9 foizni tashkil etgan holda, bu ko'rsatkich 2005-yilda 2,9 foizga pasayish kuzatilib uning ulushi 10,0 foizni tashkil qilgan. Keyingi yillarda davlat tamoniida ko'plab qarorlar va qonunlar amalga oshirildi. Jumladan Aksiyadorlik-tijorat Tadbirkorbankning kredit liniyalari hisobidan tijorat banklari tomonidan kichik biznes subyektlariga dastlabki (boshlang'ich) sarmoyani shakllantirishga kredit berish hamda lizing kompaniyalari tomonidan lizingni amalga oshirish tartibi to'g'risida nizomni o'z kuchini yo'qotgan deb hisoblash haqida (O'zR MBB, O'zR MV va O'zR

DMBDK 31.12.2005 y. Qarori), Davlat statistika qo‘mitasining 29.10.2007 y. 6-son "1-(kichik biznes) shakli bo‘yicha mikrofirm va kichik korxon hisobotini tuzish tartibi to‘g‘risida yo‘riqnomani tasdiqlash haqida"gi buyruqni o‘z kuchini yo‘qotgan deb topish to‘g‘risida"gi Qarori (AV tomonidan 06.11.2007 y. 1119-1-son bilan ro‘yxatga olingan) va boshqa qonunlar va qarorlar qabul qilindi[5]. Bunday ishlarning oqibatida kichik biznes va xususiy tadbirkorlikni sanoatdagi ulushi 2005-yilga nisbatan 2010-yil ko‘rsatkichlari 2,6 barobar ya‘ni 26,6 foizni tashkil qilgan. Ushbu ko‘rsatkichlar yillar davomida o‘zgarib kelgan. Eng yuqori ko‘rsatkichi esa 2016 yilga to‘g‘ri kelgan holda 45,3 foizga yetgani bilan xarakterlanadi. Keyingi yillarda esa sanoat mahsulotlarini umumiy hajmi oshishi va yirik korxonalarining ulushi ortib borishi natijasida sanoat mahsulotlariga nisbatan umumiy hajmi keskin pasayish kuzatilgan. Bu ko‘rsatkich 2022-yilga kelib 2015-yilga nisbatan 17,4 foizga kamaygani bilan xarakterlangan holatda 27,9 foizni tashkil qilgan. Ammo kichik biznes va xususiy tadbirkorlik sanoat mahsulotlarini hajmi yildan yilga oshib bormoqda.

Iqtisodiyotni rivojlanishida va davlatni shakllanishida asosiy ko‘rsatkichlardan biri bo‘lgan aholi bandligining ham ulushi sezilarli darajada rivojlanib keldi. Bu ko‘rsatkich 2000-yilda umumiy aholi bandligiga nisbatan kichik biznes va xususiy tadbirkorlikda band aholi ulushi 49,7 foizni tashkil qilgan bo‘lsa, bu ko‘rsatkich 2005-yilda 50,9 foizga o‘shishini ko‘rishimiz mumkin. Eng yuqori ko‘rsatkich esa 2016-yil 78,2 foizni tashkil qilgan. Keyingi yillarda esa boshqa yo‘nalishlarni rivojlanishi natijasida aholi bandligida kichik biznes va xususiy tadbirkorlikda band aholining ulushi sezilarli darajada foiz xissobida kamaydi. Lekin aholi soni esa yildan yilga ortib borgani qayt etilgan. 2022-yilda bu ko‘rsatkich 73,9 foizni tashkil qilgan holatda Respublikamizda aholini bandligini taminlovchi sohalar bo‘yicha lokomotiv yo‘nalish bo‘lib kelmoqda. Dunyo bo‘yicha global muammolardan biri bu aholi bandligi bo‘lsa. Bunday muammoni hal etish va demografik jarayonlarni izchil islohat olib borishda ustuvor yo‘nalish bo‘lib kelmoqda. Shu sababda kichik biznes va xususiy tadbirkorlikni rivojlanishida aholi bandligi ta‘sir ko‘lami katta ahamiyatga ega bo‘lgan aholi qatlamidir.

Iqtisodiy ko‘rsatkichlarning eng asosiy jarayoni bu ekisport va import hissoblanadi. Davlatni qanchalik rivojlanganlik darajasini ko‘rsatib beruvchi ko‘rsatkichdir. Respublikamizda ekisportni umumiy ko‘rsatkichlarida kichik biznes va tadbirkorlikni ulushi yillar davomida ortib kelgani bilan xarakterlanadi. Bunday jarayonlar 2000-yilda 10,2 foizga to‘g‘ri kelgan bo‘lsa bu ko‘rsatkich 2005-yilda 6 foizga tushgan. Keyingi yillarda samarali ishlar olib borilgani tufayli 2011-yilda bu ko‘rsatkich 2005-yilga nisbatan 12,8 foizga ko‘payishi bilan 18,8 foizga yetgan. 2015-yilda bu ko‘rsatkich 27 foizni tashkil qilib 2022-yilda esa 29,6 foizga ko‘paygan. 2000-yilga nisbatan 2022-yilga o‘shish surati 19,4 foizni tashkil qilgan.



**2-rasm Yangi tashkil etilgan kichik tadbirkorlik subyektlari soni (dehqon va fermer xo'jaliklarisiz).**

*Manba: O'zR Davlat statistika qo'mitasi ma'lumotlari muallif tomonidan qayta ishlangan.*

Iqtisodiy ko'rsatkichlarda qaysi tovarning importdagi ulushi yuqori bo'lsa shu tovarga bo'lgan ehtiyoj yuqoriligi bilan harakterlanadi. Hozirgi kunda Respublikamizda kichik biznes va hususiy tadbirkorlikni importagi ulushi yuqoridir. Importni umumiy ko'rsatkichlarida kichik biznes va tadbirkorlikni ulushi 2000-yilda 22,8 foizni tashkil qilsa, bu ko'rsatkich 2009-yilda 19,7 foizga ko'tarilib 42,5 foizni tashkil qilgan. Yillar davomida aholi soni ko'payishi va mahsulotga bo'lgan talabni oshishi natijasida importni ham ulushi ortib borgan. Eng yuqori ko'rsatkich 2019-yilda 61,6 foizga oshgan bo'lib, 2000-yilga nisbatan 38,8 foizga ko'tarilgani bilan xarakterlanadi. 2022-yilda esa bu ko'rsatkich 49,4 foizga tushgan. Yuqorida kamaygan ko'rsatkich esa o'zimizda bunday tovarlarni yildan yilga oshishi va mahsulotlar hajmini ko'payotganidan dalolat beradi.

Hozirgi kunda mavjud vaziyat kichik biznes va xususiy tadbirkorlini rivojlanshiga barcha shart va sharoitlar yildan yilga yaxshilanib bormoqda. Bunday jarayon esa kichik biznes va xususiy tadbirkorlik subyektlarini ulushini o'sishini taminlab bermoqda. Kichik biznes va xususiy tadbirkorlikni rivojlanishiga ko'p imkoniyatlar va sharoitlar yaratilgan. Ushbu jarayonda barcha hududlarni kompleks o'rganilganlik holatiga ko'ra birmuncha jihatlarida muammolar mavjud. Bunday jihatlardan mavjud tabiiy resruslar, mavjud xomashiyo va mehnat resuruslar bilan taminlanganlik darajasidadir. Bunday omillar natijasida yildan yilga bunday subyektlarning soni ortib bormoqda. O'zbekiston Respublikasi Davlat statistika qo'mitasi ma'lumotlarni tahlil qilganimizda eng yuqori ko'rsatkich 2021-yilga to'g'ri kelgan holatda 98886 tani tashkil qilgan (2-rasm). Keyingi o'rinlarda esa 2020-yil 93214 ta, 2019-yil esa 92874 tani tashkil qilgan. Eng past ko'rsatkich esa 2003-yilda 20164 tani tashkil qilgan.

Yillarda davomida o'rtacha ko'rsatkich esa 68949,1 tani tashkil qilgan. Hududlar bo'yicha eng ko'p joylashgan subyektlar esa Toshken shahar (15078 ta), Samarqand viloyati (10613 ta), Farg'ona viloyati (8228 ta)da tashkil qilgan. Eng past ko'rsatkich esa Sirdaryo viloyatida (2073 ta) qayt etilgan. Yuqoridagi ma'lumotlardan shuni ko'rishimiz mumkunki yillar davomida kichik biznes va xususiy tadbirkorlik subyektlarni istiqbolli kelajak kutmoqda.

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## **A LOOK AT THE HISTORY OF DIRECTING. THE IMPORTANCE OF STUDYING THE EXPERIENCE OF DEVELOPED COUNTRIES IN TRAINING SKILLED DIRECTORS**

*Abstract. This article contains information about the history of directing, its stages of development, the persons who perform directing duties in ancient theaters, the role and position of the director at the present time, the most important aspects to be paid attention to when educating future directors as mature specialists in the field, and directing. comments about the experiences of developed countries are presented.*

*Key words: Director, choir artist, artistic team, actors' team, play, stage work, creative process, living character, spiritual outlook, thinking.*

As an organizer and head of the artistic team, the director was always a leading person in the staging of field performances, theater performances, and the creation of films. The director's art is evaluated by the ability to create an artistic scene with a single solution by combining various elements of the performance. In order to achieve this goal, the director must be able to mobilize all the creative team involved in the process of staging his intention towards a single goal. From this point of view, the art of directing has a long history as a separate art form, although it was called by a different name at that time. According to Adolf Winde, who was involved in the history of directing, the director was also involved in the ancient theater, and this task was performed by the leader of the Chorus. The order of the performers, location on the field, types of dances and movements, costumes, masks, musical performances, and the place of natural sounds are determined by the leader of the Choir and arranged during the performance. This is the role of the director in our modern language. Aristophanes himself staged his comedies. The task of the leader was to teach how to read poems, to teach how to perform pantomime, plastic movements, and to teach each of the characters the unique tones of speech. While the performances presented in the amphitheatres of Greece were mostly theatrical performances, the performances in the Italian amphitheatres were distinguished by their scale, mass, and diversity of the games presented.



The concept of the director K.S. Stanislavsky, his students Meyerhold, Vakhtanogov, Tairov and Mannon Uyghur chief, entered the Uzbek National Theater with a group of graduate students of the Moscow Theater Studio. "Padarkush" (Behbudi), "Is it easy to be a lawyer?" (Avloni) and "Poisonous Life" (Hamza) were performed by the author himself or a teacher, who taught the roles, where to leave, how to speak, etc. In most cases, the actors performed the show by memorizing the words of the play. The director was in charge of controlling who wore what clothes, where to enter, where to sit, where to turn on lights and where to play music. A director is a person who stages plays, public performances, various artistic teams, films, TV and radio shows and broadcasts, pop and circus programs. When expressing an opinion about the director's profession, scope of knowledge, ability, aesthetic views, and his duties, first a look at his history is given. Although the director's profession has not been called by its name for a long time, we have already mentioned that its tasks were performed by the leading actor in the theater, the author of the play or the director of the theater. Even in ancient theater, the role of the director was performed by the leader of the choir, but by the end of the 18th century, directing as a profession began to take shape in Germany.

Goethe was the first to express the word director. As a director, Goethe was the first to pay attention to the general appearance of the performance, the artistic integrity of the stage work. He looked for ways to influence the audience through the artistic style of the performance. He put forward the idea that his actors should look like the heroes depicted in visual arts, stand in the statues created by sculptors, show off their bodies and be a role model for the actor. He thinks that if the audience is influenced not only by acting, but also by the artistic solution of some scenes, the variety of scenery, the actor's shortcomings will be covered. As a director, Goethe believes that there should be no space on the stage that does not serve the performance. Goethe paid special attention to the play's decoration, costumes, and make-up, and he thinks that these elements should contribute to the artistic unity of the play. As theater art begins to take its place in society, like literature, visual arts and music, there is a strong need for professional directing.

Directing begins to take shape in two directions.

1) Ecgofa. This director worked in the Korolini Neiber Troupe and realized his vision with the participants of this troupe.

2) Shrader. He begins to implement his views in various German theater troupes. However, Goethe, summarizing the styles of both directors, theoretically develops the direction of a single directing school.

Goethe's views were as follows: - As a performance, it is necessary for a stage play to have a complete ideological direction and a perfect form. In order to influence the audience, the director must develop different methods. In order to ensure an effective performance of actors, it is necessary to study the form and condition of visual arts and sculptures. Acting on the stage, conducting debates, entrances and exits must meet the requirements of theater art, and it must be

different from everyday life forms. It is necessary for the performance to affect the audience not only with the performance of the actors, but also with its artistic decoration and overall solution. When working with a play, you should first thoroughly study the work, analyze the roles, and then work closely with the actors around the table on each image. Because this process should be considered as the most important part of the rehearsal process. There should not be an inch of empty space on the stage. For this purpose, Goethe himself developed the mise-en-scenes for his works to the smallest detail and required the actors to pay attention to this. He advised the stage participants to move in a semicircle. He said that “stages should be constantly changing, and in order to ensure the artistic integrity of the performance, they should be subordinated to one style, one genre, using clothes, lights, and various noises.”

By the nineteenth century, a change began to appear in the creative direction of the Burg theater in Vienna. The artistic director of the theater, Shrey Fogel, begins to apply the theory of his teacher Zonnelfels in practice. He manages to form the theater as a single creative team. All creators try to prove in practice that they should serve a purpose. It proves in practice that the pause (listening silence) should be effectively used in actors and its result. It promotes the idea that every role played by an actor is inseparable from the composition of the play, that the image-symbol should be in harmony with the work with its integrity, and this harmony should be felt by the audience through continuous movement throughout the performance. For this, he says, first the play should be divided into parts, and then the director should combine these parts to form a whole performance. By the 19th century, the emergence of new independent views in directing led to the formation of a group of professional directors at the Burg theater in Germany. Shrey Fogel, head of the Burg Theater at that time, leads this group. The next stage is related to the establishment of the Shakespeare Theater in Germany. The establishment of this theater led to the emergence of great reformer directors such as Immerman, Johan, and Thicke. They occupy a special place in the history of directing. Directing is considered a highly developed profession today, and it should meet the requirements. Despite the advanced technology and the computer age, the need for a strong specialist director is increasing more and more. The shortage of young specialists is clearly visible in cinema, television, theaters, public holiday events. In the training of directors, we select real talent holders, who are capable, organized, creative, sensitive, creative, have a good understanding of fine arts, music, literature, poetry, and are aware of national traditions and various fields of folk art. We need to be able to distinguish our children from amateur directors.

It would be appropriate for us to start the initial work in educating directors by introducing the history of the director's profession and the stages of its development, its founders to the student, because without knowing the history, one cannot build a strong future. In the world of directing, historical knowledge is of great importance for creating innovations and making new creative flights.

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## **THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN MEDICINE**

*Abstract. Information technology in medicine allows high-quality monitoring of patients' condition. Keeping electronic medical records allows reducing the time spent by clinic staff on preparing various forms. All information about the patient is presented in one document available to the medical staff of the institution. All information about the results of examinations and procedures is entered directly into the electronic medical card.*

*Keywords: IT, life, medicine, storage and transfer, healthcare.*

Information technology is now used everywhere. It is clear that such an important area of human life as health cannot be left aside. The latest digital developments have a positive impact on the development of the most promising ways of organizing medical care for the population around the world. At the same time, effective construction of IT infrastructure is gaining importance. Many countries have been actively using innovations in the field of medicine for a long time. Information technology (IT) is ubiquitous in the modern world. Healthcare is no exception. Modern IT developments have a positive effect on the development of new ways of organizing medical care for the population. Many countries have been actively using new technologies in the health sector for a long time.

Conducting teleconsultations for patients and employees, sharing information about patients between different institutions, remote recording of physiological indicators, monitoring operations in real time - all this is provided by the introduction of information technologies into medicine. This brings healthcare information to a new stage of development, positively affecting all aspects of its activity. The introduction of IT in the healthcare sector allows to increase the quality of service, significantly speed up the work of employees and reduce the costs of providing services to patients.

Information technologies in the field of medicine and healthcare help to solve the following tasks:

- keeping records of patients in the clinic;
- remote monitoring of their condition;
- storage and transfer of results of diagnostic tests;
- monitoring the correctness of prescribed treatment;
- conducting distance education;
- mentoring inexperienced employees.

Information technology in medicine allows high-quality monitoring of patients' condition. Keeping electronic medical records allows reducing the time spent by clinic staff on preparing various forms. All information about the patient is presented in one document available to the medical staff of the institution. All information about the results of examinations and procedures is entered directly into the electronic medical card. This allows other specialists to evaluate the quality of prescribed treatment, to identify inaccuracies in diagnosis.

The use of IT in medicine allows doctors to conduct online consultations at any convenient time. It increases the availability of medical services. People can get skilled help from experienced doctors remotely.

This is especially true for people who:

- living in geographically remote areas;
- has a disability;
- caught in an emergency;
- located in a limited space.

Thus, patients or doctors do not have to travel long distances for consultation. With the help of modern information technologies, the doctor can assess the patient's condition, examine him and get acquainted with all the results of his examination. Such consultations are necessary not only for patients with physiological problems. Interviews also allow people who need psychiatric or psychological help. Audiovisual communication allows the doctor to communicate with the patient and provide him with the necessary assistance. Today, medical information systems are actively developing, which allows institutions to work more efficiently and quickly. Today, in Russia, the government is focusing on the informatization of health care.

Informatization of health care is a very broad concept, which includes activities aimed at informing specialists about the world's scientific achievements in the field of medicine with the help of IT. Thus, it is an effective way to train and improve the skills of hospital and polyclinic staff. №3 2022 143 With such technologies, doctors can quickly get information about new developments and discoveries that help them work more efficiently. This problem is especially relevant for medical workers working in remote settlements. Introducing innovative technologies to medicine is quick and easy. The interface of such systems is open and intuitive even for unprepared users. Clinic staff can quickly master the operation of these new technologies. It helps developers understand all the nuances of product performance.

After completing the training, which requires a minimum of time, medical personnel will have:

- work with information resources;
- holding a teleconference;
- work in local and global computer networks;
- use support systems.

Today, it is planned to create a national telemedicine system within the framework of healthcare informatization in Russia. With the right approach, this technology not only significantly improves the quality of medicine, but also helps reduce costs. For example, doctors do not have to pay for attending scientific conferences. They will be able to participate in such events remotely. Modern IT capabilities in healthcare allow to have a positive impact on all aspects of medical care.

New technologies help quickly:

- registration of operations on income and expenses
- control over warehouses;
- formation of applications for delivery of medicines;
- control of medication consumption;
- writing off materials, preparations;
- creation of reporting documents and submission to higher authorities.

Information technologies are actively used in the field of education in medicine. Distance seminars allow students of universities and medical schools to get the necessary knowledge. Such technologies allow young specialists to participate in the lectures of well-known doctors, gain new knowledge and experience. All these possibilities are now available for Russian clinics. The RoboMed unified medical system is the future of your facility. Your staff will work more efficiently, make more profit and keep pace with Western clinics. We help you implement this technology in your business. In addition, we will train your employees to work with the system as soon as possible. If any questions arise during the operation of RoboMed, our highly qualified staff will quickly answer them and help solve the problems that have arisen. When you purchase this system, you will be assigned a personal service manager who will help you at any time, inform you about new software features and available updates.



By widely introducing new pedagogical technologies such as modern communication technologies, electronic textbooks and multimedia tools in the textbook educational processes, it serves to improve and fundamentally change teaching in the medical schools of our country, in a word, it serves to raise a mature generation. The textbook is intended for professors and teachers of medical universities and research scientists, senior and junior researchers, students studying in this direction, as well as specialized medical colleges. and representatives of the younger generation studying in academic lyceums can also use it.



Today, one of the fields in which information technology has actively entered is medicine. Computer hardware is widely used for diagnosis, treatment and preventive examinations. For example, computer tomography, nuclear medical diagnosis, ultrasound diagnosis, X-ray studies based on microcomputer technologies are among them. Operation of robots, checking health status through mobile phone applications, conducting laboratory analyzes at home through technical devices.

First of all, the responsibility in medicine is not fully assigned to the technique. Monitoring the process, confirmation of the diagnosis remains the responsibility of the doctor. Secondly, a doctor who wants to achieve success in his field makes more friends with technology, tries to use its possibilities to the fullest. Then his bread will not be half, but his work will be more productive with the help of technologies, his customers will increase, and his reputation will increase.

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**NEW VARIETIES OF COTTON SUITABLE FOR DIFFERENT SOIL-  
CLIMATIC CONDITIONS OF THE REGIONS OF THE FERGANA  
VALLEY**

*Annotation. In the article, created in recent years and regionalized by selectors of Andijan research station, Andijan-35, Andijan-36, Andijan-37 cotton plant types and gained the status of future UzPITI-201, UzPITI-202, UzPITI-203 types cephalopathy, biology, quality of silk and agricultural engineering are included.*

It is known that it is a priority task of the State to comprehensively improve and speed up work in the field of selection, seed breeding, renewal of varieties, introduction of new fast-ripening varieties of cotton with high fiber quality and their rational placement in different soil and climate conditions of the country.

It is important that the newly created cotton varieties not only have economic characteristics (fastness, fiber length, fiber yield, fiber quality meeting industrial requirements), but also resistance to various diseases and tolerance to extreme conditions [1, p. 253-256].

Breeding scientists create such cotton varieties by studying wild forms with strong characteristics and using them in the selection process.

Establishing elite seed production, which is a guarantee of abundant and high-quality harvest in seed farms, in placing and renewing cotton varieties for different soil and climate conditions of the republic, and developing seed production in line with international standards, requires paying special attention to the biological characteristics of the variety [2, p. 138-142; 3, p. 160-163].

Therefore, the creation of new varieties and suitable agro-technologies that provide competitive, early, high-yielding, high-quality cotton crops that meet the requirements of global standards in the cotton cultivation of not only Andijan region, but also the regions of the Republic remains an urgent task.

As a result of the research, in the following years, the breeders of PSUEAITI Andijan scientific-experimental station created varieties of cotton such as Andijan-35, Andijan-36, Andijan-37 and Ibrat and were included in the State Register. Currently, the area of these varieties is expanding. At the moment, these varieties show high results in terms of fiber quality, productivity and other characteristics, satisfying the demand of farms.

It is known that the varieties differ from each other in the shape of the bush, the type of branching, the shape of the cup, the amount of leaves, the output weight of the fiber, the industrial type of the fiber, microneural indicators, the weight of

one thousand seeds, the content of moisture and other characteristics. If you know their morphological and biological characteristics, you can plant them and take care of them, using specific agrotechnics for each variety, and get a high yield.

As a result of the research, in the following years, the breeders of PSUEAITI Andijan scientific-experimental station created varieties of cotton such as Andijan-35, Andijan-36, Andijan-37 and Ibrat and were included in the State Register. Currently, the area of these varieties is expanding. At the moment, these varieties show high results in terms of fiber quality, productivity and other characteristics, satisfying the demand of farms.

**Andijan-35 cotton variety.** PSUEAITI was created by the breeders of the Andijan research station T. Komilov, Kh. Egamov and others by crossing (An-402 x Liniya-90) x (Mustalenum x Andijan-13). This variety was included in the State Register in 2007. The bush of the Andijan-35 variety has a conical shape, the height of the main stem is 110-120 cm, the period of operation is 122-125 days, it branches in the 2nd type, the first harvest branch appears in the 6-7 joints. The stem is strong, does not lie down, the stem and leaves are moderately hairy. The leaves are 3-5 lobed, the flower is medium, the golden leaves are pale yellow. The cup is medium in size, oval, the seed is medium, hairy, gray. The fiber is white, the weight of one bag of raw cotton is 6.6-7.2 g, the weight of 1000 seeds is 120-125 g. The length of the fiber is 33.0-33.5 mm, the relative breaking length is 27.6 g.k/tex, the metric number is 5680-5780, the yield of the fiber is 36.0-37.0 percent, the hardness of the fiber is 4.7-4.9 gr /power. Fiber belongs to type V. Microneuri 4.6-4.7. In 2017, the variety was planted on 55,000 hectares in the regions of the Fergana Valley.

As a result of the research, in the following years, the breeders of PSUEAITI Andijan scientific-experimental station created varieties of cotton such as Andijan-35, Andijan-36, Andijan-37 and Ibrat and were included in the State Register. Currently, the area of these varieties is expanding. At the moment, these varieties show high results in terms of fiber quality, productivity and other characteristics, satisfying the demand of farms.

**Andijan-36 cotton variety.** The variety PSUEAITI was created at the Andijan research station in 2001 (175-F x Andijan-13 x Andijan-21) by hybridization and multiple selection.

Authors: M. Dadajonov, A. Kasimov, Kh. Egamov and others. The bush of the Andijan-36 variety is conical in shape, 110-115 cm tall. The stem is strong, does not lie down, weakly hairy. Branching type-1, the number of branches is 0-1. The first harvest branch emerges from 5-6 joints, it belongs to medium-sized varieties, the period of validity is 119-120 days. The leaves are medium-sized, 3-5-lobed, cut, moderately hairy.

The flower is medium in size, the petals are light yellow, the pods are medium in size, oval, 4-5 sepals, beaked. One bag of cotton raw material weighs 5.5-6.0 gr. The seed is hairy, gray, the weight of 1000 seeds is 108-110 gr.

Fiber characteristics of the variety: white color length 34-35 mm, fiber yield



39.0 percent, hardness 4.6 gr/power, relative breaking length 28.4 gk/tex, metric number 6030, micron 4.6, IV-industry belongs to the type

It can be planted in the order of 60 and 90 cm, depending on the specific soil conditions, the slope of the land, and the terrain. The variety is also suitable for planting in double rows, using the film method.

For this variety, the thickness of seedlings is left depending on the soil conditions of a particular field. In particular, it is recommended to keep 80-90 thousand bushes per hectare in high-fertility areas, 100-120 thousand bushes in medium-fertile fields, and 120-140 thousand bushes in low-fertility, rocky, hilly fields.

Andijan-36 cotton variety should be watered for the first time during the growing season, depending on the soil conditions and plant condition, when one bush produces an average of 6-7 leaves in areas with deep seepage water, or at the beginning of the tillering period, and in the conditions of soils with shallow seepage water (in fertile lands) cover the cotton held during the sharpening period. Watering in the next period of operation is carried out depending on the condition of the plant and soil moisture.

Andijan-37 cotton variety. The variety PSUEAITI was developed by A. Kasimov, M. Dadajonov, Kh. Egamov and others at the Andijan research station as a result of complex crossing (Liniya-37 x Namangan-77 x Andijan-22).

This variety was regionalized for Andijan region in 2012. In 2017, it was planted on an area of 9,000 hectares.

The bush of the Andijan-37 cotton variety is conical in shape, 105-110 centimeters tall. The stem is strong, does not lie down, and is sparsely hairy. The branching is of 1.5-2.0 type, the first harvest branch comes from 5-6 joints, it belongs to the group of medium varieties, the growing period is 122-125 days.

The leaves are medium-sized, 3-5-lobed, cut, moderately hairy. The flowers are medium in size, the petals are pale yellow, the stamens are yellow. The pods are medium-sized, oval-shaped, 4-5-lobed, with a beak. One bag of cotton raw material weighs 5.6-5.8 grams. The seed is hairy, gray, weight of 1000 seeds is 105-110 gr.

Fiber characteristics of the variety: the color of the fiber is white, the length of the fiber is 33.0 - 34.0 mm, the yield of the fiber is 37-38 percent, the hardness is 4.7 gr./power, the relative breaking length is 27.6 g.k./tex, metric number 5630, micron 4.5 - 4.6, belongs to V-industrial type.

For this variety, the thickness of seedlings is left depending on the soil conditions of a particular field. In particular, it is recommended to keep 75-80 thousand bushes per hectare in areas with high soil fertility, and 100-110 thousand bushes per hectare in conditions of low fertility, rocky and hilly fields.

The first watering of the Andijan-37 variety during the growing season is carried out depending on the soil conditions and the condition of the plants, when the plant produces an average of 6-7 leaves in the areas with deep seepage water or when the tillering period begins, and in the surface soils, the seepage water is



carried out during the tillering period. Watering during the next period of operation is carried out depending on the condition of the plant and soil moisture.

It is known that the varieties lose their positive properties due to various reasons as a result of being planted for many years. Therefore, there is a need to create new varieties that will replace them and have superior characteristics. Taking this into account, breeding scientists of PSUEAITI Andijan scientific-experimental station created new cotton varieties UzPITI-201, UzPITI-202 and UzPITI-203. These new promising varieties have certain advantages over the above varieties in terms of all their characteristics. These promising varieties are being tested in the State variety test and in production.

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**THE OCCURRENCE LEVEL OF REPRESENTATIVES OF THE  
TORTRICIDAE FAMILY IN THE AGROBIOCENOSIS OF THE  
ORCHARD UNDER THE CONDITIONS OF THE FERGANA VALLEY,  
THE DOMINANT SPECIES, AND THE LEVEL OF DAMAGE**

*Annotation.* Horticultural areas around the world are expanding, and the volume of their cultivation is increasing year by year. However, pest damage to a certain extent affects the quality and volume of the crop. The expansion of apple orchards indicates the need for further improvement of agricultural technologies for their cultivation, methods of protection against pests and diseases.

*Keywords:* *Lepidoptera: Tortricidae. Carpocapsa (Cydia) pomonella Cossidae.*

**Introduction** The natural climatic conditions of Uzbekistan are the most favorable for growing fruit trees and vines. Fruit trees such as apples, pears, quinces, cherries, cherries, apricots, and peaches are planted in the republic. However, without effective protection of gardens and vineyards from pests and diseases, it is impossible to get a high-quality and high harvest from them. Some types of pests found in orchards and vineyards are apple, plum and grape bollworms, violets, false shields, fruit spider mites, pear sweetworm, pear aphids, acacia false shields, oriental fruitworm, sheath moth, which reproduces several times throughout the year and season. will cause great damage. Among the diseases of fruit trees, hole spotting (clyasterosporiosis), moniliosis (anthrax disease), powdery mildew, parsha (scab disease), peach leaf swelling, and plum pocket diseases greatly affect the quality and quantity of the crop. Certain quarantine pests - California shields, blood louse, mulberry moth, citrus mite, parasitic plants - ivy and sedges spread a lot every year, causing great concern to our gardeners and owners.

**Research results:** More than 30 pests are encountered in seed apple orchards, the most important of which are leafhoppers (Lepidoptera; Tortricidae). There are 9,800 species of barnacles worldwide, divided into three subfamilies: Tortricinae, Olethreutinae, and Chlidanotinae.

Apple borer (*Carpocapsa (Cydia) pomonella* L.) is considered one of the main pests in seed orchards, and it is observed that 65-70% of the apple crop dies in the conditions of our country. Today, the control measures against this pest are mainly used by chemical methods. However, it is urgent to develop coordinated measures against the pest in order to maintain environmental cleanliness and grow ecologically clean fruit products.

For this reason, many countries now use biological agents against agricultural pests and produce biopesticides in order to grow ecologically clean products. North America is the leader in the production of biopesticides, its share in the world market is 240-260 million US dollars. More than 250 biopesticides are registered in Canada and the United States alone. Of these, 60% are bacterial products, 25% are fungal products, and 15% are viral products, and the production of biopesticides worldwide is expected to increase by 8-10% annually. In 2013 alone, more than 200 new types of biopesticides were registered in China. Among them, the most common types are actophyte, planriz, trichodermin, phytofluorine, lepidocide. and their average efficiency is higher than 50% depending on the air temperature. Also, their cost is up to 40% cheaper than chemical means.

According to the morphological characteristics of the apple fruit eater, the back wings are light brown in color. On the outer edge of the wings there is a short, dark bulb. The bulb is 10-12 mm long, brown, on the 2-7 segments of the abdomen, two rows of spines are visible on the back. There are more than one row of long spines on segments 8 and 9 and at the tip of the abdomen. The sponge is enclosed in a soft cocoon, the threads of which are often gnawed by worms. The length of the adult worm reaches 18 mm, the top is pink, the bottom is white or yellowish, the young worm is white. The body of the worm has hairy small light gray spots. The head and nape of the worm are light brown or reddish in color. Eggs are usually 1.5 mm, round, flattened, flowing.

Despite this, systematic scientists began to use the names adopted by Hübner. Kirby and Spence first coined the term *Cydia*.

*Erminea pomonella* (Linnaeus) used in the description of the mouth part of the species. *Erminea* is mentioned as a monotype and its species is *pomonella*. However, without scientific research, the name of *Erminea* is *Erminea* Hagley [113; p. 104]. (*Yponomeutidae*) was introduced by the idea. Another scientist Treitschke (1830) proposed the name *Carpocapsa pomonana* L. by combining the above species. While Curtis (1831) says that the word *pomonella* refers to the species of the genus *Carpocapsa*, Walsingham. interpreted the word *pomonella* as the type of the genus *Cydia*. Busck confirmed in 1903 that *pomonana* was the first species for the genus *Carpocapsa*, agreeing with Curtis.

But Brown said *Cydia* and *Carpocapsa* will be left as synonyms.

In 1959, Obraztsov emphasized the names *Cydia* and *Carpocapsa* as synonyms of *Laspeyresia*. Kuznetsov and Kezner (1984) appealed to the International Commission on Zoological Nomenclature to accept the term *Cydia* as the parent genus. But after the discussions, no decision was taken.

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## **IMPROVEMENT OF METHODS OF CONTROL AGAINST THE ORIENTAL FRUIT BORER (GRAPHOLITHA MOLESTA BUSCK) IN ORCHARDS OF ANDIJAN REGION**

*Annatsiya. Increasing the productivity of orchards and improving the quality of fruits is one of the urgent tasks of our time. One of the main factors is to protect them from pests and diseases. More than 150 pests and diseases are known to damage orchards. Knowing the bioecology of such pests, it is very important to carry out control measures in the most vulnerable period of their existence.*

*Key words. garden, apple tree, insect, Lepidoptera, genus, category.*

**Introduction.** In the decisions of the President of the Republic of Uzbekistan and the Cabinet of Ministers, it was noted that in order to provide the population of the Republic with quality fruit and vegetable products and make efficient use of the orchards, special attention should be paid to the expansion of the cultivated areas of the orchards and their productivity.

Since the climatic conditions of Uzbekistan are favorable for the growth of insects harmful to orchards, various pests are observed in orchards every year. In some years, as a result of their damage, the weight and quality of the grown fruits decrease to a certain extent in all regions of our republic. Such a dangerous group of pests are fruit eaters.

Fruit borers are garden pests that reduce the productivity of apple, pear, quince, peach, cherry, plum, cherry, almond and walnut trees and spoil the quality of the fruit, sometimes making it unfit for consumption. Among them, the eastern fruit fly - (*Grapholitha molesta* Busck.) is an internal quarantine insect of the class Insecta, family Tortricidae of the order Lepidoptera, genus *Grapholita*. This pest was first identified in China and Korea and was first recognized as a pest in 1899 in Japan. It came to the territory of Uzbekistan in 1980, and now it is found that it is spread over 2577.2 ha of our Republic.

The eastern fruit borer mainly damages peaches and other seed and grain trees and their fruits. The rate of growth of peaches and other trees whose branches are damaged changes; infected fruits are not suitable for consumption.



**Fig. 1. Laboratory experience of damage to young branches of the first generation of the eastern fruit borer (2020-2022).**

Eastern fruit borer settles in the inner part of the fruit and gnaws its insides and seeds, making it unusable. During the damage to peach seedlings, it makes a path 12-15 cm long inside the body of the seedling, as a result, the leaves of the seedling wilt and fall off. This process slows down the growth and weakens the tree. This causes the fruits to drop and the yield to decrease by 40-50%.

The system of protection of fruit trees from the eastern fruit borer is eliminated by carrying out the following activities. Agrotechnical measures, biological control methods, chemical control methods and quarantine measures.



**Figure 2. The budding process of the oriental fruit borer is also an infected branch. (2020-2022).**

It is necessary to carry out agrotechnical measures in order to fight against the eastern fruit borer. For this purpose, it is necessary to bury dead leaves in autumn, clean the tree trunk from old bark, mulch around the tree, whiten the tree trunk, install retaining belts in the gardens, and pick the unripe fruits every day. Quarantine will be announced by the state plant quarantine service in the regions



where the eastern fruit borer has been detected, and measures will be taken to prevent the pest from spreading to other regions and to eliminate it. Residents will be warned 2-3 days before treating orchards with chemical means against the oriental fruit borer, and they should take measures to protect the beehives of vegetables, rice and other crops in the garden from toxic chemicals. Treatment with chemical means should be stopped at least 30 days before harvesting, installation of retaining belts in orchards; pick and discard unripe fruits every 1-3 days; in order to destroy the fruit worm, it is advisable to carry out one chemical treatment against each of its generations.

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## **CONTROL MEASURES AGAINST THE EASTERN FRUIT BORER (GRAPHOLITHA MOLESTA BUSCK) IN THE CONDITIONS OF ANDIJAN REGION**

*Abstract. An insect belonging to the class Insecta, order Lepidoptera, family Tortricidae, genus Grapholita of oriental fruit-eating insects. It is found in the Central and Southern part of Europe, Ukraine, Caucasus, Austria, Bulgaria, Hungary, Greece, Germany, Italy, Spain, Poland, Romania, France, Switzerland, Czech Republic, Yugoslavia, southwestern part of Russia.*

*Key words. morphology, egg, larva, imago, butterfly, mushroom.*

**Introduction.** China and Korea are the countries of origin of Oriental fruit eater. The oriental fruit borer was first identified as a pest in Japan in 1899 and in America in 1913, and spread to South Australia in 1959 and later to Brazil. By the 1970s, it had spread to the Mediterranean Sea. By 1980, it became known that the Eastern fruit-eater was also spread in the territory of Uzbekistan. Today, the Eastern fruit eater is distributed in Andijan, Namangan, Samarkand, Fargona regions and Tashkent city of Uzbekistan. In 2005-2006, it was known that 65-70% of peach trees were damaged in gardens in Baghdad district of Fergana region. Eastern fruit-eater was identified in 1964 in MDX states. In 1965, based on the results of extensive inspection of plant seedlings, it became known that the Krasnodar region, Sukhumi city of the Republic of Abkhazia, Garg and Ochamchir districts, Mejdunarodnyi nauchnyy zhurlan, Divichen, Kubin, Kusar and Khamchas districts of Azerbaijan are the main breeding grounds. Oriental fruit borer is a very dangerous quarantine pest. It damages fruit trees, young seedlings, fruit trees with grains and seeds. Peaches, apricots, plums, pears, apples, cherries, quinces and hawthorns are especially affected. Morphology. Butterfly: General color is gray-brown. On the front part of the forewing there are seven pairs of white spots "Koshtyrnokhmen". Four of them are clearly visible on the edge of the wing. There are seven black spots on the outer corners of the wing. Orca fins have a broad gray-brown and bronze-velvet cover. The mustache is stringy and makes up half the length of the front wing, with thin and indistinct white hairs. The lower part of the abdomen is silky white, the legs are dark, covered with short yellowish white hairs. Wings are 12-14 mm in size. The female butterfly is larger than the male. Eggs: Oval, oblong, semi-transparent white shiny, turns reddish during hatching, becomes cloudy, after which larvae begin to emerge from the egg within 15-48 hours, the head of the larva is black, length 0.4-0.5 mm, width 0,15 mm in size [2, 325 pages] Larva: The larvae hatched from the

eggs are milky white in color, the head is black, the chest is dark, and the anal part is hairy. Adult larvae are reddish-gray in color. The hairs on the body of the adult larva are brownish in color and differ from the plum worm, the plum worm has shorter body hairs. The respiratory tract consists of a skin covering with a dark border. The head is yellow-brown, there are black spots around the eyes and on the lunge. The larva's body is entirely covered with fine cuticular spines, but the shoulder muscles do not have these spines. The front chest is yellowish-brown. The segments of the posterior excretory organ are pale yellowish brown with black spots. Posterior excretory segments have comb-like anal combs with 4-7 teeth above the anal excretory organ.

Another difference between the eastern fruit borer and the plum worm is that there are 9 shields on one common segment of the 2nd thoracic segment, while in the plum worm, the individual larva is 12 mm long (Fig. 2). Gumbagi: Two rows of brown stripes on the shoulder side of the abdomen, indicating that it belongs to this family of characters. The eyes are black, complexly structured. At the end of the abdomen there are 10-18 spines of different sizes. There are 1-2 bristles on the side of the back and higher than the genital opening. The length of the sponge is 6 mm. Biology: Larvae hibernate in ripe silk-cocoons on the trunks of trees, between barks 5-50 cm above the ground, and sometimes in some rotten fruits among the remains of plants in the soil. Summer cocoons can be found on fruits, tree trunks, seedlings and other places. The period before the transition to the dome is divided into 3-4 days. The average incubation period is 10 days. Butterflies begin to fly when the air temperature is on average 15 °C. During this period, the butterflies fly between the peach trees and in three parts in an irregular zigzag movement, i.e. one up and one down. Butterflies fly mainly from sunset to dawn, but spring generations of butterflies can also be found during daytime, butterflies fly for 10-14 days, relatively more in summer and autumn. Before leaving for the winter, 2-5 days after the emergence of imagos, when the air temperature exceeds 15.5°C, they start laying eggs [1, 10 pages], egg-laying lasts 7-10 days. It lays 100 to 200 eggs on the tips of tree leaves. The female butterfly lays her eggs on the back of a peach leaf (sometimes on a cherry and plum), on the upper part of an apple and quince leaf, and on the leaves of young peach and pear seedlings. One female butterfly lays up to 200-400 seeds. After 6-8 days, the larvae emerge from the seeds, and after 8-12 days, they gnaw the inside of the young plants and turn into pupae. The larvae of the next generation continue to cause damage in the same way. The incubation period lasts 5-12 days. A generation takes 30 days to fully develop. It gives 4-7 generations in a year, depending on weather conditions. It mainly damages some varieties of peaches, apricots, plums, pears, apples, cherries, quinces and hawthorns. During the infection of peach seedlings, a path of 12-15 cm is opened inside the seedling body, as a result, the seedling withers from the tips, leaves fall, plant growth slows down and bends: In young apple and pear seedlings, the larva penetrates up to 1-2 cm, the affected parts darkens and dries up. One larva can damage 4-5 seedlings.

In the case of fruits, the fruit bands cause damage to the next fruits through the surrounding and bands. After harvesting the pods, the larvae move to the seed pods and start infesting the seedlings again. It is necessary to determine the areas where this pest is spread, to prevent its spread and to eliminate it.

**IDENTIFYING ORIENTAL FRUIT.** Inspection of plantations using pheromone traps is the best way to detect the pest. They should be hung on the crown of trees at a height of 1.5-2 meters, 1 handle is placed for 5 seedlings. The result is monitored every 7-10 days. In order to identify the eastern fruit eater and to determine its distribution areas, a double check is carried out. First inspection: 10-15 days after peach blossom, when the branches have grown 5-10 cm. Second inspection: Infected plants before fruiting, i.e. in mid-July. In the inspection, peach trees are first examined, and then all affected trees. After two full inspections, plant quarantine is selectively checked by the state inspection.

**IDENTIFICATION OF ORIENTAL FRUIT LARVAE.** The first detection of the larvae of the eastern fruit borer is done by cutting open the infected young peach seedlings. Affected seedlings are distinguished by the fact that 1-2 leaves at the tip are withered, dried and bent in three parts. During the second inspection, the fallen fruits of the affected plants are picked and examined, the tree is shaken and the fallen fruits are picked and examined for fruit moth larvae and worms. Larvae found in fruits and seedlings are removed and killed by pouring boiling water over them, fixed in alcohol, adecalone or weak saline solution, and the appropriate label is attached and sent to the quarantine inspection for identification. Other non-quarantine fruitworm species may also be encountered during detection of Oriental fruitworm larvae in fruits. In this case, an identification table is used to determine the species composition of 10 types of fruitworm larvae. To identify trees of the same variety in a large area, one out of every 10 trees is taken and 10% of the area is considered. 25-50% of 3 hectares are seen in villages, and 50-100% of homesteads. Trees are viewed along two diagonals. In regions, 3 hectares (300 trees) per person per day, and 20 plots of land in estates are planned. In order to prevent the spread of the eastern fruit borer, to eliminate its pests, and to reduce its damage, nationwide measures are implemented. Chemical means should be used in compliance with sanitary regulations.

**PEST CONTROL MEASURES.** Agrotechnical control methods In the fall, the rows are plowed and there are no favorable conditions for wintering. In spring and summer, regular cultivation is carried out and the big lumps between the rows are crushed. A trichogram is used when mass reproduction and spawning begin. Fastening straps to the trunk of the tree. If pheromones are used, the representative of the opposite sex will be trapped. It is necessary to separate the harvested fruits from the healthy ones. Fruits from the areas affected by the Eastern fruit borer should not be taken to other areas, used as fodder or used for making preserves. It is strictly forbidden to dry fruits in the open air.

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## **O'ZBEKISTON HUDUDLARIDA TOJCHILIKNING IQTISODIY SAMARALIGINI OSHIRISH YO'LLARI**

*Annotasiya. Ushbu maqolada o'simlik – kovul va uning tuzilishi, tibbiyot va oziq-ovqat sanoatida foydalanish orqali iqtisodiyotda daromad va iqtisodiy samaradorlikni oshirish masalalari yoritilgan. Maqolada viloyatda kovul yetishtirish va undan daromad manbai sifatida foydalanish borasidagi tadqiqotlar natijalari bayon etilgan.*

*Kalit so'zlar: farmatsevtika kovul sanoati, kovul tarkibi, kovul dorivor o'simlik, kovul eksporti, kovul qayta ishlash.*

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## **WAYS TO INCREASE THE ECONOMIC EFFICIENCY OF CROWN GROWING IN THE REGIONS OF UZBEKISTAN**

*Abstract. This article covers the issues of increasing income and economic efficiency in the economy through the use of the plant - capers and its structure, in medicine and in the food industry. The article describes the results of studies on the cultivation of capers in the region and its use as a source of income.*

*Key words: pharmaceutical capers industry, capers composition, capers medicinal plant, capers export, capers processing.*

**Kirish.** Odamzod bir qaraganda nazar-pisand qilmaydigan narsalar daromad keltirishi mumkinligiga uncha ishonmaydi. Masalan kovul (kavar), uni xalqda oddiy qilib tarvuzchalar deb ham atashadi. Qizig'i shundaki, o'stirish uchun uncha katta sarmoya talab qilinmasligiga qaramay, u tadbirkorlar yoki daromadli ishga sarmoya tikishga tayyor sarmoyadorlarning diqqatini tortmaydi [1].

O'zbekiston – agrar mamlakat. Azal-azaldan zaminimiz uumdor. Tarixan shakllangan iqlim sharoiti va yer tarkibi hamda fermer xo'jaliklari faoliyatini rag'batlantirish maqsadida hukumat tomonidan qabul qilingan qonun hujjatlari esa yerimiz unumdorligi yanada oshishiga xizmat qilmoqda. Bundan tashqari, fermer xo'jaliklari rag'batlantirish uchun grantlar, qulay shartlarda kreditlar olish imkoniyatiga egalar va hokazo.



Shu munosabat bilan o'z biznesingizni ochishingiz uchun yana bir biznes-g'oyani diqqatingizga havola etamiz. Bu safar g'oya agrar sohaga tegishli [5].

**Kavar (lot. caparis)** – bu kavarlar oilasiga mansub o'simlik turi, bazilar uni karam oilasiga mansub, deb hisoblaydilar [6].

Kavar yer bag'irlab o'sadigan tikanli buta bo'lib, balandligi 1 metrdan 2 metrgacha bo'ladi. Bu o'simlik oilasiga sayyoramizning subtropik va tropik yerlarida o'sadigan 300 dan ortiq turli buta, daraxt, liana va ko'p yillik o'simliklar kiradi. Shimoliy Afrika va Janubiy Yevropa kavarning vatani hisoblanadi. Odamzod kavarni ming yillardan beri iste'mol qilishi ma'lum. O'z paytida, qadimiy yunonlar kavar savdosi bilan shug'ullanganlar.

Kavar yovvoyi o'simlik sifatida ma'lum. Tikanli kavar O'rta dengiz bo'yi mamlakatlarida, Osiyoda, Hindiston, Shimoliy Afrika, Shimoliy Amerikada o'sadi. Kavarni Kavkaz va Qirimda ham uchratish mumkin.

Barglari och yashil rangda, mum bilan qoplanganga o'xshaydi, ellips shaklida va bandli bo'ladi, barg yonligi uncha katta emas, tikanli. Kavar maydan to oktyabr oyigacha o'sadi. Dona-dona gullaydi. Guli nihoyatda go'zal bo'lib, ertalab ochiladi va kechga borib yopiladi. Kavar barglarining yonidan uzun barg chiqarib gullaydi. Gul aylanasi 3 santmetrgacha bo'ladi, ochiq pushti rangli gullarning o'rtasida uzun nafarmon tuklari yaqqol ko'zga tashlanadi. Kavar bir uyali go'shtli reza meva beradi. Mevasi ikki palladan iborat bo'lib, tarvuzga o'xshaydi. Kavar quyoshsevar va qurg'oqbardosh o'simlik. Bir yerdan 15 yildan ortiq davr mobaynida o'sib chiqadi. Kavarni urug'dan, butasining bir qismidan ko'paytirish mumkin. Yashil, tuxumsimon va bodringa o'xshash mevalar pishgandan so'ng lola misol ochiladi.  $-8^{\circ}\text{C}$  gacha bo'lgan sovuqqa chidaydi.

Dorivor o'simlik bo'lishidan tashqari, kovul oziq-ovqat sifatida ham ishlatiladi. Kurtaklari, rivojlanayotgan mevalari sirka kislotasi bilan to'yingan va "Kovul" deb nomlangan oziq-ovqatda juda mashhur. Kovulning tana qismlari diuretik va antiseptik xususiyatlarga ega [3].

Biz kovul deb ataydigan bu noyob o'simlik qimmatli xomashyo hisoblanadi. Abu Ali ibn Sino bu o'simlikdan ko'plab kasalliklarni davolashda ishlatiladigan dorivor o'tlarni tayyorlash usullarini yozib qoldirgan. O'zbekistonda 2020-yilda kovul yetishtirilgan va "O'zbekiston-20" navi nomini olgan. Kovul yer tanlamaydi, uning dehqonchilik texnikasi murakkab emas, ya'ni parvarish qilishni talab qilmaydi. U o'ziga g'amxo'rlik qiladi. Yangi ekilgan kovul 3 yildan keyin yig'ib olinadi va gektariga 20 tonnagacha hosil olinadi [3].

Har gektar kovuldan 125 ming dollar daromad olish mumkinligini inobatga olsak, mazkur zavodning iqtisodiy samaradorligi yuqori ekanligini ko'rish mumkin. Ayni paytda dehqon va tomorqa yer egalari bo'sh va foydalanilmayotgan tomorqa yerlariga kovul urug'i ekib, yuqori daromad olishga harakat qilmoqda.

Jahon bozorida mashhur bo'lgan kovul dehqon va yer egalari iqtisodiyotini mustahkamlovchi foydali omillardan biridir. O'zbekiston Respublikasi Prezidenti Sh.M.Mirziyoyev Namangan viloyatiga tashrifi chog'ida kovul yetishtirish,

rivojlantirish, ishlab chiqarish va eksport qilish bo'yicha tegishli topshiriqlar berdi. Bu fermer va dehqonlar, tadbirkorlarning istiqboldagi rejalarini amalga oshirishda muhim qadam bo'ldi. Chust viloyatining Galabin, Sabzazor, Axchin massivlari hududidan o'tgan davrda tadbirkorlarga 5 ming 130 gektar yer maydoni kovul ekish uchun ajratildi [4].

Mamlakatimizda yetishtirilayotgan qishloq xo'jaligi mahsulotlari eksportini rivojlantirishga ko'maklashayotgan "Baraka meva sanoat servis" mas'uliyati cheklangan jamiyati Jizzax viloyatining Zomin, G'allaorol, Forish, Sharof Rashidov nomidagi, Andijon viloyatining Buloqboshi, Namangan viloyatining Chust va Kosonsoy viloyatlarida tabiiy sharoitda yetishtiriladi. Uning eksporti 2009 yilda boshlangan. 2014-yil 18-fevral kuni BAAning Dubay shahrida bo'lib o'tgan "Jahon oziq-ovqat ko'rgazmasi"da ishtirok etib, Turkiyaning "Denamikes" va "Denizli" kompaniyalari bilan shartnoma tuzishga muvaffaq bo'ldi. 2014 yilda borib 187 000 AQSh dollari, 2015 yilda 317 000 AQSh dollari va 2016 yilda 581 000 AQSh dollariga teng bo'lgan kovulni eksport qildi. 2017-yilda Italiyaning "Maprikom" kompaniyasiga 242 tonna, Turkiyaning "Denashikes" va "Denizli" firmalariga 495 tonna kovul yetkazib berildi. 2019-yilda Italiyaga 120 ming dollarlik mahsulot jo'natildi. 2020-yilning mart-aprel oylarida yana 128 tonna sifatli, arzon mahsulot eksport qilindi [4].

2021-yil aprel oyida yuqoridagi kompaniya va firmalar bilan uchrashuv bo'lib o'tdi va kelishuvlarga asosan joriy yilda jami 1 milliard 780 ming AQSH dollari miqdorida mahsulot yetkazib berildi. Nafaqat qishloq xo'jaligi mahsulotlarini xorijga eksport qilish, balki tayyor mahsulotni qayta ishlash va eksport qilish borasida ham izlanishlar olib borilmoqda [4].

Italiyaning "Marrikom" kompaniyasi bilan hamkorlikda ishlayotgan qo'shma korxonalar 2019-yildan buyon faoliyat yuritib, yiliga "Made in Uzbekistan" savdo belgisi ostida 3 ming tonnadan ortiq mahsulot eksport qilmoqda. Haligacha foydalanilmayotgan dasht yerlarida barpo etilgan mevali bog'lar, yong'oqzorlar, issiqxonalar negizida ko'plab yangi ish o'rinlari yaratildi. Bu tur O'zbekiston va O'rta Osiyoning butun hududida tarqalgan, asosan cho'l va chala cho'l zonasida, tog' oldi va tog' oldi rayonlarida uchraydi, ba'zan tog'larning o'rta mintaqasiga ham kirib boradi [2].

Loyiha doirasida Jizzax viloyatidagi yangi, ilgari ro'yxatga olinmagan zich o'sgan hududlar o'rganilib, Qashqadaryo, Surxondaryo, Samarqand, Navoiy, Buxoro viloyatlari, shuningdek, Farg'ona viloyatida zich o'sgan yangi hududlar aniqlandi. 15-17 yil oldin o'rganilgan, vodiyning zich o'sgan uchastkalari saqlanib qolganligini tasdiqlash uchun ekspeditsiyalar o'tkazilgan. Ma'lumotlarga ko'ra, Jizzax viloyati deyarli sof, zich o'sgan kovul plantatsiyalari mavjudligi bo'yicha eng boy hudud hisoblanadi. Jizzax shahrida zamonaviy asbob-uskunalar mavjud Jizzax viloyatining Forish tumanida sanoat korxonasi faoliyat ko'rsatmoqda.

Buxoro viloyatiga olib borilgan ekspeditsiya bu hududda kovuldan xom ashyo yig'ish foydasiz ekanligini ko'rsatdi. Ular hamma joyda yakka-yakka

topildi, lekin hech bir joyda sanoat yig'im-terimi uchun etarli darajada zich o'sgan maydonlarni hosil qilmaydi. 2014-2019-yillarda Jizzax va Samarqand viloyatlariga tashkil etilgan sayohatlar haqidagi ma'lumotlardan ham foydalanildi [3].

Shuni ta'kidlash kerakki, asosiy sabablardan biri antropogen omil (yerlarning uy-joy, yo'llar, kommunikatsiyalar, bog'lar, uzumzorlar, fermer xo'jaliklari, konchilik va boshqalar qurish uchun ekspluatatsiya qilinishi) kovul ishlab chiqarishga to'sqinlik qiladi.

Chorvachilikni boqish zich ekilgan ekinlarning holatiga ijobiy ta'sir qiladi, chunki sigir kovullarni yemaydi. Qashqadaryo va Surxondaryo viloyatlarida yetishtirilayotgan qoramollar soni ruxsat etilgan me'yordan sezilarli darajada oshib ketdi. Bundan tashqari, ba'zi joylarda mahalliy aholi maqsadli ravishda tuproqni qazib, kerakli yaylov o'simliklari uchun egallagan maydonlarni tozalashadi.

Bugungi kunga kelib kovul farmatsevtika, oziq-ovqat sanoati va an'anaviy tibbiyotda keng qo'llaniladi. Jizzax viloyatida ham 12 ta eksportyor korxonalar kovul eksporti bilan shug'ullanmoqda. Bunday holda, kurtaklarni yig'ib olgandan so'ng, ular maxsus mexanizatsiyalashgan uskunalarda saralanadi. Keyin yuviladi, maxsus idishlarga solinadi va eksportga jo'natiladi [4].

Birgina 2019-yilning o'zida G'allaorol, Zomin va Sharof Rashidov tumanlari tashqi iqtisodiy faoliyat ishtirokchilari tomonidan jami 3 million 320 ming dollarlik 2 ming 102 tonna kovul asosan Turkiya va Ispaniyaga eksport qilindi. 2017-2021-yillarda O'zbekiston iqtisodiyoti tarmoqlarini isloh qilish chora-tadbirlari dasturi yetakchi tarmoqlarni modernizatsiya va faol diversifikatsiya qilish orqali iqtisodiyotning raqobatbardoshligini, 2021-yilda esa yalpi ichki mahsulotda sanoatning ulushini yanada oshirishga qaratilgan. 30% ga yetdi [5].

**Xulosa.** Prezidentimiz Shavkat Mirziyoyev iqtisodiyotimizni barqaror rivojlantirish, oziq-ovqat xavfsizligini ta'minlash, mamlakatimizning eksport salohiyatini oshirishda qishloq xo'jaligi sohasining o'rnini va ahamiyatini oshirishga alohida e'tibor qaratmoqda. Bu yilgidek suv tanqisligi sezilayotgan yillarda qurg'oqchilikka chidamli ana shunday ekinlar qo'rig'ini ochish har jihatdan foydalidir. Bundan tashqari mazkur yilda 2022 yilning aynan shu davriga nisbatan yurtimizdan 27 tonna ko'p kovul ekport qilindi. Eksport qilingan kovul natijasida yurtimizga valyuta tushumlari esa o'tgan yilning mos davriga nisbatan 170 ming dollarga ko'payib, 4 foiz o'sishga erishildi. Davlat bojxona qo'mitasi ma'lumotlariga ko'ra, kovulning 80 foizi Turkiyaga va 14 foizi Italiyaga eksport qilingan. Shuningdek, joriy yilda kovulning eksporti AQSHga salkam 2 barobarga ortgan.

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**AVTOTRANSPORT XIZMATLARI SOHASINI RIVOJLANTIRISH  
MAQSADIDA HUDUDIY TRANSPORT LOGISTIKASI SOHASINI  
BOSHQARISHNING INNOVATSION MEXANIZMLARINI  
TAKOMILLASHTIRISH**

*Annotasiya. Maqolada avtotransport xizmatlari sohasini jadal rivojlantirish maqsadida hududiy transport logistikasi sohasini boshqarishning innovatsion mexanizmlarini takomillashtirish mulkchilikning barcha shakllaridagi tashuvchilar uchun raqobat muhitini hamda qulay shart-sharoitlarni yaratish, shuningdek, respublikaning transport-tranzit salohiyatini oshirish maqsadilari yoritilgan. Tashish jarayonlari, qatnov jadvallariga rioya etilishi, yo'lovchilar tomonidan yo'l haqini elektron tarzda to'lash samaradorligi, tushumning yig'ilishi va to'laligi ustidan markazlashtirilgan dispetcherlik boshqaruvi va nazorati tizimi mavjud emas. O'zbekiston avtomobil va daryo transporti agentligi amalga oshirayotgan ishlar mintaqalardagi yo'lovchi transportini boshqarish bo'yicha maxsus vakolatli organlar tomonidan deyarli takrorlanmoqda.*

*Kalit so'zlari. avtotransport xizmatlari, hududiy transport, logistikasi sohasi, boshqarishning innovatsion mexanizmlari, takomillashtirish, mulkchilikning barcha shakllari, tashuvchilar uchun raqobat muhiti, shart-sharoitlarni yaratish, transport-tranzit salohiyati, tashish jarayonlari, qatnov jadvallariga rioya etilishi, elektron tarzda to'lash samaradorligi, tushumning yig'ilishi, markazlashtirilgan dispetcherlik boshqaruvi, nazorati tizimi.*

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**IMPROVEMENT OF INNOVATIVE MECHANISMS OF  
MANAGEMENT OF THE REGIONAL TRANSPORT LOGISTICS FOR  
THE PURPOSE OF DEVELOPING THE FIELD OF AUTO  
TRANSPORT SERVICES**

*Annotation. The article covers the goals of improving innovative mechanisms of management of the regional transport logistics sector in order to*



*rapidly develop the field of transport services, creating a competitive environment for carriers in all forms of ownership, as well as favorable conditions, as well as increasing the transport and transit potential of the Republic. There is no centralized dispatch management and control system over transportation processes, compliance with schedules, the efficiency of electronic payment of fares by passengers, the collection and fulfillment of receipts. The work carried out by the Uzbek Agency of automobile and river transport is almost repeated by special competent bodies for the management of passenger transport in the regions.*

*Key words. transportation services, regional transport, logistics industry, innovative mechanisms of management, improvement, all forms of ownership, competitive environment for carriers, creation of conditions, transport-transit potential, transportation processes, compliance with traffic schedules, efficiency of payment electronically, revenue collection, centralized dispatch management, control system.*

So‘nggi yillarda respublika iqtisodiyoti va aholisiga avtotransport xizmati ko‘rsatishni yaxshilash bo‘yicha keng ko‘lamli ishlar amalga oshirilganligi qayd etilsin. Yo‘lovchi tashish yo‘nalishlari tarmog‘i 2019 yilga nisbatan 1,4 baravarga ortdi, respublikada 117 ta yo‘lovchi avtovokzali va avtostansiyasi faoliyat ko‘rsatmoqda, tashuvlar xavfsizligini ta‘minlash bo‘yicha chora-tadbirlar amalga oshirilmoqda.

Shu bilan birga avtotransport xizmatlari sohasini jadal rivojlantirishning mavjud imkoniyatlari va zaxiralaridan to‘liq foydalanilmayapti. Avtotransport ho‘jaliklarini modernizatsiya qilish zamonaviy talablar darajasida emas, sohada ilg‘or axborot-kommunikatsiya texnologiyalari va intellektual transport tizimlari etarli darajada joriy etilmayapti. Og‘ir yuk tashuvchi avtotransport vositalarining harakatdagi tarkibi parkining eskirganligi yuqoriligicha qolmoqda. Mamlakatning avtotransport xizmatlari eksporti va tranzitini oshirish salohiyatining imkoniyatlari va zaxiralaridan to‘laqonli foydalanilmayapti.

Tashish jarayonlari, qatnov jadvalariga rioya etilishi, yo‘lovchilar tomonidan yo‘l haqini elektron tarzda to‘lash samaradorligi, tushumning yig‘ilishi va to‘laligi ustidan markazlashtirilgan dispetcherlik boshqaruvi va nazorati tizimi mavjud emas. O‘zbekiston avtomobil va daryo transporti agentligi amalga oshirayotgan ishlar mintaqalardagi yo‘lovchi transportini boshqarish bo‘yicha maxsus vakolatli organlar tomonidan deyarli takrorlanmoqda.

Avtomobilida tashishlar va yo‘l harakati xavfsizligini ta‘minlash yuzasidan nazorat choralarining tubdan kuchaytirilishi yo‘lovchilar avtotransportida favqulodda vaziyatlarning oldini olish bo‘yicha profilaktik choralar ko‘rishni talab etadi.

Quyidagilar “O‘zavtotrans” agentligining asosiy vazifalari va faoliyatining yo‘nalishlari etib belgilansin:



avtomobil transporti ob'ektlari va yo'lovchilar xavfsizligini ta'minlovchi istiqbolli axborot-kommunikatsion texnologiyalarini va innovatsion yondashuvlarni keng qo'llagan holda yangi boshqaruv tizimlarini joriy etib, avtomobil transporti ohasida yagona texnika siyosatini yuritish;

avtomobil tashuvlarida normativ-xuquqiy va metodik bazani takomillashtirish, avtomobil transporti tashishlar xavfsizligini ta'minlash bo'yicha muammolar yuzasidan xalqaro normalar, ilmiy-tekshiruv, loyiha-konstruktorlik, texnologik ishlarni inobatga olgan holda texnik tartibga solish sohasida normativ xujjatlarning yagona ma'lumotlar bazasini ishlab chiqish va shakllantirish;

iqtisodiyot tarmoqlari va aholining tashishlarga bo'lgan ehtiyojlarini hamda avtomobil transporti xavfsizligini ta'minlash choralari inobatga olgan holda, qishloq aholi punktlarini, shaharlar, viloyat va tuman markazlarini bog'lovchi yangi yo'nalishlarni ochish, avtomobil transportini rivojlantirish bo'yicha kompleks dasturlarni ishlab chiqish va amalga oshirish; yo'lovchilarga keng ko'lamli xizmatlar ko'rsatish uchun sharoit yaratish, shu jumladan, zamonaviy axborot-kommunikatsiya texnologiyalarini keng qo'llab, avtovokzallar va avtostansiyalar faoliyatini markazlashgan holda boshqarish va muvofiqlashtirish tizimini joriy etish; avtovokzallar va avtostansiyalar hamda mahalliy davlat hokimiyati organlari qaramog'ida bo'lgan umumiy foydalanishdagi yo'lovchi tashish yo'nalishlaridagi to'xtash bekatlarini loyihalash, qurish, rekonstruksiya qilish va ta'mirlashni tashkil etish;

tashish jarayonlari, qatnov jadvallariga rioya etilishi, yo'llarda harakatlanish tezligi monitoringi, harakat yo'nalishi sxemasiga rioya etilishi hamda aholiga real vaqt tarzidagi ma'lumotlar xizmatining keng ko'lamli ro'yxati taqdim etilishi yuzasidan markazlashgan dispetcherlik boshqaruvi va nazorati tizimini joriy etish;

tashuv yo'nalishlarini tender asosida joylashtirish, yo'lovchi tashishlari sifati va xavfsizligini oshirish, tenderlar tashkilotchilari ishini muvofiqlashtirish mexanizmlarini joriy etish yo'li bilan avtomobil transporti xizmatlari bozorida bozor munosabatlari va raqobat muhitini rivojlantirish uchun qulay shart-sharoitlar yaratish;

xorijiy davlatlar va xalqaro tashkilotlar bilan faol muloqot qilish orqali avtomobil transporti sohasida xalqaro hamkorlikni rivojlantirish, xorijiy davlatlarning vakolatli organlari bilan kelishgan holda, yangi muntazam xalqaro avtobus yo'nalishlarini ochish hamda xalqaro avtomobil tashuvlari sohasidagi xalqaro shartnomalar bo'yicha majburiyatlarning bajarilishini ta'minlash, bu sohadagi amaldagi shartnomalarni qayta ko'rib chiqish va yangilarini tuzish, xalqaro yuk tashuvlarini amalga oshirish uchun ruxsatnomalar blankalarini o'zaro ayirboshlash;

avtomobil transportida yo'lovchi va yuklarni tashish faoliyatini litsenziyalash, avtomobil transportida yo'lovchi va yuklarni tashish qoidalariga

amal qilish, avtomobilda tashuvlar xavfsizligini ta'minlash talablariga, og'irlik va gabarit ko'rsatkichlariga hamda haydovchilarning mehnat va dam olish rejimlariga rioya etilishini nazorat qilish;

Transport xizmati ko'rsatishni tashkil etish tizimini yanada takomillashtirish, mulkchilikning barcha shakllaridagi tashuvchilar uchun raqobat muhitini hamda qulay shart-sharoitlarni yaratish, shuningdek, respublikaning transport-tranzit salohiyatini oshirish maqsadida:

O'zbekiston Respublikasi Transport vazirligi, Ichki ishlar vazirligi, Adliya vazirligi va «O'zstandart» agentligining 2019 yil 1 iyuldan boshlab:

a) xalqaro tashishlarda foydalaniladigan tyagach (shatakchi) avtomobillarga litsenziya kartochkalari berilishi uchun davlat boji to'lash tartibini;

b) transport-ekspeditorlik xizmatlarini majburiy sertifikatlashni;

v) chek berish yoki yo'lovchining yurganligini elektron qayd etish imkoniyati mavjud bo'lishi sharti bilan yo'lovchilar tashishda foydalaniladigan avtotransport vositalarida nazorat-kassa apparati mavjud bo'lishi haqidagi talablarni;

g) quyidagilarning:

avtomobil transportida yuk tashish bilan shug'ullanuvchi yakka tadbirkorlarning;

korxonada shtatida belgilangan tartibda attestatsiyadan o'tgan avtotransport vositalaridan foydalanish va tashish xavfsizligini ta'minlash uchun mas'ul bo'lgan mutaxassisning alohida birligi mavjud bo'lishi sharti bilan yuridik shaxs rahbarining malaka talablariga muvofiqlik yuzasidan attestatsiyadan o'tishi to'g'risidagi talablarni;

d) avtomobil transportida yo'lovchilar va yuklarni tashish bo'yicha faoliyatni amalga oshirish uchun litsenziya olishda yuridik shaxslarning balansida transport vositalari mavjud bo'lishi haqidagi talablarni bekor qilish to'g'risidagi takliflariga rozilik berilsin.

Yakuniy yildan boshlab yuridik va jismoniy shaxslar o'rtasida ijara shartnomalarini tasdiqlash uchun amaldagi davlat boji miqdori ikki marotaba kamaytirilsin.

O'zbekiston Respublikasi Transport vazirligi Ichki ishlar vazirligi, Davlat bojxona qo'mitasi va Davlat soliq qo'mitasi bilan birgalikda 2019 yil 1 iyulga qadar, shu jumladan, quyidagi imkoniyatlarni nazarda tutuvchi «UzTrans» yagona interaktiv axborot tizimi (keyingi o'rinlarda — axborot tizimi) yaratilishini ta'minlasin:

litsenziatlarning shaxsiy kabineti faoliyat yuritishi;

avtomobilda xalqaro tashishga xorijiy va/yoki ko'p tomonlama ruxsatnomalarni milliy tashuvchilar o'rtasida avtomatik ravishda choraklar bo'yicha taqsimlash;

yo'lovchilar va yuklarni shahar, shahar atrofi, shaharlararo, xalqaro tashish faoliyatini amalga oshirish uchun litsenziyalar, avtomobilda xalqaro tashishga

xorijiy va/yoki ko'p tomonlama ruxsatnomalar, shuningdek, YUXYT daftarchasini qo'llagan holda YUklarni xalqaro tashish to'g'risidagi konvensiyaga (Jeneva shahri, 1975 yil 14 noyabr) muvofiq YUXYT (CARNET TIR) daftarchasidan foydalanishga ruxsatnomalar olishga talabgorlarning arizalarini qabul qilish va ko'rib chiqish bosqichini ko'rsatgan holda qayta ishlash;

litsenziatlar va jismoniy shaxslar o'rtasida tuziladigan avtotransport vositalarining ijara shartnomalarini ro'yxatdan o'tkazish va hisobini yuritish.

O'zbekiston Respublikasi Transport vazirligi o'n kun muddatda axborot tizimi joriy etilguniga qadar mamlakatlar bo'yicha xalqaro avtomobilda tashishga xorijiy va/yoki ko'p tomonlama ruxsatnomalar mavjudligi to'g'risida doimiy yangilanadigan axborotning vazirlik veb-saytida e'lon qilinishini ta'minlasin.

Shunday tartib o'rnatilsinki, unga muvofiq:

yo'nalishsiz taksi uchun talab etiladigan to'lov terminallari, hisoblagich-taksometrlar va radioaloqa vositalari almashtiriladigan priborlarning funksiyalarini ta'minlaydigan maxsus ilovalari qurilmalarga (uyali telefonlar, planshetlar, elektron to'lov tizimlari) almashtirilishi mumkin;

yo'nalishsiz taksi rangini qonun hujjatlarida talab qilingan rangga muvofiq holga keltirish uchun ularni bo'yamasdan o'zi elimlanadigan materiallardan foydalanishga yo'l qo'yiladi;

yo'nalishsiz taksilar sifatida foydalaniladigan hamda yagona ichki va tashqi belgilar bilan jihozlangan engil avtomobillar yo'nalishli transport vositalari uchun maxsus harakat yo'nalishida harakatlanishi hamda «To'xtash taqiqlanadi» belgisi amal qilish hududida to'xtashi mumkin;

xalqaro avtomobilda tashishga xorijiy/ko'p tomonlama ruxsatnomalarni olish uchun arizalar ular olingan paytdan boshlab bir ish kuni mobaynida ko'rib chiqiladi.

O'zbekiston Respublikasi Transport vazirligi Ichki ishlar vazirligi bilan birgalikda bir oy muddatda:

a) engil avtomobillarda yo'lovchilarni tashish faoliyatini amalga oshirish huquqini beruvchi litsenziyalarga ega yuridik shaxslarni:

tashuvchining fuqarolik javobgarligini sug'urta qilish shartnomasi mavjud bo'lmaganda, uning rasmiylashtirilishini ta'minlagan holda, ularning mavjudligi;

avtotransport vositalaridan litsenziya kartochkalarisiz foydalanilayotgan davlat raqami belgilari qaytarilishi choralari ko'rgan holda yo'nalishsiz taksilar uchun mo'ljallangan avtotransport vositalariga maxsus seriyalardan berilgan davlat raqami belgilarining amaldagi litsenziya kartochkalariga muvofiqligi yuzasidan xatlov o'tkazsin;

b) avtomobil transportida yuk va yo'lovchilarni tashish xizmatlari ko'rsatish bilan bog'liq huquqbuzarliklar uchun javobgarlikni kuchaytirish bo'yicha takliflar kiritilsin;

v) himoyalangan telekommunikatsiya kanallari yordamida «Transport vositalari hisobi», «Texnik ko‘rik» va «UzTrans» axborot tizimlarining samarali idoralararo integratsiyasini yo‘lga qo‘yish choralari ko‘rsin.

1 sentyabrdan boshlab, shu jumladan, davlat-xususiy sheriklik asosida avtomobil yo‘llarida transport vositalarining og‘irlik va gabarit parametrlarini aniqlash uchun avtomatlashtirilgan o‘lchov vositalari bilan jihozlangan og‘irlik va gabarit nazorati bo‘yicha statsionar va ko‘chma shoxobchalarni tashkil etish tartibi joriy etilsin.

Transport vazirligi avtomobil yo‘llarida davlat-xususiy sheriklik ob‘ektlari ro‘yxatini, reglamentni va investorlarni davlat-xususiy sheriklik shartlari asosida tanlab olish mexanizmini nazarda tutuvchi og‘irlik va gabarit nazorati bo‘yicha maxsus punktlarni tashkil etish yuzasidan faoliyatni amalga oshirish tartibini tasdiqlash uchun O‘zbekiston Respublikasi Vazirlar Mahkamasiga kiritsin. Quyidagilar:

Yo‘lovchi va yuk tashishni yanada rivojlantirish bo‘yicha «Yo‘l xaritasi»ga muvofiq;

Transport-logistika sohasida hamkorlik qilish masalalari yuzasidan xorijiy davlatlar bilan muzokaralar o‘tkazish bo‘yicha chora-tadbirlar rejasiga muvofiq tasdiqlansin.

O‘zbekiston Respublikasi Transport vazirligi bir oy muddatda:

Davlat soliq qo‘mitasi bilan birgalikda yakka tartibdagi tadbirkorlarga ruxsat berish tartibotlarini soddalashtirish va minimallashtirish maqsadida axborot-kommunikatsiya texnologiyalarini joriy etgan holda engil avtomobillarda yo‘lovchilarni tashish faoliyatini amalga oshirish huquqini berish haqidagi takliflarni Vazirlar Mahkamasiga kiritsin;

manfaatdor vazirlik va idoralar bilan birgalikda 2019 yil 1 iyuldan boshlab davlat buyurtmachilari, shu jumladan, xo‘jalik jamiyatlari va strategik ahamiyatga ega bo‘lgan korxonalarining avtomobil transportida yuk tashish xizmatlari ko‘rsatishni maxsus elektron savdo maydonchasida elektron savdo yakunlari bo‘yicha xarid qilish va xizmat ko‘rsatishini nazarda tutuvchi tartibni joriy etish haqidagi taklifni Vazirlar Mahkamasiga kiritsin;

O‘zbekiston Respublikasi Ichki ishlar vazirligi, Davlat bojxona qo‘mitasi va boshqa idoralar bilan birgalikda xorijiy davlatlar avtotransport vositalarining O‘zbekiston Respublikasi hududiga kirishi, chiqishi, tranzit o‘tishi (alohida yuklar va harbiy kontingentlardan tashqari) va hududda bo‘lishi tartibini, shu jumladan, respublikaga kirayotgan xorijiy davlatlar avtotransport vositalarining bo‘lishi muddatlarini optimallashtirishni nazarda tutgan holda yanada takomillashtirish bo‘yicha takliflarni O‘zbekiston Respublikasi Vazirlar Mahkamasiga kiritsin;

O‘zbekiston Respublikasi Ichki ishlar vazirligi bilan birgalikda xorijiy tashuvchilar tomonidan O‘zbekiston Respublikasi hududida joylashgan ikki punkt oralig‘ida yuk va yo‘lovchilar tashish amalga oshirilganligi, shuningdek,

ruxsat etilgan og'irlik va gabarit parametrlari oshirilganligi uchun ta'sir choralarini qo'llash yuzasidan takliflarni Vazirlar Mahkamasiga kiritсин;

Xulosa qilib aytganda O'zbekiston Respublikasi Davlat aktivlarini boshqarish agentligi bilan birgalikda milliy transport-ekspeditorlik tashkilotlari tomonidan «O'zbekiston temir yo'llari» AJ bilan transport-ekspeditorlik xizmatlarini ko'rsatish yuzasidan to'g'ridan-to'g'ri shartnomalar tuzish, mazkur shartnomalarni tuzgan tashkilotlar ro'yxatini oshkora e'lon qilish tartibini o'rnatilsa maqsadga muvofiq buladi.

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## **RECREATIONAL AND TOURISTIC OPPORTUNITIES OF UZBEKISTAN'S MOUNTAINS**

*Abstract. In this article, recreational and tourist opportunities of the mountains of Uzbekistan are studied and analyzed. Recreational resources provide information about natural objects that can be used for travel, tourism, and healing purposes. Proposals and recommendations for the development of all sectors of the tourism industry have been developed in areas with recreational resources.*

*Key words: Recreation, tourism, travel, health recovery, treatment, mountains, rivers, regions, resources, recreational-tourist opportunities.*

The word “recreation” signifies the concepts of improving and restoring health. Recreational resources refer to natural objects that can be utilized for travel, tourism, and entertainment purposes. These primarily include mountain ranges, forests, meadows, rivers, lakes, coastal areas, and mineral springs.

The southern and eastern parts of Uzbekistan are characterized by mountains. This fact indicates the abundance of natural recreational resources in these mountainous regions. Therefore, numerous healthcare and wellness facilities have been established in the mountainous areas of our republic. Particularly, in the Fergana Valley, located in the eastern part of our country and surrounded by mountains, several resorts and sanatoriums have been built.

In the northern region of the valley, in Namangan Province, the slopes of mountains such as Chortoq, Kosonsoy, Chodaksoy, G’ovasoy, and Poshshaotasoy have influenced the construction of various recreational and entertainment facilities. In the southern part of the valley, in areas like Chimyon, Shoximardon, Qiziltepa, Farg’ona, and Ropqon, similar resorts and recreational centers have been established. Moreover, Qurbonkuli, a lake situated in the valley, is also one of the beloved places for locals to relax and have a good time.

In the eastern part of the valley, within the territory of Andijan Province, there are recreational facilities such as Polvontosh, Janubiy Olamushuk, Marhamat, and others. Along with that, the Fergana Valley is also rich in cultural and historical recreational resources, such as the Xudoyorxon Palace and historical monuments in Shoximardon and more.

Even in the Chirchiq and Ohangaron regions of the natural geographical basin, there are abundant military recreational resources. Due to the presence of mountains and mountain ranges in the eastern direction of the valley, numerous resorts and recreational centers have been established. Among them, Oqtosh,

Xumson, Chorvoq, Chimyon, Kumushkon, and others hold significant importance.

The availability of water reservoirs like Chorvoq, Oxangaron, and Tuyabo'g'iz in the region is also considered as one of the favorite recreational destinations for the local population and the people of our country as a whole. In the mountain ranges of Chimyon, the conditions are suitable for enjoyable recreation throughout the year. Additionally, many ancient historical sites are preserved in the valley, such as Zangiota, Baroqxon, Ko'kaldosh madrasas, and others.

The Zarafshan River flows through the capital of our republic, and it is surrounded by mountains in the north, northeast, east, and south (Turkiston, Zarafshon, Qoratog', Oqtog', Ziyoviddin Zirabuloq mountains). The river administratively encompasses the regions of Samarkand, Bukhara, and Navoi. The region has preserved numerous cultural and historical recreational resources. Consequently, 40% of the foreign tourists visiting Uzbekistan directly come to this region. At the same time, this area is abundant in natural recreational resources. For instance, various mineral springs have been discovered in the region, leading to the establishment of sanatoriums and recreational resorts such as Sitorai Mokhi Khosa, Og'aliq, Ibn Sino, Samarkand, and others.

Our Republic has several mountainous regions in Jizzax, Qashqadaryo, and Surxondaryo provinces, which offer abundant recreational resources. In the southern part of Jizzax province, there are a series of dammed and reservoir areas in the Turkiston river valleys, including Xavotog', O'rikli, Zomin, Baxmal, and others. Additionally, the Zomin mountain range is located within the province, while the Nurota mountain and Yong'oqzor nature reserves are found in Navoiy province. The northern and eastern parts of Qashqadaryo province are adorned with mountains. This region boasts numerous picturesque spots and ample opportunities for establishing resorts and health facilities. However, due to the rapid population growth in the province, it has become more crowded compared to other regions in the country in terms of dammed and recreational areas.

Surxondaryo province, situated in the southernmost part of our country, encompasses the Ko'hitang, Boysun, Bobotog', and Hisor mountain ranges. The absence of cold air masses in this area creates favorable climatic conditions. The presence of various healing mineral waters has been identified in the region, with Jayronxona mineral water being of great importance. Furthermore, the Uchqizil water reservoir provides convenient opportunities for dam construction. Several dammed areas have been developed in the mountain valleys.

During the years of independence, significant efforts have been made to promote tourism and recreational activities in the mountainous regions of the country. State and private resort houses and sanatoriums are available to visitors who come to enjoy the dammed areas.

In meeting the demand for recreational, resort, and tourism facilities by the population of Uzbekistan, the recreational opportunities in Tashkent province

play a crucial role. The remarkable development of the province from an industrial and social perspective, as well as its unique natural and recreational resources, not only cater to the province's residents but also meet the demands of neighboring regions.

With an area of 15,600 square kilometers and a population of over 4.5 million, Tashkent province holds a significant position geographically, and its rapid economic and social development compared to other provinces contributes to its distinct status. The wide river valleys, cultural landscapes, plateau and lowland mountains with moderate elevations, and high mountain ranges create unique recreational areas. Among these mountains are the Chorvoq and Xodjикent reservoirs built on the Chirchiq River, as well as the Angren and Tashkent reservoirs constructed on the Ohangaron River, along with numerous underground mineral water sources found throughout the province.

If the conditions are suitable in terms of average elevation, ranging from 800-900 meters to areas at an absolute elevation of 2500-3000 meters, and hydrogeologically, it corresponds to lowlands (0-300 m), foothills and semi-desert (300-1200 m) regions. The province has natural-recreational resources that can be utilized in four main areas of recreation: improving public health, sports, nature exploration, and healthcare for the population.

Analyzing the natural-recreational resources of Tashkent province, it is possible to allocate recreational areas such as Chirchiq-Pargos, Khumsan-Oqtosh, Chimgon-Beldersay, Burchmulla-Nanay, Oqsuqota-Parkent in the Chirchiq basin. Among them, the most convenient in terms of recreational points is the Khumsan-Oqtosh, Chimgon-Beldersay, and Burchmulla-Nanay areas located in the middle and upper parts of the Chirchiq reservoir. Let's provide brief information about them below.

Khumsan-Oqtosh region. The most important for recreation in this area is the Khumsan resort. It is located in the western and southeastern foothills of the Ugam ridge, the southern foothills of Korjontog, and along the Ugam river, covering an area of 15,000 hectares with a population of 3,300 people. This village, mainly inhabited by Uzbeks, is situated at an absolute elevation of 800-1000 meters. The unique landscapes, climate, ethnic characteristics of the region, the absence of industrial and agricultural complexes polluting the environment, and its proximity (60-90 km) to the capital city of Tashkent, the Republic of Uzbekistan, make its territory significant as a recreational area. The period from May to September is considered the tourist season in the Khumsan-Oqtosh region. During this time, the population in Khumsan reaches 10,000, and within the entire region, it can reach up to 120,000 people. Activities such as hiking, walking, treatment, and fishing are possible during this period. In addition, they can engage in activities in the "Khumsan" and "Oqtosh" sanatoriums, as well as in the "Khumsan-buloq" fishing house and many other state and private fishing houses and resorts that operate throughout the year.

Burchmulla-Nanay region. This area includes the southern-eastern part of the Chorvoq water reservoir, located in the western parts of the Piskom and Koksuv rivers, with an absolute elevation of 900-1000 meters, and includes the villages of Burchmulla, Yakkatut, Yangikurgan, Yusupkhona, Bogiston, and Nanay, as well as the surrounding areas. The most important in terms of recreational points in this region is the Burchmulla resort, which covers an area of 15,000 hectares with a population of 4,100 people, mainly consisting of ethnic Tajiks. It is possible to access the Kolsoy mountain range, Ohotnichiy waterfall, Ko'ksuv watercourse, and Chorvoq water reservoir from these resorts. Currently, the residents of these resorts are engaged in fishing in the Chorvoq water reservoir, organizing long and short-term excursions, visiting landmarks, hiking, fishing, and providing services in personal sectors and in the "Oltin yombi" fishing house. 80% of the tourists visiting Burchmulla-Nanay are residents of the capital city. The limited infrastructure and the high demand for services do not allow attracting many foreign tourists to this area. Currently, during the tourist season, the Burchmulla-Nanay region attracts around 100-150 thousand visitors. If the number of tourists increases in the future and the aforementioned issues are resolved positively, it can accommodate up to 350 thousand people. This also requires providing clean air, sunlight, water, and creating treatment points, beaches along the Chorvoq water reservoir, and improving medical and rescue services.

Chimgon-Beldersay Recreation Area. It is part of the Ugam-Chatkal National Park, and the most significant area for recreation within it is Chimgon. It is located 80 km northeast of the capital city Tashkent and 12 km south of the Chorvoq water reservoir. Chimgon is situated in the upper part of the Chimgon mountain range at an elevation of 1600 meters above sea level.

Chimgon attracts tourism enthusiasts with its picturesque mountain ranges. The proximity of the area to the city of Tashkent, the absence of industrial pollution in the surrounding environment, the comfortable climate throughout the year, the diverse and captivating nature, abundant natural resources, and the population's culture and traditions all contribute to the development of not only tourism but also ecotourism in this region.

Chimgon-Beldersay stands out among the previously analyzed regions due to its well-developed sports and tourism infrastructure. Therefore, during the summer season, the number of visitors reaches up to 3,000 per day on weekdays and up to 10,000 on Saturdays, while during the winter season, the number of visitors can reach around 5,000 per day. If the necessary facilities and opportunities for visitors and tourists are created in the area, the number of visitors can exceed 350,000 per year. Currently, Chimgon offers a hotel, a restaurant, two cable car lines, and skiing slopes, while Beldersay, located near Chimgon, has a cable car line that operates according to international standards.

The Molguzar Range is the northern part of the Turkiston Range, which is the southernmost and westernmost branch of the Tianshan System, located in the southern part of Mirzacho'l. The Molguzar Range stretches over an area of

390,301, and 400 kilometers in terms of north-south width and 680 kilometers in terms of east-west length. The range is considered the northern watershed of the Sangzor River basin. It extends from the Go'ralash Pass (2710 m) in the east to the Amir Temur Gate (Ilon o'tdi Gate) in the west. The Molguzar Range extends from the west (900 m) to the east and reaches its highest point at Sho'rbel Davon (2621 m), which is almost at the center of the range. The range starts to slope down again from the middle-eastern part.

Administratively, the Molguzar Range includes parts of the G'alla Orol District of Jizzakh Region, as well as the southern part of Jizzakh District, the western part of Zomin District, and a portion of Zarbdor District. The mountain ranges and ridges in the northern part of the Molguzar Range are located about 35 km from north to south and 65 km from west to east, covering an area of over 2,000 square kilometers. The Molguzar Range is a vast area with abundant recreational resources. Its picturesque mountain landscapes, fresh air, rich flora and fauna, clean springs and rivers, ancient settlements, caves, historical sites, and breathtaking views attract tourists. They provide convenient opportunities for opening tourist routes, developing recreational areas, and promoting mountaineering activities.

The establishment of unique and extraordinary residential areas that do not lag behind famous resorts is becoming a key issue in the conditions of the market economy in the Molguzar region. This can be accomplished primarily through scientific research and investigations. In order to strengthen people's health during the ecological crisis, sanatoriums, preventive treatment facilities, residential houses, and children's recreation centers are being considered to be expanded based on local recreational resources. Currently, several climatic and health resorts are operating in the Molguzar mountain range.

The Jizzakh region's mountainous landscapes, lush valleys, numerous springs in rocky gorges, and unique relief shapes created by the accumulation of large moraine boulders are the exclusive treasures of natural beauty. The northern slopes of the Zomin mountain range (archazors, bodomzors, butazors), the western part of the Zomin mountain range, the valleys in that area, and the clear waters that result from them are magnificent natural museums. The northern slopes of the Molguzar range are home to more than 30 rare plant species, such as white tulips, orchids, snowdrops, wild saffron, and various bird species, including black stork, eagle owl, hoopoe, and partridge, with over 150 bird species. The Jizzakh National Park houses the Kulsoy research base of the mountainous industry research institute, the "Zomin" botanical garden, and more than ten residential facilities. Several caves are found in the northern slopes of the Molguzar range, some of which are still unexplored. In the upper part of Pishogorsoy, the formation of Pishogor caves has occurred.

Local geologists have determined that the first hall of the cave is 300 meters long, with a height of 10-12 meters and a width of 8-10 meters. The cave's chambers, inscriptions, and drawings have not yet been fully studied. There are



several pilgrimage sites in the northern slopes of the Molguzar range. Karst formations such as annual ice caves and other caves are considered pilgrimage sites, and some people's graves are considered sacred pilgrimage sites. In addition, it is possible to mention the Parpi father pilgrimage site along the Ko'rpasoy on the Ravotsoy stream, the Molguzar father pilgrimage site in the upper part of the Molguzar range, and the large stones and others on the slope of the Uchqizlar wintering ground. The majority of the residential facilities in the northern slopes of the Molguzar range are located in the upper part of the Zominsoy River. The Zominsoy and Yettikechusuvsoy valleys offer ample opportunities for utilizing clean air, recreational resources, and taking advantage of the low humidity, mild climate, and wide distribution of mountain ranges. Residential facilities such as the Sharshara residential complex, the Buxoro-Sharif pension, the Mirzashirki pension, the O'rikli pension, the Qashqasuv pension, and seven student and children's recreation centers are located there. They serve thousands of people every year. Additionally, the Zomin Republic sanatorium is available for mothers and children to improve their health.

In the western part of the Molguzar range, in the Uobsoy area, there are four children's recreation centers. The construction of the "Boston" children's recreation center is underway in the upper part of Uobsoy. There is also the "Paxtakor" children's recreation center, and at the lowest part, there is the "Bobur" children's recreation center affiliated with Jizzakh State Pedagogical Institute. These centers accommodate and improve the health of numerous students every year. The mountainous and hilly regions of Uzbekistan stand out among the Central Asian countries with their unique ecotourism potential. More than 60 mineral water sources have been identified in Uzbekistan for the improvement of human health.

The mountainous territories of the Samarqand region are diverse and attractive for tourism. The geographical location of the region, consisting of southern, northeastern, and western slopes with mountains and hills (including Oqtog', Qoratog', G'obdin in the north, Chaqlikalon, Qoratepa, Ziyovuddin, Zirabuloq in the south) is significant for the development of mountain tourism. This has led to the emergence of distinct natural and landscape recreation resources in the area.

The distribution of precipitation and temperature in the region varies considerably, with an average of 300-450 mm of precipitation in the mountainous and arid areas, and an average of 650-850 mm in the eastern and southeastern parts. Therefore, the specific climate of the Samarqand region provides great opportunities for organizing and developing seasonal tourism during spring and summer.

The hydrological features of the Samarqand region, including mountain rivers and valleys, enhance the tourism potential of the area. The presence of mountain formations, such as peaks, gorges, caves, springs, and waterfalls, contributes to the tourism opportunities. Additionally, the healing and medicinal



properties of the available mud, springs, and fish in the region create favorable conditions for improving and maintaining the health of the population. These accommodations are located in the mountainous and hilly areas of the Urgut, Samarqand, Nurobod, and other districts of the region, offering excellent opportunities for tourism purposes.

The Omonqo'ton nature reserve stands out for its unique characteristics, such as the difference in precipitation (750-800 mm in Omonqo'ton and 320-340 mm in Samarqand city), which ensures the diversity of plant life. Taking these features into account, artificial forest plantations were established in 1887, covering an area of 2,158 hectares. Nowadays, convenient conditions are created for tourists to visit the forest plantations in the Omonqo'ton basin, and special trails are being developed.

The mountainous and hilly regions of the area are rich in diverse plant life, including colorful vegetation such as juniper, apple trees, wild cherry, archazors, and others, which give the Omonqo'ton forests their distinctive landscape shapes. The unique combination of climate and plant life in this region has created many recreational areas and opportunities for establishing orchards.

In addition to the Samarqand region, there are also dam-affected areas in the Ohalik mountain ranges. The presence of these dammed areas, such as the "Yoshlik" tourist base and others, is directly related to the favorable climate, beautiful landscapes, and ecotourism potential, which attract seasonal accommodation for dam-affected areas in the region.

The natural landmarks in the Chaqlilqalon Mountains are widely known. In this area, the remains of ancient glaciers that existed during the Ice Age have been well preserved. This place is considered one of the unique geological formations in the world. It includes cliffs and rocks of various shapes, picturesque valleys, steep cliffs, intricate caves, and other geomorphic landmarks. Two famous karst caves, Lev and Kelsi, are found in the Chaqlilqalon Mountains. Lev Cave is located in the Bulbulzor area of Omonqo'ton and was inhabited by people during the Stone Age, about 40-50 thousand years ago. Naturally, the current appearance of the cave may not leave a significant impression on tourists. Therefore, it is necessary to organize the surroundings of the cave, create appropriate appearances resembling the Stone Age, and depict images and sculptures depicting the life of early humans to make it more interesting. Kelsi Cave was discovered by Ukrainian scientists in 1980. The depth of this cave exceeds 800 meters, making it one of the top three deepest caves in the world. It is undoubtedly fascinating for mountaineering enthusiasts. If materials about this cave are published and advertised, it can further increase the interest of tourists. Additionally, the steep slopes, deep valleys, unique rock formations, and stone pillars resembling haystacks in the villages of Kamargaron, Vaxashti, and G'us contribute to the expansion of hiking and excursion routes.

The Chaqlilqalon Mountains are also rich in hydrological landmarks, including healing springs, beautiful waterfalls, mountain streams, and

magnificent lakes. The karst springs in Kelsi and Lev caves, Qaynar buloq, Rohat buloq, Muz buloq, and Alvasti lakes, as well as the Sharsharal waterfalls in G'ussoy and Kamangaron valleys, are included in tourist routes according to their attractiveness.

The ancient Robotkhodja water separator in the upper part of the Zarafshan River and the historical Darg'om and Eski Tuyatortar canals, which were built a long time ago, also attract the interest of tourists. Promoting and highlighting these places can greatly attract tourists.

The recreational areas in the Fergana region are divided as follows:

1. Recreation areas in the river and lake valleys. These areas include So'x, Isfayram, Shoximardonsoy, and the natural vegetation on the left bank of the Sirdaryo River, where cultural tree plantations and seasonal residences (convenient in May, June, July-August) are located. These areas are characterized by a moderate climate, abundance of vegetation, sufficient humidity, a variety of birds and fish species, and distance from major highways. These areas are suitable for short-term (1-day) stays.

2. Climate therapy-oriented and curative recreational areas in central Fergana. These include Zilxa, Akbarobod, Yozyovon, Bostonbuva sand massifs, and the "Yozyovon Springs" natural landmark in central Fergana. This recreational region is mainly intended for seasonal (primarily the first half of summer and autumn) therapy. It features healing sandy areas as the main curative objects. It is convenient for patients with respiratory, skin, and rheumatic diseases.

3. Al-Farg'only reservoir in Fergana city. It is characterized by its natural beauty and recreational features related to water sports.

4. Recreation areas located in the Adir region, incorporating the Chimyon, Arsif, Satkak, Avval, Karkidon water reservoirs, offering seasonal and year-round opportunities for swimming, recuperation, and relaxation with their healing waters, beaches, and springs. Arsif and Chimyon have bathing and recuperation facilities. Good transportation accessibility.

5. Recreation areas in the Tog'oldi region. This includes the Vodil, So'x, and Quvasoy areas, which have established recreational areas at an elevation of 800-1200 meters above sea level. These places have many adult and children's playgrounds. They also offer opportunities for treating nervous system-related diseases.

6. Recreation areas in the mountainous regions. They cater to various recreational activities. However, the large size of the Fergana region's mountainous territory and the geographical and geological limitations pose challenges for access to recreational areas. Shohimardon village, located near Fergana city, is considered a recreational area accessible through such challenging mountain passes. At the same time, the access of visitors to this area is significantly restricted.

Creating recreational facilities and making effective use of them involves considering not only the natural and resource potential of recreational areas but

also their economic aspects, which are of significant importance. First and foremost, it requires taking into account services such as food supply, transportation, and residential services for visitors.

In terms of utilizing recreational areas, it is not only essential to provide visitors with food and supplies but also to address the transportation issue because for short-term stays (1-2 days), visitors can bring their own provisions. However, for longer stays, such as a week or ten days, there will undoubtedly be a need for new supplies. Consequently, waiting for transportation, changing vehicles along the way, or experiencing discomfort during transportation in unfavorable weather conditions are possibilities.

Such a situation can be evaluated as follows:

$$\{ T = T1 + T2 + TZ \}$$

Here, T1 represents the time spent on traveling to and from recreational areas, T2 accounts for inconveniences related to changing transportation, and TZ refers to difficulties arising from unfavorable weather and other conditions affecting transportation.

In unfavorable weather conditions and sometimes when the number of visitors is high, there may be an increase in costs associated with transportation. Thus, to meet their recreational needs, different professional and age groups of the population in the Fergana region take advantage of short-term residential facilities located within a radius of 5-10 km from nearby cities. The load on these specific recreational areas is significantly higher in terms of ecological and medical-sanitary standards. This, in turn, necessitates a high level of service organization in these particular recreational areas.

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## **UMUMKASBIY FANLARNI O'QITISHDA PEDAGOGIKA FANINING O'RNI VA METODLARIDAN FOYDALANISH USULLARI**

*Annotatsiya. Bu maqolada pedagogika fanining tarmoqlari, predmetlari o'qitishning qonuniyatlarini o'rganuvchi fan metodikasi, shu bilan birga, pedagogika fani boshqa fanlardan ajralgan holda rivojlana olmasligi ko'rsatib o'tilgan. Pedagogikaning tarbiya sohasidagi obyekti o'sib kelayotgan yosh avlod bo'lganligi uchun pedagogika talabalarni o'zlashtirishda katta yordam berishi haqida ko'rsatib o'tilgan*

*Kalit so'zlar: Pedagogika, ta'lim, maktab, metod, metodika, defektologiya, ijtimoiy, tarbiya.*

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## **THE ROLE OF PEDAGOGICAL SCIENCE AND METHODS OF USING METHODS IN TEACHING GENERAL SCIENCES**

*Annotation. In this article, it is shown that the branches of pedagogic science, the method of science studying the laws of teaching subjects, at the same time, pedagogic science cannot develop in isolation from other disciplines. As the object of pedagogy in the field of education is the growing young generation, it is shown that pedagogy greatly helps in mastering students.*

*Keywords: Pedagogy, education, school, method, methodology, defectology, social, education.*

Pedagogikaning boshqa fanlar bilan bog'lanish tizimida etnografiya, xalq pedagogikasi, fan va texnikaning tez sur'atlar bilan rivojlanishi, turli yo'nalishlarda bilim hajmining o'sib borishi fanning tabaqalanib, turli tarmoqlarga bo'linishiga sabab bo'lmoqda. Yaqin o'tmishda falsafadan ajralib chiqqan pedagogika fanida ham ko'pgina tarmoqlarga bo'linish jarayoni ko'zga yaqqol tashlanadi. Ayrim tarmoqlar esa mustaqil fan sifatida shakllanadi. Masalan, maktab pedagogikasi, maktabgacha tarbiya pedagogikasi. Ayrimlari esa fan sifatida endi shakllanib kelmoqda. Kattalar pedagogikasi, oliy maktab pedagogikasi shular jumlasidandir.[1]

Hozirgi zamon pedagogikasi ko'p tarmoqli fan bo'lib, avvalo, tarbiya ijtimoiy hodisa ekanligi jihatidan pedagogika tarixi bilan bog'lanadi. Pedagogikaning ko'zi ojiz, aqli zaif, qulog'i kar jismoniy kamchiliklarga ega

bo'lgan bolalarni tarbiyalash va ularni hayotga tayyorlash bilan shug'ullanadigan yana bir tarmog'i maxsus pedagogika (surdopedagogika, tiflopedagogika, oligofrenopedagogika) defektologiya bilan chambarchas bog'liqdir. Pedagogika fani tarmoqlariga predmetlarni o'qitishning qonuniyatlarini o'rganuvchi fan metodika ham kiradi. Shu bilan birga, pedagogika fani boshqa fanlardan ajralgan holda rivojlana olmaydi. Pedagogikaning tarbiya sohasidagi obyekti o'sib kelayotgan yosh avlod bo'lganligi uchun pedagogika insonni o'rganuvchi fanlar bilan bog'liqdir.

Inson biologik evolutsiyaning mahsuli sifatida biologiya fanlarining o'rganadigan obyekti hisoblanadi. Shuning uchun bu fanlar pedagoglar o'rganishi lozim bo'lgan fanlar qatorida o'quv rejalariga kiritilgan. Pedagogika fanining metodologik asosini falsafa tashkil etadi. Chunki tarbiyaning maqsadi, ilmiy dunyoqarashni shakllantirish; jamoa va shaxs muammolari va shu kabilar ikki fanni birlashtiradi. Iqtisodiy va, xususan, uning bir bo'laki bo'lgan xalq ta'limi iqtisodi pedagogika bilan bog'lanib ketadi. [2] Chunki iqtisodchilarning olib borgan tadqiqotlari natijasiga ko'ra, ishlab chiqarishning yuksak samaradorligi umumiy ta'limning yuqori darajada rivojlanganligiga bog'liq ekan. Pedagogika bola tarbiyasida uning yosh va individual (psixologik) xususiyatlarini hisobga olib boradi. Shu bois pedagogika uchun pedagogik psixologiyaning bola xususiyatlari, ularda o'tadigan psixik jarayonlarning qonuniyatlari haqidagi ma'lumotlar muhimdir.

Shunga ko'ra, pedagogikaning psixologiya fani bilan bog'liqligi an'anaviy tus olgan. Keyingi vaqtlarda pedagogikaning kibernetika (muhim dinamik tizimlarini boshqarishni o'rganadigan fan) bilan bog'lanishi ko'zda tutilmoqda. Bu holni kibernetikaning umumiy g'oyalaridan ta'limda foydalanish tajribalarini dasturlashtirilgan ta'lim misolida ko'rish mumkin. Pedagogika fani taraqqiyoti pedagogika fanlari tizimini vujudga keltirdi. Bular: Umumiy pedagogika, Maxsus pedagogika, Metodika, Pedagogika tarixi, Oliy ta'lim pedagogikasi, Qiyosiy pedagogika, Ijtimoiy pedagogika, Harbiy pedagogika. Pedagogikaning boshqa fanlar bilan bog'lanish tizimida etnografiya, xalq pedagogikasi kabilar alohida o'rin tutadi.[3] Pedagogika boshqa oraliq fanlar ma'lumotlaridan tayyor holda foydalanmaydi. Bu ma'lumotlar pedagogik nuqtayi nazardan tanlovdan o'tgandan keyin maqsadga muvofiq lashtirilgan holda amalda joriy etiladi.

**PEDAGOGIKANING ILMIY-TADQIQOT METODI** Pedagogika o'z tadqiqot obyektiga va tadqiqot metodlariga ega. Ilmiy tadqiqot barcha fanlar kabi pedagogika fanini ham takomillashib borishiga, ayrim pedagogik hodisalarni tekshirishga, ularni to'g'ri hal etish yo'llarini aniqlashga yordam beradi. Hodisa uning taraqqiyoti davomida boshqa hodisalar bilan bogliq holda o'rganiladi. Miqdor o'zgarishi sifat o'zgarishiga o'tish daqiqalarida kuzatiladi.

**ILG'OR TAJRIBALARNI O'RGANISH METODI** Pedagogikaning ko'pgina muammolarini hal etishda ta'lim-tarbiya sohasida orttirilgan tajribalarni o'rganish muhim ahamiyat kasb etadi.



ADABIYOTLAR BILAN ISHLASH METODI Pedagogik muammolarni tadqiq etish adabiyotlarni o'rganishdan boshlanadi. O'rganiladigan hujjatlar va manbalarga xalq maorifiga aloqador hujjatlar kiradi. Shu bilan birga, pedagogika faniga oid bo'lgan tarixiy-pedagogik adabiyotlar, arxiv hujjatlari, pedagogik matbuot materiallari, darsliklar, o'quv-metodik ishlanmalar ham kiradi. Adabiyotlarni o'rganish metodi muammolarning qay tomonlari yaxshi ochilganligini, qaysi masalalar hal etilmagani kabilarni bilish imkoniyatini beradi. Adabiy manbalar bilan ishlash quyidagi metodlardan foydalanishni nazarda tutadi: bibliografiya tuzish, annotatsiya, konspektlashtirish. Ishning maqsadidan kelib chiqqan holda yuqoridagi usullardan biri tanlab olinadi. Bibliografiya — bu hal etilishi lozim bo'lgan muammoni tadqiq etish jarayonida zarur bo'lgan adabiyotlar ro'yxati.

Xulosa o'rnida shuni aytish kerakki pedagogika fanlarni o'qitishda eng asosiy soha hisoblanadi. Pedagogik jihatdan yondashib fanlarni o'rganish kelgusida o'rganayotgan talaba yoshlarni yaxshi mutaxassis bo'lib tayyorlashga xizmat qiladi.

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## **DISTRIBUTION OF DISEASE TYPES IN PLANT ORGANS**

*Annotation. The article provides information on the analysis of diseases of coniferous plants and the distribution of micromycetes of pine trees in the conditions of the Fergana Valley based on the research.*

*Key words. Forests, temperature, oxygen, carbonic anhydrite, Fusarium, Alternaria, Hormiscium, Dothistroma, Pinus sylvestris, Phomopsis juniperovora.*

In the course of the study, information on the infected part of the plant, the infected degree score, and the disease symptoms of the detected pathogens in the oleander plant species was given (Table 1).

It is the most dangerous rot disease in seeds and seedlings, and it was noted that this disease is caused by such fungi as *Fusarium oxysporum*, *F. solani*, *Alternaria alternata*, *Botrytic cinerea*, *Verticillium dahlia* and *G. debaryanum*.

Especially due to this disease, it was noted that the germination of Crimean pine seeds decreased by 70%, and sprouts died by 90%.

Spruce tree family members are affected by mold up to 2 points, root rot disease in seedlings up to 3 points, branch rot disease up to 2-3 points, and spots on leaves up to 2 points, pine tree family species are infected with mold. It was noted that up to 2 points, the disease of branches up to 3 points, spots and darkening of leaves up to 1-2 points.

As the body of newly sprouted sprouts gradually strengthens, the resistance of seedlings to diseases increases.

In the distribution of disease types by plant organs, depending on the bioecological characteristics of the host plants and based on the identified fungal species and disease development characteristics, we focused on the plant organs and seasonal development of diseases.

The distribution of micromycetes of pine trees in the conditions of Fergana Valley was studied throughout the year in spring, summer and autumn seasons.

The spread of micromycetes depends on their bioecological characteristics, various, i.e., abiotic (environmental influence, temperature, soil moisture, precipitation), biotic (pathogenic parasitic insect, viral, bacterial and fungal diseases) and anthropogenic factors.

On the basis of observing the characteristics of the seasonal development of diseases by plant members, there will be opportunities to study the conditions of development of diseases caused by certain groups of fungi and the laws of

seasonal change of diseases. Identified diseases were divided into 5 types or groups with similar symptoms and common names. We do not use the expressions "types of diseases" for nothing. Because the symptoms of one type of disease may be present in another type. These types are diseases such as blight on branches, leaf spotting, blackening, powdery mildew, fusarium root rot and wilting. The obtained data are presented in Table 3.7. If we pay attention to the data in the table, the most common disease is the blight disease in pine and spruce, in which up to 14 species of fungi are involved.

It was noted that many diseases of the leaves and stem of the plant were infected with this disease during the germination and seedling periods. In general, it was noted that leaves and stems of palm trees are severely affected by diseases during the germination and seedling period and from the limbs.

In the course of the research, it was noted that root rot and Fusarium disease were particularly important in seedlings.

The types of diseases detected during our research include different fungi found in different stages of growth of pine trees (Table 1). Most of them are considered saprotrophs and develop in different body parts of the plant. Fungi that cause spotting diseases are dangerous for seeds and seedlings, causing them to die. In terms of the number of species and damage, it is considered an important group of diseases, which causes the development of diseases in palm trees and shedding of palm leaves.

**Table 1**

**Distribution of disease types by plant organs**

Types of diseases	Damaged trees		Stage of plant development			Damaged parts of the plant			
	pine	juniper	seed	sprout	seedling	bud	nina leaf	noda	root
Mold	4	4	4	-	-	4	-	-	-
Root rot	3	3	-	4	4	-	-	-	4
to build	9	5	-	-	-	-	-	14	-
Spotting	4	-	1	-	-	-	3	-	-
Darkness	3	1	-	-	-	-	3	-	-
dusting	1	-	-	-	-	1	1	-	-
Rust	1	1	-	-	-	-	-	2	-
Total	39	14	4	4	4	5	7	16	4

Diseases are strongly manifested in the body, leaves and branches of the plant. The most important type of disease in terms of risk is seed and seedling rot, which includes *Fusarium oxysporum*, *F. sporotrichioides*, *Altenaria altemata*, *Botrytic cinerea*, *Verticillium dahlia* and *G. debaryanum* (R. Hesse) Uzuhas'hi, Tojo & Kakis'h. (=Pythium debaryanum (DC.)) fungi are involved. The disease

causes severe death of pine seedlings and ranks first among the diseases in the preparation of planting material.

Damage occurs as follows; a brown fungal mycelium appears on the damaged tissue, the seed leaf does not swell and the plant dies. The plant lags behind in growth in the phase of true leaf release, the affected stem thickens, the leaves keep their erect position but change color, the roots show signs of rotting. The disease can rarely be observed in the upper stages of plants. If we pay attention to the dynamics of the development of root rot disease in nurseries, the death of seedlings due to the disease occurs mainly in the period when the seeds are sown - in the spring.

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## **SEVERAL FRACTURES OF THE VERTEBRAL BODY IN CHILDREN AND ADOLESCENTS**

*Annotation: this article presents various data on the frequency of multiple vertebral fractures in children and adolescents.*

*Keywords: MSKT, computer tomography, diagnostics, thoracic vertebrae.*

The medical literature of recent years lists various data on the frequency of multiple vertebral fractures in children and adolescents. Thus, the lowest percentage of this type of damage is 19.62% - Kanna R. M. et al. [1], the largest is 81.1% Franklin D. B. 3-prose, et al. [2]. In 74.4% of cases, the data we received on the frequency of the appearance of multiple fractures were reported by local researchers Baidurashvili A. G. and the closest to the indicators of a similar category of vertebral injury published by others. [3]. The authors found damage to this category in a large volume of clinical material-1230 people-67.3% of children. The results of gender-based distribution of victims were almost similar. In our study, 52.01% of men and 47.99% of women were studied. The predominance of many injuries to the middle chest is mainly due to the anatomical and physiological characteristics of the child's spine, primarily in patients of age groups. It is known that at the age of 5-12 years, the spine in children has a flexible structure, in the middle thoracic vertebrae the bone rays are arranged vertically and have short horizontal joints, in the lower thoracic and lumbar vertebrae the same rays are closely connected with each other, different plains. These features of the structure of thoracolumbar and lumbar localization vertebrae give them greater density and therefore strength relative to the pectorals [4].

Vertebrae located in the upper part of physiological kyphosis are more prone to compression compared to the upper or lower parts when traumatic force is applied [4]. Based on the diagnostic results we conducted, 1,228 (48.21%) vertebrogenic fractures from a total of 2,547 vertebrae fell into the middle thoracic section (ThIV-ThVIII). The high frequency of several fractures in light weight injury (e.g. when falling from the height of one's own neck to the back) is primarily associated with the belt-keyboard mechanism [5]. Belenky V. E. etc. (1984) they experimented on biological mannequins, repeating the blow to the spinous processes of the vertebrae of the thoracolumbar region, which often occurs when the patient descends from his height to the back. Experimenters documented that the traumatic force acting on top of the spinous process of the spine led to compression of the above vertebrae and stretching of the main

intervertebral discs. Thus, in two cases, when Thxi-Thxii was hit by a region of spinous processes, a pathological autopsy of biomanecenes revealed fractures of two (ThII and ThIII) and one (ThIII) vertebrae [5]. An important and unresolved problem of emergency vertebratology in childhood is the lack of unified approaches to assessing the results of the treatment of vertebral fractures in children and adolescents. The Oswestry survey, used for these purposes, and S. T. Vetrile scale et al. (2004) cannot be fully used in pediatric practice. Taking into account this fact, they developed an "individual map of the assessment of the results of conservative treatment of children with spinal fractures", in which the results of clinical and radiation studies of the spine were recorded in 6 and 12 months after the injury. In total, 65 of the 744 children of the research cohort (8.73 %) were able to study long results in these terms. According to the evaluation criteria developed, 58 (89.24 %) children were found to have "good" outcomes of therapy, while 7 (10.76 %) patients were found to have "satisfactory" outcomes. Symptoms indicative of "unsatisfactory" treatment outcomes have not been reported in any of the clinical observations. The problem of several uncomplicated compression fractures of vertebral bodies in children and adolescents is multifaceted and relevant for many reasons, including the spread of this type of injury in the structure of childhood trauma, difficulties in clinical diagnosis, the absence of unified approaches to therapeutic tactics and the assessment of long-term results of therapy. Thus, among children and adolescents who received uncomplicated compression cracks in the vertebral bodies, 74.4% of clinical observations fell on patients with multiple damage. Most often, children experience fractures of two (37.23%) vertebrae, in 41.71% of cases these vertebrae are adjacent. In total, 45 different combinations of localization of damaged vertebrae were identified in the research group of patients. The severity of fractures acquired by children corresponds to types a (99.52% of those affected) and B (0.48% of patients) according to the AO/ASIF classification. In accordance with the severity of the injuries received in most patients-99.52% of clinical observations - conservative treatment tactics were used, in 2.02% of cases surgical methods were used. An alarming high percentage of a large number of fractures of vertebral bodies in the population of children and adolescents presupposes the need to study this problem further.

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## PYRICULIARYOS DISEASE OF RICE AND MEASURES TO CONTROL IT

*Abstract. The rice plant is cultivated in large quantities in our country. At the same time, the population has a great demand for rice products obtained from this plant. At the same time as the population of Uzbekistan is increasing, the number of various diseases in rice is also increasing, or diseases are spreading widely and causing serious damage to productivity. Our research has shown that one of the most common diseases in rice stalks is Piricularia disease. During the vegetation period, various disease symptoms are invisible in the rice plant, one of them is serious damage with symptoms such as breaking of the rice stalk, darkening of the root neck. is bringing From this article, you can learn about the rice piricular disease and the measures to fight against it.*

*Kalit so'zlar: Sholi, Pirikulyarioz, Hyphomycetales tartibiga mansub Piricularia oryzae Br. et Cav. takomillashmagan zamburug`i va azotli o`g`itlar.*

**Introduction.** The implementation of the decision of the President of the Republic of Uzbekistan "On measures to rapidly develop the food industry of the Republic and fully provide the population with quality food products" dated September 9, 2020 No. PQ-4821 The Cabinet of Ministers made a decision in order to provide further support to newly established promising projects on the production of food industry products. Within the framework of the law, practical work is being carried out on the ground.

**Rice content:** Rice is a source of several B vitamins, including thiamin-B1, riboflavin-B2, niacin B3 and B6, vitamin RR, carotene, a vitamin that strengthens the nervous system and has a positive effect on skin, hair and nails. Rich in E's. Rice contains a sufficient amount of trace elements such as potassium, phosphorus, zinc, iron, calcium, iodine and selenium necessary for the human body. Rice contains complex carbohydrates, therefore it is a nutritious, low-calorie product that does not cause a person to lose weight.

Rice contains 8 different amino acids necessary for the formation of new cells in the human body. Rice grain consists of 7-8 proteins. One of the positive factors in rice is that, unlike other cereal products, it does not contain a plant protein called gluten, which causes an allergic reaction in humans. In addition, it contains lecithin, a substance that activates brain activity, oligosaccharide, which restores intestinal tract activity, and gram amino fatty acid, which helps maintain blood pressure. Rice contains a lot of potassium, this mineral combines with other food products and neutralizes the effects of salts that enter the body. The more the grain of rice is processed, the less vitamins and minerals it contains. There is no

product comparable to rice in terms of the amount of aluminum and copper in its composition.

**Piricular disease.** Symptoms of the disease appear in all above-ground parts of the plant during the entire growing season. Dark brown spots with various shapes and gradually increasing in length, 3-4 cm in length appear on the leaf sheath and leaves. Later, the spot turns dark brown and the leaf dries up. On the lower side of the leaf, a gray powder is formed in place of the spot. When the stem is damaged, long spots are formed on them, the joints darken, soften, and as a result, the stem breaks. Sometimes the upper part of the stem and the furrow turn black and rot. Damaged furrows dry out prematurely, or they form empty grains. Sometimes the furrows become grainless. When the leaf sheath and leaf are severely damaged, the buds may not appear, and the plant will have a burnt color.

The causative agent of the disease is *Piricularia oryzae* of the Hyphomycetales order Br. et Cav. immature fungus. It forms a multicellular colorless mycelium located between the cells of the plant tissue. A conidial spore is formed in the mycelium and protrudes through the mouth to the surface of the leaf.

It is spread by conidia of the fungus during the vegetation period of plants. Their development takes place at high humidity and temperature from 15 to 35 C0. The most favorable conditions occur when the temperature is 22-24 C0 and the relative humidity is 90-95%, and the disease can develop so rapidly that the total death of the crop is observed. Conidia die at a temperature of 51-52 C0. The fungus is stored in the form of mycelium in the stalk and straw, as well as in the seed, its surface, under the flower and fruit peel, endosperm and pulp. According to information, the fungus is killed by soil microorganisms, but it overwinters very well on the surface of the soil, therefore, it can serve as a source of infection. *P. oryzae* also develops in many cereals, so such crops can be an additional source of infection for rice.





**Figure 1. Calvary and microscopic appearance of piricularia disease**

*P.oryzae* has a stimulating effect on the vitality of saprozoic nematode species, as a result of which they accelerate the process of tissue decomposition and cause the death of the plant.

When infected with piricular disease, the germination of seeds decreases, grasses die, some plants become dormant during the growing season, less grains are produced in the ear, and poorly developed or empty grains are formed. 20-25% or more crop can be lost due to disease.

**System of measures used against rice diseases.** In the system of measures used against rice diseases, special importance is given to the release and application of new resistant varieties, as well as the correct organization of crop rotation. Perennial leguminous grasses, legumes and legumes are the best predecessors for rice. The seeds are collected from healthy fields, calibrated and treated with preparations listed in Appendix 1. Wet treatment of seeds (10 kg of suspension: 8 l of water + drug) also gives good results. Treatment is effective against pyriculariosis, root rot, helminthosporiosis, bacteriosis and other diseases. After processing, the seeds are soaked for 24 hours under a tarpaulin and lightly dried.

Planing of the floors before planting is carried out in order to eliminate the lateral germination of lawns and the development of root rot diseases and disease-causing pests. Planned lands are treated with any of the appropriate herbicides approved for use in agriculture in our republic (6-12 l/ha). This event is aimed at eliminating weeds - reservoirs of many pathogens. After spraying the herbicide, the soil is fertilized.

It is very important to plant rice on time. In the previous years, if piricular disease developed strongly in the field, it is watered as soon as the seeds are planted (with a thickness of 20-25 cm in 5-6 days).

In the fight against pyriculariosis and other diseases, apply DUPLET TT 22.5% em.k, 0.4 l/ha, FOLIKUR BT 22.5% em.k 0.4 l/ha TOPSIN-M, 70% n, one to three times. cooking 0.4 l/ha suspension of drugs by airplane spraying gives high results. In this case, the first spraying is carried out according to the "flag", the second at the beginning of flowering, and the third (when piricular disease develops strongly) ten days after the second. Spraying must be stopped at least 20 days before harvesting.

As with any other plants, the correct application of fertilizers according to the agrochemical parameters of the soil increases the resistance of plants to diseases.

It is also very important to systematically fight against disease carriers - insects and pathogen reservoirs - weeds. In particular, it is necessary to regularly remove the spiky grass growing in the ditches around the rice fields.

Removal of weeds, deep plowing of the land in autumn, timely processing of seeds and their proper storage, as well as regular checking of signs of pathogenicity in crops are necessary measures in rice cultivation. Crops with helminthosporosis, bacterial and viral diseases are harvested separately. It is strictly forbidden to use grain from this area for seed purposes. Quarantine measures are also taken seriously in rice cultivation.

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## ACCOUNTING ORGANIZATIONS IN SERVICE COMPANIES

*Annotation. The article discusses issues of scientific research in this regard being carried out in such areas as cost accounting according to international standards, classification of variable and fixed expenses, dividing them into classes for accounting. However, research has not sufficiently studied the issues of digitalization through the use of new modern technologies in order to improve the accounting policies of motor transport enterprises.*

*Key words: audit, accounting, costs, management processes, production costs.*

The world pays special attention to scientific research on the organization and maintenance of accounting in service companies and passenger transport companies according to international standards. Scientific research in this regard is being conducted in such areas as cost accounting according to international standards, classification of variable and fixed expenses, and dividing them into classes for accounting. However, research has not sufficiently studied the issues of digitalization through the use of new modern technologies in order to improve the accounting policies of motor transport enterprises.

In Uzbekistan, the road transport sector is one of the key components of the socio-economic infrastructure, and its high level of development is important for the economic development of the country. Speaking about the importance of this area: "This area is the lifeblood of the economy. We will not be able to ensure stable economic development if we do not raise the transport industry and logistics to a new level," the head of our state emphasized. Today, the global economic downturn due to the coronavirus pandemic is entering a recovery phase, and in this process, transport logistics, like other sectors of the economy, is showing a serious downward trend.

The root of this scheme must always be under constant control and attention. In our opinion, this problem is solved on the basis of organizing the accounting of expenses incurred according to the direct cost system.

Conclusions for this chapter: in motor transport enterprises, one of the main indicators in generating profit from the economic activities of the enterprise is accounting for expenses; in current conditions there is no unified system for accounting and calculating the cost of services of motor transport enterprises; For a motor transport enterprise, it is very important to ensure a balance between



additional income and marginal expenses in the accounting policy; It is advisable for an enterprise to organize accounting using a cost accounting system (Direct Costing), based on the division of total costs into fixed and variable costs.

During the study at the enterprise under study (in the Urta Osiyo Trans JSC), when analyzing the current economic control, we established that at the enterprise there are additions and falsifications, namely:

1. – exaggeration of the transportation distance and weight of the transported cargo;

2. – falsification of shipping documentation;

3. – calculation of the weight of the transported cargo not based on the actual weight, but on the carrying capacity of the vehicle;

4. – exaggeration of the number of flights.

5. To eliminate such situations, it was proposed to introduce digitalization of primary accounting data provided by drivers into the activities of the Central Asia Trans joint stock company. The online platform (Avto-stat.uz) began to be used in test mode. And this provides for prompt receipt and processing of primary accounting documents, calculation of fixed (daily, monthly) revenue in real prices and ensuring the reliability of information.

Rolling stock tires are a complex technical structure and have different characteristics. Therefore, we believe that within each group, quantitative accounting in the warehouse should be carried out for individual parts (tires, tubes).

Car tires in reserve and in circulation are included in the account

10 “Materials” under subaccount 1040 “Spare parts”, it reflects spare parts intended for repair and replacement of obsolete vehicle parts. However, in our opinion, taking into account the specifics of the analytical data, three more sub-accounts should be opened for car tires (for example - 1041 “Acceptance of tires in their original form”, 1042 “Worn out tires subject to depreciation”, 1043 “Recycled tires”). In this way, it is possible to ensure completeness of information about the tires available in the organization. The use of such accounts also allows you to obtain, as far as possible, more detailed information about the quantity, volume, grade, cost and classification group of automobile tires. In addition, used tires can be recycled, so the accounting should include the following analytical data: “car tires in stock”, “rear tires”, “car tires in repair”. Tires recycled and released for use from subaccount 1070 must be returned to account 1043.

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## **THEORETICAL FOUNDATIONS FOR RESEARCH OF ACCOUNTING IN MOTOR TRANSPORT ENTERPRISES**

*Annotation. The article discusses the place of accounting in motor transport enterprises and the scientific and theoretical foundations of its research, as well as studies the accounting of motor transport enterprises that provide transport services to the population of Uzbekistan, its organizational and legal foundations, the specifics and problems of the transport economy of New Uzbekistan.*

*Key words: wages, accounting, audit, management processes, production costs.*

In the context of integration into the global economy, the geography of clients is rapidly expanding due to routes beyond state borders, and transport is increasingly of an export-import nature. There is a growing need to formulate financial indicators in a unified system. In this regard, the application of IFRS (international financial reporting standards) in the accounting of transport companies becomes a necessary condition.

Theoretically, standard production costs should be included in the cost, but in practice there are excess costs for raw materials, fuel and spare parts. As in all industries, for the correct determination of the cost of services at motor transport enterprises and the correct organization of their accounting, the correct identification of cost points and responsibility centers is important. Therefore, at motor transport enterprises, the formation of costs and accounting at the point of origin of expenses should be organized on the basis of studies.

Taking into account the specifics of motor transport enterprises, before studying the costs and their composition, especially the costs that form the cost of services, let us dwell on the points where costs arise. In any business entity, the correct identification of cost points and responsibility centers is of great importance. Correct determination of cost points not only provides an economic benefit to the enterprise, but also ensures correct, accurate and timely execution of accounting work. In this regard, the work examines general provisions for cost points and specific provisions directly related to the specifics of motor transport enterprises.

In general, the main purpose of accounting for costs at the point of their occurrence is the correct organization of their management and accounting. In our

opinion, cost management is the application of procedures, requirements, norms and methods that arise on the basis of knowledge about the effective saving of enterprise resources in order to benefit from them at a higher level.

Taking into account the statistical indicators of the participation of motor transport enterprises in the total volume of passenger and cargo transportation, it can be seen that over the past five years it remains one of the main indicators and occupies a dominant position in the passenger transportation sector.

As can be seen from the table, over the past five years, the demand for transport services has had a wide range between freight and passenger transportation. For example, you can see an increase in cargo transportation volumes

railway (107.6%) and road transport (114.4%) and a sharp reduction in the volume of cargo transportation by air

(-131%). This is due to the fact that air freight prices have increased and large exporters and importers prefer to transport goods by rail.

Passenger transportation services have also shown partial growth over the past five years. Thus, passenger transportation by air increased by 157.7%, and metro transportation by 196%.

In recent years, passenger transportation by rail has decreased and amounted to -245%. This is primarily due to the epidemiological situation and the fact that more cargo is being transported by rail.

Conclusions from the first chapter: this industry occupies a key place in the sustainable growth of the economy, meeting the social needs of the population in transport, as well as in the country's GDP; the organization, maintenance of accounting records in motor transport enterprises and the preparation of reports are regulated by the current legislation on accounting and regulatory documents of government bodies. In addition, taking into account the characteristics of motor transport enterprises, the requirements of internal departmental documents can also be included in the accounting policy. The accounting policies of motor transport enterprises should specifically establish methods for recognizing indicators that reflect income from the performance of work (provision of services) by transport, expenses for them and final financial results, as well as accounting.

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## **CHIROQCHI TUMANI QISHLOQ XO'JALIGI VA AHOLI BANDLIGI**

*Annotatsiya. Bugungi kunda fan taraqqiyoti rivoji ortib borgani sari inson ehtiyojlari ham ortib borayotganligini ko'rish mumkin. Ushbu tezisda Qashqadaryo viloyatining Chiroqchi tumani qishloq xo'jaligi va aholining xo'jalikning qaysi tarmog'ida band ekanini ko'rib o'tamiz.*

*Kalit so'zlar: Qishloq xo'jaligi, dehqonchilik, paxtachilik, bog'dorchilik, chorvachilik, xomashyo.*

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## **AGRICULTURE AND EMPLOYMENT OF CHIRAKCHI DISTRICT**

*Abstract. Today, it can be seen that human needs are also increasing as the development of science increases. In this thesis, we will consider the agriculture of Chirakchi district of Kashkadarya region and in which branch of the economy the population is employed.*

*Keywords: Agriculture, farming, cotton growing, horticulture, cattle breeding, raw materials.*

**Kirish.** O‘zbekiston Respublikasi Prezidentining “Chiroqchi” erkin iqtisodiy zonasini tashkil etish to‘g‘risida” 2019-yil 13-sentabrdagi PF-5825-son Farmoni ijrosini ta’minlash maqsadida Vazirlar Mahkamasi qaror qiladi:

O‘zbekiston Respublikasi Prezidentining “Chiroqchi” erkin iqtisodiy zonasini tashkil etish to‘g‘risida” 2019-yil 13-sentabrdagi PF-5825-son



Farmoniga muvofiq "Chiroqchi" erkin iqtisodiy zonasi tashkil etilganligi ma'lumot uchun qabul qilinadi. Bunda, *"Chiroqchi" erkin iqtisodiy zonasi direksiyasi* davlat unitar korxonasiga kelgusi yillarda o'zini o'zi moliyalashtirishga o'tkazish sharti bilan 2020-2021-yillar davrida saqlash xarajatlari uchun asoslangan hisob-kitoblar bo'yicha zarur mablag'lar ajratilishi, Qashqadaryo viloyati erkin iqtisodiy zonalar va kichik sanoat zonalarining ma'muriy kengashiga "Chiroqchi" erkin iqtisodiy zonasi direksiyasi" davlat unitar korxonasining (keyingi o'rinlarda — Direksiya) tasdiqlangan tuzilmasiga va xodimlari soniga investitsiyalar hajmi Chiroqchi hududida joylashtirilgan investitsiya loyihalari sonidan kelib chiqib, zaruratga ko'ra o'zgartirish kiritish huquqi berilishi qayd etilgan.

Mamlakatimiz o'z mustaqilligini qo'lga kiritgan kundan beri o'tgan, tarixan qisqa davr ichida respublikamiz singari viloyatimiz ham katta iqtisodiy yutuqlarga erishdi, ana shu davr mobaynida yuz bergan olamshumul o'zgarishlar, qo'lga kiritilgan natijalar va eng asosiysi - iqtisodiy islohotlarni amalga oshirishda to'g'ri va oqilona yondoshish natijasida tumanlar xo'jalik tuzilmalarida ham yuqori samaralarga erishildi. Chiroqchi tuman iqtisodiyoti asosini ko'p tarmoqla hududiy-ishlab chiqarish majmuasidan tashkil topgan bo'lib, uning asosini bir qancha ixtisoslashgan tarmoqlar tashkil etadi. Jumladan, yoqilg'i, yengil va oziq-ovqat sanoati, ko'p tarmoqli qishloq xo'jaligi, transport hamda noishlabchiqarish tarmoqlari kabilar kiradi.

Tuman iqtisodiy taraqqiyot yuksaltirish uchun zarur bo'lgan imkoniyatlar mavjud. Eng avvalo agroiqlimiy sharoitlarning qulayligi, foydali qazilmalarning mavjudligi, serunum yerlarining borligi va mehnat resurslarining mavjudligi tumanda iqtisodiyotning barcha tarmoqlarini rivojlantirishning muhim omillari sanaladi. Quyida tuman iqtisodiyot tarmoqlariga alohida-alohida holda ta'rif beramiz. Tuman xalq xo'jaligi tarkibida qishloq xo'jaligi katta ahamiyatga ega. Bu tarmoqda yalpi mahsulotning asosiy qismi yaratiladi. Viloyatda yetishtiriladigan yalpi qishloq xo'jalik mahsulotining 9,5 % i, jumladan paxtaning 7,6 % i, pillaning 7 % i, qorako'lning 19 % i, junning 16 % i, g'allaning 11,1 % i Chiroqchi tumanining ulushiga to'g'ri keladi

Qishloq xo'jaligi mahsulotlarini yetishtirish uchun tabiiy sharoit qulay. Iqlimi keskin kontinental bo'lib, sovuqsiz davr 210-242kunni, ijobiytemperaturalar yig'indisi 4760-5200 gradusni tashkil etadi. Tuman ancha kata yer resurslariga ega. Umumiy yer maydoni 283,7 ming ga bo'lib, shundan 123.2 ming gektari haydalgan yerlardir, 22,7 ming gektarida sug'orilib dehqonchilik qilinadi. Qolgan 160,5 ming ga. maydondan yaylovlar sifatida foydalaniladi. Tumandagi aksariyat xo'jaliklar asosan paxtachilikka, shuningdek donchilik, meva va uzumchilik, sutchilik, sut-go'sht yetishtirishga ixtisoslashgandir. Dehqonchilik tuman qishloq xo'jaligida bosh tarmog'i hisoblanadi. Qishloq xo'jaligida olinayotgan yalpi mahsulotning 70% i dehqonchilikdan keladi. Tuproqning unumdorlik darajasi hosildorlikka ta'sir ko'rsatadigan asosiy omildir. Chiroqchi tumanining hududi tabiatining

xususiyatlari va landshaft sharoitlariga ko'ra, tog' oldi mintaqasining tipik hududlaridan biridir. Tuman hududi uchun relyefning tekisligi, iqlim sharoitlarining quruq va issiqliigi, cho'l o'simliklar va tuproqlari harakterlidir.

Tumanda yaqin paytlarga qadar sug'orish uchun yaroqli yerlar maydoni anchagina bo'lgan, lekin Qarshi cho'lining boshqa joylaridagi kabi sug'orish uchun suv resurslarining taqchilligi, obikor dehqonchilikni rivojlantirish imkoniyatlarini ishlab turgan. Suv tanqisligi tufayli mavjud sug'oriladigan yerlar (agroiirrigatsiya landshaftlari)ning meliorativ holati dehqonchilik uchun to'siq bo'la olmagan. Obikor dehqonchilik uchun yaroqli bo'lgan yerlarini o'zlashtirish maqsadida, Zarafshon daryoning suv resurslaridan foydalanish imkoniyatlari Eskianhor kanalining ishga tushirilishi bilan bog'liq bo'lgan. Natijada Chiroqchi tumanining qishloq xo'jalik tarmoqlarini rivojlantirish va obikor dehqonchilik maydonlarini kengaytirish imkoniyatlarini tug'dirdi. Hozirgi paytda Chiroqchi tumanida haydaladigan yerlarning maydoni 49,3 ming gektar bo'lib, bu yerlarning hammasi sug'oriladigan yerlar toifasiga mansubdir. Chiroqchi tumanida sug'orilayotgan yerlarning meliorativ holatiboshqa tumanlardagiga nisbatan ancha qoniqarli ahvolda. Ammo, bunday yerlarning holatini barcha xo'jaliklarda zaruriy meyorlarga yetkazish uchun melioratsiya ishlarini uzluksiz ravishda olib borish lozim. Chunki 1998 yilda sizot suvlarining sathi 2 m gacha bo'lgan yerlar tumanda 290 gektarni tashkil etgan. Shu sababli zovurlar tarmoqlarini uzaytirish, mavjud zovurlarni tozalab turish va boshqa meliorativ tadbirlarni amalga oshirish, tuman hududidagi sug'oriladigan yerlarning meliorativ holatini yanada yaxshilash va qishloq xo'jalik ekinlaridan yuqoriroq hosil olish imkoniyatlarini beradi.

**Dehqonchilik.** Tuman qishloq xo'jaligida dehqonchilik bosh tarmoq hisoblanadi. Tabiiy omillar ichida tuproq bilan iqlim dehqonchilikni rayonlashtirishda katta ahamiyatga ega. Tuproqning unumdorlik darajasi dehqonchilik hosildorligiga ta'sir ko'rsatadigan asosiy omildir. Shuning uchun qishloq xo'jalik ishlab chiqarishda tuproqning meliorativ holatini yaxshilash va uning unumdorligini oshirish muhim agronomik tadbir hisoblanadi. Qishloq xo'jalik ekinlaridan yuqori hosil yetishtirishda tuproq sho'rini o'z vaqtida yuvish katta ahamiyatga ega.

Mexanik tartibi jihatidan og'ir bo'lgan soz tuproqlarda, tumanda, ayrim xo'jaliklarda yahob suvlari fevral oyida beriladi. Mexanik tarkibi o'rtacha va yengil bo'lgan tuproqlarda yahob suvi mart, aprel oyida ekishdan 10-15 kun oldin beriladi. Chunki yahob suvi erta bahorda berilsa, ekish vaqtiga kelib, tuproqning ustki qoplami qurib qoladi. Dehqonchilikda mineral va mahalliy o'g'itlarni ishlatish, o'simliklarni yaxshi oziqlanishi va normal o'sishga, mahsulot sifatini yaxshilashga yordam beradi. Dehqonchilikda almashlab ekishning roli ham katta, almashlab ekish xo'jalik taraqqiyotining tuproq, iqlim va iqtisodiy sharoitlarini hisobga olgan holda turli qishloq xo'jalik ekinlarining tarkibi va nisbatini belgilaydi. Chiroqchi tumanida paxtakor xo'jaliklarda to'g'ri almashlab ekishni

joriy qilish paxta hosilini oshiradi, chorvachilik uchun mustaqil yem-hashak bazasini yaratish imkonini beradi.

Dehqonchilik biologik industriyaning o'zida xom murakkab turi bo'lib, uning asosiy ishlab chiqarish vositalari o'simliklar, mikroorganizmlar va tuproq hisoblanadi. Ular energiya va texnika yordamida inson uchun kerakli organik moddalarni hosil qiladi. O'simliklar hosili mehnat va mexanikadan tashqari bir qancha murakkab faktorlar, jumladan, o'simliklarning irsiy tabiatiga, quyosh radiatsiyasi, suv, kislorod, azot va tuproqdagi boshqa ko'pgina mineral organik birikmalarga bog'liq. Chiroqchi tuman dehqonchiligida paxta, don yetishtirish, texnika ekinlari, meva va uzumchilik, poliz ekinlari, sabzavot mahsulotlari, hashaki ekinlar asosiy tarmoqlarni tashkil etadi. Tumanda dehqonchilik mahsulotlari yetishtirishni ko'paytirish hozirgi kundagi asosiy masalalardan biri bo'lib hisoblanadi. Hozirgi bozor sharoitida tuman dehqonchiligida donli ekinlarning ahamiyati juda katta, chunki donli ekinlar bilan aholini oziq-ovqatga va chorva mollarning yem-hashakka bo'lgan talabini qondirishda muhim rol o'ynaydi.

Tumanda paxta yetishtirish doirasining kengayishi qishloq mehnatkashlarining turmush darajasini tubdan o'zgartirdi. Paxtakor xo'jaliklar aholisi elektr bilan to'liq ta'minlandi, gazlashtirish, qisman bo'lsa ham tumanda zamonaviy uylar, yangi binolar qad ko'tardi. Shuningdek, yangi kasalxonalar va kino-teatrlar ham zamonaviy tarzda qad ko'tardi. Tuman dehqonlari paxtachilikda qo'lga kiritilayotgan yutuqlarga yuksak agrotexnika tadbirlarini joriy qilish tufayli erishmoqda. Paxta maydonlarini ekishga sifatli qilib tayyorlashning ahamiyati katta. Bu sohada ishni to'g'ri tashkil etish masalasi har bir xo'jalikning tuproq, iqlim sharoitini sinchiklab o'rganish asosida amalga oshirilmoqda. Hamda dalalarni tekislash yer uchastkalarini yiriklashtirish, ortiqcha ariqlarni yo'qotish yer uchastkalarini qisqartirib ketishiga yo'l qo'ymayapdi. Yaxshi tekislangan va yiriklashtirilgan dalalarda suvdan foydalanish koeffitsiyenti oshadi. Paxta qator oralarini ishlov berish, parvarish qilishda qo'llaniladigan barcha mashinalarning ish unumi ko'tarilmoqda.

Chigit, ekish, uni xatosiz undirib olish katta ahamiyatga ega. Dala tekis va yaxshilab ishlangan bo'lsa, urug' bir tekis ekiladi, aniq kvadratlar hosil bo'ladi. Qator oralari sifatli ishlanadi va sug'orish suvlari bir meyorda tarqaladi. Tumanda deyarli hamma xo'jaliklarda chigit kvadrat uyali ekilmoqda va ikki tomonlama parvarish qilinmoqda. Chigitli uyalarga aniq miqdorda ekish to'la joriy qilingan ekan, yagonalashni o'z vaqtida o'tkazish lozim. Yagonalash 8-5 kun kech o'tkazilsa, paxta hosildorligi 3-4 sentnerga kamayadi. Uni o'tkazishning eng yaxshi muddati-paxta unib chiqqandan so'ng 1-2 chinbarg chiqarguncha bo'lgan davrdir. Paxtani yagonalashda dastlab nimjon kasalliklarga chalingan nihollar yulib tashlanadi. Paxta yagonalashda navlarning xususiyatlari, yer sharoiti, ekish sxemasi, tuproq unumdorligini, yerning sho'rlanish va sizot suvlarining joylashish sathi hisobga olinishi va har bir gektarda ma'lum miqdorda ko'chat qoldirishi zarur. Shunday qilib paxtadan yuqori va sifatli hosil yetishtirishning

muhim sharoitlaridan biri har bir gektarda yetarli miqdorda ko'chat qalinligini saqlashdir. Tuproq unumdorligini va paxta hosildorligini oshirib borish hamda don yetishtirish va chorva mollari uchun oziq tayyorlash maqsadida paxtakor xo'jaliklarida beda, makkajo'xori va dukkakli ekinlash ekishni keng joriy qilish imkonini bermoqda. Hozirgi paytda tuman xo'jaliklarida paxta beda almashlab ekish agrotexnikasi keng joriy qilingan.

**Donli ekinlar**-donli ekinlarga bug'doy, sholi, makkajo'xori, arpa, taqir, suli va javdar kiradi. Chiroqchi rayonida donli ekinlardan eng ko'p bug'doy, arid va makkajo'xori ekiladi. Donli o'simliklar o'zida inson organizmi uchun zarur bo'lgan oqsil va uglevod moddasiga boy, don va don mahsulotlari ozuqa konsentrati tugallash va boshqa sohalarida keng qo'llaniladi. Hozirgi bozor sharoitida tuman dehqonchiligida donli ekinlarning ahamiyati ortib bormoqda. Tumanda don ekinlarini rivojlantirish, joyning tuproq iqlim sharoitiga ham bog'liq. Hozirgi kunda tuman xo'jaligida don hosildorligini oshirishning ishonchli vositasi uni o'g'itlashdir, shuning uchun qishda erta ko'klamda urug'lik ekinlarini oziqlashtirish har bir dehqonning birinchi navbatdagi vazifasi bo'lishi kerak. Shu sababli tuman hududida bu ishlar o'z o'rnida qo'yib olib borilmoqda.

Tuman don ekinlarini yaqin kelajakda don xo'jaligining iqtisodiy jihatdan samaradorligini kengaytirish uchun mehnatni fan-texnika taraqqiyoti asosida tashkil qilishlari, maxsus tajriba uchastkalari, shuningdek, xo'jalikning tuproq, iqlim sharoitlarini, relyef formalarini to'g'ri hisobga olib, dehqonchilik madaniyatini uzluksiz oshirib borishlari tuman mehnatkashlari oldida turgan asosiy masalalaridan biridir. Tuman don xo'jaligida makkajo'xori yetishtirishning hissasi ortib bormoqda. Bu bejiz emas, albatta makkajo'xori donli ekinlari ichida eng serhosil tarmoqdir. Makkajo'xori yetishtirish bilan tumanning dehqonchilikka ixtisoslashgan barcha paxtakor jamoa va davlat xo'jaliklari shug'ullanmoqda. Xo'jalikda makkajo'xoridan don, ko'k maysa tayyorlash bilan bira undan paxtachilikda almashlab ekishda ham keng fodalani moqda.

Tumanning paxtachilik xo'jaliklarida tuzilgan makkajo'xorichilik brigadalarini asosan yoshlar boshqarmoqda va gektariga 35-38 sentner yetkazib hosil olmoqda. Hozirgi kunda tuman xo'jaligida tajriba maqsadida yangi navlarning biologiyasi va erta ekishning o'ziga xos xususiyatlari to'la hisobga olingan holda, makkajo'xori o'stirishning yangi texnologiyasi mutaxassislar tomonidan batafsil ishlab chiqilmoqda. Xulosa qilib aytganda donli ekinlar maydonini tuman xo'jaligida yanada kengaytirib undan aholi uchun oziq-ovqat mahsulotlari olish bilan birga chorva mollari uchun yem-hashak yetishtirish imkonini bermoqda. Don ekinlarining hosildorligini oshirish, yangi navlarini ya'ni o'rta va tez pishar navlari ustida tajriba uchastkalarida olib boriladigan ishlarga alohida e'tibor berish lozim.

**Sabzavot va polizchilik.** Inson kundalik iste'molida va oziq-ovqat sanoatida sabzavotning ahamiyati katta. Sabzavot ekinlari tarkibida uglevodlar, oqsil, organik kislotolar, mineral tuzlar, vitaminlar va shakar bo'ladi. Chiroqchi

tumanida sabzavot ekinlari 423 gektarni tashkil etadi. sabzavot ekinlaridan karam, pomidor, bodring, sabzi, piyoz turi va turli xildagi ko'katlar ko'p yetishtiriladi.

**Meva va uzumchilik.** Tumanda meva, uzum yetishtirishni ko'paytirishning asosiy yo'li meva va tok ekiladigan maydonlarni kengaytirish hamda ularning hosildorligini oshirishdan iborat. Tuman xo'jaliklarida bog' va tokzorlarning maydoni 1078 gektarni tashkil etadi. (1992). Meva va uzum tarkibida kishi organizmi uchun juda zarur bo'lgan qand, organik kislotalar, oqsil. Yog' mineral tuzlar, vitaminlar va boshqa moddalarga boy. Meva rezavor-meva va uzumlar mazali hamda shirin bo'lganidan ovqatni yaxsh bo'lishiga yordam beradi.

Meva rezavor, meva va uzum oziq-ovqat va vino sanoati uchun qimmatbaho xomashyodir. Bu mahsulotlardan konserva, murabbo, kompot vino tayyorlanadi. Tuman mehnatkashlarining oldida turgan asosiy vazifalaridan biri bu meva va uzumchilikka ixtisoslashgan xo'jaliklarning ishlab chiqarish ko'lamini kengaytirish, shu bilan birga meva va uzumchilikka ixtisoslashgan yangi xo'jaliklar, fermerlarni tashkil qilish va shu yo'l bilan meva va uzum yetishtirishni ko'paytirishdan iborat. Tumanning uzumlari shirasi o'tkirligi bilan ajralib turadi. Bular ichida mashhur "Husayn", "Tez pishar daroyi", "Chillaki", "Moskva" va yana bir necha navlari mashhurdir.

**Qoramolchilik.** Tuman chorvachiligida qoramolchilik yetakchi tarmoqdir. Umumiy chorva mahsulotlari hajmiga go'sht mahsulotlarini yetishtirish va aholini shu mahsulotlar bilan ta'minlashda muhim ahamiyatga egadir. 2012 yil mahsuloti bo'yicha tumanda 47519 bosh qoramol bo'lib, tuman xo'jaliklarida go'sht va sut yetishtirishni yanada ko'paytirish xo'jaliklarda sut yetishtirish va go'shtga boqiladigan, ixtisoslashgan fermerlarni tashkil qilish hamda fermer xo'jaligini rivojlantirish bo'yicha yangi ishlar olib borilmoqda. Chiroqchi tumanida qoramolchilikni rivojlantirishda mol zotlarini yaxshilashga katta e'tibor berilmoqda. Hozirgi kunda asosan Rossiya, Estoniya davlatlaridan keltirilgan zotdor mollarni urchitish ishlari olib borilmoqda. Tumanda qoramolchilikni rivojlantirishda yem-xashak yetishtirishni ko'paytirish, ularning to'yimligini oshirishni talab qiladi. Yem-xashak yetishtirishda asosiy vazifa har gektar maydondan iloji boricha ko'proq arzon yem-xashak yetishtirish, ularni tayyorlashda, saqlashda nobudgarchilikka yo'l qo'ymaslik chora-tadbirlari yo'lga qo'yilgan. Tuman chorvachiligi balansida qoramolchilikni ulushi katta. Mahsuldor chorvachilikning asosiy turlaridan biri bo'lgan qoramol sut, go'sht, sariyog' va charimbog' teri singari hech narsa almashlab bo'lmaydigan qimmatbaho mahsulot beradi. Tumanda qoramolchilik chorvachilikning birmuncha takomillashgan tarmoqlaridan biri bo'lib, bu yerda u keyingi o'n-o'n besh yil ichida intensiv rivojlanish yo'liga ko'chdi. Xo'jalikda sut, go'sht yetishtirishga ko'ra, qoramollarni maxsus fermalarda ixtisoslashgan holda qo'lda boqishga o'tildi. Keyingi yillarda tuman qoramolchiligi bazasida jamoa shirkat bo'rdoqichilik korxonalari vujudga kelmoqda. Chorva mollarning tuyog'i ko'paymoqda, shu bilan birga zoti yaxshilanmoqda. Qoramollar jumladan sigirlar



23370 ta asosan sug'oriladigan zonada ixtisoslashtirilgandir. Sog'in sigirlarni qo'lda boqish tajribada yaxshi natijalar bermoqda. Tuman xo'jaligida qoramolchilik strukturasi aholining ayniqsa sutga bo'lgan talabi o'sish borayotganligini shu bilan birga aholini sut bilan ta'minlash yo'lga qo'yilmoqda. Buning asosiy belgilaridan biri qoramollar balansida sigirlar nisbatining yaxshilanishidir.

**Qo'ychilik.** Chiroqchi tumanida asosan qorako'l qo'ylar boqiladi. Uning asosan tovar mahsuloti qorako'l teri, jun, sut yetishtirishni kam mablag' sarflangan holda ko'paytirish va davlatga topshiriq vazifalarini uddalamoqdalar. Jun va qorako'l yetishtirish bo'yicha mutloq tumanlar qatorida ikkinchi o'rinda turadi. Tumanda qorako'l qo'y zotlari boqiladi. Bu zotli qo'ylar juda chidamli bo'lib, cho'l yaylovlarida o'tlatib boqish va asrash uchun yaxshi moslashgan: Qorako'l teri qo'ylarining asosiy mahsuloti sifatli qorako'l terisi uchun tug'ilishi bilan birinchi va ikkinchi kuni so'yiladigan qorako'l terisi jahon bozorida yuqori bahoda 28 AQSH dollarida baholanadi. Qo'ychilikni intenzivlashtirish borasidagi asosiy choralar yaylovlarga qo'shimcha ravishda yem-hashak bo'ladigan o'tlar ekish yo'li bilan mustahkam yem-hashak bazasi yaratish yaylovlardan ratsional foydalanish ishlari olib borilmoqda.

Ma'lumki chorva mollari o'z biologik xususiyatlariga muvofiq keladigan tabiiy iqlim sharoitida yashagandagina sermahsul bo'ladi. Tabiiy sharoiti o'simliklar dunyosi bilan qorako'l qo'ylari uchun juda qulaydir. Shuni qayd qilish kerakki, qorako'l qo'ylari mahalliy iqlim sharoitining tez-tez o'zgarib turish sharoitiga chidamlidir. Tumanda yoz oylarida issiq sharoitlar bu qo'ylar o'z og'irligini yo'qotsada, lekin hamma vaqt sifatli qorako'l terisi olinadi. Terilarning eng qimmatlisi so'r bo'lib, u ko'rinishida kumush rang bo'lib tovlanib turadi. So'r terilar esa jahon bozorida qora rangli qorako'l terilariga nisbatan ikki baravar qimmatli turadi. Hozirgi kunda echki va qo'ychilikning tuyoq sonini 78725 taga ko'paytirish naslchilik ishlari ham ilmiy asosda tashkil etilmoqda.

Xulosa qilib aytganda tumanda qishloq xo'jaligiga kuchli e'tibor qaratilgan. Hozirgi kunda paxta maydonlari qisqartirilib, ularning hosildorligini oshirish ishlari olib borilmoqda. Shu bilan birga eng qulay tadbirlaridan biri paxta maydonlarini beda bilan almashlab ekish ishlari keng yo'lga qo'yildi. Bu albatta ijodiy natijalarga erishganligini ko'rishimiz mumkin. Paxta maydonlarini sug'orishda juyaklar tortib, shu juyaklarning pay orqali suv bilan ta'minlab sug'orish ishlari olib borilmoqda. Hozirgi kunda tuman xo'jaligida paxta maydonlarida kimyoviy minerallardan kamroq ta'minlab, tabiiy biologik go'ng solish ishlari keng ko'lamda olib borilmoqda. Shu bilan birga paxta maydonlaridan har xil hashoratlarga qarshi biologik nurash choralari olib borilmoqda.

**Xulosa.** Chiroqchi tumanida qishloq xo'jalik ishlab chiqarishi ko'p jihatdan bozor iqtisodiyotiga o'tish jarayonida agrosanoat majmuida yangidan tarkib topayotgan hududiy tizimlarni qayta ko'rib chiqish va ilmiy tahlil qilishni taqozo



qilmoqda. Tuman iqtisodiyotini yanada rivojlantirish uchun quyidagi tavsiyalarni taklif qilamiz:

Tuman arid zonada joylashganligidan suv tanqisligining mavjudligi, janubiy navlarini bu yerda kam suv talab o'simliklar, poliz ekinlari, mevali bog', o'rik, tut, tokzorlarni g'amda dunyodagi ariq tabiat zonalari daraxtlaridan yerdagi zaxni kamaytirishga moslashgan Avstraliya evkalipti kabi daraxtlarni olib kelib o'stirish, ko'paytirish tadbirlarini ishlab chiqish va amalga tadbiriq etish;

Paxta yetishtirishda ham hozirgi maydonlarni shu holda saqlash hisobiga hosildorlikni oshirish uzumchilikda: "Ko'chat o'stirish-uzum yetishtirish, vino, aroq, konyak va boshqa ichimliklar ishlab chiqarish;

Pillachilikda: "Ipak qurti urug'ini oladigan zavod – jamoa xo'jaligi ikibator xonasi- uy (jamo) qurtxonasi". Tut plantatsiyalarini kengaytirish atlas to'qish kichik sexlarini tashkil etish.

Donchilikda: hududiy sistemani tashkil etish, don (bug'doy) yetishtirish uchun ishlab chiqarish un mahsulotlarini ishlab chiqarish;

Meva, sabzavot va poliz mahsulotlarini yetishtirish, ularni saqlash uchun omborxonalar, salqinxonalar, birlamchi va ikkilamchi qayta ishlashni yaxshi yo'lga qo'yish, ushbu sohalarga ixtisoslashgan xo'jaliklarni barpo qilish, parnik va issiqxonalarni rivojlantirish.

Dehqonchilikda ilg'or agrotexnika qoidalaridan foydalanilgan holda mehnat unumdorligini oshirish. Dehqonchilikning yangi tizimini joriy qilish yaxni almashlab ekishni to'la joriy etish, chorva mollari uchun mustaqil yem-xashak bazasini yaratish;

Hozirgi bozor iqtisodiyoti sharoitida aholini oziq-ovqat mahsulotlari bilan ta'minlash maqsadida tuman xo'jaliklarida sabzavot va poliz mahsulotlari, bog'dorchilik, uzumchilikni rivojlantirish hamda qayta ishlash korxonalarini bunyod etish. Kelajakda tuman hududida mavjud bo'lgan xom ashyo va mehnat resurslarini hisobga olgan holda xo'jaliklarda keng iste'mol buyumlari ishlab chiqaradigan kichik korxonalarini qurish hamda kasanachilikni rivojlantirish maqsadga muvofiqdir.

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## **AGROTEXALOGY BASES OF GROWING SALINIZATION PLANTS**

*Abstract. A number of irrigated soils are currently working on analytical study of the nature of irrigated soils, including agrochysical, microbiological, agrochemical, especially the reclamation, and the reclamation of nutrients are interrogated with the rates of nutrients and microbiological processes. Work is underway to increase the production of new crops and matures. To do this, our republic is adapted to soil and climatic conditions, the most optimal way is the most optimal way to choose high new varieties of abiotic factors, resistant to abiotic and quality. This is due to the complex stress of the saline area, the development of varieties of high, drought, resilient indicators are developing varieties of growing varieties and developing new development agro-technology.*

*Key words. Variety, hybrid, cultivation, salinization, ecological, technology, desertification, productivity, releft.*

**INTRODUCTION.** As a result of a number of research conducted in the country, a number of scientific studies in our country, created by the drought, various diseases resistant regenerations, and the ridges are being carried out to determine the endurance of the regions of the country to determine the complex stress of the country [2].

The technologies for the spring crops were introduced in the field of disease and pests and pests, shorter-resistant areas of such cases, on the basis of the implementation of new work.

**MATERIALS AND METHODS.** Results of agricultural crops The results of agricultural crops are conducted under the famous greater soils in the laboratory, heating, product quality indicators and the Republican Scientific Research Institute. In order to determine the salinity of varieties and ridges in the future, the soil layer of the highly salineous limes is deeply applied and experienced in the fields of Masqur Tourist fields [5,7].

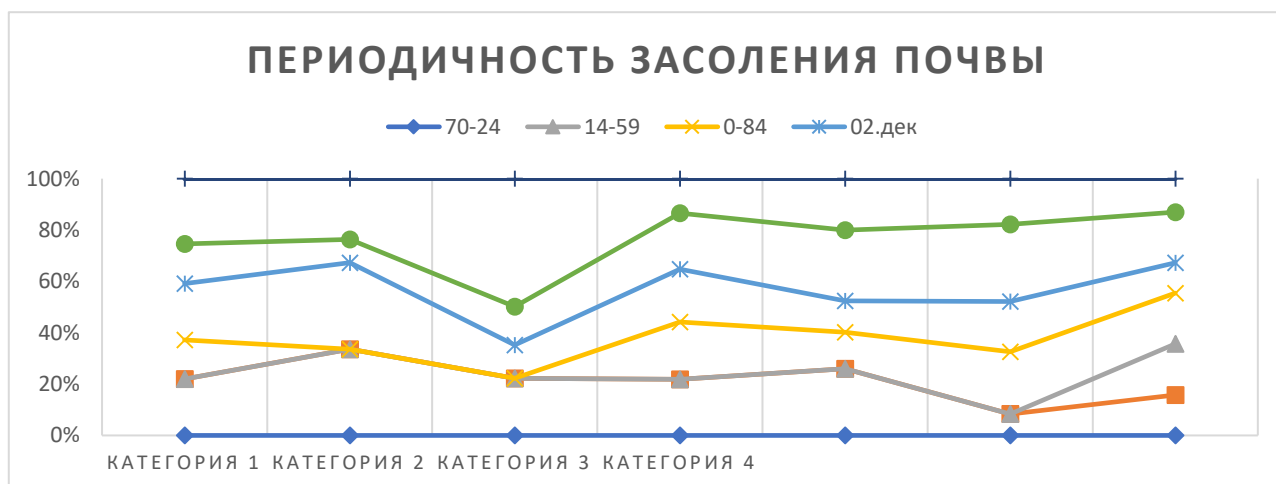
**RESULTS AND DISCUSSION.** A total of 310 million hydropower lands is available on the Earth, of which 20% is saline and dry lands, which are salients of 62 million, and in most parts of this land, agricultural crops are growing.

The Aral Sea, which is the entire Aral Sea in the territory of the country, is created by 5 million hectares of saline and more than the total irrigated area of our country, and the fact that it is more than the total irrigated area. The scientific

work carried out for a number of years for the solution to these problems, the coverage of the Aral Sea region with a green vegetable coverage remains an efficient and economic efficient approach.

As a result of the various levels of the southern regions of the country, it is important to create varieties of new agricultural and the introduction of its agrotechnology that are suitable for the region. At the same time, the main task is to create varieties of high-efficiency type farms, which are appropriate for soil-climatic conditions, and very efficient, industrial requirements, and fully compatible, fertile, industrial requirements. To do this, many practical and fundamental products are being introduced in the country.

**CONCLUSION.** In conclusion, the main crops that will determine the capacity of the country and its potential will be grown on gray soiled lands. That is, vegetable growing, donum, ornamental, horticulture, viticulture, oilseed areas are grown on the ground. An important feature of the following soil zone is mainly agriculture is being carried out. But it should not be forgotten that many of the soils of many large arcent lands are also this type. The salinity is required to enter the insduction of new varietal variety and develop the technology of new growth.



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## **TAKOMILLASHTIRILGAN QUYOSH QURITGICHDA PAMIDORQURISH KINETIKASI**

*Annotatsiya. Quyosh energiyasidan samarali foydalanish, insoniyatni energiya taqchilligidan butunlay ozod etish kabi global muammolarni yechimini topish ustida ilmiy izlanishlar olib bormoqdalar. Quyosh kollektoridan o‘zining qator texnologik afzalliklari bilan farqlandi va issiqlik almashinuvi jarayonida yuqori foydali ish koeffitsiyentiga erishildi.*

*Kalit so‘zlar: Kollektor geliokvuritgich, temperatura, konvektiv, radiatsiya, shkaf, quritgich, qora toshlar, polietilen, ultrabinafsha akkumulyatsiyalash.*

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## **IN AN IMPROVED SUN DRYER PAMIDOR CONSTRUCTION KINETICS**

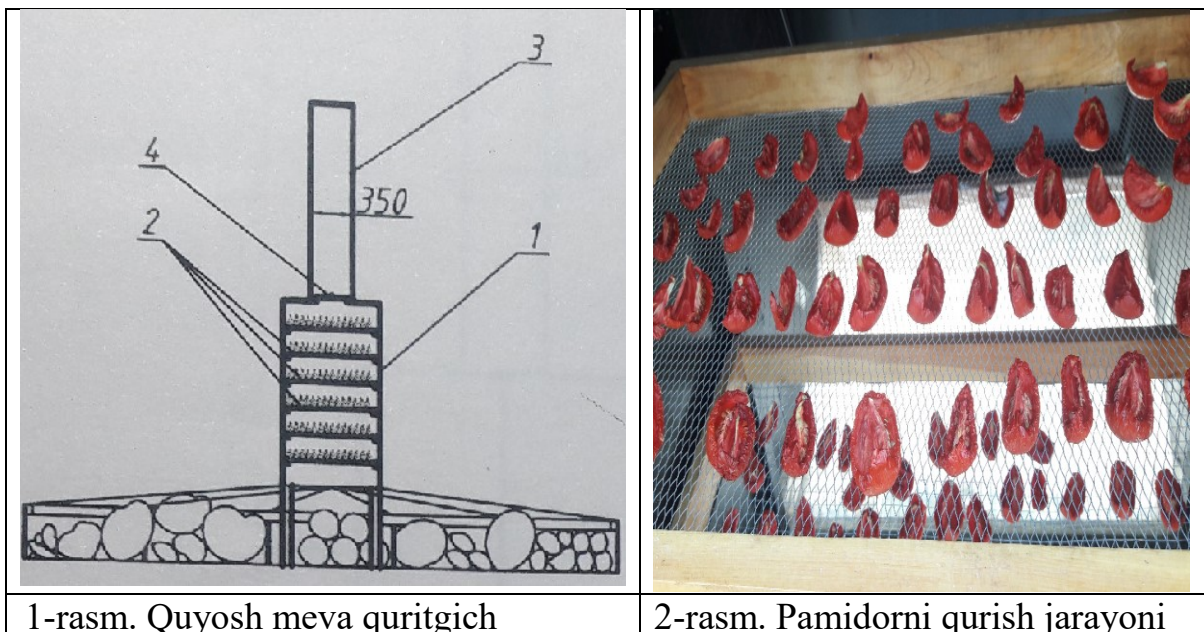
*Annotation. They are conducting scientific research on finding solutions to global problems such as the efficient use of solar energy, the complete liberation of humanity from the energy deficit. It was distinguished from the solar collector by its number of technological advantages, and a high useful working coefficient was achieved in the process of heat exchange.*

*Keywords: Collector heliocoouter, temperature, convective, radiation, cabinet, dryer, black stones, polyethylene, ultraviolet accumulator.*

Tabiiyki, ochiq maydonda mahsulotning qurish jarayoni cho‘zilib ketadi, noqulay ob-havo sharoitida mahsulotda mikroorganizmlar rivojlanib uning tarkibini buzadi, turli hasharotlar va qurt-qumursqalar yopishadi, ari va qushlar ifloslaydi, chang va g‘ubor bilan qoplanadi. Respublikamizda aksariyat hollarda o‘rik, mayiz va boshqa quritilgan mevalar ishlab chiqarish bevosita ochiq maydonlarda amalga oshirilib kelinmoqda. Bunda dastlabki ishlov berilgan mahsulotlar ochiq maydonlarda yoyilib qo‘yiladi va mahsulotning turi hamda iqlim sharoitlariga qarab, quritish jarayoni 10 kundan 25 kungacha davom etadi [1,2]. Bu usulning kamchiligi shundan iboratki, quritish jarayonining uzoq davom etishi va samaradorlikning pastligi (maydonchanning har kvadrat metridan kunlik 0,1-0,2 kg quritilgan meva olinadi), katta maydonlarga ehtiyoj borligi (har 10 kg quritilmagan mevaga kamida  $1m^2$  joy kerakligi) [2], tayyor mahsulotning ifloslanishi va buzilishi, buning natijasida mahsulot zavodlarda qayta yuvilishi va



yana quritilishi kabi qo'shimcha ishlovni talab qiladi. Shuning uchun, hosilni havo – quyosh nuri yordamida quritish usuli, yuqorida keltirilgan kamchiliklarga ko'ra ustunlik qilolmaydi. Meva – sabzavot mahsulotlarini quritish jarayonida boshlang'ich massadan 80% - 90% gacha suvni chiqarib yuborish kerak ya'ni, qayta ishlash jarayoni o'ta ko'p energiya resurslarini talab qiladi. Bunday paytda haroratni oshirish esa tayyor mahsulot sifatining pasayishiga olib kelishi mumkin. Ushbu muammolar meva va sabzavotlarni quritishning resurstejamkor texnologiyalari hisoblangan gelioquritgichlarni ishlab chiqarishga joriy etishni taqazo etmoqda [3]. Quyosh energiyasi yordamida ishlovchi meva-sabzavotlarni quritish qurilmalarini qo'llanilishi yuqorida qayd etilgan kamchiliklarning keskin kamayishiga olib keladi. Eng asosiysi, bu qurilmalar faqat quyosh energiyasi hisobidan ishlab, atrof-muhitni zararlamaydi, ekologik toza mahsulot olinishiga xizmat qiladi. Quyosh quritkichini issiqlikni akkumulyatsiyalovchi kollektor qismi shaffof plyonka qatlam, havo aylanishini ta'minlovchi tirqishlar, quritiladigan mahsulot uchun temir shkafdan iborat bo'ladi. Quyosh kollektorining ish tamoyili quyosh nurlari shaffof qatlamdan o'tadi va ichki havo hamda issiqlikni akkumulyatsiya qilish elementlari tomonidan yutiladi. Yutilgan energiya issiqlikka aylanadi (1-rasm). Qurigkich harorati shu energiya hisobiga shakllanadi. Qurilmaning pastki tirqishlaridan kirgan harorati past bo'lgan havo oqimi quritkich ichiga kirib harorati oshadi shu bilan birgalikda quritish uchun qo'yilgan mahsulotning namligini ham bug'latib yuqoridagi tirqishdan olib chiqadi. Quritgichlarning samaradorligini oshirish maqsadida quyosh quritgichlarida ishlatilgan. Yoz oylarining issiq kunlarida quritish shkafining ichki temperaturasi  $70-74^{\circ}C$  ga yetadi, kollektor ichidagi temperatura  $80-85^{\circ}C$  ga yetadi, qizitilayotgan 100 litr suvning harorati  $67^{\circ}C$  bo'ladi. Quritish shkafining tepa qismida namlikni chiqarish uchun balandligi 2 m va  $30\text{ cm}^2$  tirqich muri qo'yilgan. Quritish shkafining ichki hajmi  $1\text{ m}^3$  bo'lib shaffof kollektorning yuzasi  $12\text{ m}^2$  ega tag qismi  $9\text{ m}^2$  ga teng. 2022- yil 6 avgust kuni kollektor ichidagi tosh qatlamlarini harorati o'rganilindi shu kuni ob – havo harorati maksimal  $38-39^{\circ}C$ , quyosh radiatsiyasi  $960\frac{W}{m^2}$  bo'ldi. Muhim afzalliklaridan biri, bu kabi pomidorlarning uzoq vaqt saqlanishi, ularning ta'mini yo'qotmaydi. Boshqa sabzavotlarga o'xshab, pomidor ko'p miqdorda foydali vitaminlar va organizm uchun zarur bo'lgan elementlarni o'z ichiga oladi. Olingan natijalarga ko'ra pomidorni quritish jarayoni (2-rasm) 40 soat davom etdi bu vaqtda mahsulot tarkibidagi namlikni 80 foizini yuqotib massasi 1/5 qismi qoldi. Tashqi harorat oshishi bilan shkaf ichidagi harorat ham oshib boradi.



1-rasm. Quyosh meva quritgich

2-rasm. Pamidorni qurish jarayoni

Poliz ekinlarini quritishda harorat  $60-62^{\circ}C$  dan oshmasligi kerak [8.,9]. Aks holda, mahsulotni ustki qismi kuyib qoladi (qoramtir bo'lib). Quritish shkafidagi haroratni barqarorlashtirish uchun shkaf tepasidagi tirqichni ochish orqali kerakli haroratni ta'minladik. 1-rasmda. 1. Quritish shkafi., 2. Stelajlar., 3. Tuynik., 4. Tirqich. Kollektor qismiga issiqlikni akkumulyasiyalash uchun qoraga buyalganqayroq toshlar joylashtirilgan. Quyoshli vaqtda akkumulyatsiya qilgan issiqlik energiyasidan kechki vaqtda foydalanish mumkin. Mavjud barcha turdagi meva quritgichlarning akkumulyatsiya qismi yaxshi takomillashtirilmaganligi sababli kechki vaqtlarda mahsulotlarni qurish davri tuxtaydi. Mahsulot tashqaridan namlikni tortib oladi tarkibidagi namlik ortadi. Bu namlikni bug'latib yuborish uchun yana ma'lum issiqlik energiyasi kerak bo'ladi.

Endi energiya tenglamasini keltirib chiqaramiz. quritgichga kiradigan havo oqimi  $G_+ C_p T_a d\tau$  issiqlik energiyasini olib kiradi. Kameradan chiqib ketadigan energiya esa  $G_- C_p dT\tau$  ga teng [5].

Bundan tashqarii kamera xaroratini o'zgarishiga quyosh radiatsiyasi asosiy omil sifatida ta'sir ko'rsatadi va uning qiymati ga teng. Issiqlik almashinish tufayli tashqi muhitga beriladigan issiqlik miqdori:

$$Q = \alpha F(T - T_a) d\tau \text{ bo'ladi [4].}$$

$$\text{Shunday qilib; } 1 \frac{dC_p \rho TV}{d\tau} = C_p G_+ T_a - C_p G_- T + JAS + \alpha F(T_a - T) \quad (1)$$

$$\text{Ammo, } C_p \rho TV = PV \frac{K}{K-1} = \text{const bo'lgani uchun}$$

$$C_p G_+ T_a - C_p G_- T + AJS + \alpha F(T_a - T) = 0$$

Tenglamalar sistemasini yopish uchun quritiladigan mevedan bug'lanadigan namlik miqdori aniqlanadi.

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## **MODERN REQUIREMENTS FOR THE ORGANIZATION OF EDUCATIONAL ACTIVITIES**

*Abstract. Achieving the creation of a scientific-based system of organization, management and development of the educational process, including educational activities, in higher education institutions will create wide opportunities to ensure the fulfillment of goals and tasks.*

*Key words: educational system, higher education, training, intellectual ability, educational activity.*

For this purpose, we emphasize that the following methods should be widely used:

- equipping auditoriums with modern technical tools and using them effectively in training sessions, organizing this process in small groups;
- determining the logical-structural form of educational activities for each educational field, adapting them to the demands of life, enriching them with problem assignments, and preparing methodological recommendations and instructions;
- to establish the use of pedagogical and information technologies and interactive methods in training sessions;
- delivering handouts on the topics of the training sessions held in accordance with the varied programs to the learners and preparing questions for them on each topic, thus ensuring that they come to the training prepared;
- to pay special attention to the content of the questions prepared and asked by the students, depending on the quality of the questions, to determine the state of their preparation on specific educational topics, to achieve the formation of the skills of thinking, independent knowledge, finding literature on the topic, using them and analyzing them;
- mutual discussion of information collected by students on the topic of training sessions, analysis of expressed critical and independent opinions, summarizing them;
- revitalization of scientific and technical research in groups;
- to strengthen the activity of internal control departments in order to understand that pedagogues approach their tasks responsibly and impartially in providing knowledge to learners, and among them conduct surveys on the topic "Educators in the eyes of learners" and discuss the results in detail;
- to study, generalize foreign experiences on improving the quality of educational training and develop methodological manuals on those that can be used in the republic.

Based on these tasks, we believe that in order for students to independently think modernly, to choose and implement the directions of professional activity, they should have the following qualities: to be able to see problems, to understand the reasons for their occurrence, to generalize the observed events with the acquired knowledge, to conclude and generating new knowledge, replacing several concepts with one general one, distinguishing the main one from many events, expressing one's opinion correctly and in detail, finding the necessary information quickly and clearly, analyzing and evaluating problems, completing the work, changing the direction of thinking in accordance with the changing situation and development.

It should be emphasized that in traditional education students are taught only to acquire ready-made knowledge, while education with the help of modern technologies teaches them to independently search, analyze and draw conclusions about the knowledge they need to acquire. The topic of development and improvement of their level of knowledge has always been one of the urgent problems in the education system. At the same time, it is necessary to develop pedagogical technologies in the educational process and implement them with the help of information technologies.

Information technologies and pedagogical technologies occupy one of the main places in ensuring the final results of the development of the continuous education system, which can be seen in all aspects of education. Therefore, the use of information and materials of information technology as much as possible in the pedagogical technologies used in the education of the young generation is becoming an urgent issue of the day, the development of the society shows its development on all fronts.

The structure of the lesson should be very clear when moving from one part to another in accordance with its logic, the laws of the teaching process and the didactic purpose of the lesson.

#### Training structure

1. The structure of the process of acquiring new knowledge. Motivation - updating basic knowledge - acceptance - understanding and initial recall - checking mastery - strengthening - analysis.

2. The logic of the process of strengthening knowledge Motivation - actualization of methods of action and basic knowledge - perception of the pattern of knowledge application - independent application of knowledge in similar and new situations - self-control - control - correction - analysis.

3. The logic of the process of complex application of knowledge and action methods. Motivation - actualization of complex knowledge - example of complex application of knowledge - independent application of knowledge in similar and new situations - self-control - control - correction - analysis.

4. The logic of the process of systematization and generalization of knowledge.



5. Methods of action, evaluation and correction of knowledge, the logic of the verification process. Motivation - self-control - control - evaluation - analysis - correction - reflection.

6. The main criterion of the quality of training is not the use of one or another type of work, but the fact that the students have been trained and the goal of the training has been achieved.

In the modern world, the requirements for the organization of educational activities are becoming more complex and diverse. Here are some basic requirements:

1. Adapting to the rapidly changing demands and needs of society and the labor market. Organizations of educational activities should be flexible and able to quickly respond to changes in technology, economy, science and other fields.

2. Quality education. Organizations of educational activities should have qualified teachers, modern teaching materials and methods, as well as ensure that students use the latest knowledge and technologies.

3. Individualization of training. Modern requirements for education require taking into account the individual capabilities and needs of students. Educational organizations should develop and implement personalized teaching methods.

4. Development of teamwork and interpersonal communication skills. Educational organizations should create conditions for the development of teamwork, interpersonal and communication skills, as well as promote the development of leadership skills and emotional intelligence.

5. Consideration of different types of intelligence and abilities. The organization of educational activities should create opportunities for the development of different types of intelligence, such as logical, linguistic, mathematical, artistic, etc.

6. Application of modern technologies. Organizations of educational activities should actively use information and communication technologies (ICT) for training personnel, organizing distance education, monitoring progress and other purposes.

7. Support students throughout the entire educational process. Educational organizations provide support and assistance to students throughout their studies, including counseling, career guidance and career guidance, as well as opportunities for self-awareness and personal development. must do.

These requirements help ensure the quality of education, adapt it to the requirements of the modern world, and meet the needs of all participants in the educational process.

The modern requirements for the organization of educational activities are as follows:

- Quality of education: an educational institution must provide high-quality education that meets modern requirements and standards. This includes modern curricula, qualified teachers, modern teaching methods and student assessment.



- Individualization of education: the educational institution should offer different educational paths, taking into account the characteristics and needs of each student. This includes differentiated levels of difficulty, choice of subjects to be studied, individual study plans and more.

- Use of modern technologies: Modern technologies play an important role in the educational process. It is necessary to actively use modern information and communication technologies (ICT) for teaching and evaluating student performance in the organization of educational activities.

- Development of competences: the educational institution should form and develop in students not only knowledge, but also skills and competencies that will be useful to them in life and in the labor market. This includes developing communication, critical thinking, creative thinking and other skills.

- Personal development: the organization of educational activities should contribute to the development of each student's personality. This includes paying attention to the personal needs and interests of students, developing social and emotional competencies, forming value orientations, and others.

- Cooperation with parents and society: in the organization of educational activities, it is necessary to actively cooperate with the parents of students and the general public. This may include organizing parent meetings, counseling, involving parents in the learning process, etc.

- Evaluation and feedback: there should be a system of evaluation of student performance that will be objective and fair in the organization of educational activities. It is also important to provide feedback to students and their parents about learning outcomes and opportunities for improvement.

- Development of the professional community: the organization of educational activities should ensure the development and support of its teachers and other employees. This includes conducting professional development events, sharing experience, introducing innovations, etc.

- Modern requirements for the organization of modern educational activities include the following aspects:

- Use of information and communication technologies. Educational activities should be conducted using modern technologies such as computers, interactive whiteboards, multimedia materials, online platforms, etc. This will allow you to increase the effectiveness of learning, make the process more interesting and convenient for students.

- Active use of practical methods of the lesson. A modern learning experience should be as hands-on as possible with active use of assignments, projects, role plays, group discussions, etc. It allows students to apply the knowledge and skills they have acquired and develops their critical thinking and collaboration skills.

- Individualization of training. Taking into account the diversity of students' needs and abilities, modern educational activities should provide an

individual approach to each student. This can be manifested in different work formats, additional materials, personal assignments, etc.

- Development of critical thinking and creativity. Modern education should encourage students to develop critical thinking, the ability to analyze and evaluate information, as well as creative and creative thinking. It is necessary to create conditions for the development of students' initiative and independence, as well as their creative potential.

- Taking into account modern trends and requirements of the labor market. The educational system must take into account the requirements of the modern labor market and develop the skills and abilities necessary for successful professional activity in students. Training sessions should focus on practical application of knowledge and development of skills required in the labor market.

- Cooperation and interaction. Classroom activities should encourage cooperation and interaction between students and teachers. This will allow you to create an environment of active exchange of experience, discussion and joint problem solving, which will help you to master the material more deeply and develop communication skills.

Therefore, the modern requirements of organizing a modern educational lesson include the use of modern technologies, active use of practical methods, individualization of teaching, development of critical thinking and creativity taking into account the requirements of the labor market, cooperation and mutual cooperation.

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## **METHODS OF DEVELOPING INTELLECTUAL ABILITIES OF STUDENTS**

*Annotation. This article describes methods, models, and some conclusions and suggestions for developing the intellectual abilities of students of higher educational institutions in the process of training competitively qualified personnel.*

*Key words: educational system, higher education, training, intellectual ability, educational activity.*

In the conditions of globalization, in order to reorganize the training system of qualified specialists in the higher education system of our country at the level of modern requirements, the effective use of international models of this education is gaining urgent importance. Because almost all of the world's developed and market economy countries have a modern education system for training qualified specialists who can adapt to the sudden changes of the new mechanism and compete in any conditions. For example: the analysis of the experience of the USA, Germany, Japan, France and industrially and intellectually developed countries shows that the training of qualified and competitive personnel at all levels is achieved due to the following: integration between education, science and production, the type of educational institutions and scientific the variety of educational programs developed on the basis of the achievements of science, technology, technology and economy, turning the educational system into a priority and profitable sector of the economy, providing educational institutions with modern educational and methodological literature and material technical base, attracting qualified pedagogues and specialists to the educational system, the educational process provided with computers and modern digital equipment, objective control and personnel training quality assessment systems were used, psychological and pedagogical research was carried out on the problems of developing and evaluating the intelligence, abilities and human characteristics of specialists, as well as the problem of their professional perception, material and social protection of pedagogues was provided at a high level.

Naturally, the creative use of the experience of industrially and intellectually developed countries will allow the reforming education system to improve the quality of personnel training that can withstand competition at all levels.

To develop the cognitive qualities of a person, to develop the skills to distinguish the main ones, to develop a plan, theses, to make a summary, to observe, to make experiments, as well as to develop the skills of partial research;

development of general labor and polytechnic qualities, creative approaches of students to solving various tasks, development of operational and control qualities, ability to use equipment, planning, evaluation of the results of the performed actions, management and control of one's actions, development of educational work skills, ability to work in the necessary major, reading, writing, measuring, drawing, summarizing, developing observation methods, being able to determine the purpose of observation, knowing its sequence, knowing the composition of observed objects, and developing freedom and independence, cultivating initiative, self-confidence, diligence, overcoming difficulties to achieve the set goal aimed at forming coping skills, being able to manage oneself, and acting independently.

Development of students' intellectual abilities is an important task of the educational system. Here are some ways to help students develop their intellectual abilities:

- **Reading:** Reading stimulates the mind and develops critical thinking. Students should read a variety of books, articles, and academic studies to expand their knowledge and learn new ideas.

- **Problem Solving:** Students can engage in active problem solving and puzzle solving, which helps them develop analytical and logical skills. Addressing problematic alternative thinking can also be helpful.

- **Participation in discussions:** Active participation and exchange of ideas in discussions with classmates and teachers helps to develop the ability to think critically and argue one's point of view.

- **Studying new subjects:** Studying new subjects that are not mandatory according to the main program helps to expand students' knowledge and develop their minds. It also helps to develop flexibility of thinking and ability to adapt to new situations.

- **Participation in scientific projects:** Participation in research projects allows students to apply their knowledge in practice and develop research skills. It also helps develop critical thinking and analytical skills.

- **Developing Problem Solving Skills:** Problem solving skills are an important aspect of intellectual development. Students need to develop problem analysis, alternative solutions and critical thinking skills.

- **Use of technology:** The use of various technologies such as computers and the internet help students to gain a lot of information and improve their intellectual skills.

- **Regular exercises:** Regularly training your intellectual skills, such as solving puzzles and games, will help improve their development.

- **Participation in educational activities:** participation in lectures, seminars and conferences allows students to learn new ideas, develop knowledge and intellectual abilities.

- **Meditation and Exercise:** Meditation and exercise help students improve their concentration and cognitive skills, which in turn help them develop their intellectual skills.

It should be remembered that the development of intellectual abilities is a long-term process that requires constant practice and effort. Students should strive for continuous learning and intellectual development.

Development of students' intellectual abilities is one of the main tasks of the educational process. It should be remembered that each student has his own individual characteristics and these characteristics should be taken into account in the development of intellectual abilities.

Here are some approaches to help students develop their intellectual skills:

- **Active participation in the educational process:** Students should actively participate in classes, ask questions, express their thoughts and opinions. It helps to develop analytical and critical thinking.

- **Development of self-organization and planning skills:** Students need to acquire the skills to effectively plan their time and manage their tasks. This helps them to use their intellectual abilities more effectively.

- **Expanding knowledge in different fields:** Students should study different subjects not only in their major. The more knowledge a student has, the more opportunities there are for new ideas and solutions.

- **Development of critical thinking skills:** Students should develop the ability to analyze information, assess its reliability and make informed decisions based on this information.

- **Participation in brain games and competitions:** Participating in brain games and competitions helps students develop reaction speed, logical thinking and problem solving skills.

- **Reading and self-education:** Reading and self-education are excellent ways to develop intellectual skills. Students should read books, magazines, and articles on various topics in order to expand their worldview and acquire new knowledge.

- **Communicating with interesting people:** Communicating with interesting and intelligent people helps to develop students' intellectual abilities. Often, communication with people with experience and knowledge can inspire a student to new ideas and problems.

In general, the development of students' intellectual abilities requires continuous independent learning, active participation in the educational process, and the pursuit of multifaceted development. In addition, it should not be forgotten that each student has his own individual approach, and therefore an individual and well-thought-out approach to the development of his intellectual abilities is needed.



### **Model of development of students' intellectual abilities**

The model of development of students' intellectual abilities can be based on various approaches and theories of psychology and education. Let me give an example of one of these models:

1. Intellectual stimulation: The model begins by providing students with various opportunities to actively use their intellectual abilities. This may include conducting intellectual development activities, assignments and exercises, as well as carrying out projects and research.

2. Self-management: The model also includes the development of self-management skills in students. This includes the ability to find and analyze information, make decisions, and find new approaches to problem solving.

3. Critical thinking: The model emphasizes the development of critical thinking in students. This includes the ability to analyze information, critically evaluate its reliability and applicability, and form and justify one's own opinions.

4. Creative thinking: The model also envisages the development of creative thinking in students. This includes the ability to encourage experimentation, explore new ideas and solutions, think outside of standard approaches, and find creative solutions to problems.

5. Development of social and communication skills: The model emphasizes the development of social and communication skills in students. It includes the ability to work in a team, communicate effectively, listen and understand other people, cooperate and resolve conflicts.

6. Assessment and feedback: the model provides for regular assessment and feedback on the results of the development of students' intellectual abilities. This helps students to be aware of their progress and problem areas and take this information into account for further development.

Of course, each individual institute or educational institution can adapt this model to its own needs and goals.

Development of students' intellectual abilities is an important direction of the educational process. Students with good intellectual ability do better in schoolwork, achieve academic success, and have more opportunities for personal growth and development.

The model for the development of students' intellectual abilities includes a number of aspects aimed at providing optimal conditions for the development of students' intellectual abilities. Below are some of these aspects:

- Quality education: Teachers must not only have professional knowledge and skills, but also be able to effectively convey information to students. Teaching should be interesting, understandable and interesting for students.

- Intellectual stimulation: students should be given assignments and tasks that require mental strength and analytical thinking. Such tasks help to develop logical thinking, creativity and problem thinking.

- Individual approach: Each student has unique intellectual abilities and needs. Therefore, it is important to take into account their individual

characteristics and provide different opportunities for the development and use of their intellectual abilities.

- Support and feedback: Students need support and feedback from teachers and their peers. It helps to understand their strengths and weaknesses, to find ways of further improvement and development.

- Continuous education: The development of students' intellectual abilities is a process that requires continuous learning and self-improvement. Students must be willing to constantly learn new topics, acquire new skills, and develop their thinking.

In general, the model of development of students' intellectual abilities implies the creation of a stimulating and supportive environment for the development and use of students' intellectual abilities. This includes quality teaching, intellectual stimulation, personal attention, support and feedback, and continuous learning.

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## **INCREASING THE ROLE OF TAXES IN STABILIZING LOCAL BUDGET REVENUES**

*Annotation: this article discusses the essence of increasing the role of taxes in stabilizing local budget revenues, the structure and composition of local budgets in the Republic of Uzbekistan, as well as the composition of income of local budgets, and its sources of income.*

*Keywords: local budget, income, cost, tax and tax types, local government.*

The success of the economic reforms carried out in our country is due to the degree to which the issues of the formation of budget revenues at a priority level are established. The implementation of the effectiveness of economic reforms is also directly related to their financial justification. Currently, the importance of local budgets in ensuring the financial stability of the territories is growing even more, so it is important to strengthen the income of local budgets.

World experience shows that in most countries, the socio-economic development of regions, increasing investment activity, further improving existing infrastructure, creating new jobs, improving the quality of social services to the population are provided through local budgets.

Our president also said in this regard: it is necessary to expand the income base of the local budget at the expense of the proportional development of spheres and territories in the financial sphere. Most importantly, the expansion of local budgets in districts and cities should serve to raise the standard of living and living conditions of the population, stability and tranquility in general.

From the above definitions, which embody the essence of local budgets, it is possible to separately highlight the most important characteristic signs that are characteristic of local budgets.

- The first is that the local budget is aimed at meeting the socio - economic needs of the respective provinces, districts and cities.

- The second is that local budgets must have the amount of sources of income and receipts so that local authorities can carry out the tasks assigned to them.

- The third is the financing of enterprises, organizations and institutions subordinate to local authorities at the expense of local budgets. This refers to the lines of expenditure of funds allocated for specific purposes. It should be noted separately that only if all of the above characteristic signs inherent in local budgets are manifested at the same time, they serve to reveal the meaning and essence of local budgets.

Financing of measures related to important tasks such as ensuring the socio-economic development of territories, improving existing infrastructure, social protection of the population, construction and improvement is carried out mainly at the expense of local budgets. Funds are used from the local budget to the areas of Education, Health, Social Security, Culture and communal services. The main tasks of local budgets are to finance the activities of local authorities and governing bodies, distribute funds to the branches of the local economy, finance and control the activities of enterprises, organizations and institutions under the local budget.

To assess the role of local taxes in the formation of local budget revenues, in our opinion, it is necessary, first of all, to get an idea of the composition of local budget revenues and what they will be classified depending on. In this regard, it should be noted that budget revenues have a complex composition and structural structure, which can be classified according to their sources, socio-economic character, form of ownership, type of taxes and payments, form of falling funds, methods for charging them to the budget, etc.

In ensuring the financial stability of local budgets, it is important, first of all, to develop complex measures for the formation mechanism of local budget revenues, analysis of the composition and share of local budget revenues, raising the economic potential of the regions and its rational use. The main purpose of the study is to give a broader understanding of local budget revenues, to shed light on what its sources consist of and to what extent the role of taxes in it is. The methodological basis of the study lies in the sum of the philosophical, psychological and pedagogical positions of scientists. A theoretical analysis of literature and scientific articles on the issues of research, processing, systematization and presentation of data was carried out mainly.

As part of this paper, the case study was adopted as a qualitative research method for its implementation. In particular, quality interviews based on open-ended questions and providing quality information were used. Open-ended questions provide a number of advantages in the field of research, as they reduce the tension in the conversation, stimulate cooperation and establish communication between the researcher and the interlocutor.

In the Republic of Uzbekistan, local taxes and receipts attached to local budgets are created from income attached to local budgets by the state during the approval of the state budget for the new budget year in ham. Local budgets form an important component in the state budget of the Republic of Uzbekistan and are a financial resource in the activities of local government bodies.

As some common features inherent in local taxes, and in the Republican tax system, the fees can be noted:

- local taxes and fees are used for the needs of the territories of the local state, the jurisdiction of the authorities;

- the main part of them is introduced directly by the local state authorities themselves, while in their legal regulation, certain powers are assigned to local

state authorities, which require that they also be taken into account by Republican legislation, etc.

The following conclusions can be drawn from the study of the importance of taxes in the process of formation of the local budget and its sources of income, income, as well as from the analysis of the composition of the income of the local budget:

- At the initial stage of research on the issue of increasing the role of local taxes in the formation of local budget revenues, first of all, local.

- sources of budget revenues, it is necessary to determine the essence of the formation of budget revenues, and then formulate the principles for the formation of budget revenues. It does not have its own meaning to proceed to the solution of the above issue, without having a clear position in relation to these issues.

- In order for the main part of local budget revenues to be formed using taxes, the following principles should lie on their basis: budgeting taxes does not lead to the end of the sources of the country's national wealth; taxes are divided equally (fairly) between their payers; taxes do not affect the size of the revolving funds of producers; taxes are calculated.

- The principles of the formation of local budget revenues fully apply to all of its revenues, taxes that are a major part of them, and including local taxes.

As soon as we saw in the results of the above analysis that the share of taxes in the structure of the local budget income decreased, we found out that taxes the role of taxes is higher. For this reason, the tax burden should be reduced but it is necessary that it does not have its own impact on income. Great attention should be paid to solidarity.

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## **EFFECT OF PLANTING PERIOD ON GROWTH AND DEVELOPMENT OF LEAF LETTUCE (LACTUCA SATIVA VAR.CRISPA) PLANT**

*Annotation. This scientific article examines the effect of planting times of leaf lettuce (lactuca sativa var.crispa) on the duration of vegetation, plant height, leaf bladder diameter, length, width and leaf bladder mass in the Andijan region.*

*Key words: leafy salad, duration of vegetation, leaf set, leaf set mass.*

**Introduction.** Vegetable growing is one of the oldest and leading industries in world agriculture. A characteristic feature of vegetable crops is that they can be grown on small areas, the growing season is short (in most crops), and their economic efficiency is high. Lettuce is one of our vegetable crops. Currently, different forms of lettuce are grown in different regions of the world, both in open fields and in sheltered areas. However, the selection of varieties of leaf lettuce (lactuca sativa var.crispa) and the development of elements of cultivation technology in the Marquis region of Uzbekistan have not been fully studied [2, 3, 5].

**Research methods.** Research in field and laboratory conditions “Guidelines for the environmental testing of vegetable crops in open ground” (M., VNISSOK), “Guidelines for the selection of green, spicy-flavoring and perennial crops”, “Guidelines for the study of a collection of cabbage and leafy green crops (lettuce, spinach, dill )”, "Methodology of the State variety testing of agricultural crops", "Methodology of experimental work in vegetable and melon growing" [1] was carried out on the basis of such methodological manuals. The statistical analysis of the data was carried out using the Microsoft Excel program based on the dispersion method (B.A. Dospekhov) [4].

**Research results.** Researches were conducted by sowing the seeds of lettuce varieties directly in the ground. February 20 was accepted as a control option for the southern conditions of Andijan region.

The period from sowing to germination in lettuce cultivar Lollo Rossa varied from 6 to 10 days at different planting dates (Table 1). In 2020, the shortest period from planting to germination (7 days) was observed on the planting date of March 10. In 2021, there was no significant difference between this period for all planting periods.

In 2020-2021, it was observed that the period from germination to technical maturity was 46 to 50 days. The shortest period (46) in 2020 and 2021 was recorded at the March 10 planting date, which was 4 days less than the control option, respectively.

**1-jadval**

**Effect of planting dates on growth and development of leaf lettuce, variety Lollo Rossa (2020-2021 year)**

Planting period	Lifetime				Period, days					
	Mass germination		Technical maturity		From planting to seedlings			From germination to technical ripening		
	2020	2021	2020	2021	2020	2021	o'rtacha	2020	2021	average
01.02.	10.02.	09.02.	28.03	29.03	10	9	9±	47	49	48
10.02.	18.02.	19.02.	04. 04.	06. 04.	9	10	9±	46	48	47
20.02. (control)	27.02.	28.02.	16.04	19.04	8	9	8±	49	51	50
01.03.	07.03.	08.03.	25.04	24.04	7	8	7±	49	47	48
10.03.	06.03.	05.03.	21.04	23.04	7	6	6±	45	47	46

This was due to the acceleration of growth and the rapid transition to the reproductive stage of development, which was observed due to the fact that the air temperature was higher than in other planting periods.

With the studied planting dates in 2020, the period from planting to seedlings (almost the same as in 2007) and the period from seedlings to technical ripening (up to 2± days) had a tendency to increase.

The shortest period from sowing to germination (6 days) was observed during planting on March 10, and the period from germination to maturity (45 days) was also observed in this variant.

**Table-2**

**Morphological indicators of lettuce plants, variety Lollo Rossa (2020-2021)**

Planting period	Plant height, cm	The diameter of the leaf set, cm	Leaf			Mass of leaf bundle, kg		Productivity, %
			number, piece	Length, cm	Width, cm	On a plant	A penny in meters	
01.02.	16	14	12	10	7	0,185	1,85	96
10.02.	18	16	12	11	8	0,191	1,91	94
20.02. (control)	19	17	11	10	8	0,198	1,98	87
01.03.	20	18	10	14	9	0,220	2,20	80
10.03.	21	19	12	13	10	0,217	2,17	77
Ekfo5	-	-	-	-	-	-	0,8	-
S <sup>x</sup>	-	-	-	-	-	-	0,5	-

Based on the data of Table 2, the highest indicators of morphological characters were observed in variants with planting dates - March 1 and 10, compared to the control planting date - March 20. During these planting periods, plant height was 20-21 cm, rosette diameter was 18-19 cm, number of leaves was 10-12 and rosette weight was 0.019-0.022 kg more compared to the control planting period (0.198 kg). we can see.

In 2020 and 2021, the highest yield of leaves was observed in the variant planted on March 1 and was 2.20 kg/m<sup>2</sup>, which was 0.22 kg/m<sup>2</sup> more than the planting period in the control period, but the yield of the product was 7% less. It's done.

Average daily temperatures during the study years were higher than the observed multiyear temperatures, which led to faster tillering of the lettuce plant, resulting in higher yields of the lettuce plants planted on March 1 and 10 (80-77%) was significantly lower than other options.

When analyzing the effect of planting dates on the yield and quality of lettuce, it was found that plants have high biochemical indicators on the planting dates of February 1 and 10. Also, 96-94% of the harvest obtained from these options was suitable for consumption, and this indicator was 7-9% higher than the control option.

For many varieties of lettuce, the upper temperature limit during seed germination varies from +20°C to +25°C. At high temperatures, the seeds go into a state of forced dormancy, they can germinate later under the influence of low temperatures.

As a result of the study of the effect of different planting dates on the yield and quality of lettuce heads, it can be concluded that the yield obtained from the varieties planted in the planting dates of March 1 and 10 was higher than the other varieties, but it was observed that the yield was very low.. The harvest obtained from February 1 and 10 planting dates had high biochemical indicators and marketability. Based on the above indicators, it was determined that February 1 and 10 are the most favorable planting dates for the cultivation of leaf lettuce in the conditions of the Fergana Valley.

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## EFFICACY OF BIOSLIP BW MICROBIOLOGICAL PREPARATION AGAINST HELIOTHIS ARMIGERA Hb IN BEANS

*Abstract.* This article reflects the results of scientific research conducted to study the effectiveness of the Bioslip BW drug, which was used in different doses against cotton bollworm in beans.

*Key words.* biologically clean, microbiological preparation, bean, *Heliothis armigera* Hb, biological efficiency.

**Introduction.** Although the chemical method is widely used in the world experience in the fight against pest insects and other arthropods, it was found that such insect-acaricides do not have sufficiently selective and effective properties, that is, pesticides kill biological agents, primarily pests. destroys entomophagous insects, insectivorous birds, etc., which are natural predators that prevent their mass development

Increasing the productivity of cultivated crops and raising their quality is one of the main factors in the development of agricultural culture. In order to solve these problems, science and production experience require the development of ways to increase the efficiency of protection of plants from harmful insects, less pollution of the environment, restore the biological and ecological balance in nature, and their wide implementation in farms.

Protecting the health of the population and protecting the environment from the harmful effects of pesticides is one of the most urgent tasks today (SH.T. Khojaev 2018). Currently, biological methods are widely used in the fight against agricultural pests, because this method is intended to protect human health and the environment, and various combinations of microbial preparations and harmful insects are used. (G.A. Turdiyeva, H. Agzamova 2020)

In the protection of agricultural crops from pests, the use of microbial drugs that cause diseases in insects is a part of biological control. Microbiological preparations are biological means used in the fight against agricultural pests and protection of plants from diseases. These types of preparations contain fungi, bacteria or viruses as active substances. (Sh.T.Khojaev 2004)

In recent years, fungal preparations with microbial insecticide properties have been widely used in the countries of the world.

Boveria (Beauveria) series. Mycelium is white or pale. consists of septate and branched hyphae, conidiophores (phialides) are bottle-shaped. a few fuse with their bases to form a star. Conidia are unicellular, spherical or egg-shaped. colorless, sometimes, when many spores are together, it has a light color. The name of the disease caused by boveria in insects is derived from the French phrase

"candied fruit" and is called muscardina. *Boveria bassiana* (*B. bassiana*) is the most common among the representatives of the category. This fungus protects more than 170 species of the families of ergots, semi-rigids, hardy-wings, nymphs and hymenoptera, as well as some mites, including the important pests:

damages the long nose, apple moth, apple fruit borer, corn butterfly, autumn moth and others. The parasite infects insect larvae, pupae, and adult stages. The body of the dead insect shrinks, twists, and is covered with white, flour-like feathers formed from the fungus body and conidia. Mycelium and spores are preserved not only in the bodies of infected insects, but also in plant residues, and are spread by insects that are resistant to boveria. The technology of preparation of boverin drug was developed on the basis of this causative agent. Another practically important species belonging to this group is the thin boveria (*B. tenella*). Unlike the previous species, its conidia are elongated and have a single mycelium so much fluff.

Microbiological preparations differ from chemical preparations in every way and have many advantages. These drugs are distinguished by their ability to harm warm-blooded animals, beneficial insects found in nature, spread disease among pests, affect future generations of insects, and have other properties.

Therefore, biopreparations are not only biologically effective in the fight against pests in agriculture, but also have ecological and social effectiveness, which are the future of the microbiological method.

It is important to develop safe pesticides to protect the food bean crop from pests. (G.A. Turdiyeva 2023)

In 2022-2023, in order to determine the biological effectiveness of the BIOSLIP BW biopreparation against the first generation of the cotton bollworm, field experiments were conducted in 4 variants and 4 times at the scientific experimental station of "Vegetables, field crops and potato growing ITI Andijan", Andijan district, Andijan region. The experiment was carried out during the period of mass development of the 1st generation of cotton tunlam in the "Red bean" variety.

**Subject to placement of experience options:**

1. Control - the pest was not treated with the drug
2. As a template Avaunt15% e.c. 0.45 liters of the drug per hectare were processed.
3. BIOSLIP BW preparation was processed at the rate of 2.0 l/ha per hectare.
4. BIOSLIP BW was treated at the rate of 2.5 l/ha per hectare.

The average air temperature on the days of the field experiment was 25-27°C, the average relative humidity was 45-52%.

In May-June 2022, the weather created favorable conditions for the development of cotton cultivation in most regions. On May 12, the cotton tunlam butterfly started laying eggs in the experimental farm fields. Mass laying began on May 18-19. On May 25, calculations were made and in the evening, in the



presence of small young worms, 300 liters of working liquid per hectare were applied to the bean crop with the help of a hand sprayer.

As can be seen from the data of Table 1, in experimental variants, 7.3-10.6 I-II young worms per 100 bean plants; middle-aged 4.6-3.3 units; and older youth made 2.1-2.4 units.

It is known from the biological condition of the cotton plant that the main part of young worms feeds and develops on the newly grown combs and pods of the plant. Therefore, the use of biological preparations for young children is highly effective (Sh.T. Khojaev 2004).

**Table 1**

**Biological effectiveness of the biological preparation BIOSLIP BW against *Heliothis armigera* Hb in the bean crop (Field experiment, Andijan region, Vegetables, poly crops and potato growing ITI in bean fields, May-June, 2021-2022)**

№	Options	Drug consumption rate liter, kg/ha	The average amount of cotton fiber in 100 bean plants, pcs				Total (piece)
			Before spraying the medicine				
			Egg	Worm			
				Including			
I- II	III- IV	V- VI					
1.	Control (idle)	-	2,6	7.6	4.3	1.4	13.3
2.	Avaunt15% (template) em.k.	0,45 l/ga	1,3	10.6	4.3	2.7	17.6
3.	<i>BIOSLIP BW</i>	2l/ga	3,0	7.3	4.6	2.1	14.0
4.	<i>BIOSLIP BW</i>	2,5l/ga	2.3	10.6	3.3	2,4	16.3

**Table 2**

**Biological effectiveness of BIOSLIP BW biologic preparation against *Heliothis armigera* Hb (goza tunlami) in bean crop (Field experiment, Andijan region, vegetable, field crops and potato growing ITI Andijan scientific experimental station in bean fields, May-June, 2018-2019)**

№	Options	Drug consumption rate liter, kg/ha	The average amount of cotton fiber in 100 bean plants, pcs				Efficacy is calculated as a percentage of control		
			Number of worms in days after spraying				3	7	14
			The number of worms before processing	3	7	14			
1.	Control (idle)	-	13,3	15,0	18,3	17,0	-	-	-
2.	Avaunt15% (andoza)em.k.	0,45 l/ga	17,6	10,0	4,3	2,0	49,6	82,2	91,1
3.	<i>BIOSLIP BW</i>	2 l/ga	14,0	10,3	9,3	6,3	34,8	51,7	64,8

4.	<i>BIOSLIP BW</i>	2,5 l/ga	16,3	10,0	7,0	3,0	45,6	68,7	85,5
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The results obtained from the fields of the scientific experimental station of the Andijan ITI of vegetable crops and potato production showed that the biological preparation BIOSLIP BW used against the 1st generation of the cotton bollworm in the bean crop was applied in the amount of 2-2.5 kg per hectare, and the working liquid was calculated at 300 liters per hectare. 34.8-45.6% on the 3rd day of calculation in cultivated areas; 51.7-68.7% on the 7th day; On the 14th day, it was 64.8-85.5% biological efficiency. The chemical preparation used as a template is Avaunt 15% em.c. 49.6 on days 3, 7, 14 when treated at the rate of 0.45 liters per hectare; 82.2; 91.1% effective. In the control variant, the number of worms increased from 13.3 to 18.3.

In the conducted scientific research, it was found that in the fight against *Heliothis armigera* Hb in the bean crop, biopreparation BIOSLIP BW not only reduces the number of worms, but also protects the bean crop from pests, maintains the balance of the ecological situation in nature, and ensures the cleanliness of the environment.

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## **THE DIFFERENCE BETWEEN WORD FORMATION AND ATTITUDE-MOTIVATION IN UZBEK LANGUAGE**

*Abstract. Word formation is one of the basic concepts of word formation. The process of similarity is a natural phenomenon in a language, which is usually phonetic and morphological.*

*Key words: affix, phrase, composition, similarity, word formation, attitude-motivation.*

Language: English Common sense that distinguishes motivational words from a particular type of word from their torus motive, - these are the meaning words of words of this type. For example: words such as longevity, abundance, value - which are understood from the basics in words made by joint affixes - the meaning of the event is expressed by the word formant. So, word formation means a word formation form, which also depends on the wording of the actual word formation

DISCUSSION. If we compare the meanings of nouns with adjectives formed by the inclusion of nouns, such as desperate, unworthy and insensitive, it becomes clear that each of them represents a certain type of word formation. One of these issues is the concept of word formation. In recent years, understanding of the meaning of word formation has expanded in connection with the elopement of science with disagreements on certain issues. Opinions in the field of determining the meaning of word formation can be grouped as follows: the value of word formation is dialectically associated with such types of earnings as morpheme-morphological, lexical, phraseological, syntactic, homologically connotative.

When calling affixes, the word morphology assumes that the affix is a morpheme, and the morpheme is a morphological unit. From this point of view, the attachment method is called the morphological method. However, not all affixes and related phenomena are subject to morphological research. Vocabulary affixes and related phenomena are studied in a special section of linguistics called "word formation". Therefore, linking the affixes of words with morphology is not enough to justify the method of morphology of words.

Calling this method the attachment method, it is fully consistent with the real nature of the event. The composition method is also called the morphological method, which means that the combined words formed by this method are formed

by adding more than one corpus, and that the core is a morphological unit. As you know, phrases usually mean occurring words. Compound word means a word consisting of more than one component, which can represent an independent lexical meaning. However, these components that make up the combined word do not always coincide with the core, that is, the morpheme.

These components may look like tokens or even word forms. Examples: master-master (master + glacier) and others. Such joint words themselves are not morphological words. The combined words having the same root morpheme contain a significant amount of the Uzbek language: roses, belts, bouquets, glasses, etc. But these words cannot be said by morphological methods. Because the core is not a unit (morphological unit), which is the object of study of morphology. Thus, when adding more than one independent lexical unit, the word-formation method should be called compositional. In the case of A. Gulyamov, the designation and naming methods are somewhat different. The author writes: "Conversation 1. Compilation of words by affix - affixation, compilation by word formation, transformation of a word from one lexicon-grammatical category to another category. 2. Lexical-semantic word formation. 3. Creating phonetic words. But none of these three words have grammar. This is what was said when it came to membership and composition. The third case is not a phenomenon in the Uzbek language, that is, there is no way to translate words from one category to another. A lexical or semantic word may relate to its category or relate to another category. Word formation is one of the basic concepts of word formation. Therefore, the meaning of word formation differs from other meanings by its distinctive features. It turns out that word formation is a separate layer that has its own unity and understanding.

The basic unit of the word-building industry is the word word. The composition of the wording should be checked synchronously and diagonally. To do this, you need to learn the basics of these areas. So, first of all, it is necessary to determine the object, the main unit and the concepts of the word-building industry. Secondly, it is necessary to distinguish between the main types of word formation - other semantic types of word formation from morph-morphological meanings, vocabulary, phraseology, syntactic meanings and connotative meanings. A lot of new research can still be done about the basic concepts and concepts of word formation.

The study of processes such as the formation of words and forms in a language, the relationship of these processes has a long history. Ancient grammars argued about the laws of linguistic phenomena and laid the foundations of analogues and anomalies. Analysts have introduced the concept of paradigm into science, creating doctrines about the correctness and consistency of forms. Anthropologists noted that cases of abnormality are quite large, and they give examples of the formation and spirituality of these cases. For the first time in the history of science, the Russian-Polish scientist I. A. Baudouin de Courted in an article published in 1902, discovered the legality of changing the foundations or

shortening in favor of buttons. Accordingly, some of the vowels belonging to the horse breeders were later included in the affix and, by analogy, were actively involved in new horse bases. In European linguistics, especially in Turkology.

In the work of scholars such as Greenberg, E.A. Zemskaia, A.G. Gulyamov, Sh. U. Dare the concept of "Greenberg Square" came into science. The following are some similarities based on some theoretical considerations. For a new word to appear, a word-formation model must exist that covers at least two compositions. Various lifestyle changes can cause this template to be activated or not used. The studies of F. Abdullayev and A. Berdialiyev show that the word producer. Joint kinship is rarely found in the old Uzbek language, and it was noted that the role of such an industry in this area has intensified since the 30s and 40s of the 20th century. This was due to changes in economic and cultural life, diversification of production sectors: alfalfa, vegetable growing, viticulture. The purpose of this argument is to illustrate how the meaning of suffixes, **-li** and suffixes differed in the history of the language: **-li** (connection), which is often similar (phonetic variants); According to F. Abdullayev, the development of the suffix form with **(-lik)** was influenced by the periodical press and the brotherly Azerbaijani and Tatar languages. The fact that this supplement is not fully absorbed can also be used to add winter clothes and summer fruits: an annual plan, an hourly break, a blanket. Differences in use and supplementation still persist.

Compare: when it comes to work, wealth is the path to life. (Beauty was supposed to be in really beautiful shape. Nevertheless, initially it was not clearly distinguished, however later additions expanded the area of their complementarity by analogy and took the form of independent word formation: family-family, family; neighborhood - neighborhood, Neighborhood; low minority; the plural is the majority. Consequently, the language patterns used today are the basis of one or two aliases, which have since expanded their scope, creating new fakes. S. Rakhmatullaev words, but lately it seemed to sprout from the triangle of nouns and adjectives, such as "from system to lexeme" after the development phase, directly to the creation of the connection based on the scheme was created and "bridegroom grows from, but not now appearing calves, chickens and mold.

A. G. Gulyamov thinks about regular and irregular additives, and regular additions (for example, - etc.) have a certain state of existence, stability and a specific model so that they can be read outside concrete joints. It stands for (person means), which means that they have commonsense, that they are in the finished part and can be remembered and added to the database if necessary. "As you can see in our minds, there are areas of meaning that belong to certain patterns, and the pressure force in this area creates new fakes. Compare: who guarantees that those who attend the banquet in Cork will not invent new habits such as rainbow, chamois, rhubarb, soullessness? (S. Ahmad).

**CONCLUSION:** The process of similarity is a natural phenomenon in language, which is usually phonetic and morphological: when one phonetically

splits into two or more morphemes, one form morphologically merges with the other. In recent years, literary processes have led to the emergence of tools such as campsites, camps, stadiums, universities, universities.

Although some of these artifacts do not meet literary standards, it is necessary to study them as a product of certain language processes. Combining in the same way, it is important to study this phenomenon, which is part of the general (general) laws of the language, as well as the system of language education and word formation.

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## **MARKERS PREDICTING PERMANENT FORM OF ATRIAL FIBRILLATION IN PATIENTS WITH CARDIORENAL SYNDROME**

*Abstract. Introduction: the high prevalence of cardiorenal syndrome (CRS) among patients with chronic heart failure makes it urgent to study the pathogenetic mechanisms that contribute to its development and progression. Based on the importance of the role of fibrosis and cardiac remodeling in the development of arrhythmogenic readiness of the myocardium, the predictive value of fibrosis markers can be assumed in relation to the development of atrial fibrillation (AF) against the background of existing CRS.*

*Purpose of the study: to study the advantages and disadvantages of fibrosis markers - tissue inhibitor of matrix metalloproteinases type 1 (tissue inhibitor of matrix metalloproteinases type 1, TIMP-1) and stimulating growth factor expressed by gene 2 (soluble ST2, sST2) as predictors of the development of permanent AF in patients with cattle.*

*Material and methods: 155 patients with verified CRS were examined. A permanent form of AF was recorded in 79 (50.8%) patients, and sinus rhythm was recorded in 76 (49.2%) patients. To assess the activity of fibrosis, the concentration of TIMP-1 and sST2 in the blood serum was determined.*

*Study results: the content of TIMP-1 was statistically significantly higher in patients with permanent AF (107.5 [102.0; 111.0] ng/ml,  $p = 0.003$ ), the level of sST2 was also statistically significantly higher in the group of patients with permanent form of AF (48.0 [54.0; 135.0] ng/ml,  $p = 0.001$ ). ROC analysis for sST2 revealed a cut-off point of 56 ng/ml (AUC=0.991,  $p < 0.001$ ) with a sensitivity of 98.2% and specificity of 100.0%; for TIMP-1, the cut-off point was 105 ng/ml (AUC=0.907,  $p < 0.001$ ) with a sensitivity of 78.2% and specificity of 83.5%.*

*Conclusion: sST2 can be recommended as markers of fibrosis that have predictive value in relation to the permanent form of AF against the background of cattle, an increase in the content of which makes it possible to predict the development of a permanent form of AF, being a more reliable predictor than NT-proBNP. TIMP-1 cannot serve as a marker of choice to determine the risk of permanent AF in patients with CRS.*

*Key words: permanent form of atrial fibrillation, cardiorenal syndrome, fibrosis, sST2, TIMP-1.*

### **Introduction**

Cardiorenal syndrome (CRS) is a complex multisystem dysfunction in which neurohumoral mechanisms, in particular excessive activation of the renin-

angiotensin-aldosterone system, the expression of proinflammatory mediators and markers of oxidative stress, leading separately to cardiovascular failure and impaired renal filtration, initiate a cascade of successive mutual negative influences leading to the formation of chronic heart failure (CHF) and chronic kidney disease (CKD) [1]. The high—up to 60%—prevalence of CRS among patients with CHF determines the undoubted relevance of studying the pathogenetic mechanisms that contribute to its development and progression [2].

Atrial fibrillation (AF) occupies a special place in the formation of the cardiorenal continuum, creating a complex set of electrophysiological and morphological prerequisites for the development of CRS [3]. The results of the GARFIELD-AF registry, which included more than 33 thousand observations, showed that approximately 30% of patients with newly diagnosed AF were diagnosed with CKD [4]. The severity of CKD in patients included in the registry correlated with the frequency and severity of concomitant cardiovascular diseases and, to the greatest extent, was associated with CHF. Despite the obvious relevance of the problem of the combination of CRS with AF, there is currently not much data on the mutual influence of AF and combined damage to the heart and kidneys. In general, most researchers agree that AF negatively affects the prognosis of patients with CRS, which forces us to look for the mechanisms of this effect and markers that can adequately assess them. Multicomponent comorbidity, in particular the combination of CHF, CKD and AF, makes significant adjustments to the use of generally accepted markers for assessing the severity of each individual condition, such as glomerular filtration rate (GFR), the content of the N-terminal fragment of brain natriuretic peptide (NT-proBNP), etc. [5, 6]. In the development of arrhythmogenic readiness of the myocardium, the role of the mechanisms of collagenolysis, the formation of fibrosis and remodeling is important cardiovascular circuit, therefore, one can assume the prognostic value of fibrosis markers in relation to the development of AF against the background of existing CRS [7].

Modern concepts allow us to distinguish two main types of myocardial fibrosis: “reactive” and “replacement” [3]. Reactive fibrosis is a change in the extracellular matrix and perivascular spaces, leading to the formation of a collagen “wrap” around myocardial syncytia. These changes do not lead to a significant change in their contractility or relaxation ability, but may cause electrophysiological changes (eg, conduction acceleration) that cause or maintain proarrhythmogenic activity. Replacement, or restorative, fibrosis is the formation of fibrotic foci at the site of dead myocardial cells. In this case, the proarrhythmogenic activity of fibrosis is associated with massive apoptosis myocardiocytes, as well as with possible interruption of the conduction pathways by formed fibrous cords. The described mechanisms allow, among other things, to explain the development of a permanent form of AF and unsuccessful attempts to restore sinus rhythm in conditions of severe fibrotic disease. remodeling \_

The family of metalloproteinases and their inhibitors appears to be a reliable tool for assessing the activity of fibrosis in the myocardium, including in patients with AF. It is noted that increased activity of metalloproteinases contributes to the development of arrhythmogenic fibrosis and remodeling of the atrial myocardium, creating a substrate for the development of AF, and an increase in the concentration of tissue inhibitor of matrix metalloproteinases type 1 (TIMP-1) is associated with an increased risk of recurrent AF after electrical cardioversion [5]. A promising marker of myocardial fibrosis, including arrhythmogenic atrial remodeling, soluble stimulating growth factor expressed by gene 2 (soluble ST2, sST2) also serves [7]. As a member of the interleukin 1 family, sST2 is overexpressed by endothelial cells in response to myocardial stress and pressure overload and is currently considered a promising marker of the presence and severity of CHF. In 2017 American college of Cardiology (ACC) was the first to include sST2 in recommendations for the treatment of CHF as an auxiliary marker proposed for use in cases where there is an excessive third-party effect on the concentration of NT-proBNP. The above provisions determined the choice of TIMP-1 and sST2 as candidates—predictors of the development of permanent AF in cattle patients.

**Purpose of the study:** to study the advantages and disadvantages of fibrosis markers TIMP-1 and sST2 as predictors of the development of permanent AF in patients with cattle.

#### *Material and methods*

The cross-sectional cohort study included 155 patients with verified CRS. Permanent AF was diagnosed in 79 (50.9%) patients, and sinus rhythm was recorded in 76 (49.1%). The diagnosis of CRS was established on the basis of verification of CHF in accordance with the clinical recommendations of the Russian Society of Cardiology (RSC): clinical symptoms and/or signs, increased NT-proBNP levels >365 pg /ml, left ventricular (LV) systolic dysfunction and/or the presence of at least one of the additional criteria - structural changes in the heart or LV diastolic dysfunction; and also based on verification of CKD in accordance with KDIGO criteria ( Kidney Disease: Improving Global ) Outcomes, 2012) [16]: GFR <60 ml/min/1.73 m<sup>2</sup> for >3 months. AF was diagnosed in accordance with the clinical guidelines of the RSC. AF when recorded on a standard 12-lead electrocardiogram (ECG) or throughout the entire recording of one lead during long-term ECG monitoring.

For statistical processing of the obtained data, the programs Statistica 11.0 (StatSoft, USA) and MedCalc 11.5.0 (MedCalc Software, Belgium). To check the law of normality of distribution of characteristics in comparison groups, the Shapiro- Wilk and Kolmogorov-Smirnov tests were used. For quantitative characteristics in the compared groups, the median, 25th and 75th percentiles (1st and 3rd quartiles) were calculated (Me [Q1; Q3]). For qualitative nominal characteristics, the absolute (number of subjects examined) and relative (%) frequency of manifestation of the characteristic were indicated. The prognostic

significance of candidate predictors of AF development was assessed using logistic regression analysis. To assess the chances of developing a clinical outcome in the main group relative to the chances of its development in the control group, we used the method of determining the odds ratio (OR, 95% CI). To assess the quality of logistic regression, ROC was used (Receiver Operating Characteristic) - analysis with calculation of a quantitative indicator of the area under the curve (AUC, Area Under Curve), which was considered a reliable indicator for values  $>0.5$  at  $p < 0.05$ . For statistically significant prognostic indicators, a cutoff threshold was obtained, and its sensitivity and specificity were assessed. The critical value of the level of statistical significance when testing null hypotheses was taken to be  $p < 0.05$ .

### **Research results**

The study included 62 (40%) men and 93 (60%) women. The average age of patients participating in the study was 65.0 [58.0; 76.0] years. The average duration of CHF was 12.5 [5.5; 20.0] years, the functional class of CHF at the time of inclusion in the study was equal to 3.0 [2.0; 3.0]. In 73 (44.4%) patients, LV functional output (LVEF) was within the normal range; a moderate decrease in LVEF to 40–49% was observed in 92 (55.6%) patients. The criteria for LV diastolic dysfunction were verified in 122 (73.7%) patients. The average NT-proBNP level was 588.5 [220.5; 1210.0] pg/ml.

Patients were divided into groups. The 1st group included 83 (50.5%) patients with BRS in combination with a permanent form of AF, the 2nd group included 82 (49.5%) patients with BRS accompanied by sinus rhythm.

The data obtained demonstrate signs of more pronounced fibrosis, assessed by the level of TIMP-1, which was higher in patients of group 1 (83 [102.0; 111.0] ng/ml versus 82 [98.0; 104.0] ng/ml,  $p = 0.003$ ), and in terms of sST2 level, which also turned out to be higher in the group of patients with permanent AF (64.0 [54.0; 135.0] ng/ml versus 44.0 [36.0; 61.0] ng/ml,  $p = 0.001$ ). It was found that the proportions of patients with elevated sST2 levels ( $>34.3$  ng/ml) did not differ statistically significantly in groups with different basic heart rhythms.

When constructing the ROC curve for all sST2 values, a cut-off point of 56 ng/ml was obtained (AUC=0.991,  $p < 0.001$ ). Thus, the sST2 level  $>56$  ng/ml can serve as a predictor of the development of permanent AF in patients with BRS with a sensitivity of 98.2% and a specificity of 100.0% ( $p < 0.05$ ).

ROC curve for all TIMP-1 values with a cut-off point of 105 ng/ml (AUC=0.907,  $p < 0.001$ ), which allows predicting the development of permanent AF in patients with CRS with a sensitivity of 76.3% and a specificity of 84.5% ( $p < 0.05$ ). Thus, fibrosis markers sST2 and TIMP-1 have demonstrated value as predictors of the development of permanent AF in patients with CRS.

### **Discussion**

The role of fibrosis as one of the key components of myocardial remodeling, contributing to the development of AF, has been determined, however, ideas about the specific mechanisms of fibrosis development, ways of

implementing neurohumoral dysregulation, leading to significant structural and functional restructuring of the myocardium, including the atria, remain incomplete, based on experiment, requiring further analysis regarding the possibility of further clinical implementation. In addition to the markers presented in this work, various authors also propose galectin 3, tissue growth factor  $\beta$ 1, fibronectin and a number of others, however, most studies evaluating these markers are experimental in nature, and their use in real clinical practice is debatable. TIMP-1 and sST2 have been introduced into clinical practice and are recommended for use in certain clinical situations. According to W. Sun et al., paroxysmal AF is associated with increased levels of sST2 and TIMP-1, but their predictive value for AF is not as great as, for example, left atrium size, age, or NT-proBNP concentration. G. Vergaro et al. analyzed the predictive value of sST2 in comparison with NT-proBNP in relation to the development of cardiovascular events in patients with CHF and demonstrated a significant increase in the incidence of adverse outcomes in patients with high serum sST2 concentrations with normal NT-proBNP levels. In our study, sST2 appears to be a more balanced and sensitive predictor of permanent AF than NT-proBNP. In cattle conditions, when impaired renal function contributes to impaired NT-proBNP metabolism, the sST2 marker in question naturally demonstrates great value as a predictor of AF. Most of the data presented on the role of sST2 in the development and course of AF concerns non-permanent forms. It has been shown that an increased concentration of sST2 is a precursor of new-onset AF in patients with coronary heart disease. There is also evidence for the role of sST2 in assessing the risk of AF recurrence after electrical cardioversion. There is insufficient data on the clinical value of sST2 in predicting the development and course of permanent AF, but the results of our study indicate the promise of using this marker. In the present study, the value of TIMP-1 as a predictor of AF was lower than that of sST2. However, convincing evidence that TIMP-1 serves as a reliable marker of AF recurrence after cardioversion makes its use more justified in patients with paroxysmal or persistent AF. In cattle conditions, an increase in TIMP-1 concentration is associated to a greater extent with symptoms of congestion and a decrease in renal clearance than with frequency-dependent restructuring of the heart and blood vessels. Given these data, TIMP-1 appears to be a marker of fibrosis more associated with BRS than with AF.

### **Conclusion**

The study of fibrosis markers in patients with CRS in combination with AF is of great clinical and prognostic significance. Fibrosis is an important part of the pathogenesis of AF, and a multimorbid background in the form of cattle creates additional preconditions for arrhythmogenic fibrosis and remodeling of the myocardium. As markers of fibrosis that have predictive value in relation to the permanent form of AF against the background of cattle, we can recommend sST2, which, at a level of  $>56$  ng /ml, allows us to predict the development of a permanent form of AF with a sensitivity of 96.3% and a specificity of 100.0% ( p



<0.05), being a more reliable predictor than NT-proBNP. TIMP-1 cannot serve as a marker of choice for determining the risk of permanent AF in patients with cattle, since it is more associated with the development of fibrosis caused by congestion than caused by rhythm disturbances. The results obtained in this work can be applied in clinical practice, justifying the study of sST2 levels in the examination of patients with CRS to determine the risk of developing permanent AF.

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## **TEACHING THE SCIENCE OF SPORTS PHYSIOLOGY BASED ON THE APPLICATION OF EDUCATIONAL TECHNOLOGIES**

*Annotation. The purpose of the article is to clarify the practical and technological aspects of teaching based on the use of educational technologies, including the pedagogical and psychological peculiarities of the organization of the teaching process based on the use of educational technologies; interactive educational technologies: application and essence; Innovations and advanced foreign experiences in teaching the science of "Sports Physiology"; design and planning of the teaching process; Information on ways to use interactive educational technologies in teaching the subject "Sports Physiology" is given.*

*Key words: Educational technology, interactive education, innovation, experience, method, teaching, critical thinking, communicative skills, education.*

Provides for a radical reform of the structure and content of the system of continuing education, relying on the achievements of modern science and social experience. To do this, first of all, it is necessary to provide in practice the educational process in institutions of all forms of the educational system with a new and modern methodology based on advanced, scientific and methodological aspects. The purpose, objectives, content, methodical requirements of education and education for the younger generation, the effective use of achievements in science, technology and advanced technology are considered to be pressing problems facing today's educational system.

In order to improve the effectiveness of education, to ensure that the individual is in the center of education and that young people receive independent knowledge, educational institutions need teachers who, in addition to a strong acquisition of knowledge in their field, know modern pedagogical technologies and interactive methods, know the rules for their use in the organization of educational and educational.

Interactive technologies of education make it possible to use and activate the enormous educational power of students, to introduce competitive elements into the educational process: the mental strength of the group of learners is more than the sum of the strength of its members, that is, the result of the group is always more than the sum of individual results.

Interactive technologies of education provide a real opportunity to create an atmosphere of cooperation between the teacher and the student in the study room. Armed with technology based on interactive techniques, the teacher learns to work in a creative co-authoring routine, prepare for fundamental changes and

prepare for responsible decisions. Interactive methods of education to the educator:

- \* ensuring students' interest in the subject of training;
- \* achieve more thorough assimilation of educational material;
- \* development of critical thinking;
- \* formation of communicative skills;
- \* to create conditions for the involvement of all learners in active educational activities;
- provides optimal psychological microclimate and other capabilities in the training group.

Interactive methods of Education fall into the ranks of innovations (innovations) in education. K. Angelevski believes that all nations are seeking to innovate as much as possible in education. Today's news requires an organized, planned, public approach to them. Innovations are long-term investments for the future. To arouse interest in innovation, to educate a person who is eager to create, education itself should be rich in innovations, in which the spirit and atmosphere of the creator should prevail.

It is worth noting separately that many of the main methodological innovations are associated with the application of interactive methods of Education. Interactive and interactive words are synonymous, with the word interactive being derived from the English words inter - joint and ast - move. Interactivity means moving together or having a conversation, something in dialogue mode—for example, a computer or someone with a person. It follows from this that interactive education is, first of all, dialogic education, during which teacher and student, student and computer interaction is carried out.

It is known that active and group methods of educational work were used even earlier in traditional pedagogy, but at the end of the 20th - beginning of the 21st century, their large – scale application was strongly motivated by the development of a new direction in pedagogy-critical thinking skills. Therefore, in this educational and methodological manual, the implementation of such tasks as the development of the didactic supply of training based on the application of educational technologies, the content, capabilities and didactic conditions for teaching the subject of Sports Physiology on the basis of the application of educational technologies; the study and analysis of philosophical, sociological, psychological and pedagogical literature on the topic; advanced experiments accumulated in educational institutions on the problem were studied and a modernized didactic supply of teaching was developed.

The application of educational technologies to the teaching process it is necessary for the teacher to perfectly design the training, plan the project implementation work, taking into account the peculiarities of this approach.

The application of educational technologies in the teaching of the subject of sports physiology is understood as the dual training of a teacher, which is inextricably linked with each other, that is, the first is the design taking into

account the technology requirements of each training, that is, the preparation of a technological model of training, the preparation of a complex of didactic materials.

So, in order to use educational technology in training, it is necessary to develop a technological model based on the design of the course of training based on the specifics of the content of the topic being studied, the continuity of teaching tools and methods based on it, the requirements of educational technology, planning, and in this training, it is understood to draw up a technological map, which combines the pedagogical activity of the teacher and the peculiarities of the activities carried out according to the stages of training of the student's educational and cognitive activity.

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## **EFFECTIVENESS OF PROVIDING KNOWLEDGE TO STUDENTS BASED ON THE APPLICATION OF THE COACHING METHODOLOGY IN HIGHER EDUCATION**

*Annotation. This article examines the effectiveness of teaching students based on the application of coaching methodology in higher education. Coaching is a method that helps students identify their potential, set goals, and set a course for achieving them. In this article, the benefits and effectiveness of the coaching methodology for students are shown in terms of mastery, communication and guidance, self-monitoring and other important aspects. The article also provides case studies and extensive research to explain how the use of coaching in higher education can be effective in imparting knowledge to students.*

*Key words: higher education, coaching methodology, students, imparting knowledge, efficiency, mastering, communication, manual, self-monitoring.*

In an ideologically and practically developed society, the important importance of learning and mastering knowledge is prominent. Training centers and universities have provided students with great opportunities to develop scientific knowledge, practical skills and human abilities. Here, the application of the coaching methodology in higher education is considered as one of the major ways to help improve the effectiveness of providing students with knowledge.

Coaching, for several years, was popularized among teachers, mentors, and students and showed its effectiveness. This technique helps students to identify, assimilate, assimilate, and control their development. The coaching methodology serves as an important tool for students to guide themselves, solve their problems, and set a course of self-appropriation.

In the first place, the coaching methodology helps students identify their goals. Students create guides and tasks so that they can master themselves and understand what pages they want to reach. This helps students fix themselves to determine their future road traffic.

In the second place, mastering is another important part of the coaching methodology. Students make a difference in self-appropriation, setting themselves steps, and determining road traffic to guide themselves. This method helps students to determine the steps they need to take to become self-absorbed and self-absorbed.

Coaching in education is seen as a long-term collaboration between the subjects of the educational process that helps to achieve high results in all areas of life, including education.

Coaching is a way of improving the effectiveness of pedagogical activity, self-education, promoting the self-development of educators, creating conditions through counseling (trainings, conversations, seminars). Coaching means teaching, instructing, inspiring.

Kouching is a development consultancy. The difference between traditional counseling and coaching is that coaching is a form of active education focused on the personal application of professional activities. The basis of this style is interactive communication, discussion (question and answer, where the educator does not receive advice and recommendations, but only answers the questions that coucher asked him, and the educator finds reserves and ways to solve his problems.

Coaching is used in the process of professional and pedagogical competence and efficiency improvement in the provision of three main areas of leadership:

- a) the communicative sphere that provides the organization's charters, views and goals;
- b) build relationships and facilitate interoperability with high-performance teamwork;
- c) ensure high efficiency of execution and obtaining results.

Couching technology is a goal-oriented conversation of coucher (senior teacher, experienced teacher,) with a client (educator).

During training, koucher uses techniques that activate the educator, helping the teacher to move from goal setting to the final result by analyzing reality and choosing options for achieving the goal. In the third place, the coaching methodology helps students to solve difficulties related to communication and guidance. In coaching sessions, it is possible to teach communication tools and strategies that help students analyze their problems, anticipate how to progress in the future and set the necessary steps. It provides students with communication skills that are important in self-mastery and achieving their goals.

Self-monitoring is another important part of the coaching methodology. This method teaches students to control themselves. Students are taught self-monitoring to assess their progress, road traffic and achievement of their goals. This will make students effective in developing themselves and achieving their goals.

The effectiveness of applying the coaching methodology in higher education in giving students knowledge is evident. This method helps students to identify their potential, self-appropriate, set goals and road traffic, and address and self-monitor difficulties with communication and guidance. This method will be effective in making students develop themselves and achieve their goals. The practical application of the coaching methodology in higher education institutions helps students to develop themselves and achieve their goals. In doing so, teachers and mentors teaching and assisting students with coaching techniques will enable students to achieve a high level of knowledge and competence.

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**EFFECT OF SOME ANTIHELMINTHIC MEDICINES**

*Abstract. Helminth infections are diseases caused by worms living in the human body. Helminths are especially harmful to children's bodies; they release toxic substances. With a long course of helminthic diseases (more often in children), they can cause anemia, changes in the central nervous system, gastrointestinal tract, liver and blood vessels.*

*Key words: helminth, proteolytic enzyme, cestodosis, roundworm, nematode.*

Depending on the habitat of the worms, substances used against helminths are divided into two groups:

1. Substances used for intestinal helminthiasis.
2. Substances used for extraintestinal helminthiasis.

Most anthelmintic drugs have a selective effect depending on their type, so before treatment it is necessary to determine the type of worms. In the treatment of helminths, substances such as piperazine adipate, levamisole, decaris, naphthamon, pyrantel, mebendazole, phenasal, aminoacrixin, antimony tartrate, sodium cloxyl are widely used.

The mechanism of action of anthelmintic substances: some substances affect the neuromuscular system of worms, others affect the metabolism of worms, and others affect the permeability of the worm's shell, making it susceptible to proteolytic enzymes. The gastrointestinal tract may contain round helminths - nematodes and flatworms (cestodes), therefore substances are divided into those used for both nematodes and cestodes. For effective treatment, easily digestible foods are consumed during treatment. Substances that have an effect on worms must act inside the intestines; fats and alcohol enhance the absorption of the drug into the blood; repellents, mainly salt repellents, are used to quickly remove dead worms from the intestines, as they prevent the absorption of toxic anthelmintic substances into the blood. Anthelmintic substances dissolve in oil suppositories (sesame oil) and are easily absorbed into the blood. Nowadays, anthelmintics themselves are manufactured with laxative properties, and laxatives are no longer necessary. Intestinal nematodes include roundworms, ostrich nematodes, and hookworms. Piperazine is used to expel roundworms and ostriches; the substance paralyzes the neuromuscular system of worms, stops the movement of mucus in the intestines and cannot pass into the bile ducts. Along with the anthelmintic effect, this substance has a laxative effect. Piperazine is less

toxic even when it enters the bloodstream, which is why this substance is used for mass deworming. In some cases, piperazine can cause dizziness, headache, dizziness, abdominal pain, and in overdose, muscle relaxation and tremors.

Levamisole-decaris is used mainly against roundworms, paralyzes the muscles of the worm and disrupts its metabolism. It is 90-100% useful even when sent once, is a low-toxic substance and has no negative effects. Decaris is also effective against nematodes and extraintestinal worms.

Naftamon has a strong effect against nematodes and roundworms, but its effect is weaker against oysters. Naftamon enters the body of worms, paralyzes their muscles, is less absorbed into the blood, and irritates the stomach. Levamisole is less effective than piperazine and this substance can also be used for mass deworming. Pyrantel-Combantrin is also used to treat ascariasis. Diphenyl from naphthamon products has a strong effect against caterpillars.

Cestodes - tapeworms include serbar broad tapeworms, armed and unarmed worms. Fenasal reduces the resistance of tapeworms to proteolytic enzymes and paralyzes the umbilical muscles. Fenasal is practically not absorbed from the gastrointestinal tract and does not affect the mucous membrane. The patient should be prepared separately for the use of Fenasal (enema, suppositories, diet). When treating cestodes, aminoacriquine is used in the absence of the effect of other substances; before use, the patient must be prepared separately; has an effect, although it is less toxic compared to quinine, but negative effects are observed: nausea, vomiting, increased body temperature.

Pomegranate peel and pumpkin seeds are used for intestinal cestodes. The alkaloids in pomegranate peel paralyze the worm's muscles. Pumpkin seeds are used when the above substances are prohibited.

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## **IQTISODIYOTIMIZNI RIVOJLANTIRISHDA YENGIL SANOAT KORXONALARINING O'RNI**

*Annotatsiya: ushbu maqolada, iqtisodiyotimizni rivojlantirishda yengil sanoat korxonalarining o'rni hamda yengil sanoat tarmoqlarini samarali boshqarishni takomillashtirish muammolari haqida ma'lumotlar berilgan.*

*Kalit so'zlar: O'zbekiston, sanoat, moliya-kredit, iqtisodiyot, soliq, yengil sanoat korxonalarini, tadbirkor, raqamli iqtisodiyot, eksport.*

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## **THE ROLE OF LIGHT INDUSTRIAL ENTERPRISES IN THE DEVELOPMENT OF OUR ECONOMY**

*Abstract: this article provides information about the role of light industrial enterprises in the development of our economy and the problems of improving the effective management of light industrial sectors.*

*Key words: Uzbekistan, industry, finance and credit, economy, tax, light industrial enterprises, entrepreneur, digital economy, export.*

O'zbekistonda sanoat tarmoqlarini barqaror rivojlantirishda davlatning roli, birinchi navbatda, makroiqtisodiy barqarorlikni ta'minlash maqsadida milliy iqtisodiyot tarmoqlarini tartibga solish, sanoat tarmoqlariga ta'sir etuvchi tashqi salbiy omillarni bartaraf etish, eksportni rag'batlantirish, soliqqa tortishda imtiyozlar berish, moliya-kredit mexanizmlarini rivojlantirish masalalaridan iborat. Bu jarayonlar bevosita qonuniy-huquqiy jihatlar va institutsional o'zgarishlarga asoslangan holda davlat tomonidan tartibga solinishi lozim.

Iqtisodiyotning tarkibiy o'zgarishlari va rivojlanishning zamonaviy bosqichi yengil sanoat tarmoqlarini samarali boshqarishni alohida tadqiq qilishni talab qiladi. Zero xalqaro maydondagi yengil sanoat sohasida raqobatning ham keskinlashuviga, har bir mamlakatning xalqaro mehnat taqsimotidagi o'z mavqegini mustahkamlash uchun kurashishning kuchayishiga ham ta'sir ko'rsatadi. Bu borada mamlakatimizda mazkur sohaga raqamlashtirishning tadbiriq etilishi, innovatsiyalarni keng jalb qilish, tadbirkorlarni moliyaviy rag'batlantirish va tartibga solish mexanizmini takomillashtirish, samarali boshqaruv orqali davlatning Yengil sanoat sohasini rivojlantirish bo'yicha amalga oshirayotgan

chora-tadbirlarini takomillashtirishga yo'naltirilgan ilmiy izlanishlarga alohida e'tibor qaratilmoqda.

Boshqaruvning tashkiliy-iqtisodiy mexanizmlariga nazariy yondashuvlarni tahlil qilamiz. Iqtisodchi olimlardan B.Z Milnerning fikricha tashkiliy-iqtisodiy boshqarish mexanizmiga qaror qabul qilish jarayonida tashkilot elementlarining yaxlitligini, resurslar bilan ta'minlash va taqsimlash tizimini, boshqaruv ob'ektlariga ta'sir qilishning asosiy usullarini, jumladan, tashkiliy, ma'muriy va iqtisodiy usullarning muvofiqligi sifatida qaraydi. Ular tashkiliy-iqtisodiy boshqarish mexanizmi aniq natijalarga erishish uchun ma'suliyatni his etish, maqsadlarni aniqlash, faoliyat ishtirokchilarini undash va motivlashtirish, resurslar bilan ta'minlash va ularni taqsimlash kabi vazifalarni bajarishi kerak degan fikrni ilgari suradi.

Raqamli iqtisodiyotni rivojlantirish boshqa mamlakatlar kabi, O'zbekiston uchun ham uning dunyo miqyosidagi raqobatbardoshligini belgilab beradigan strategik ahamiyatga molik masalalardan biri hisoblanadi. SHu boisdan mamlakatimizda raqamli iqtisodiyotni faol rivojlantirish, barcha tarmoqlar va sohalarda, eng avvalo, davlat boshqaruvi, ta'lim, sog'liqni saqlash va yengil sanoatda zamonaviy axborot-kommunikatsiya texnologiyalarini keng joriy etish bo'yicha kompleks chora-tadbirlar amalga oshirish zarur.

Raqamli iqtisodiyotni rivojlantirishda avvalo shu sohaga kerakli kadrlar tayyorlashga e'tibor qaratish, raqamli iqtisodiyot uchun kerakli bo'lgan yuqori malakali kadrlarni o'rta va oliy ta'lim muassasalarida tayyorlashni yo'lga qo'yish, yengil sanoat tarmoqlarining yuqori malakali dasturchilar va soha mutaxassislarini tayyorlashni yo'lga qo'yish va bu boradagai xorij tajribalarini o'rganish, elektron platformali texnologiyalardan foydalangan xolda yengil sanoat tarmoqlarini jahon bozorida keng targ'ib qiluvchi milliy ma'lumotlar to'plamlarini yaratish.

O'zbekiston Respublikasida so'nggi 10 yil ichida yengil sanoati mahsulotlarining eksporti oshdi, eng avvalo, gilam va gilam buyumlari, paypoq buyumlari, tikuvchilik-to'qimachilik kiyimlari va to'qimachilik gazlamalari eksporti tezkor o'sdi. To'qimachilik va yengil sanoatining raqobatbardoshligi hamda innovatsion mahsulotlarining sifat darajasiga e'tibor O'zbekistonning jahon bozorida past mavqeini va o'rta hamda uzoq muddatli istiqbolda chora-tadbirlar, mexanizmlar ishlab chiqarish zaruratini ko'rsatadi.

Keyingi yillarda mamlakatimiz yengil sanoat korxonalarini o'z zimmasiga yuklatilgan vazifalarni muvaffaqiyatli ravishda bajarishni davom ettirmoqda. Ularning bajarilish darajasiga davom etayotgan jahon moliyaviy-iqtisodiy inqirozi o'z ta'sirini ko'rsatayotgan bo'lishiga qaramay, uning ta'sirchanlik darajasi O'zbekistonda ishlab chiqilayotgan va hayotga tatbiq etilayotgan oqilona iqtisodiy siyosat tufayli kamaytirilmoqda.

Bunday sharoitda mamlakatimiz yengil sanoat korxonalarining ishlab chiqarish dasturlari bajarilishiga nisbatan bozor iqtisodiyotining zamonaviy talablariga mos barqaror qat'iy bir tendensiyaning tarkib toptirishga harakat qilishi

lozim. Bu jarayonda ularning moliyaviy jihatlariga jiddiy e'tibor berish alohida ahamiyat kasb etadi.

Bundan tashqari O'zbekiston Respublikasi Vazirlar Mahkamasining 23.02.2021 yildagi «O'zto'qimachilik sanoat» uyushmasining to'qimachilik va tikuv-trikotaj sohasini rivojlantirish jamg'armasi mablag'larini shakllantirish va undan foydalanish tartibi to'g'risidagi nizomni tasdiqlash haqida» gi qarori qabul qilindi. Mazkur qarorga binoan, to'qimachilik va tikuv-trikotaj sohasidagi tashkilotlarga Jamg'armadan mablag' ajratish tartibi, daromadlar va xarajatlar smetalarini tuzish tartibi, to'qimachilik va tikuv-trikotaj tarmoqlari tashkilotlarida xalqaro standartlarni joriy etish, tayyor mahsulotlarni tashqi bozorlar talablarini hisobga olgan holda sertifikatlash bo'yicha tadbirlarni moliyalashtirish, soha tashkilotlarining xalqaro ko'rgazmalar va yarmarkalarda ishtirok etish, milliy brendlarni yaratish va ilgari surish bilan bog'liq xarajatlarini qoplash, ilmiy-tadqiqot va innovatsion loyihalarni amalga oshirish, kadrlarni tayyorlash, qayta tayyorlash va ularning malakasini oshirish, jumladan ularni xorijga o'qish uchun yuborish bo'yicha tegishli chora-tadbirlar belgilandi.

Bu kabi muammolar sanoatda tarkibiy investitsion siyosatni yanada takomillashtirish yuzasidan aniq chora-tadbirlar ishlab chiqishni talab etadi. Shu bilan birga mamlakat sanoati rivojlanishini ta'minlovchi quyidagi yo'nalishlarni taklif etamiz:

- investitsion ishlab chiqarishni rivojlantirish, keng ko'lamli ehtiyojlarni qondirishga qaratilgan, ilmiy asoslangan loyihalar ishlab chiqish;
- korxonalarda innovatsion salohiyatni takomillashtirish, ilm va yuqori texnologiya talab qiladigan yangi korxonalar tashkil etish va import mahsulotlari bilan raqobatlasha oladigan mahsulotlar ishlab chiqarish;
- rivojlangan mamlakatlarning sanoat mahsulotlari ishlab chiqaruvchi zamonaviy texnika-texnologiyalarini import qilish siyosatini jadallashtirish;
- sanoatda xususiy tarmoq va kichik tadbirkorlik ulushini oshirish;
- diversifikatsion faoliyatni takomillashtirish, ichki zahira va mavjud imkoniyatlardan to'liq foydalanishni ta'minlash lozim bo'ladi.

Mamlakatimizda amalga oshirilgan va oshirilayotgan islohotlarning barchasi mamlakat makroiqtisodiy barqarorligining oshishi bilan birga, aholi turmush farovonligiga ijobiy ta'sir etmoqda va ularning davom ettirilishini davrning o'zi taqozo etmoqda.

Yuqoridagilardan xulosa qilib ta'kidlash lozimki, yengil sanoat tarmoqlarida tashkiliy-boshqaruv usullar soha faoliyatini davom ettirishda va korxonaning asosiy maqsadi bo'lgan foyda olishda katta ahamiyatga ega. Korxonada ish yuritish tartibi qanchalik samarali yo'lga qo'yilgan bo'lsa, boshqaruv tuzilmasi samarali, rejali, uzoqni ko'zlab tuzilgan bo'lsa ishning natijasi ijobiy bo'ladi.

O'zbekiston yengil sanoat tarmoqlarini rivojlantirishning strategik maqsadlari boshqaruv strukturasi takomillashtirishga bog'liq va u quyidagi yo'nalishlar orqali ifodalanadi:

- Iqtisodiy islohatlarni chuqurlashtirish, yengil sanoat tarmoqlarini bozorini shakllantirish va rivojlantirish;

- respublika iqtisodiyotini va aholisini sifatli yengil sanoat mahsulotlari bilan ishonchli ta'minlash.

Sanoat korxonalarini modernizatsiya qilish, texnik va texnologik yangilash asosida barqaror rivojlantirishning ushbu usuli va modelidan foydalanish korxonaning strategik rivojlantirish jarayonlarini rejalashtirish va prognoz qilish imkonini yaratadi. Chunki ular kapital yangilanish vaqti, ya'ni undan samarali foydalanish va korxonaning faoliyatining bir qator muhim parametrlari orasidagi bog'liqlikni ochib beradi hamda korxonaning istiqboldagi moliyaviy-iqtisodiy strategiyasini to'g'ri belgilash imkonini yaratadi.

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## SOME ANTI-TUBERCULOSIS MEDICINES

*Abstract. Tuberculosis is a common infectious disease caused by Mycobacterium tuberculosis (Mycobacterium tuberculosis, also known as Koch's bacillus), characterized by the formation of one or many foci of inflammation in various organs, but most often in the lung tissue.*

*Key words: tuberculosis, mycobacterium, isoniazid, isonicotinic acid, antibiotic.*

People, animals, birds, and even fish suffer from tuberculosis. Tuberculosis can affect a person of any age. Children under the age of one year, primary school age, adolescents and the elderly are most susceptible to tuberculosis, and their tuberculosis has a severe progressive course.

Tuberculosis is one of the ancient and widespread infectious diseases. This is confirmed by tuberculous changes discovered during excavations in the bone remains of Stone Age people. Signs of tuberculosis affecting joints and bones were found in the mummified corpses of ancient Egyptians and Peruvians. Pulmonary tuberculosis was widespread in ancient India and China. Classic descriptions of pulmonary tuberculosis were made by Hippocrates (460 - 377 BC). Avicenna (Abu Ali Hussein ibn Abdallah ibn Sina, 980 - 1037, Central Asian philosopher and physician) listed the main clinical manifestations of tuberculosis - cough, sputum, exhaustion, hemoptysis and was the first to suggest the infectious nature of tuberculosis, this was indicated by the wide and widespread spread of the disease among residents all continents.

Mycobacterium tuberculosis was discovered by the German microbiologist Robert Koch on March 24, 1882. Hence its second name - Koch's bacillus. At that time, every seventh resident in Germany died from tuberculosis, and doctors were absolutely powerless against the terrible disease. Robert Koch conducted an intensive search for the infectious "agent": studying lung preparations under a microscope, the scientist isolated a pure culture of bacteria with which he infected several hundred animals of different species, and all of them fell ill with tuberculosis.

In the treatment of tuberculosis, substances such as isoniazid, ftivazid, ethambutol, sodium para-aminosalicylate, bepask, ethionamide, prothionamide, sikioserine, streptomycin sulfate, kanamycin, floromycin, thioacetazone are widely used. The substances have a selective effect against tuberculosis microbacteria and, depending on their presence, are divided into two groups:

1. Synthetic substances are hydrazide derivatives of isonicotinic acid - isoniazid, ftivazide and derivatives of para-aminosalicylate sodium acid - litsylate, bepask and other chemical compounds - ethionamide, thioacetazone. Synthetic substances have an effect only against tuberculosis, sometimes leprosy, that is, acid-fast mycobacteria.

2. Antibiotics – streptomycin sulfate, dehydrostreptomycin, calcium chloride complex of streptomycin, rifampicin, sikioserine, kanamycin sulfate, florimycin.

Antituberculosis antibiotics also have an effect against other microorganisms. Most of them are bacteriostatic, some have a bactericidal effect.

Isoniazid reduces the content of mycolic acids, which are the main basis of mycobacterial membranes. According to another hypothesis, isoniazid inhibits the metabolism of pyridoxine in mycobacteria. Isoniazid binds to phosphopyridoxal due to the hydrazide group, and phosphopyridoxal is the active site of many enzymes involved in the processes of decarboxylation and peroxidation. Isoniazid prevents the formation of phosphopyridoxal from pyridoxine, pyridoxine is excreted from the body in large quantities.

Under the influence of isoniazid, the metabolism of pyridoxine is disrupted not only in mycobacteria, but also in the body of the patient consuming this substance, which causes side effects. Isoniazid is well absorbed through the gastrointestinal tract, easily penetrates all tissues, passes through the blood-brain and placental barriers, enters the cerebrospinal fluid, and accumulates in the lungs and liver. Isoniazid is metabolized in the liver, predominantly acetylated, and is excreted from the body through the kidneys. Isoniazid is used in the treatment of all types and stages of tuberculosis; it is administered orally, into the rectum, if necessary, into a vein, between muscles, or into a cavity. When isoniazid is used, mycobacteria are less resistant to it. During treatment, various negative phenomena are observed, often complications associated with pyridoxine deficiency: neuritis, headache, dizziness, insomnia, and sometimes mental changes. When using isoniazid, allergic processes, dyspeptic conditions, anemia, agranulocytosis occur, and the liver and kidneys are affected. The vitamins pyridoxine, nicotinate, ascorbate, pantothenic acid and thiamine are used during treatment with isoniazid to reduce the negative effects. The use of Isoniazid for epilepsy, liver and kidney diseases, and atherosclerosis is prohibited.

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## **COMPARATIVE ANALYSIS OF TOPONYMIC PHRASEOLOGICAL UNITS IN ENGLISH AND KARAKALPAK LANGUAGES**

*Abstract.* This article explores the similarities and differences between toponymic phraseological units in Karakalpak and English. It highlights that both languages have such units that refer to specific places or locations and are used to convey specific meanings or ideas. However, English has a wider range of toponymic phraseological units due to its extensive historical and cultural influences, while Karakalpak may have fewer expressions due to its smaller linguistic community. Additionally, the linguistic structures used in these units may differ between the two languages, with English often using prepositions or articles before the toponym, while Karakalpak may use possessive forms or other grammatical constructions. According to the result of the research, the comparative analysis of these expressions can provide insights into the cultural and historical aspects of both languages.

*Keywords:* toponymic, phraseological units, Karakalpak, English, similarities, differences, specific places, convey meanings, linguistic structures, cultural influences, historical influences.

In this comparative analysis, we will explore the similarities and differences between toponymic phraseological units in the Karakalpak and English languages. Specifically, we will examine how these units convey meanings through linguistic structures, as well as the cultural and historical influences that shape them. Additionally, we will consider the impact of being a smaller linguistic community on the development and usage of these units.

Toponymic phraseological units refer to expressions that combine a place name with other words to convey a specific meaning. Toponymical phraseological units are phrases or expressions in the English and Karakalpak languages that are based on place names. They can be classified into different groups based on their structure and meaning, such as toponymic compounds, collocations, idioms, proverbs, and expressions. These types of phraseological units add depth and cultural significance to the English and Karakalpak languages by using specific place names to convey meaning and create unique expressions. It is important to note that English and Karakalpak researchers have studied phraseology for a long time as a separate field of study, yet interest in this branch of linguistics has persisted to this day [6, 200-202]. These units can provide insights into both cultural and historical aspects of a language. In the case of Karakalpak and English, there are notable similarities and differences in the usage and construction of such units [5].

The article provides with the examples of toponymic phraseological units in English and Karakalpak languages. They are as follows:

1. New York City - a major city in the United States
  2. Mount Everest - the highest mountain in the world
  3. Lake Michigan - one of the Great Lakes in North America
  4. Big Ben - the famous clock tower in London
  5. Golden Gate Bridge - a suspension bridge in San Francisco
  6. Stonehenge - a prehistoric monument in England
  7. Grand Canyon - a steep-sided canyon in Arizona
  8. Niagara Falls - a group of waterfalls on the border of Canada and the United States
  9. Red Square - a public square in Moscow, Russia
  10. Sydney Opera House - an iconic performing arts center in Australia [2].
- Examples of Karakalpak toponymic phraseological units:
1. Aral Sea - a once large saltwater lake in Central Asia
  2. Nukus Oasis - a city in the Karakalpakstan region of Uzbekistan
  3. Ayaz-Kala - ancient fortress ruins in the desert of Karakalpakstan
  4. Amu Darya - a major river in Central Asia, also known as the Oxus River
  5. Kyzylkum Desert - a large desert spanning across Uzbekistan and Kazakhstan
  6. Khiva - an ancient city in Uzbekistan, known for its well-preserved old town
  7. Moynaq - a former fishing town on the shores of the Aral Sea, now mostly abandoned
  8. Jipek Joli - a mountain range in Karakalpakstan, also known as the Ustyurt Plateau
  9. Khoja Ahmed Yasawi Mausoleum - a famous Islamic pilgrimage site in Turkestan, Kazakhstan
  10. Sarykamysh Lake - a large salt lake in Karakalpakstan, known for its pink color [3].

One similarity between Karakalpak and English is the use of prepositions to connect the place name with other words in a phraseological unit. For example, in English, we have phrases like "in London" or "at the Eiffel Tower," where the prepositions "in" and "at" establish the relationship between the place name and the accompanying words. Similarly, in Karakalpak, one might say "Londonda" (in London) or "Eiffel qorğanında" (at the Eiffel Tower), using prepositions to convey the same spatial relationships.

However, there are also differences in the usage of prepositions between the two languages. English tends to use a wider range of prepositions, such as "on," "by," or "near," to express different spatial relationships. Karakalpak, on the other hand, may rely more heavily on context or specific grammatical constructions to convey similar meanings.

Another difference lies in the use of articles. English utilizes definite and indefinite articles (e.g., "the," "a/an") when referring to specific places, while Karakalpak does not have articles. This distinction can impact the way toponymic phraseological units are constructed and understood in each language.

Possessive forms also differ between Karakalpak and English. In English, possessive forms are commonly used to indicate ownership or association with a place, as in "London's attractions" or "America's capital." In Karakalpak, possessive forms are less common in toponymic phraseological units, with other grammatical constructions or word order used to convey similar meanings.

The cultural influences on toponymic phraseological units are evident in both languages. Specific places hold cultural significance, and the expressions associated with them reflect this. For example, in English, phrases like "Big Apple" for New York or "City of Lights" for Paris evoke cultural imagery and associations. Similarly, in Karakalpak, expressions like "Qaraqalpaq Eli" (Karakalpak Land) or "Nökis qalasi" (Nukus City) carry cultural connotations and historical references.

Historical influences also shape toponymic phraseological units. English has a long history of borrowing words and expressions from other languages, resulting in a rich and diverse vocabulary. Karakalpak, as a smaller linguistic community, has also been influenced by neighboring languages and cultures. This can be seen in the use of loanwords or adaptations of place names in Karakalpak phraseological units.

In conclusion, a comparative analysis of toponymic phraseological units in Karakalpak and English reveals both similarities and differences. While both languages use prepositions to connect place names with other words, there are variations in the usage of prepositions, articles, possessive forms, and grammatical constructions. Cultural and historical influences play a significant role in shaping these units, with specific places carrying cultural connotations and historical references. The smaller linguistic community of Karakalpak also influences the development and usage of toponymic phraseological units.

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## **XALQARO EKO TURIZM BOZORI ISHTIROKCHILARI O'RTASIDAGI O'ZARO MUNOSABATLAR**

*Annotatsiya. Turoperatorlar biznesining paydo bo'lishi ommaviy turistik oqimlarning shakllanishi va turistik xizmatlarning murakkablashishi natijasini tahlil qilish. Turoperator xizmat ko'rsatuvchi provayderlar bilan shartnoma munosabatlari asosida va mavjud turistik talabga muvofiq turni yakunlash bilan shug'ullanishdagi munosabatlar yechimi ilmiy izohlar bilan ifodalangan. Shuningdek maqolada mazkur masala yuzasidan muallif tomonidan shakllantirilgan ilmiy taklif va amaliy tavsiyalar o'z ifodasini topgan*

*Kalit so'zlar: Turoperator, business, ekoturizm dasturlari, provayderlar, turagentlar faoliyati, investitsiya jalb qilish, xizmat ko'rsatish sohalari.*

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## **INTERACTIONS BETWEEN PARTICIPANTS OF THE INTERNATIONAL ECO-TOURISM MARKET**

*Abstract. Analysis of the result of the emergence of the tour operator business, the formation of mass tourist flows and the complexity of tourist services. The solution of the relationship between the tour operator and the service providers in completing the tour based on the contractual relationship and in accordance with the current tourist demand is expressed with scientific explanations. The article also contains the scientific proposal and practical recommendations formulated by the author on this issue*

*Key words: Tour operator, business, ecotourism programs, providers, travel agents, investment attraction, service sectors.*

So'nggi yillarda mamlakatimiz turizm bozorini raqobatbardosh turistik dasturlarni ishlab chiqish orqali sifatli xizmatni tashkil etish masalalari keng yoritilmoqda. "Turistik xizmatlar sohasida xizmatlar ko'rsatuvchi tashkilot, korxonalar va firmalarni jalb qilish, shuningdek, ushbu xizmatlardan turli mavzuli turlarni tashkil qilish, yakunlash – bularning barchasi aniq biznes-turni ishlab chiqishni talab qiladi. eko turizmni qo'llab quvvatlash, faoliyat yuritish (turistik dasturlarni ishlab chiqish) sayyohlarni uzoq muddat mamlakat turistik bozoridagi ishtirokini ta'minlash ko'zda tutiladi».

Turoperator xizmat ko'rsatuvchi provayderlar bilan shartnoma munosabatlari asosida va mavjud turistik talabga muvofiq turni yakunlash bilan shug'ullanadi. U turistik marshrutlarni ishlab chiqadi, turistlarga xizmat ko'rsatish dasturini tuzadi, turlarni targ'ib qilish va sotish bo'yicha tadbirlar majmuasini tashkil qiladi. Turoperator ko'p hollarda turar joy, transport xizmatlari, oziq-ovqat, dam olish tadbirlari va boshqalar uchun xizmatlarning ulgurji xaridori sifatida ishlaydi. Natijada, u ushbu xizmatlar uchun individual, chakana narxlardan ancha past bo'lgan guruh tariflariga ega. Shunday qilib, sayyohlar havaskor turoperatsiya bilan shug'ullanmasdan, turoperatoridan tur sotib olish orqali sezilarli foyda olishlari mumkin. Turoperator xizmatlarni alohida sotishi mumkin. Bu xizmatlarning to'liq sotilishini ta'minlash zarur bo'lgan hollarda amalga oshiriladi, chunki tovarlardan farqli o'laroq, xizmatlarni saqlash mumkin emas. Shuning uchun, masalan, samolyot havoga ko'tarilgunga qadar, turoperator o'zi tomonidan tashuvchidan sotib olingan barcha o'rindiqlar uchun chiptalarni sotishi kerak.

Turoperatorlar faoliyat turlari bo'yicha eng ko'p tashrif buyuriladigan joylarga charter reysni o'z ichiga olgan turlarni sotadigan ommaviy bozor operatorlariga bo'linadi; ma'lum bir geografik hududda yoki bitta bozor segmentida ishlaydigan ixtisoslashgan operatorlar. Ixtisoslashgan turoperatorlar quyidagilar bo'lishi mumkin:

- turizm turlari bo'yicha turoperatorlar (masalan, chang'i yoki suv va boshqalar);
- yo'nalishdagi turoperatorlar (masalan, Zomin tog'lari, Haydar ko'l bo'ylari va boshqalar);
- bozor segmentlari bo'yicha turoperatorlar (masalan, talabalar yoki bolali juftliklar va boshqalar);
- maxsus turar joy ob'ektlari uchun turoperatorlar (masalan, yotoqxonalar va chodirlar yoki tog'lardagi boshpana va kulbalarda va boshqalar);
- transport turoperatorlari (masalan, kruiz yoki turistik poyezdlar va boshqalar).

Faoliyat joyiga ko'ra turoperatorlar quyidagilarga bo'linadi:

- mahalliy (ichki) turoperatorlar, ularni ichki bozorda sotish uchun o'z mamlakati, mintaqasi bo'ylab turlarni ishlab chiqadi;
- o'z mamlakatidan kelgan sayyohlar uchun chet elga sayohatlarni tashkil qiluvchi outbound turoperatorlar;
- kiruvchi xorijiy sayyohlarga xizmat ko'rsatuvchi qabulxonadagi turoperatorlar.

Bundan tashqari, turoperatorlarni tashabbuskor va qabul qiluvchilarga bo'lish odatiy holdir.

Tashabbuskor turoperatorlar turistlarni xorijga yoki boshqa hududlarga mezbon (reseptiv) turoperator yoki joylashtirish muassasasi bilan kelishilgan holda jo'natuvchi operatorlardir. Ular sayyohlik agentliklaridan turoperatsiya bilan ajralib turadi. Bundan tashqari, JST standartlariga ko'ra, tur kamida uchta

xizmatni (turar joy, transport xizmati va ko'rsatilgan ikkitasiga bevosita bog'liq bo'lmagan boshqa xizmatlar) o'z ichiga olishi kerak. Klassik tashabbusli turoperator kompleks turlarni shakllantiradi, ularni mahalliy turoperatorlar yoki mehmonxona, ekskursiya va boshqa tashkilotlarning turli tashrif joylaridagi xizmatlaridan to'ldiradi. Shuningdek, u sayyohlarni sayohat boshlangan joyga va qaytib kelishni ta'minlaydi, ichki yo'nalishli transport bilan ta'minlashni tashkil qiladi.

Qabul qiluvchi turoperator xizmat ko'rsatuvchi provayderlar bilan to'g'ridan-to'g'ri shartnomalardan foydalangan holda turistlarni qabul qilish va ularga xizmat ko'rsatish joyida tur va xizmat ko'rsatish dasturini yakunlaydi, proaktiv va qabul qiluvchi tur operatsiyalari funksiyalarini birlashtiradi. Turoperatorlik tashkilotlari xalqaro chiqish va kirish turizmiga ixtisoslashtirilgan xizmatlarni taklif qiladi.

Agar iste'molchi (turist) va turistik xizmat ko'rsatuvchi provayderlar (mehmonxonalar, restoranlar, gidlar, muzeylar va boshqalar) o'rtasidagi o'zaro aloqalar sxemasini ular o'rtasidagi aloqalar samaradorligi nuqtai nazaridan tahlil qiladigan bo'lsak unda katta muammo yuzaga keladi. ular orasidagi vositachilar soni ayon bo'ladi. Turistga xizmat ko'rsatish sifati to'g'risida uzatiladigan ma'lumotlarning buzilishi muqarrar bo'ladi. Shu sababli, turistlar va etkazib beruvchilar sayohatni tashkil qilish uchun zarur bo'lgan ma'lumotlarni broshyuralar, reklama va Internet yordamida olishda yaqinlashishga intilishlari kerak.

Ekoturizm - bu O'zbekiston sayyohlik agentliklari uchun biznesning yangi turi. Yangi bozorni "o'zlashtirib olish"ning jozibali istiqbollari har doim ham muvaffaqiyatsizlik qo'rquvidan ustun kelavermaydi. Bu, ayniqsa, kichik va o'rta biznesni rivojlantirishda turoperatorlar faoliyatini muvofiqlashtirishda qo'l keladi. Hatto iqtisodiy jihatdan gullab-yashnagan va barqaror Yevropa mamlakatlarida ham har yili 80000 ga yaqin sayyohlik agentliklari bankrot bo'ladi. Tur biznesidagi muvaffaqiyatsizliklarning 6 ta asosiy sababi bor:

- 1) moliyaviy menejmentdagi muammolar;
- 2) bozor va kompaniya tashqi muhitining beqarorligi, inflyatsiya;
- 3) buxgalteriya hisobidagi kamchiliklar;
- 4) marketingdagi muammolar;
- 5) inson resurslarini boshqarishdagi muammolar;
- 6) tashqi maslahatdan noto'g'ri foydalanish. Bundan tashqari, oilaviy sayohat agentliklarida ko'pincha hissiy muammolar mavjud.

Mahalliy sayyohlik agentliklari uchun turistik bozorning ushbu yangi segmentiga faqat menejment va marketing sohasida samarali ishlanmalar, tajriba va zaxiraga ega tajribali operatorlar kirishi maqsadga muvofiqligi aniq. Bunday firmalar rahbarlari uchun yagona qiyin lahza bu ekoturizm mahsulotini ishlab chiqish va sayyohlarga marshrutda va undan tashqarida bevosita xizmat ko'rsatishdir. Bu nuqtadagi muammolar quyida batafsil muhokama qilinadi.

Mamlakatda mavjud turistik xizmatlar ko'rsatishdagi ayrim muammolar.

1. Albatta, logistika, hozir ham turoperatorlar, ham mustaqil sayohatchilar uchun katta muammo. Poezdlar juda kam, ularni doimiy ravishda onlayn tutish unchalik yoqimli emas, energiya talab qiladi va odatda me'yorda emas.

2. Turizmni rivojlantirish va sayyohlarning mamlakatda harakatlanishi uchun ustuvor ahamiyatga ega bo'lishi kerak bo'lgan Afrosiyob poyezdlari nima uchun ko'pincha qandaydir tadbirlar, maxsus mehmonlar, davlat amaldorlari uchun ajratilayotganidan hanuz xavotirdaman.

3. Parvozlar qimmat, narx uchun kim javobgar? Narxi birinchi navbatda sayyohlar uchun qulay bo'lishi kerak, menimcha, bunday "hashamat"ni hamma ham ko'tara olmaydi. Bu, ayniqsa, boshqa mamlakatlarda ko'plab mahalliy aviakompaniyalardan foydalanishda va narx oddiy fuqarolar uchun qulay bo'lishini, ular qanday formula bo'yicha hisoblashlarini belgilash, lekin iste'molchining xarid qobiliyatini aniq hisobga olish lozim

Shuni ham ta'kidlash kerakki, turistlarning sifatli xizmat ko'rsatish huquqi va tabiiy muhitga g'amxo'rlik qilish majburiyati " O'zbekiston Respublikasining Qonuni, 18.07.2019 yildagi O'RQ-549-son turizm asoslari to'g'risida" qonunining tegishli moddalarida mustahkamlangan.

Xorijiy ekoturizm firmalarida sifat deganda xizmat ko'rsatish darajasining sayyohlarning kutganlariga mos kelishi tushuniladi. Ushbu taxminlarni bajarish quyidagilarni o'z ichiga oladi: iste'molchilar nimani kutayotgani haqida aniq bilim; sayyohlik agentligi xodimlarining rahbariyat tomonidan talab qilinadigan sifat standartlari va ularni saqlashda xodimlarning roli haqida xabardorligi; xodimlar sifat standartlariga mos kelmaydigan belgilar va harakatlarni aniq bilishlari kerak.

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## **BUXORO VILOYAT QISHLOQ AHOLI MANZILGOHLARI GEOGRAFIYASI**

*Annotatsiya. Ushbu maqolada ijtimoiy hayotni hududiy tashkil etilishining asosiy shakllaridan biri bo'lgan qishloq joylar geografiyasi, xususan Buxoro viloyat qishloq aholi manzilgohlari haqida qisqacha geografik tahlil qilib o'tilgan.*

*Kalit so'zlar: Aholi manzilgohi, qishloq joylar, kishilarning hududiy birligi, cho'l hududlari qishloqlari, Arabxona, Chitgaron.*

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## **GEOGRAPHY OF RURAL SETTLEMENT OF BUKHARA REGION**

*Abstract. In this article, the geography of rural areas, which is one of the main forms of territorial organization of social life, in particular, the rural settlement of Bukhara region, is briefly analyzed geographically.*

*Key words: population settlement, rural areas, territorial unit of people, villages of deserts areas, Arabkhana, Chitgaron.*

Qishloq joylar shahar va shaharchalardan tashqaridagi hududlar bo'lib, ularda qishloq xo'jaligida muntazam foydalaniladigan yerlar hamda doimiy aholi manzilgohlari (punktlari) mavjud bo'lishi bilan tavsiflanadi.

Qishloqlar shaharlarga qaraganda aholi yashash joyining qadimiyroq shaklidir. To'g'ri, qadimda dastlabki aholi manzilgohlari shahar yoki qishloq deb atalmagan, qishloqlarning vujudga kelishi ijtimoiy mehnat taqsimotida sug'orma dehqonchilik madaniyati rivojlanishi bilan bog'liq bo'lgan. Sug'orma dehqonchilik avvallari tabiiy suv oqimidan foydalangan holda olib borilgan, keyinchalik sug'orish inshootlari (to'g'on, kanal va b.) va vositalari (chig'iriy) asosida rivojlangan.

Albatta, bunday inshootlar yoki hozirgi zamon tili bilan aytganda, irrigatsiya infratuzilmalarini yaratish, qo'riqlash va ulardan foydalanish keng jamoatchilik mehnatini, aholini bir joyda va birgalikda yashashini taqozo etgan. Shunday qilib, jamoa (sotsium), kishilarning hududiy birligi, turg'un aholi manzilgohlari paydo bo'lgan. Sug'orma dehqonchilikning chorvachilikdan ajralib chiqishi, shu asosda hunarmandchilik va savdoning rivojlanib borishi natijasida ijtimoiy va hududiy mehnat taqsimotining navbatdagi muhim bosqichi boshlangan. Jamiyat hayotdagi bunday o'zgarishlar qishloqlardan shaharlarning

ajralib chiqishiga va rivojlanib borishiga sabab bo'lgan. Aynan shu davrdan boshlab ijtimoiy hayotni hududiy tashkil etilishining ikki shakli, ya'ni qishloqlar va shaharlar vujudga kelgan.

O'zbekistonda mavjud 10990 ta qishloq aholi manzilgohlarini hududiy farqlarga asoslanib, 4 guruhga ajratish mumkin.

1. Vodiy qishloqlari
2. Voha qishloqlari
3. Cho'l hududlari qishloqlari
4. Tog' hududlari qishloqlari

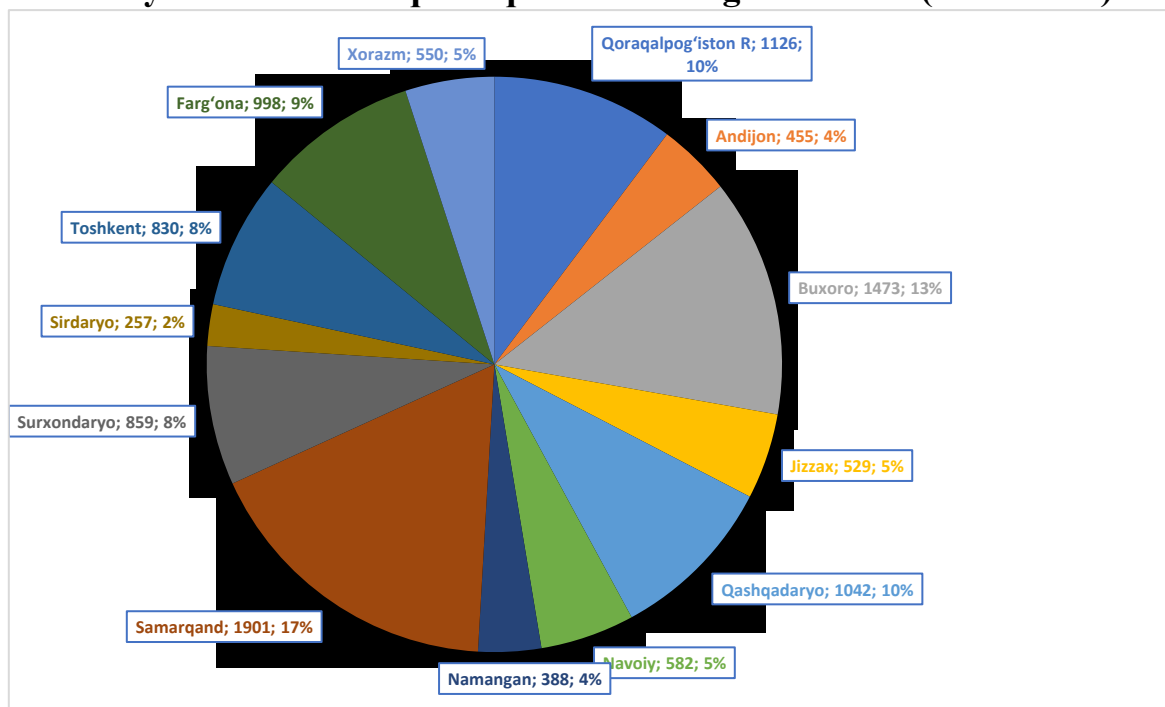
Ma'lumotlarga ko'ra, respublikamizning taxminan 70 foiz maydoni cho'llar egallaydi. Cho'lshunos olim I.Q.Nazarov cho'llarni o'zlashtirish nuqtai nazardan ikki qismga cho'l vohalarga va cho'l yaylovlarga ajratadi.

Umuman olganda, cho'l mintaqalari asosan, respublikamizning g'arbiy va shimoli-g'arbiy qismlarini egallaydi. Ularga Qoraqalpog'iston Respublikasi, Buxoro, Navoiy, Surxondaryo, Qashqadaryo, Sirdaryo, Jizzax, Samarqand viloyatlarining katta qismlari kiradi. Eng "cho'lli" hududlar esa Qoraqalpog'iston Respublikasi, Buxoro va Navoiy viloyatlari hisoblanadi.

Buxoro viloyati qishloq aholi manzilgohlarini tahlil qiladigan bo'lsak, mazkur viloyatda iqlimning issiq hamda nihoyatda quruqligi, yog'in-sochinning (namgarchilik) o'ta kamligi va mumkin bo'lgan bug'lanish juda yuqoriligi, suvning tanqisligi bilan boshqa ma'muriy birliklardan ajralib turadi. Viloyat maydoni 40,3 ming kv km bo'lib, Respublika umumiy maydonining 9,0 foizini tashkil qiladi. Bu jihatdan Buxoro viloyati respublikada Qoraqalpog'iston Respublikasi va Navoiy viloyatlaridan keyingi uchinchi o'rinda turadi. Hududining kattaligi bois qishloq aholi manzilgohlari viloyat bo'ylab notekis taqsimlangan. Buxoro viloyatida jami 1473 ta qishloq aholi manzilgohi mavjud bo'lib, Respublika umumiy qishloq aholi manzilgohlarining 13 foizda ko'prog'ini o'zida jamlagan. Bu ko'rsatkich bo'yicha faqatgina Samarqand viloyati (1901 ta) Buxoro viloyatidan oldinda turadi. 1-rasm.



### Viloyatlar kesimida qishloq aholi manzilgohlari soni (01.01.2023)



Izoh: Diagramma O'zbekiston Respublikasi Prezidenti huzuridagi statistika agentligi ma'lumotlari asosida muallif tomonidan tuzilgan.

Yuqoridagi ma'lumotdan ko'rishimiz mumkinki, Respublikamizdagi mavjud qishloq aholi manzilgohlari joylashuvida hududiy tafovutlar mavjud. Maydon jihatdan katta bo'lgan ko'pgina viloyatlarimizda qishloq aholi manzilgohlari soni ancha ko'pligini ko'rishimiz mumkin. Navoiy viloyatida bu ko'rsatkich kamligini aholi sonining kamligi, viloyatlar ichida eng kenja va hududining kam o'zlashtirilganligi bilan izohlash mumkin.

Qishloq aholi punktlari soni bo'yicha Samarqand va Buxoro viloyatlari boshqa viloyatlardan ancha oldinda turadi. Shuningdek, Qoraqalpog'iston Respublikasi va Qashqadaryo viloyatida ham bu ko'rsatkichda oldingi o'rinlarda turadi. Ularda mos ravishda 1126 ta va 1042 ta shu tipdagi aholi manzilgohlari joylashgan. Yana bir qiziq tomoni shundan iboratki, demografik salohiyati yuqori bo'lgan Andijon va Namangan viloyatlari ushbu ro'yxatda pastki o'rinlardan joy olgan.

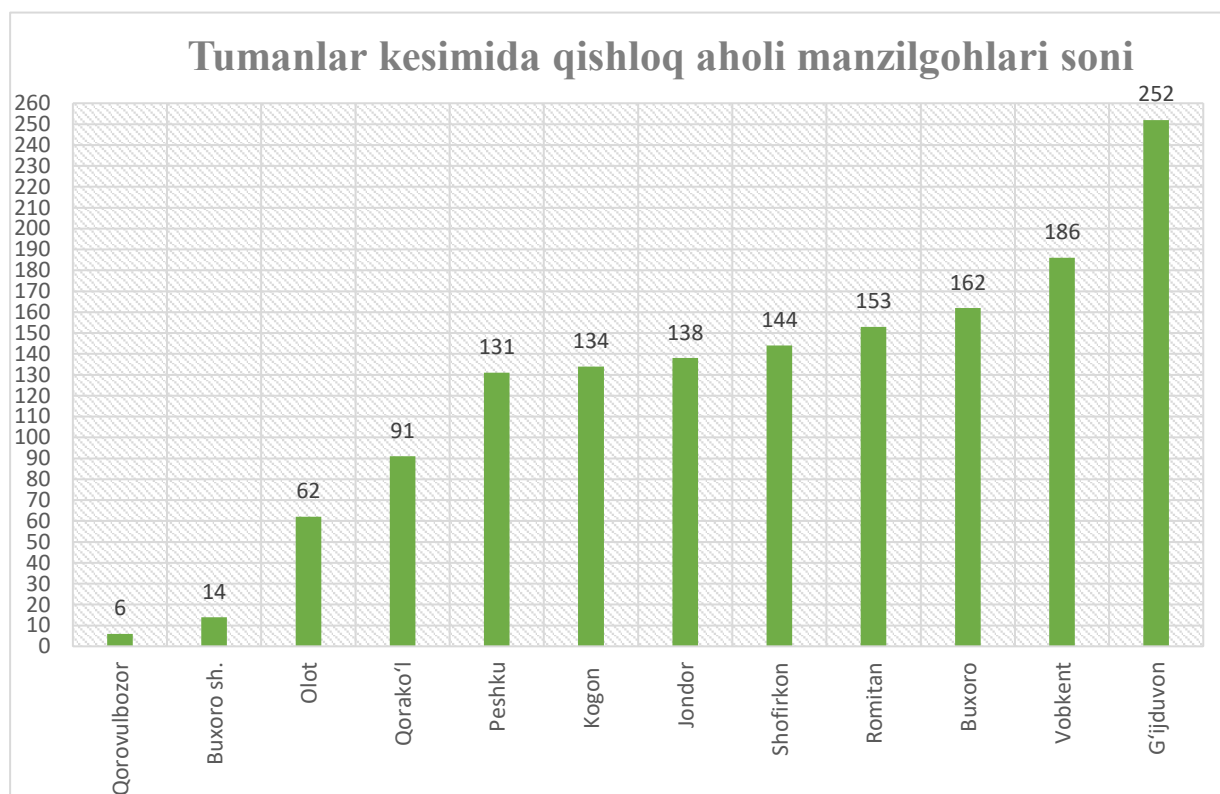
Buxoro viloyati aholi sonining ko'payishi bo'yicha respublikada o'rtacha ko'rsatkichga ega. Qishloq aholisi 1989-2009-yillar oralig'ida 130,8 foizda o'sgan. Undan keying davrda o'sish biroz pasaygan. Bunga sabab, 2009-yilning "urbanistik siyosati" shahar va qishloq aholisi o'sish va joylanish ko'rsatkichkariga, ularning o'zgarishiga keskin ta'sir etdi.

Xususan, mazkur yilda, viloyatdagi 60 ta qishloq aholi punktlariga shaharcha maqomi berildi. Ushbu qishloqlarda jami 156790 kishi istiqomat qiladi. Tumanlar kesimida tahlil qilinganda, eng ko'p qishloq aholi punktlari Qorako'l

(12 ta), G'ijduvon (10), Shofirkon, Olot, Jondor (har birida 8 ta) tumanlarida shaharcha maqomi berildi. Shaharcha maqomini olgan qishloq aholi punktlari orasida Yangibozor (6460 kishi, Peshu tumani), Qoqishtuvon (4085 kishi, Romitan tumani), Iskogare (3996 kishi, Shofirkon tumani), kabi hududlarda eng ko'p aholi istiqomat qilgan.

Bugungi kunda viloyatda mavjud 1473 ta (01.01.2023) qishloq aholi manzilgohlari viloyat tumanlari bo'yicha notekis taqsimlangan. Bunga relyef, iqlim, gidrologik va boshqa omillar o'z ta'sirini ko'rsatadi. Voloyat tumanlari orasida eng kam qishloq aholi punktlari 8,4 ming qishloq aholisi mavjud bo'lgan Qorovulbozor tumaniga to'g'ri keladi. 2-rasm.

**2-rasm**



Izoh: Diagramma O'zbekiston Respublikasi Prezidenti huzuridagi statistika agentligi ma'lumotlari asosida tuzilgan.

Buxoro viloyat tumanlari qishloq aholi punktlari soni bo'yicha boshqa viloyatlardan keskin ajralib turadi. Ayniqsa Vobkent va G'ijduvon tumanlari bu borada yetakchilar qatorida turadi. Respublikada eng ko'p qishloq aholi punktlariga ega tumanlar uchligida G'ijduvon (252 ta) birinchi, Payariq (210 ta) ikkinchi, Vobkent (186 ta) uchinchi o'rinda turadi.

Viloyat qishloq aholisining umumiy soni 1284,1 ming kishini tashkil qiladi. Qishloq aholisining o'rtacha zichligi 1 km<sup>2</sup> maydonga 24,1 kishiga teng. Eng yuqori ko'rsatkich – 314,5 kishi Vobkent viloyatda yetakchi hisoblanadi. Bu borada mazkur tuman Farg'ona vodiysi tumanlariga yoki Qashqadaryo

viloyatining Shahrisabz, Kitob tumanlariga o‘xshab ketadi. Ayni vaqtda maydoni katta hisoblangan Peshku, Qorako‘l va Jondor tumanlarida aholi juda siyrak joylashgan.

Shunday qilib, Buxoro viloyati qishloqlarining qisqacha tahlili shuni ko‘rsatadiki, cho‘l sharoitida aholi geografiyasi nihoyatda katta ichki tafovutlarga ega. Bir tomondan Buxoro va Qorako‘l vohalarida aholi zich va kattaroq qishloqlar ko‘p bo‘lsa, katta maydonni band etgan cho‘l hududlarida aholi siyrak joylashgan va doimiy qishloq aholi manzilgohlari nihoyatda kam.

Viloyat qishloqlari toponimiga to‘xtaladigan bo‘lsak, ularning toponimikasi viloyatning tarixiy-geografik, etnografik xususiyatlarini aks ettiradi. Chunonchi, bu yerda “arab” so‘zi bilan yasalgan 40dan ortiq qishloq nomlari bor (Arabxona, Arabon, Arablar, Arabsaroy va h.k.). Shuningdek, turli kasb-hunar ma’nosini anglatuvchi Pichoqchi, Charmgar, Gilambof, Quttisoz, Sartaroshlar, Novvoylar, Chitgaron, Zargaron kabi 50dan ziyod qishloqlar viloyatning turli hududlarida joylashgan.

Xulosa o‘rnida ta’kidlash lozimki, Buxoro viloyati qishloqlarining katta-kichikligi, tarixiy shakllanishi, geografiyasi va toponimikasi o‘ziga xosligi bilan mamlakatimizning boshqa mintaqalaridan ajralib turadi. Ushbu yo‘nalishdagi ilmiy ishlar doimo dolzarbligini saqlab qoladi.

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## **RESPUBLIKAMIZDA INVESTITSION LOYIHALARNI BAHOLASH VA SAMARADORLIGINI TAHLIL QILISH**

*Annotatsiya. Mazkur maqolada investitsiyalardan samarali foydalanishni boshqarishning amaldagi holatini tahlil qilish va investitsion loyihalarni baholash haqida ma'lumotlar berilgan.*

*Kalit so'zlar: Iqtisodiyot, investitsiya, yalpi hududiy mahsulot, loyiha, mamlakat iqtisodiyoti, tadbirkorlik faoliyati, xorijiy va mahalliy investorlar.*

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## **ASSESSMENT OF INVESTMENT PROJECTS IN OUR REPUBLIC AND ANALYSIS OF EFFICIENCY**

*Abstract. This article provides information on the analysis of the current state of management of the effective use of investments and the evaluation of investment projects.*

*Key words: Economy, investment, gross regional product, project, country's economy, entrepreneurship, foreign and local investors.*

So'nggi davrda jahon mamlakatlarida hududlar iqtisodiyoti o'rtasidagi nomutanosibliklar kuchayib bormoqda. Ilg'or mamlakatlarda aholi jon boshiga to'g'ri keluvchi real yalpi hududiy mahsulot hajmi bo'yicha rivojlanish darajasi jihatidan eng yuqori va eng past 10 foizlikka kiruvchi hududlar o'rtasidagi o'rtacha tafovut ortib borib, oxirgi o'n yillikda 1,7 martani, rivojlanayotgan mamlakatlarda esa ushbu tafovut aytilgan davrda 3,2 martani tashkil etgan. Ba'zan iqtisodiy salohiyat bo'yicha mamlakatlar ichidagi hududlar o'rtasidagi farq mamlakatlar o'rtasidagi farqdan katta bo'lmoqda<sup>20</sup>.

Iqtisodiyotda investitsiya loyihalarining qoplanish muddatlari tashkiliy-uslubiy mezonlarini noaniq to'plamlar nazariyasi asosida yaxshi, o'rta va yomon darajalarda baholash hamda tahlil qilish metodikasini takomillashtirish natijasida ularning qoplanish muddatlarini tahlil qilish va aniq mezonlar asosida baholanadi (1-rasm).

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<sup>20</sup><https://blogs.imf.org/2019/10.09/widening-gaps-regional-economies>

<b>Investitsion loyihalarni baholash mezonlari</b>	
Amalga oshiriladigan loyihani baholashga imkon beruvchi maqsadli mezonlar	Loyihalar orasidan maqbul bo'lganini tanlashga imkon beruvchi mikdoriy mezonlar (moliyaviy-iqtisodiy)
Me'yoriy mezonlar (huquqiy), ya'ni milliy, xalqaro huquq, standart talabi, konventsiyalar va boshqalar. Ilmiy-texnik va bozor mezonlari	Loyiha qiymati. Ishlab chiqarish mezonlari. Foyda. Rentabellik.
Sarflangan kapitalning qoplanish vaqti	Tavakkalchilik va moliyaviy oqibatlar
Loyihaning uzoq muddatli rivojlanish istiqboli maqsadlariga	Foyda ko'rsatkichining mo'ljallanayotgan davr, muhit o'zgarishi va loyihani baholashdagi xatoliklariga ko'ra tarkib topishi
<b>1-rasm. Investitsiya loyihasi baholashda foydalaniladigan mezonlar<sup>21</sup></b>	

Mamlakat iqtisodiyotida tadbirkorlik faoliyatini erkinlashtirish, xorijiy va mahalliy investorlar uchun qulay investitsiya muhitini shakllantirish, hududlarning investitsiyaviy jozibadorligini oshirish, investitsiya muhitini rivojlantirish, real amaliyotda yuzaga kelayotgan muammoli vaziyatlarni o'z vaqtida aniqlab, bartaraf etish mumkin bo'lgan iqtisodiy platformani yaratishga erishish islohotlarning bosh omili bo'lib qolmoqda. Bu borada olimlarning fikrlariga e'tibor qaratsak, A.M.Sodiqovning yondashuviga ko'ra, muayyan mintaqada investitsiya salohiyati undagi tabiiy-resurs, ishlab chiqarish, iste'mol, infratuzilma, innovatsiya, mehnat, institutsional, moliyaviy salohiyat bilan aniqlanadi<sup>22</sup>. Uning tadqiqotlarida keltirilishicha, faqatgina mintaqaning tabiiy-iqtisodiy, demografik, ekologik va boshqa sharoitlarini har tomonlama hisobga olibgina kapitalni jalb qilishdan kutilayotgan samaraga erishish va uni iqtisodiyotni jadal rivojlantirishga yo'naltirish mumkin. MDH davlatlari olimlaridan biri D.D.Dengin esa<sup>23</sup> "...investitsiya salohiyatini mintaqaning makroiqtisodiy xususiyati sifatida bilib, o'z ichiga iqtisodiy-geografik sharoiti, hududning ishlab chiqarish omillari bilan to'yinganligi, aholi turmush darajasi, ularning iste'mol talabi kabi omillarni qamrab olishini ta'kidlaydi.

Investitsiyalarning samaradorligini baholashda investitsiya normasi, investitsiya multiplikatori, investitsiya akseleratori, ICOR koeffitsienti,

<sup>21</sup> Tadqiqotlar asosida muallif tomonidan tuzildi

<sup>22</sup> Садыков А.А. Основы регионального развития: теория, методология, практика//Монография. Ташкент. «IQTISOD-MOLIYA», 2005. С. 198 – 201

<sup>23</sup> Денгин Д.Д. Региональный инвестиционный потенциал: пути изучения и проблемы использования // Экономический журнал. 2009. Т. 16. № 2. С. 50–56.

investitsiya qaytimi koeffitsientidan foydalanish maqsadga muvofiq. Mazkur ko'rsatkichlarni tanlashdan maqsad ular investitsiyalarning hajm miqdoriy o'zgarishini emas, balki ularning o'zgarishi iqtisodiyotga qanchalik samara bera olishini ifodalashga xizmat qiladi.

O'zbekiston hududlariga 2010-2022 yillar davomida kiritilgan investitsiyalarning iqtisodiyotga nisbatan ko'lami va samaradorlik darajasini ko'rsatuvchi investitsiya normasi, investitsiya multiplikatori, iqtisodiy salohiyatdan foydalana olish indeksi salmoqli yuqori bo'lgan mintaqalar qatoridan Qoraqalpog'iston Respublikasi, Buxoro viloyati, Qashqadaryo viloyati, Toshkent shahri, Sirdaryo viloyati kabi hududlar joy olgan (2-jadval).

## 2-jadval

### O'zbekiston hududlarida 2010-2022 yillarda o'rtacha investitsiya samaradorligi ko'rsatkichlarining o'zgarishi<sup>24</sup>

№	Investitsiya normasi	Investitsiya multiplikatori	Iqtisodiy salohiyatdan foydalana olish indeksi			
<b>Yuqori ko'rsatkichga ega hududlar</b>						
1.	Qoraqalpog'iston Respublikasi	61,2	Buxoro	2,44	Qoraqalpog'iston Respublikasi	2,45
2.	Buxoro	48,3	Qoraqalpog'iston Respublikasi	1,43	Buxoro	1,90
3.	Qashqadaryo	45,1	Qashqadaryo	0,81	Qashqadaryo	1,73
4.	Sirdaryo	35,2	Toshkent vil.	0,80	Sirdaryo	1,36
5.	Toshkent sh.	35,2	Toshkent sh.	0,67	Toshkent sh.	1,35
<b>O'rtacha ko'rsatkichga ega hududlar</b>						
6.	Navoiy	32,5	<b>Respublika</b>	0,63	Navoiy	1,25
7.	Jizzax	30,9	Andijon	0,61	Jizzax	1,19
8.	Namangan	28,7	Samarqand	0,57	Namangan	1,09
9.	Surxondaryo	28,0	Farg'ona	0,55	Surxondaryo	1,06
10.	<b>Respublika</b>	<b>25,9</b>	Namangan	0,43	Toshkent vil.	0,95
11.	Toshkent vil.	24,6	Surxondaryo	0,40	Xorazm	0,94
<b>Nisbatan past ko'rsatkichga ega hududlar</b>						
12.	Xorazm	23,9	Sirdaryo	0,39	Samarqand	0,92
13.	Samarqand	23,4	Jizzax	0,33	Farg'ona	0,79
14.	Farg'ona	20,3	Navoiy	0,31	Andijon	0,67
15.	Andijon	17,4	Xorazm	0,29		

Mazkur hududlarda investitsiya samaradorligi yuqori bo'lish bilan birga ishlab chiqarishning kapital sig'imi ham katta bo'lgani uchun ularning ICOR koeffitsienti ham baland bo'lgan. Andijon, Farg'ona, Samarqand, Xorazm viloyatlarida esa so'nggi o'n yillikda investitsiya faolligi past bo'lgani sababli ularda investitsiya normasi 17,4-23,9 qiymatga ega bo'lgan. Investitsiya

<sup>24</sup>O'zbekiston Respublikasi Davlat statistika qo'mitasi ma'lumotlari asosida hisoblangan



multiplikatori bilan tavsiflanuvchi investitsiyalar iqtisodiy samaradorligi esa Xorazm, Navoiy, Jizzax va Sirdaryo viloyatlarida nisbatan past bo'lgan. 2010-2022 yillarda Samarqand, Farg'ona va Andijon viloyatlari esa o'z iqtisodiy ko'lamiga mos ravishda investitsiyalar jalb qila olmaganlar. Andijon, Farg'ona, Xorazm va Samarqand viloyatlariga o'zlashtirilayotgan investitsiyalar asosan mehnat sig'imi yuqori tarmoqlarga yo'naltirilgan.

“Har qanday korxonada samarali investitsiya tanlovi borasida ma'lum muammolarga duch kelishi mumkin. Shu bois, ushbu tanlovning olib borilishi rejalashtirilgan moliyaviy resurslar hajmiga mos kelishi talab etiladi. Investitsiya jozibadorligi loyihalar samaradorligi bilan uzviy bog'liq, ya'ni investitsiya portfelida, birinchi navbatda, samarali investitsiya loyihalari o'rin oladi. Xususan, amaliyotda investitsiya loyihalarini joylashtirish ko'plab bosqichlarda amalga oshirilishini talab etadi. Korxonalarda investitsiya portfelini shakllantirishda loyiha samaradorligini baholash quyidagi usullar orqali aniqlanadi: vaqt omili hisobga olinmagan – oddiy, ya'ni statistik usullar; istiqboldagi tushumlarini diskontlashga asoslangan va davriy qiymatni o'zida mujassamlashtirgan yangi dinamik usullar.

Mamlakatimizda oqilona investitsiya siyosatini olib borish va hududlarga investitsiyalarni faol o'zlashtirish hamda ulardan samarali foydalanish uchun zarur shart-sharoitlar yaratishda dastlabki bosqichda uzoq muddatga mo'ljallangan Mintaqaviy siyosat umumrespublika konsepsiyasini ishlab chiqish maqsadga muvofiqdir. Mazkur umumrespublika konsepsiyasi esa alohida mintaqalar doirasida uzoq muddatli ijtimoiy-iqtisodiy rivojlantirish konsepsiyalarini ishlab chiqishda ustuvor yo'nalishlar va asosiy maqsadlarni aniqlashga asos bo'ladi. Keyingi bosqichlarda esa mintaqalar ijtimoiy-iqtisodiy rivojlantirish konsepsiyalari asosida hududlar investitsiya strategiyalarini ishlab chiqish tavsiya etiladi.

Har qanday loyihani muvaffaqiyatli amalga oshirish uchun investitsion resurslar zarur bo'ladi. Lekin uning o'zi etarli emas, korxonada zarur investitsion resurslarga ega bo'lish bilan birga, ulardan samarali foydalana olishi ham lozim. Zero, har qanday biznesda birinchi vazifa mavjud resurslardan unumli foydalana olishdan iboratdir.

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## EFFECTIVE METHODS OF TEACHING FRENCH

*Abstract. Today, many pedagogical technologies are used in teaching the French language. It is intended to make complex topics more understandable and memorable for students. The article envisages the use of new modern pedagogical technologies, the application of the "heuristic education" technology to the science of the French language, and thereby increasing the activity of students, encouraging them, engaging students in the lesson and improving the quality of the lesson.*

*Key words: pedagogical technology, heuristic educational technology, problem, handout, heuristic didactics.*

### INTRODUCTION

Pedagogical technology is an innovative approach to teaching technical subjects with high efficiency for students. It uses technological tools to create a more interesting and interactive learning experience [1, 2].

Educational technology can be used effectively in technical education, including video lectures, simulations, animations, and virtual labs to help students visualize complex concepts and gain practical skills. This allows students to study at their own pace and learn in ways that suit their individual learning styles, which improves comprehension and retention of material [3].

In addition, pedagogical technology provides rapid feedback and diagnostic tools that allow students to identify their strengths and weaknesses. Teachers can also track their progress and provide personalized support and feedback based on their needs. This approach can lead to increased motivation and overall performance, which can have a positive impact on learning outcomes.

### METHOD

The main essence of heuristic learning is to always try to discover something new. Heuristic comes from the Greek *heuriska*, which means to seek, to find, to discover.

Teaching heuristics:

1. Form of teaching - heuristic conversation. In this, questions and answers are organized between the teacher and the student in order to understand the essence of the issue and come to a consensus.

2. Teaching method. In the process of creative work, the teacher gives the student purposeful ideas about the work, guides him in the right direction when

his mind wanders, and organizes brainstorming from time to time. It creates a heuristic situation to clarify the issue.

3. Technological process of the given issue. It was determined by the student himself. The final result of creating a creative product will depend on the technology chosen by the student. If the chosen way does not work, the teacher will help the student in time.

The student's creative self-realization is the highest issue of heuristic teaching.

The technological form of heuristic teaching among innovative technologies is almost based on Socrates' method of questioning and reasoning.

It is known that Socrates first asked his students a general guiding question, and after receiving the answer, he asked a clarifying question and asked a question very close to it until he determined the truth.

The situation in heuristic teaching is a key element of teaching. Such a situation activates the student's ignorance, its purpose leads to the birth of a personal idea by the student, to the creation of hypotheses, schemes. In heuristic teaching, the learning outcome cannot be predicted. Different answers can be obtained from each student [3, 5].

### **RESULT AND DISCUSSION**

In heuristic learning, the student learns prior knowledge and then applies it to his or her project through live learning. The motto of striving for the future by studying previous knowledge applies here.

Heuristic teaching is based on the school of free development, and its theory is heuristic didactics.

The topic given by the teacher to the student of the French language subject of heuristic educational technology for creative project work: "Singular and plural forms of nouns".

Table 1

The order of tasks that must be performed to clarify the problem of the topic

Tasks	Fulfillment of the task
Giving examples of singular forms of nouns	
Give examples of plural forms of nouns	
Making a sentence using the given examples	
Creating a dialogue using a structured sentence	

As part of the implementation of heuristic technologies, the process of assimilation of educational material by students has a certain structure and sequence. The teacher creates conditions for difficult situations, offers it to students, then students are divided into groups [4].

Small groups come together to divide the respective tasks and functions and formulate the problem. Small groups engage in active brainstorming discussions, which allow students to propose hypotheses that cannot be refuted in the first stages of discussion. Activation of student participation in brainstorming is provided by the absence of criticism from the teacher and students. During the discussion of the problem, the students themselves determine the viability of the hypothesis; their logic test is performed. Students draw appropriate conclusions. Thus, there are many solutions to the same problem (several hypotheses are put forward during the discussion). Further research allows students to reject unnecessary hypotheses and draw appropriate conclusions. Also, in the process of mastering the educational material, students implement projects. They work on the project both individually and in pairs. Projects can be done in large groups. The teachers in the auditorium organize the space in such a way that it is necessary to create comfort for students to work with each other and discuss various issues. The teacher tries to create a cooperative environment. Necessary educational and methodological materials and support are formed. Multimedia technologies (interactive whiteboard and projector) are used, various electronic resources are used on the personal platform of students, such as Moodle and HEMIS, where additional reference literature is placed, which students can use at any time.

Students' knowledge and completed projects are evaluated according to the following criteria:

- originality of ideas and solutions;
- degree of independence;
- ability to apply theoretical knowledge in practice;
- the amount of new information on the topic and the level of awareness of this news;
- the creative side of the topic (level of presentation of the project - oral presentation, report, multimedia presentation), etc.

### **CONCLUSION**

In conclusion, the use of pedagogical technology in the teaching of philological subjects can be effective in improving educational results. Through the use of technology, students can gain new concepts, practical skills, and knowledge while contextualizing teaching and learning with real-life scenarios, allowing students to think critically and solve problems. helps build problem-solving skills.

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## **YURTIMIZ TINCHLIGI VA TARAQQIYOTI, XALQIMIZ FAROVONLIGI ASOSLAB BERILGAN HUJJAT**

*Annotatsiya. Maqolada O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Oliy Majlis va O'zbekiston xalqiga qilgan Murojaatnomasining Vatanimiz taraqqiyoti va xalqimiz farovonligini ta'minlashdagi muhim hujjat ekanligi har tomonlama asoslab berilgan.*

*Kalit so'zlar: Murojaatnoma, Harakatlar strategiyasi, Taraqqiyot strategiyasi, Insonga e'tibor, sifatli ta'lim, Tarixiylik va mantiqiylik ilmiylik tamoyili.*

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## **THE DOCUMENT ON WHICH THE PEACE AND PROGRESS OF OUR COUNTRY AND THE WELFARE OF OUR PEOPLE ARE BASED**

*Abstract. In the article, the Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis and the people of Uzbekistan is an important document in ensuring the development of our country and the well-being of our people.*

*Key words: Petition, Action strategy, Development strategy, Attention to people, quality education, Historicity and rationality and scientific principle.*

Jamiyatimiz hayotining barcha sohalarini qamrab olgan islohotlar strategiyasi tufayli qanday ulkan natijalarga erishilayotganiga bugun barchamiz guvoh bo'lib turibmiz. Chuqur o'ylangan, jahon tajribasi, mamlakatimizning o'ziga xos xususiyatlari va xalqimiz mentaliteti inobatga olingan holda ishlab chiqilgan mazkur strategiya o'zini to'la oqlayotgani har qadamda ko'zga tashlanyapti.

Prezidentimizning Oliy Majlis va O'zbekiston xalqiga Murojaatnomasida belgilab berilgan ustuvor yo'nalishlar va dolzarb vazifalar buning yaqqol dalilidir.

Ma'lumki, 2017-2021 yillarda O'zbekiston Respublikasini rivojlantirishning beshta ustuvor yo'nalishi bo'yicha Harakatlar strategiyasi mamlakatimiz taraqqiyotining yangi davrini boshlab berdi. Mustaqil demokratik rivojlanish yo'lidagi tiklanish bosqichlarini o'tib, milliy taraqqiyot tamoyillari yaqqol namoyon bo'lgan islohotlar sari yuz tutdik. Yangi O'zbekistonning taraqqiyot strategiyasi esa hayotimizning barcha sohalarini yanada rivojlantirish

borasida erishish lozim bo'lgan yuksak natijalar, milliy yuksalishning ulkan imkoniyatlari va shart-sharoitlari uchun mustahkam zamin yaratdi.[1]

Shu jihatdan olganda, Prezidentimizning har yilgi Murojaatnomalari va ular asosida qabul qilingan Davlat dasturlari yurtimiz strategik taraqqiyot yo'lining mazmunini, maqsad va yo'nalishlarini aniq-tiniq belgilab bermoqda.

Bu borada quyidagilarni alohida ta'kidlash joiz:

Birinchidan, davlatimiz rahbarining eng asosiy va dolzarb ijtimoiy iqtisodiy masalalar va jamiyatni demokratik rivojlantirishning ustuvor yo'nalishlari bo'yicha Murojaatnoma bilan chiqish tajribasi dunyoning ko'pchilik taraqqiy etgan mamlakatlari siyosiy hayotining tarkibiy qismiga aylangan. Bu nuqtai nazardan, Murojaatnoma joriy yildagi keng qamrovli ijtimoiy iqtisodiy islohotlarni muvaffaqiyatli amalga oshirish, davlat va jamiyat qurilishi sohasida chuqur demokratik o'zgarishlar samaradorligini ta'minlash borasidagi muhim dasturulamal vazifasini o'tashi, shubhasiz.

Ikkinchidan, Prezidentimiz Murojaatnomasida bugungi taraqqiyotimiz va Yangi O'zbekiston kelajagining poydevorini belgilab bergan strategiyaning ulkan ahamiyati, uning hayotimizni tubdan isloh qilish, mamlakatimizni eng rivojlangan davlatlar qatoriga ko'tarish borasidagi faoliyatning metodologik asosi sifatidagi mohiyati ochib berilganini alohida ta'kidlash lozim.

Uchinchidan, Murojaatnomada keyingi yillarda erishilgan marralar sarhisobiga doir keltirilgan misollar va dalillar keng ko'lamli va samarali islohotlarning ulkan natijalari haqida aniq-tiniq tasavvur uchun asos bo'ladi.

To'rtinchidan, istiqbolimizni belgilab beradigan ustuvor yo'nalishlar, amalga oshirilishi lozim bo'lgan eng dolzarb vazifalar, barchamiz uchun birdek ahamiyatga molik masalalarning yechimlari ko'rsatib berilgan Murojaatnoma, shubhasiz, Prezidentimiz tomonidan **"Insonga e'tibor va sifatli ta'lim yili"**, deb nom berilgan 2023 yilda amalga oshirilayotgan islohotlardagi bevosita ishtirokimiz va mas'uliyatimizning o'ziga xos muhim mezoni hamdir. Murojaatnomani ana shu serqirra va dorulomon jarayonning asosiy hujjati sifatida anglash va tushunish, bu boradagi ma'naviy-ma'rifiy va targ'ibot-tashviqot ishlarida ushbu hujjatda o'z aksini topgan quyidagi tamoyillarga alohida ahamiyat qaratish maqsadga muvofiq.

Tarixiylik va mantiqiylik tamoyili nuqtai nazaridan ma'lumki, hayot bir joyda deysinib turmaydi, uning oqimi tez va har bir yangi kun, yangi yillar yangicha yondashuv hamda o'zgarishlarni talab qiladi. Ayni paytda, xalqimiz taraqqiyotining hozirgi davri barcha sohalarda yangidan-yangi islohotlar va o'zgarishlarni kun tartibiga chiqaryapti.

Prezidentimiz Shavkat Mirziyoyev o'zining Murojaatnomasida "Jonajon O'zbekistonimiz milliy rivojlanishning yangi davriga dadil qadam qo'ymoqda. Hayotimizning barcha jabhalarida ulkan o'zgarishlar yuz bermoqda. Behisob shukr, bu yil aholimiz 36 milliondan oshdi. Har yili safimizga qariyb 900 ming yangi avlod qo'shilmoqda. O'zbekiston deb atalmish katta va inoq oilaning har

bir a'zosi tinch va farovon hayot kechirishi uchun zarur shart-sharoitlar yaratish yo'lida tinimsiz izlanyapmiz", deya bejiz ta'kidlamagan.[2]

Ilmiylik tamoyiliga ko'ra, ushbu Murojaatnoma mamlakatimizning yangi qiyofasini yaratish, Yangi O'zbekistonni barpo etish asnosida adolatli demokratik davlat, rivojlangan fuqarolik jamiyatini rivojlantirishga xizmat qiladigan islohotlar va taraqqiyot strategiyasining o'ziga xos xususiyatlari hamda zamonaviy masalalarini har tomonlama chuqur tahlil qilishning yorqin namunasidir.

Shu bilan birga, mazkur tarixiy hujjat keyingi yillardagi islohotlar istiqbolini belgilab beradigan ustuvor yo'nalishlar, kelgusida amalga oshirilishi lozim bo'lgan eng dolzarb va muhim vazifalar, barchamiz uchun birdek ahamiyatga molik masalalarning yechimi ko'rsatib berilgan qo'llanma, shuningdek, yaqin kelajakdagi faoliyatimizning ilmiy-nazariy va metodologik asosi hamdir. O'z navbatida, 2023 yilga mamlakatimizda **"Insonga e'tibor va sifatli ta'lim yili"**, deb nom berilgani ham ana shu hayot haqiqati va bugungi davr da'vatini aks ettiradi.

Prezident Murojaatnomasi yurtimiz, xalqimiz hayotini tubdan o'zgartirish, mamlakatimizning yangi qiyofasini yaratish, Yangi O'zbekistonni barpo etishning nafaqat 2023 yil, balki keyingi yillarga ham mo'ljallangan taraqqiyot va yangilanish strategiyasi asosidir. Bu esa, o'z navbatida, yurtimiz taraqqiyoti, xalqimiz farovonligi, barcha sohalardagi o'zgarishlar va yangilanishlarning strategik tamoyillari asoslab berilganligidan dalolatdir.

Muxtasar qilib aytganda, Prezidentimiz Shavkat Mirziyoyevning Oliy Majlis va O'zbekiston xalqiga Murojaatnomasini yirik fenomen, muhim tarixiy hujjat sifatida o'qib-o'rganish, uning ta'sirchanligi va ahamiyatini yanada oshirishga xizmat qiladigan ma'naviy-ma'rifiy tadbirlarni samarali tashkil qilishda barchamizning zimmamizga ulkan mas'uliyat yuklaganini unutmasligimiz kerak.

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## **"MUROD" TECHNOLOGY POLUCHENOGO METHODOM INDOOTBORA**

*Annotation. The article describes the results of scientific research on the introduction of a new modern seed-growing system and agrotechnical measures, one of the main factors in increasing the gross harvest of radish and increasing yields*

*Key words: agricultural technology, growing season, individual selection, sowing, mother plant, flowering, harvest.*

Taking into account that the demand of the population of our country for medicinal plants is increasing day by day, increasing the variety of vegetable crops, enriching the market stall with various vegetable crops is one of the urgent tasks of today. Therefore, in our article, we conducted an experiment in order to test the newly created and introduced radish variety "Murod". The experiment was carried out in 2021-2023 at the scientific-experimental station of the Scientific-Research Institute of Vegetables, Potatoes and Potatoes and Andijan.

Considering that radish is cultivated as a repeated crop in the republic, this medicinal plant does not require a separate place. The cultivation technology is not so complicated. Radish is very useful for the human body and it contains mineral salts such as potassium, calcium, sodium, magnesium, iron, phosphorus, sulfur, carbohydrates and phytoncides. Another valuable feature is its antiseptic properties. Radish increases the secretion of gastric juice, stimulates appetite, improves the functioning of the stomach.

Radish variety "Murod" was obtained by single selection of "Andijon-9" variety, (*Raphanus sativus.*), belongs to the cabbage family and is a two-year plant. In the first year of the growth of the "Murod" radish variety, a ball of hairy leaves and 200 g weight, elongated, green root fruits are produced. In the second year, it blooms with a flower, and the flowering lasts up to a month. 8-12 seeds are placed in small pods. The color of the seed is reddish-brown, the shape is round.

The root is an arrow root, and after the seed has germinated, the arrow roots are 25-30 cm long. penetrates to a depth of The color of the roots is white during the growth period. The thickened part of the root and stem is called rhizome. When the plant turns green and produces 1-2 leaves, the rhizome begins to form. Root consists of three parts: 1- head, 2- neck, 3- true root. In the formation of rhizomes, the upper part of the seed-bearing leaf (hypocotyl), the lower part of the seed-bearing leaf (epokotil) and the primary root are involved in the formation of the root.

The leaves emerge from the radish in a circular shape. The upper part of the rhizome and the outer part of the circle have leaves, and the inner part has young leaves. The leaves are like a compound leaf on a long stem. These leaves are hairy, segmented and have a blister-like structure in some places.

Flower bouquet - shingle. The flower has four corollas, bisexual, white, pink, pollinated by external insects, mainly bees, and easily hybridizes with wild radish.

"Murod" variety of seed radish ripens in 90-100 days after planting. The fruit consists of a soft, non-opening capsule or cylindrical pod. The seed is round-oval in shape, brown, and it is very difficult to distinguish it from the radish seed. Only the color of the radish is pale, and the color of the radish is more reddish. 1000 seeds weigh 9-14 grams, the germination rate is 85 percent in I class seeds, and they are stored for 4-5 years.

The Murad variety of radish is a cold-resistant plant, like other varieties, and the rhizome grows and forms in the average temperature of autumn. After the seed is planted, it germinates in 3-5 days at 4-5 °C. A favorable temperature for development is 15-22 C°. An increase in temperature has a negative effect on the formation of the rhizome, that is, it becomes hard, wrinkled and has a low level of preservation. Seed and root-fruit plants stored at low (from zero to 5-8 C) temperature produce buds and fruits in the second year of their life. Roots stored at high temperatures continue to grow in the second year, but do not flower and produce seeds. A mature plant produces small, woody, inedible tubers. At a high temperature, it ripens quickly, becomes lumpy, tastes bad, and the yield decreases. The optimum moisture content of the soil for radish should be 75-85 percent. The plant is very demanding on moisture. If there is a lack of moisture in the soil, the roots are hard, small and bitter; remains. Remaining high soil moisture also leads to poor quality of roots and diseases. When the air humidity drops below 60 percent, root growth slows down and the appearance of woody elements in the fruit increases. This condition makes the root fruit hard and has a negative effect on its taste.

The "Murod" variety of radish, like other varieties, requires the fertile and mechanical composition of the soil to be light and rich in humus. However; it accepts mineral fertilizers well, gives high yield in light soils with mechanical structure. The diametrical increase of the rhizome makes the soil denser by 10-15 percent. The soil is definitely soft, if it is well plowed, it will be compacted. For this reason, the depth for radish is 30-35 cm. it is advisable to choose plowed soils with not less than

The Murad variety of radish, like other varieties, is planted in the middle of July in the northern regions, in the central regions in the end of July, in the first decade of August, and in the south from August 10 to August 20, and the harvest is harvested in October and the first half of November before the onset of cold days.

It is recommended to plant from November 15 to December 10 in the



ninety-fifth period. Radish seeds are usually sown without freezing. It is sown in double ribbon, wide ribbon or wide spreading method. Since the radish root is large, the row spacing is 60 cm. It is planted in double-row ribbons 50+20/2 cm, multi-row ribbons, 20-30 cm between ribbons, 40-80 cm between rows. When planted in the indicated forms, 150-200 thousand seedlings are placed per hectare. The consumption of seeds is 5-6 kg per hectare. Planting depth is up to 2-3 centimeters. SKON-4.2 when planting radishes; SMM-4 and other branded seeders and mechanisms with various attachments are used.

Weeding in cultivation is extremely difficult and laborious work. Therefore, depending on the type and extent of weeds, "Stomp" herbicide is sprayed at the rate of 35 kg/ha. It inhibits weed germination for up to 40 days. Radishes are harvested 12-15 days after the sprouts are fully grown. After 2-4 weeks, when the roots and fruits begin to form, the lawns are fertilized a second time. 2-3 cm between the bushes in the first row. distance from

The Murad variety of radish, like other varieties, is given seed water every 3-4 days. After the lawns turn green, watering is carried out depending on the condition of the soil, until the sprouts are leveled. This ensures that the soil moisture is at the level of 60-75 percent relative to the field moisture capacity.

In the cultivation of vegetable crops, it is necessary to strictly adhere to feeding, that is, the use of mineral fertilizers, taking into account the soil fertility. Because, at present, the cultivation of ecologically pure products is the demand of the times. Taking into account the shortness of the growing period (vegetation) of vegetable crops, especially giving nitrogen fertilizers in excess of the norm is very harmful for the human body, as well as spoiling the quality of the product. Because the root system of vegetable crops is not well developed, it is necessary to pay more attention to local fertilizers. In this case, the consumption value of the plants will be at the level of demand, while preserving the valuable properties. The marketability of the product increases, an ecologically clean product is created. In our experience, we focused more on local fertilizers.

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## **THE USE OF DISTANCE LEARNING IN MEDICAL EDUCATION**

*Abstract: this article reflects on the use of modern educational methods in medical education as well as distance learning mixed educational methods.*

*Keywords: mixed education, face-to-face, mLearning, blended learning distance learning.*

According to Smith and Braim, what distinguishes a distance or online course from a mixed course is the classes that online courses do with respect to a face-to - face meeting: online courses-at least 80% of the course content is delivered online mixed learning 30-80% of the course that is conducted online through face-to-face interaction. "The state and structure of the reading environment is mixed and distance learning is not the only thing that is different from the traditional face-to-face mode; these teaching methods determine the role of traditional education and provide a variety of opportunities for learning" (Smith & Brame).

### **Designing a mixed education course:**

1.Reconfiguring a traditional course for mixed or distance learning based on blended learning technology takes more time and effort, the in-house technologies of the required mixed learning used for the online portion of the classroom. An effective review of course design should include multimodal learning strategies and matching course goals and objectives with both online activities. To develop ideas for conducting face-to-face courses for effective online education at each faculty, it is possible to create lesson processes rich in graphics, using the graphic (design) services of the necessary programs.

2.Tools used in a mixed and distance learning environment are not limited to the internet and the set of computers. In the course of the lesson, students use mobile technologies-for example, smartphones, laptops and tablets. All this includes our mobile communication culture (Milne, 2006). Mobile teaching (mLearning) is another way for teachers to better explain their guidance to students. One way to shape mobile learning in course design is to design online learning materials that can be obtained through the smartphone application of the learning process management system (e.g. Blackboard) and virtual learning activities that can be accessed and completed on mobile devices. Mobile learning (mLearning) is another way in which teachers use the "blended learning" technology of lesson content and meet the students ' demands for the lesson.

3.For study, the physical and virtual classroom space is combined. For example, a mixed learning environment does not occur between a traditional

classroom and an office in someone's home. If a teamwork lesson is expected, by designing activities that can be done remotely, to provide opportunities to work as a team both in and out of the classroom, such as chat-using groups and discussion forums, social media to support online learning communities, course-related websites, and peer-to-peer electronic assessment.

If working in a team increases the effectiveness of the lesson, it is necessary to give the opportunity to work in a team both in the audience and outside it.

Benefits of mixed and distance learning:

**Flexibility.** The mixed learning learning environment allows students to access a variety of media for multimodal learning - hands-on learning files in video, audio, and videoformat for visual learning. Multimodal learning involves students studying in several ways to strengthen concepts and help students learn faster and deeper than information is presented in a single mode.

**Social environment.** Online teaching components such as synchronous conversations, Q & A sessions, and asynchronous hands-on activities and group work give all students, especially those who tend to be silent in face-to-face classes, the opportunity to talk in a safe and open lesson about changing environment, individual engagement, being one-of-a-kind in the room, decreased arousal. In addition, the interaction of groups is facilitated by students sharing files, creating discussion topics and participating in a virtual conversation. At the same time, the social environment of the online learning environment must be carefully developed by the teacher through the possibilities of effective and mutual cooperation online.

**Reusable educational facilities.** Materials such as tutorials, simulations, practical work and assessment can be used for use in other learning environments with the aim of saving design and development time. After the initial effort and time spent developing these materials, the course will be prepared for a mixed education course that will update course materials and use blended learning technologies as needed.

**Mixed and distance learning problems.** There may be some difficulties in creating the course design. For example, an existing course that students cannot master can be made online so that it is convenient. Initially, it is up to the teacher to determine which content is presented face-to-face in traditional education and which content is provided for the course mixed online/offline.

**Roles and responsibilities.** In a distance learning environment, students must learn to adapt, which often requires more individual study than face-to-face courses. Students must have good time management skills, requiring them to balance online and face-to-face training with external commitments. Regardless of whether the educational materials relevant to the subject are presented online or face-to-face, the role of the teacher ultimately serves as the presenter, presenter of the course process. Despite the fact that the teacher creates a mixed learning environment, technology occupies a central stage, as students interact through technology supply, access, flow, content and activities.

Let's consider the application of models of "Blender learning" technology in practice.

The Station Rotation model allows students to rotate through educational institutions on a fixed schedule of classes. This model is the most common in elementary schools, since teachers are already well aware of becoming the "center of their science".

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## **QASHQADARYO VA SURXONDARYO VILOYATLARI SHAHARLARI TOPONIMIKASI**

*Annatsiya: O'zbekistonning barcha viloyatlari singari Qashqadaryo va Surxondaryo viloyatlarining ham joy nomlari kelib chiqishi bilan bog'liq bo'lgan tomonlari ko'p qirrali hamda bahs va munozarali jihatlari bor. Bu ikki viloyat respublikaning Qizilqum va Ustyurt platosida joylashgan hududlardan farqi toponimlarni nomlanishida orografik ya'ni tog'li relyefning borligidir.*

*Kalit so'zlar: Qarshi, Termiz, Shahrisabz, Denov, Kitob, Naxshab, Nasaf, Chig'atoy, Kebekxon, Yerqo'rg'on, Qutadg'u bilig, Gulshan ul-muluk, Antioxiya, Demetrais, Tarmid, Tarmiz, Tami, Tamo.*

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## **TOPONYMICS OF THE CITIES OF KASHKADARYA AND SURKHANDARYA PROVINCES**

*Abstract. Like all regions of Uzbekistan, Kashkadarya and Surkhandarya regions have many aspects related to the origin of place names, as well as controversial and controversial aspects. The difference between these two regions and the regions located on the Kyzylqum and Ustyurt plateaus is the presence of orographic, mountainous terrain in the naming of toponyms.*

*Key words: Karshi, Termiz, Shahrisabz, Denov, Kitob, Naxhab, Nasaf, Chigatoy, Kebekhan, Yerkurgan, Qutadgu bilig, Gulshan ul-muluk, Antiochia, Demetrais, Tarmid, Tarmiz, Tami, Tamo.*

O'zbekistonning janubiy viloyatlari bo'lmish Qashqadaryo va Surxondaryo viloyatlari hududida ko'plab qadimiy shaharlar mavjud. Bunday shaharlar qatoriga Qarshi, Termiz, Shahrisabz, Denov, Kitob va boshqa shaharlarni kiritishimiz mumkin. Bu shaharlarni har birining toponomikasida o'ziga xosliklar mavjud. Yurtimizning eng qadimiy shaharlaridan biri - Qarshi hisoblanadi. Qarshi

qadimda Naxshab (“suv obod qilgan. suv naqsh bergan manzil”) yoki Nasaf deb nomlangan bo'lib, shahar qoldiqlari dastavval A. I. Terenojkin, S. K. Kabanov va M. E. Masson kabi arxeolog olimlar tomonidan o'rganilgan.

Nasaf shahri tarixi bo'yicha jiddiy tadqiqotlar XX asrning 70-yillaridan boshlab O'zbekiston fanlar akademiyasiga qarashli Arxeologiya institutining maxsus ekspeditsiyalari tomonidan olib borilgan. Yozma manbalarda Naxshabda IV-V asrlarda bunyod etilgan yirik va mustahkam qal'a sifatida. VII—VIII asrlarda esa vohaning poytaxt shahriga aylangani haqida ma'lumotlar keltirib o'tilgan. IX-X asrlardan boshlab Nasaf gullab-yashnagan o'rta asr shaharlaridan biri sifatida yodga olinadi. Ushbu davrda ham shahar Buxoro - Balx karvon yo'lida joylashgan. Shaharda qal'a va rabod mavjud bo'lgan hamda shahar to'rtta darvozaga ega mudofaa devori bilan o'rab olingan. XIII asrda esa Naxshabni mo'g'ul bosqinchisi bo'lgan Chingizxon bosib olgach, yondirilib, butunlay vayron etilgan. Tarixchilarning fikricha, yangi Qarshi shahrining vujudga kelishi Kebekxon faoliyati (1318 - 1326) bilan bog'liq. XIV asrda qadimgi Nasafdin 5 km shimolda bo'lgan hozirgi Qarshi shahri o'rnida Chig'atoy urug'idan bo'lmish Kebekxon tomonidan saroy qurdirilgan va yangi shaharga asos solingan. Qarshi atamasi barcha olimlar tomonidan birday qabul qilinmagan. Xususan, yozma manbalarda shaharning eski nomlari bilan - Nasaf, yoki Yerqo'rg'on deb yuritilgan. Shahar nomi turli davrlarda turlicha nomlangan bo'lsada u Naxshab vohasi poytaxt shahrining turli davrlardagi taraqqiyot bosqichlarini o'zida mujassam etgan. Tarixchilarning fikricha, “Qarshi” so'zining ma'nosi xususida quyidagi fikrlar mavjud: M. Ye. Masson va V. V. Bartol'd mo'g'ulcha “Qarshi” so'zi "saroy" ma'nosini anglatadi. chunki mo'g'ul xonlari rasmiy yig'inlari o'tkaziladigan saroy “Oltin Qarshi” deb nomlangan, degan ma'lumot keltirgan. Shuningdek. Yusuf Xos Hojibning “Qutadg'u bilig” asarida “Qarshi” atamasi - “Saroy va “qarama-qarshi turish” ma'nolarini bildiradi deb yozilgan. Zahiriddin Muhammad Boburning “Boburnoma” asarida “Qarshi” so'zi mo'g'ulcha “go'rxona”, ya'ni maqbara degan ma'noni bildirishini va bu nom mo'g'ullar istilosidan keyin paydo bo'lganini ta'kidlab o'tgan. T. Nafasov yozganidek, XV-XVI asrlarda xon avlodi, ulug' ruhoniy va boshqa mo'tabar shaxslar qabri uchun qurilgan dahma, maqbara ham “Qarshi” deyilgan. Chunki o'sha davr odatiga ko'ra bunday kishilar jasadi maqbara ichiga qo'yilgan, maqbara esa saroy, ya'ni “Qarshi” ichida bo'lgan. Muhammad Yoqub Buxoriy “Gulshan ul-muluk” asarida esa “Qarshi” so'zi uyg'urcha “saroy” ma'nosini bildirishini qayd etilgan. Shunday qilib, Qarshi shahrining nomini Kebekxon saroyi yoki uning xilxonasi nomidan kelib chiqqan deyish mumkin. XVI asrlardayoq Qarshi shahri ichki qo'rg'onga ega bo'lgan mustahkam shahar bo'lgan. Asr oxiriga kelib Abdullaxon II tomonidan shaharda bir qator yangi binolar - madrasa, masjid, karvonsaroylar, sardoba, hammomlar va gumbazli savdo inshooti - chorsu, bozorlar hamda Qashqadaryo ustidan ko'prik barpo etilgan.

Mahmud ibn Valining yozishicha bu katta va saranjom shahar jahonning katta shaharlari bilan tenglasha olgan. P. P. Ivanovning ta'kidlashicha, XIX asr



boshlarida Qarshi shahri Buxoro va Samarqanddan so'ng uchinchi o'rinda turgan yirik shahar bo'lgan.

**Shahrisabz** o'rta asrlarda Kesh deb nomlangan. Shahrisabz vohasi Zarafshon tog'lari etagi va G'uzordarvo atrofida joylashgan tumanlami o'z ichiga olgan. Arxeologlarning ta'kidlashicha, voha poytaxti ham Kesh nomi bilan atalgan. U Kitob va Shahrisabz o'rtasida joylashgan. XIX - XX asr boshlarida Kesh vohasida Shahrisabz va Kitob alohida markazga ega yirik shaharlardan hisoblangan. Manbalarda Shahrisabz shahri "Kesh-Kashsh", "Kas" va "Kis-Kis" shakllarida tilga olingan. Akademik V.V. Bar'told Kesh shahri nomi asli Kash bo'lgan, chunki shaharning epiteti "Kashi - dilkash" edi degan fikri e'tibirlidir. Shahrisabz atamasi ham shaharning qadimiy nomi bo'lib, "yashil shahar" ma'nosini bildiradi. Shahrisabz ilk o'rta asrlarda Kitob shahri o'rnida joylashgan. Keyinchalik shaharning mudofaa devori bilan o'rab olinishi va mustahkamlanishi Amir Temur faoliyati bilan bog'liq. Shahrisabz bu davrda aniq rejali asosda baland himoya devori va mustahkam minoraga ega bo'lgan shaharga aylangan. O'zbekiston Respublikasi Vazirlar Mahkamasi tomonidan 2002-yil 29-martda Shahrisabz shahrining 2700 yilligini nishonlash to'g'risida qaror qabul qilindi va tantanalarda YUNESKO vakillari ham ishtirok etdi.

**Kitob** shahri Qashqadaryo vohasida joylashgan yana bir muhim markaz hisoblangan. Manbalarda keltirilishicha, qadimgi va ilk o'rta asrlarda Kesh vohasining markazi Kitob shahri o'rnida joylashgan. XVIII asrda ilk o'rta asrlarga oid shahar harobalari o'rnida Kitob qo'rg'oni barpo qilingan. Uning hududiga ko'plab aholi ko'chib kelib joylashishi natijasida yangi shaharga asos solingan va bu shahar asta-sekin rivojlana borgan.

Tarixchilarning fikricha "Kitob" atamasining ma'nosi haqida quyidagi fikrlar mavjud. Bir guruh tadqiqotchilar shahar nomini Qashqadaryoning yuqori oqimidagi Kashaf jilg'asi nomi bilan bog'laydi. Boshqa bir guruh tojikcha "kift" - "elka", "ob" - "suv" ya'ni "yelkadagi suv" degan ma'noni bildiruvchi "kiftob" so'zidan kelib chiqqan desa yana bir guruh tadqiqotchilar joy ma'nosini anglatadigan so'g'diycha "xat" va "suv" ma'nosini beruvchi tojikcha "ob" so'zidan, ya'ni "suv bo'yidagi shahar" ma'nosidagi "katob" birikmasidan kelib chiqqan deb ta'kidlashadi. Ma'lumki XVIII asrning birinchi yarmida Qashqadaryo vohasining sharqiy qismida Sangfurush, Ulash, Kitob kabi qo'rg'onlar vujudga kelgan bo'lib, keyinchalik ular orasida faqatgina Kitob qo'rg'oni taraqqiy etgan hamda shahar darajasiga ko'tarilgan.

**Chiroqchi.** Chiroqchi qadimdan mohir usta va hunarmandlar shahri bo'lgan. Shuning uchun Chiroqchi shahri nomi - "chiroq yasovchi hunarmandlar" kasbi bilan bog'liq deyilishiga asos mavjud.

**Termiz** - O'zbekistondagi eng qadimiy shaharlardan biri va Surxondaryo viloyatining ma'muriy markazi. Shahar miloddan avvalgi IV - III asrlarda 10 gektar mavdonni egallagan. Mashhur tarixchi Hofizi Abro'yning yozishicha, shahar nomi Amudaryoning narigi tarafidaligiga qaratilib, baqtriyacha "Taramastxa" ("narigi sohildagi manzil") so'zidan olingan va asrlar davomida

turlicha atalib kelingan. Masalan, Antioxiya, Demetrais, Tarmid, Tarmiz, Tami, Tamo va hokozolar. Shahar X asrdan boshlab Termiz deb atala boshlagan.

**Denov.** Kattaligi va aholisining soni bo'yicha Surxondaryo viloyatida Termizdan so'ng ikkinchi o'rinda turuvchi shahar. Denov shahri yozma manbalarda XIV asrdan boshlab forscha "Dehnav" shaklida ya'ni "Yangi qishloq" mazmunida tilga olingan. XVII asr muallifi Mahmud ibn Valining yozishicha, Dehinav ajoyib bozori, katta masjidi va xonoqosi bo'lgan mustahkam qal'a hisoblangan.

Ba'zi tadqiqotchilar Chag'aniyon shahri Denov o'rnida bo'lgan deb hisoblab kelishadi. Arxeologik topilmalar esa denov XV asrga oidligini, uni mustahkam qo'rg'on bo'lganligini tasdiqlaydi.

**Boysun.** Miloddan avvalgi I asrda Boysun o'rnida Poikalon nomli mustahkam shahar-qal'a mavjud bo'lgan. Milodiy VI - XIII asr boshlarida Boysun o'rnida Chag'aniyon shaharlaridan biri - Bosand joylashgan. Abu Is'hoq Istahriyning "Kitob masolik al mamolik" ("Mamlakatlar yo'llari to'g'risida kitob") asarida ham Bosand deb ta'riflangan. "Hudud ul-olam" asarida Bosand ko'p sonli va jangovor aholiga ega bo'lgan mustahkam joydir deyilgan. Arxeologik manbalarga ko'ra, Bosandda hayot ilk o'rta asarlardan mo'g'ullar istilosigacha davom etgan. Mo'g'ullar bosqinida vayron bo'lgan shahar keyinroq qayta tiklangan.

Boysun toponimi bo'yicha quyidagi fikrlar mavjud: Chig'atoy ulusi tarkibiga mansub ko'chmanchi turk qavmlari unga "Boysun" deb nom berganlar. "Boysun" atamasi qadimgi turkiycha "boy" va "sin" dan olinib, "ulug' tog'" yoxud "katta tog'" ma'nosini anglatgan. Qadimgi turkiy qavmlarda turli sanamlarga sig'inishlar qatorida tog'larga nisbatan sig'inish ham mavjud bo'lib, tog'lar muqaddas sanalgan. Mahalliy rivoyatlarga ko'ra, bu yerda qadimdan turkiy qavmlarning badavlat kishilari yashagan bo'lib, "Biysun" atamasi "boylar qishlog'i" ma'nosini anglatgan.

**Jarqo'rg'on.** "Jarqo'rg'on" toponimi qadimda "jar yoqasida joylashgan qo'rg'on" nomidan kelib chiqqan. Arab-fors manbalari bergan ma'lumotlarga ko'ra, Jarqo'rg'on shahri o'rnida VIII - XII asrlarda Charmangan (Sarmangan) shahri mavjud bo'lgan. Bu davrda Jarqo'rg'on vohada mavqei jihatidan Termizdan keyingi ikkinchi shahar bo'lgan.

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## **BUYUK GEOGRAFIK KASHFIYOTLAR**

*Annatsiya. Buyuk geografik kashfiyotlar natijasida insoniyat yangi yerlarni kashf qilish bilan birgalikda eski yerlar bilan quruqlik yo'li ya'ni savdo karvonlari orqali savdo qilingan davlatlarga dengiz yo'li orqali borish mumkinligi ham isbotlandi. Bu jarayonda mohir dengiz suzuvchilari o'z nomlarini tarixning zarvaraqlarida munosib holda qoldirdilar.*

*Kalit so'zlar: Yevropa, Buyuk Ipak Yo'li, Portugaliya, Ispaniya, Xristofor Kolumb, Bagam, Gaiti, Kastiliya, Dominika, Gvadelupa, Kichik Antil, Yamayka.*

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## **GREAT GEOGRAPHICAL DISCOVERIES**

*Annotation. As a result of the great geographical discoveries, along with the discovery of new lands by mankind, it was also proved that it is possible to go to the countries that were traded with the old lands by land, i.e., by trade caravans, by sea. In the process, skilled sea swimmers left their names in the annals of history.*

*Keywords: Europe, Great Silk Road, Portugal, Spain, Christopher Columbus, Bahamas, Haiti, Castile, Dominica, Guadeloupe, Lesser Antilles, Jamaica.*

**Buyuk geografik kashfiyotlar** – XV-XVII asrlar o'rtalarida yevropaliklar tomonidan yangi yerlarni topish va o'zlashtirishlar amalga oshirilgan kashfiyotlar hisoblanadi. Buyuk geografik kashfiyotlar davri boshlanishining bir qancha sabablari bor. Birinchidan, XV-XVII asrlarda Yevropada aholi sonining o'sib borishi natijasida tovarga bo'lgan ehtiyojlar oshib bordi. Bu esa o'z navbatida xomashyoga bo'lgan talabning ortishiga olib keldi. Yevropada xomashyo yetarli

bo'lmagach, sayyoh olimlar ekspeditsiyalar uyushtirib, yangi yerlarni o'zlashtirishni boshlagan. Ikkinchidan, Osiyoni Yevropa bilan bog'laydigan Buyuk Ipak Yo'li o'ta xavfli bo'lib qoldi. Shu sababli, yevropaliklar oldida yangi yerlarni ochish zarurati paydo bo'ldi. Uchinchidan, oltin, kumush, ziravorlar, fil suyagini topish maqsadida yangi yerlarni qidirish ishlari amalga oshirildi. Buyuk geografik kashfiyotlar tashabbuskorlari Portugaliya va Ispaniyalik dengiz sayyohlari bo'lishgan. Sababi, ularga yangi yerlarni o'zlashtirish topshirig'i berilgan. Ekspeditsiya uchun zarur bo'lgan barcha xarajatlar qirollik tomonidan ta'minlangan.

Tarixda Amerika Qit'asini 1492-yilning kuzida Xristofor Kolumb kashf etganligi qayd etilgan. X.Kolumb Amerikaga 4 marta sayohat uyushtirgan, ammo bu yerlarni Hindiston deb atagan. Bunga sabab taxminlarga ko'ra, astronom va geograf **Paolo Taskanelli** sayyoh olimga *Hindistonga g'arbga* suzish orqali ancha yaqin yo'l borligi haqida aytgan. *P.Taskanelli* maslahatlari yordamida hisob-kitoblarni bajarib, uning fikricha Hindistondan Yaponiyagacha 5 ming kilometr masofada yo'l bo'lgan *Kanar* orollari orqali suzish eng qulay deb o'ylagan.

X.Kolumbning birinchi ekspeditsiyaga uchta kema tayyorlagan va flagman (*kema*) uzunligi - 17,3 m.; hajmi - 101,2 tonna; ekipajida 40 kishi bo'lgan. Flot tarkibida hammasi bo'lib, 100 kishi kirgan. Ekspeditsiya natijasida, tarixda birinchi marta yevropaliklar *Bagam* va *Gaitiga* orollariga qadam qo'yishdi. Bu sayohat bilan *Ispaniyaning* Yangi Dunyoga ekspeditsiyasi boshlangan. X.Kolumb bu yerlarni *Xitoy, Yaponiya yoki Hindiston* qirg'oqlari deb o'ylagan. Yevropaliklar bu yerlarni "**Vest-Indiya**" deb atashgan. 1492-yil 13-oktabrda X.Kolumb qirg'oqqa tushdi, unga *Kastiliya* bayrog'ini o'rnatib orol *Kastiliya* mulkiga aylangani to'g'risida akt tuzdi.

Ikkinchi ekspeditsiyada X.Kolumb "**Admiral**" unvoni va 1500 kishilik ekipaj bilan 17 ta kemada safarga chiqdi. Ekspeditsiya natijasida, *Dominika, Gvadelupa, Kichik Antil, Yamayka va Kubaning* janubiy qirg'oqlari bo'ylab suzib, bir necha orol va yarim orollarni kashf etdi. 1496-yil 11-iyunda *Kastiliyaga* qaytib keldi.

Uchinchi ekspeditsiyada 6 ta kema bilan safar uyushtirdi. *Trinidad* orolini kashf etdi. Janubiy tomondan *Orinoko* daryosi deltasi atrofidagi sohil va *Pariya* yarim oroligacha kirib borib, **Janubiy Amerikani** kashf etishni boshlab berdi. 1500-yil *Kastiliyaga* qaytib keldi.

To'rtinchi ekspeditsiyada 4 ta kema bilan 1502-yil 12-iyunda *Martinika* oroliga yetib keldi. Ekspeditsiya izlanishlari natijasida *Gonduras, Nikaragua, Kosta-Rika va Panama* sohillarini kashf qildi. 1504-yil 7-noyabrda *Kastiliyaga* qaytib keldi. X.Kolumb birinchi bo'lib, Atlantika okeanining shimoliy qismida joylashgan subtropik va tropik iqlim mintaqalarini kesib o'tgan va Karib dengizida suzgan birinchi yevropalik sanaladi.

Dengiz navigatsiyasi, kartografiya va geografiyani chuqur bilgan **Vasko da Gama** ham geografik kashfiyotlarga o'z hissasini qo'shgan. Vasko da Gama ekspeditsiyani *Lissabondan* g'arb tomonga yo'l olgan, ammo keyin sharqqa

burilgan. Dengiz sayyohlari Atlantika okeanida yoysimon yo'nalishda suzib, Afrikaning janubida bo'lgan burunni "*Yaxshi Umid*" burni deb atadilar. Vasko da Gama 1497-yilning dekabrda hozirgi **Janubiy Afrika Respublikasining** sharqiy qirg'oqlarini kashf qildi. 1498-yilning 20-may sanasida esa Hindistonning janubi-g'arbdagi yirik savdo markazi hisoblangan **Kalikut** shahriga yetib keldi va Hindistongaboradigan birinchi dengiz yo'lini ochdi.

Amerigo Vespuchchi Ispaniya va Portugaliya dengiz flotida xizmat qilgan. 1499 va 1501-1502-yillarda Janubiy Amerikaning sharqiga uyushtirilgan ekspeditsiyada qatnashgan. Amerigo Vespuchchi bu yerlar Hindiston emas, dunyoning yangi Qit'asi degan fikrni ilgari surgan va Yangi dunyo deb atagan.

**Valdzemuller** 1507-yilda X.Kolumb kashf etgan materikni Amerigo Vespuchchi sharafiga *Amerika* deb atashni taklif etgan. Bu nom hammaga manzur bo'lgan. Keyinchalik esa **Gerard Merkatorning** (1512) xaritalarida ilk marotaba *Amerika* degan so'z ishlatildi. Shu tarzda Yangi dunyoga nom berildi.

Tarixda birinchi bo'lib, dunyo bo'ylab sayohatni **Fernan Magellan** boshchiligidagi ekspeditsiya amalga oshirdi. Bu sayohat Yerning shar ya'ni dumaloq shaklda ekanligini isbotladi. F.Magellan astronomiya va navigatsiya bo'yicha yaxshi bilimga ega edi. 1519-yil sentabr oyida 5 ta kema bilan yo'lga chiqadi. 1520-yilda *La-Plataning* dengizga quyilish joyigacha yetib bordi. Fevral oyida janubga suzishda davom etdi. F.Magellan ekspeditsiyasi tomonidan ochilgan bo'g'iz keyinchalik *Magellan* bo'g'izi deb ataldi. Kemalar Olovli Yer oroli bilan Magellan bo'g'izi orqali o'tib, noma'lum okeanga o'tishdi. Okeanning tinch tabiati uchun F.Magellan tomonidan "**Tinch okean**" deb nom berildi. To'xtovsiz 17 ming km masofani o'tib, *Mariana, Filippin* orollariga yetib borishdi. F.Magellan **Fillipinlik** mahalliy xalq bilan to'qnashuvda vafot etdi. Hamrohlari Tinch okeani orqali suzib, Afrikaning janubi orqali faqat 1 ta "*Viktoriya*" kemasida 1522-yilda Ispaniyaga qaytib kelishdi va dunyo bo'ylab suzishni yakunladilar. Ekspeditsiya orqali yerning sharsimonligi hamda yer yuzasining ko'p qismi suv bilan qoplanganligi aniqlandi.

Golland geografi **B.Varenius** 1650-yilda Antarktidani o'rab turgan qismini *Janubiy okean* deb mustaqil okeansifatida ajratgan. Okeanning chegarasi Janubiy Amerika, Afrika, Avstraliya materiklarining va Tasmaniya hamda Yangi Zelandiya orollarining janubiy chekkalari orqali o'tkazilgan shartli chiziq va janubiy qutbiy doira 35-60° j.k. lar orqali o'tkazilgan. Janubiy okeanni alohida okean qilib ajratishda iqlimning sovuqligi, gidrologik sharoitlar asos qilib olingan. Biroq keyingi tadqiqotlar natijasida Janubiy okeanning iqlimiy va gidrologik sharoitlari Atlantika, Tinch va Hind okeanlariga o'xshashligi aniqlangan. Shu sababli Janubiy okean termini ishlatilmagan.

**Uilyam Yanszon** boshchiligidagi Gollandiya *Ost-Indiya* kompaniyasi ekspeditsiyasi *Karpentariya* ko'rfaziga keldi. U.Yanszon va ekspeditsiya a'zolari *Yangi Gvineya* qirg'oqlarini o'rganishdi. Gollandiyaliklar *Yava orolidan Yangi Gvineyaning* janubiy qirg'og'igasuzib o'tib, bir qancha vaqt o'tgach *Keyp-York* yarimoroli qirg'og'iga yetib borishdi. Hamda 1606-yilda gollandiyalik



U. Yanszon Avstraliyani kashf etgan va Yangi Gollandiya deb atagan. Bir necha oydan so'ng ispaniyalik **A. Torres Keyp-York** yarimoroli shimolidagi bo'g'izdan suzib o'tdi. Keyinchalik bu bo'g'iz uning nomiga qo'yilgan. 1640-yil gollandiyaliklar materikning g'arbini, qisman shimoliy va janubiy sohillarini kashf etgan.

**Jeyms Kuk** mashhur ingliz dengiz-sayyohi va kartografi. Sayyoh yer shari bo'ylab 3 ta aylanma sayohatga boshchilik qilgan va ko'plab geografik ma'lumotlar to'plagan. *Nyufaundlend oroli va Kanadaning sharqiy qirg'oqlarini, Avstraliyani, Tinch, Hind va Atlantika okeanlarini* o'rgangan. Hamda J.Kuk tomonidan tuzilgan xaritalar aniqligi bilan alohida ajralib turadi. 1768-1771 yillarda "*IN-devor*" kemasida Tinch okeaniga amalga oshirilgan birinchi ekspeditsiya Janubiy materikni topish va Avstraliya qirg'oqlarini o'rganishni maqsad qilib qo'yadi. 1769-yilning oktabrida baland tog' bilan qoplangan noma'lum yerga yetib keldilar. Bu *Yangi Zelandiya* bo'lib, sayyoh uch oy davomida uning barcha qirg'oqlarini tekshirdi. Keyinchalik ikki orolni ajratib turuvchi bo'g'izga *Kuk* nomi berilgan. Sayyoh boshchiligidagi ekspeditsiya *Okeaniya* va *Janubiy Atlantika* orollarini xaritalarga aniqlik kiritish, uning geologiyasi, hayvonot olamini o'rganish bo'yicha katta hajmdagi tadqiqotlarni amalga oshirgan. 1774-yil 3-sentabrda ekspeditsiya tomonidan *Yangi Koledoniya* oroli kashf etilgan. 1778-yil 18-yanvarda J.Kuk Gavayi orollarini kashf qildi.

**Buyuk geografik kashfiyotlarning natijalari.** Buyuk geografik kashfiyotlar ilm-fan uchun katta ahamiyatga ega bo'ldi. Uning natijasida geografiya, tarix, etnografiya va okeanshunoslik fanlari ma'lumotlar bilan boyidi. **Vasko da Gama** Hindistonga bolib boradigan dengiz yo'lini ochdi, **F. Magellan** dunyoning ko'p qismini suv qoplab yotishini aniqlab geografiya fanining rivojiga ulkan hissa qo'shgan. **Mikluxo Maklay** esa Yangi Zelandiyaliklar va Yangi Giveniyalik Papuaslar bilan 12 yil yashab bu xalqlar haqida ko'plab ma'lumotlar to'pladi. U nafaqat geografiyaga, balki etnografiyaga ham ma'lumotlar to'plagan. Buyuk geografik kashfiyotlar natijasida yangi dengiz savdo yo'llari ochildi. Dengiz savdo yo'llarining ochilishi o'z navbatida, jahon savdosini vujudga keltirdi. Endi savdogarlar dengiz yo'li orqali uzoq mamlakatlarga tovarlar olib bora olishadi. Buyuk geografik kashfiyotlar insonlar uchun yuqorida aytib o'tilgan shunday imkoniyatlarni berdi.

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**QO‘YILGAN MASALANI YECHISH UCHUN TURLI XIL  
MURAKKABLIKDAGI ALGORITMLARDAN ENG SAMARALI  
ALGORITMNI ANIQLASH**

*Annotatsiya. Ushbu maqolada aniq integralni taqribiy hisoblashda foydalaniladigan trapetsiya, simpson, to‘g‘ri to‘rtburchaklar usullarining turli xil algoritm murakkabligini baholash va eng samaralisini aniqlash bayon qilingan.*

*Kalit so‘zlar: Algoritm, tahlil, aniq integral, taqribiy hisoblash, trapetsiya usuli, simpson usuli, to‘g‘ri to‘rtburchaklar usuli.*

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## DETERMINE THE MOST EFFICIENT ALGORITHM FROM ALGORITHMS OF DIFFERENT COMPLEXITY TO SOLVE THE PROBLEM

*Abstract. This article describes the evaluation of the algorithm complexity of different trapezoidal, simpson, and rectangular methods used in the approximate calculation of the definite integral and the determination of the most effective one.*

*Key words: Algorithm, analysis, exact integral, approximate calculation, trapezoidal method, Simpson's method, rectangular method.*

Turli xil algoritmlarning murakkabligini tahlil qilish va qo'yilgan masalani yechish uchun eng samarali algoritmni topish uchun katta O yozuvi (Big-O) algoritmning murakkabligini tavsiflash uchun ishlatiladigan statistik o'lchovlardan foydalaniladi. Buni uchun aniq integralni taqribiy hisoblash usullari - trapetsiya, simpson, to'rtburchak usullarini algoritm murakkabligini baholashda tadbiiq etamiz.

Katta O (Big-O) yozuvi algoritmga kiritilgan ma'lumotlar va algoritmni bajarish uchun zarur bo'lgan qadamlar o'rtasidagi munosabatni bildiradi. U katta "O" harfi bilan belgilanadi, undan keyin ochilish va yopish qavslari keladi. Qavs ichida "n" yordamida algoritm tomonidan kiritilgan va bajarilgan qadamlar o'rtasidagi bog'liqlik ko'rsatilgan.

Misol uchun, agar kirish va uning bajarilishini yakunlash uchun algoritm tomonidan qilingan qadam o'rtasida chiziqli bog'liqlik mavjud bo'lsa, ishlatiladigan katta-O belgisi  $O(n)$  bo'ladi, ya'ni  $n=1$  bo'lganda 1 qadam qo'yiladi.  $n=10$  bo'lganda 10 ta qadam qo'yiladi. Xuddi shunday, kvadratik funksiyalar uchun katta-O yozuvi  $O(n^2)$ , ya'ni  $n=1$  bo'lganda 1 qadam qo'yiladi.  $n=10$  da 100 ta qadam qo'yiladi.  $n = 1$  da, bu ikkalasi bir xil ishlaydi! Bu kirish va ushbu kiritishni qayta ishlash uchun qadamlar soni o'rtasidagi bog'liqlikni kuzatish, ba'zi bir aniq kirishlar bilan funktsiyalarni baholashdan ko'ra yaxshiroq bo'lishining yana bir sababidir.

Quyida eng keng tarqalgan Katta-O(Big-O) funksiyalari keltirilgan:

Doimiy(o'zgarmas) – $O(c)$ ( $O(1)$ )	Ekspontsial – $(2^n)$
Chiziqli – $O(n)$	Logarifmik – $O(\log(n))$
Kvadrat – $O(n^2)$	Logarifmik chiziqli – $O(n\log(n))$
Kub – $O(n^3)$	

Katta-O(Big-O) ning qanday hisoblanishi haqida tasavvurga ega bo'lish uchun keling, doimiy, chiziqli va kvadratik murakkablikning ba'zi misollarini ko'rib chiqaylik.

**Doimiy murakkablik -  $O(C)$ :** Agar algoritmning bajarilishini yakunlash uchun zarur bo'lgan qadamlar kiritilgan ma'lumotlar sonidan qat'iy nazar, doimiy bo'lib qolsa, algoritmning murakkabligi doimiy deyiladi. Doimiy murakkablik  $O(c)$  bilan belgilanadi, bunda  $c$  har qanday doimiy son bo'lishi mumkin.

Pythonda ro'yxatdagi birinchi elementning kvadratini topib, keyin uni ekranda chop etadigan oddiy algoritm yozamiz:

```
def doimiy(element):  
natija = element[0] * element[0]  
print(natija)  
doimiy([4, 5, 6, 8])
```

Yuqoridagi skriptda, kirish o'lchamidan yoki kirish ro'yxatidagi elementlar sonidan qat'iy nazar, algoritm faqat 2 qadamni bajaradi:

1. Birinchi elementning kvadratini topish
2. Natijani ekranda chop etish.

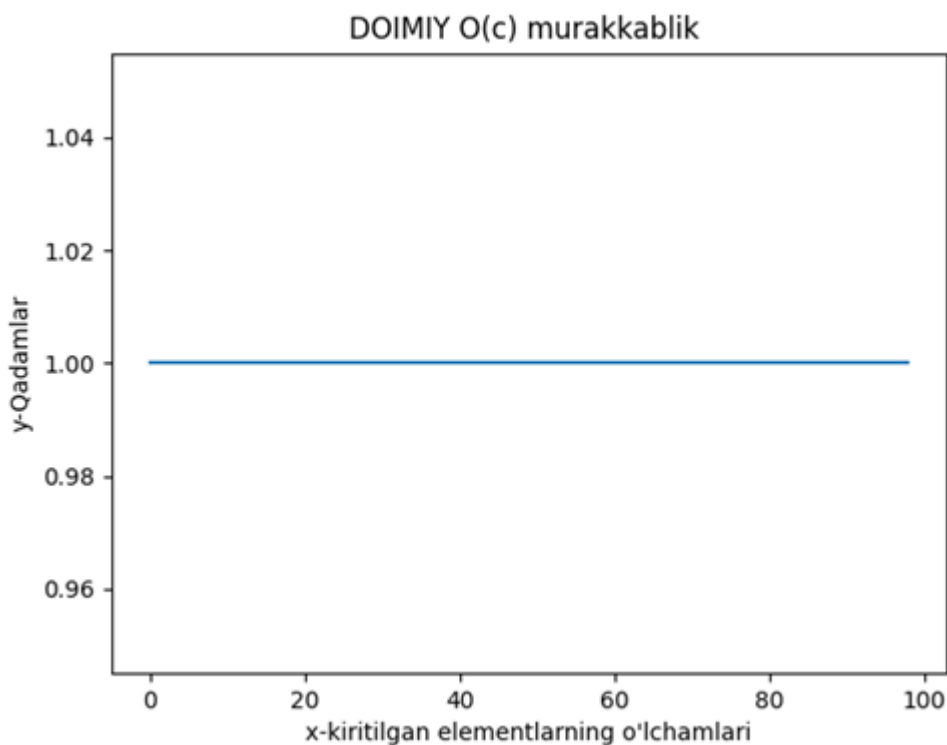
Shunday qilib, murakkablik doimiy bo'lib qoladi.

Agar X o'qida kiritilgan elementlarning o'lchamlari va Y o'qidagi qadamlar soni o'zgaruvchan chiziqli chizma chizilsa natija to'g'ri chiziqdan iborat bo'ladi.

Buni quyidagi dastur yordamida tasavvur qilishga harakat qilamiz.

Kirishlar sonidan qat'iy nazar, bajarilgan qadamlar soni bir xil bo'lib qoladi:

```
import matplotlib.pyplot as plt  
import numpy as np  
qadamlar = []  
def doimiy(n):  
return 1  
for i in range(1, 100):  
qadamlar.append(doimiy(i))  
plt.plot(qadamlar)  
plt.xlabel('x-kiritilgan elementlarning o\'lchamlari')  
plt.ylabel('y-Qadamlar')  
plt.title('DOIMIY O(c) murakkablik ')  
plt.show()
```



**1-rasm.** Doimiy(o‘zgarmas) murakkablikda algoritmning kiritilgan elementlarning o‘lchamlari bilan qadamlarning bog‘lanishi

### Chiziqli murakkablik - $O(n)$

Algoritmning bajarilishini yakunlash uchun zarur bo‘lgan bosqichlar kirishlar soniga qarab chiziqli ravishda ortib yoki kamaysa, algoritmning murakkabligi chiziqli deyiladi. Chiziqli murakkablik  $O(n)$  bilan belgilanadi. Ushbu misolda ro‘yxatdagi barcha elementlarni konsolga ko‘rsatadigan oddiy dastur yozamiz:

```
def chiziqli(elementlar):
    for element in elementlar:
        print(element)
chiziqli([4, 5, 6, 8])
```

chiziqli() funksiyasining murakkabligi yuqoridagi misolda chiziqli, chunki *for*ning takrorlanish soni kirish elementlari ro‘yxatining o‘lchamiga teng bo‘ladi. Misol uchun, agar ro‘yxatda 4 ta element bo‘lsa, *for* 4-marta bajariladi.

Quyida x o‘qidagi kirishlar soni va y o‘qidagi qadamlar soni bilan chiziqli murakkablik algoritmi uchun ko‘rinishni tuzamiz:

```
import matplotlib.pyplot as plt
import numpy as np
qadamlar = []
def chiziqli(elementlar):
    for element in elementlar:
```

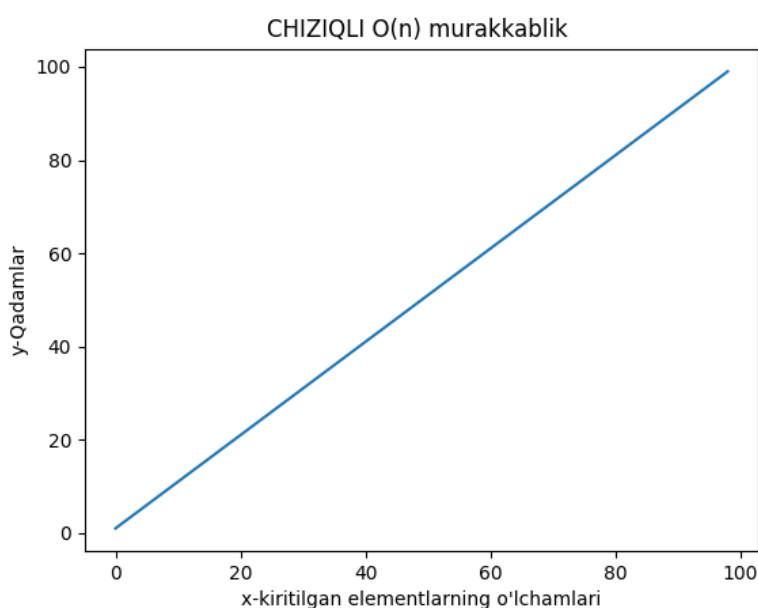
```

qadamlar.append(element)
chiziqli([0,1,2,3,4,5,6,7,8,9,10])
plt.plot(qadamlar)
plt.xlabel('x-kiritilgan elementlarning o'Ichamlari')
plt.ylabel('y-Qadamlar')
plt.title('CHIZIQLI O(n) murakkablik ')
plt.show()

```

Shuni ta'kidlash kerakki, katta kirishlar bilan doimiylar qiymatini yo'qotadi. Shuning uchun biz odatda Big-O belgisidan doimiylarni olib tashlaymiz va  $O(2n)$  kabi ifoda odatda  $O(n)$  ga qisqartiriladi.  $O(2n)$  ham,  $O(n)$  ham chiziqli – aniq qiymat emas, balki chiziqli munosabat muhim.

**2-rasm.** Chiziqli murakkablikda algoritmnining kiritilgan elementlarning



o'Ichamlari bilan qadamlarning bog'lanishi

### **Kvadrat murakkablik - $O(n^2)$**

Algoritmni bajarish uchun zarur bo'lgan bosqichlar kiritishdagi elementlar sonining kvadratik funksiyasi bo'lsa, algoritmnining murakkabligi kvadrat deyiladi. Kvadrat murakkablik  $O(n^2)$  bilan belgilanadi:

```

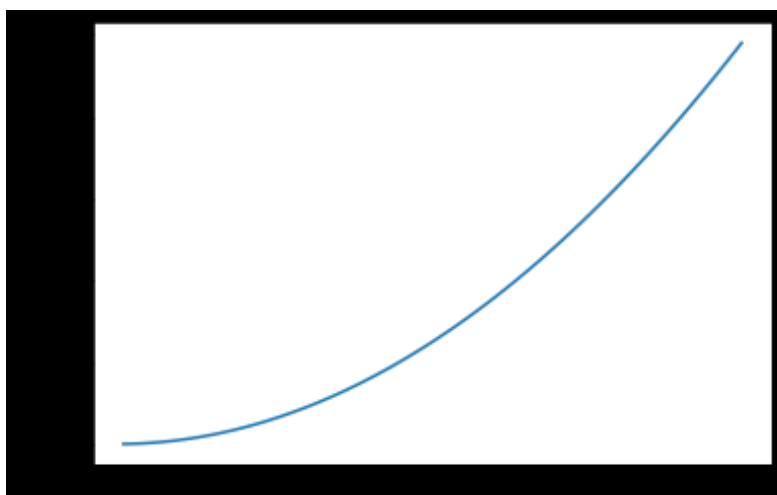
ruyxat=['ali','vali']
for i in ruixat:
for j in ruixat:
print(j)

```

Amalga oshirilgan qadamlarning umumiy soni  $n * n$ , bu yerda  $n$  - kirish massividagi elementlar soni.



Quyidagi grafik kvadrat



**3-rasm.** Kvadrat murakkablikda algoritmning kiritilgan elementlarning o'lechlari bilan qadamlarning bog'lanishi

### **Logarifmik murakkablik - $O(\log n)$**

Ba'zi algoritmlar logarifmik murakkablikka erishadi, masalan, Binary Search. Ikkilik qidiruv massivning o'rtasini tekshirish va element bo'lmagan yarmini kesish orqali massivdagi elementni qidiradi. Qolgan yarmida buni yana bajaradi va element topilgunga qadar xuddi shu amallarni davom ettiradi. Har bir bosqichda u massivdagi elementlar sonini ikki barobarga qisqartiradi. Bu massivni saralashni talab qiladi va biz ma'lumotlar (masalan, tartiblangan) haqida taxmin qilishimiz kerak. Agar kiruvchi ma'lumotlar haqida taxminlar qila olsangiz, algoritmning murakkabligini kamaytiradigan qadamlarni qo'yishingiz mumkin.

### **Hajm murakkablik**

Algoritmning bajarilishini yakunlash uchun zarur bo'lgan qadamlar sonini hisoblaydigan vaqt murakkabligiga qo'shimcha ravishda, siz dasturni bajarish paytida xotirada ajratishingiz kerak bo'lgan joy miqdorini ko'rsatadigan bo'shliq murakkabligini ham topishingiz mumkin.

Quyidagi misolni ko'rib chiqamiz:

```
def murakkab(n):  
    ruyxat = []  
    for raqam in n:  
        ruyxat.append(raqam * raqam)  
    return ruyxat  
raqam = [2, 4, 6, 8, 10]  
print(murakkab(raqam))  
[4, 16, 36, 64, 100]
```

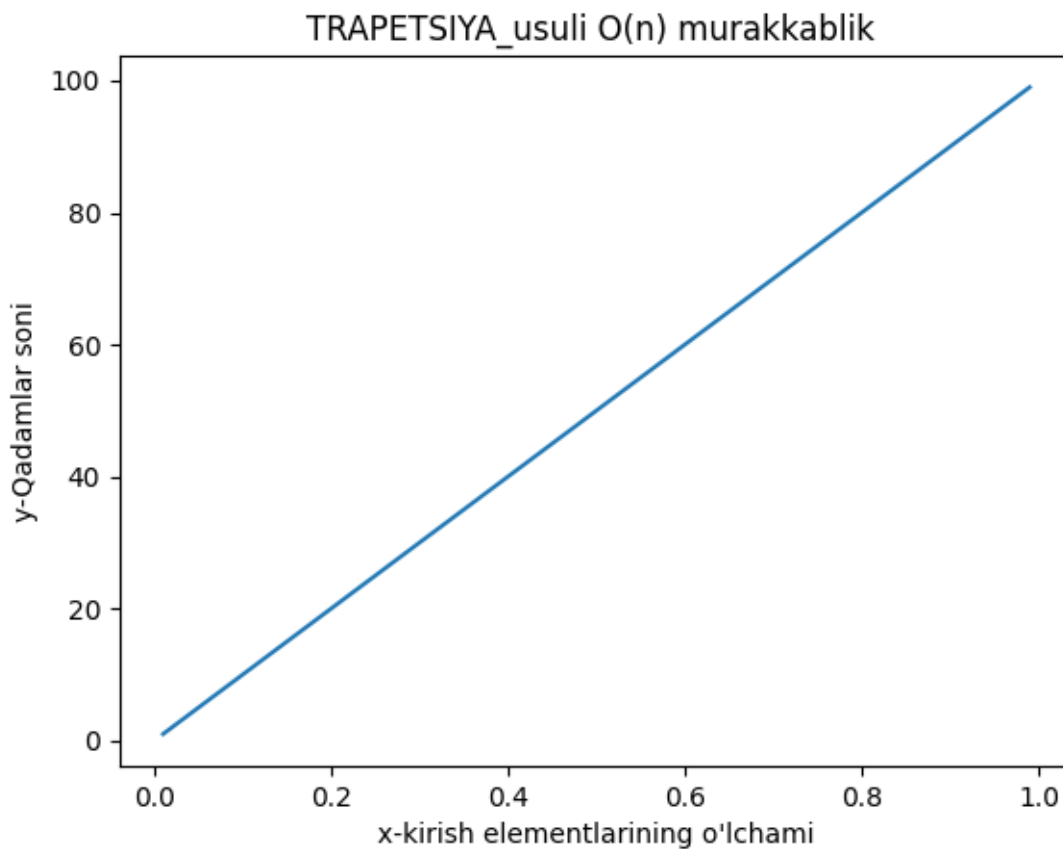
**murakkablik()** funksiyasi butun sonlar ro'yxatini qabul qiladi va mos keladigan kvadratlar ro'yxatini qaytaradi. Algoritm kirish ro'yxatidagi kabi bir xil miqdordagi elementlar uchun xotirani ajratishi kerak. Shuning uchun algoritmnining **hajm murakkabligi**  $O(n)$  ga aylanadi.

**Masalaning qo'yilishi:** Yuqorida keltirilgan algoritmlarni vaqt va hajm bo'yicha baholash usullardan foydalangan holda  $\int_0^1 \frac{d(x)}{1+x^2}$  integralni taqribiy hisoblash usullari simpson, trapetsiya, to'g'ri to'rtburchaklar usullarining algoritmik murakkabligi baholansin.

**1-usul:** Berilgan aniq integralni trapetsiya usulida hisoblash dasturini Python dasturlash tilida tuzamiz.

```
import matplotlib.pyplot as plt
import numpy as np
#1-USUL TRAPETSIYA
z=[]
s=[]
def trapetsiya_formulasi(a, b, n):
    h = (b - a) / n
    integral = 0
    for i in range(1, n):
        x = a + i * h
        z.append(x)
        s.append(i)
        integral += 1 / (1 + x**2)
    integral += (1 / (1 + a**2) + 1 / (1 + b**2)) / 2
    integral *= h
    return integral
a = 0 # Integrallash chegarasi
b = 1 # Integrallash chegarasi
n = 100 # bo'linishlar soni
trapetsiya_formulasi(a, b, n)
plt.plot(z,s)
plt.xlabel('x-kirish elementlarining o'lchami')
plt.ylabel('y-Qadamlar soni')
plt.title('TRAPETSIYA_usuli O(n) murakkablik ')
plt.show()
```

## Natija:



**4-rasm.** Trapetsiya usulida berilgan algoritmda kiritilgan elementlarning o'lchamlari bilan qadamlarning bog'liqligi  
4-rasmdan ko'rinib turibdiki, trapetsiya usuli **O(n)** chiziqli murakkablikga ega.

**2-usul:** Berilgan aniq integralni simpson usulida hisoblash dasturini Python dasturlash tilida tuzamiz.

```
a = 0 # Integrallash chegarasi
b = 1 # Integrallash chegarasi
n = 100 # bo'linishlar soni
# 2-USUL SIMPSON
s=[]
r=[]
def simpson_integral(f, a, b, n):
    h = (b - a) / n
    x = a
    sum1 = 0
    sum2 = 0
    for i in range(1, n):
        x += h
        r.append(x)
```

```

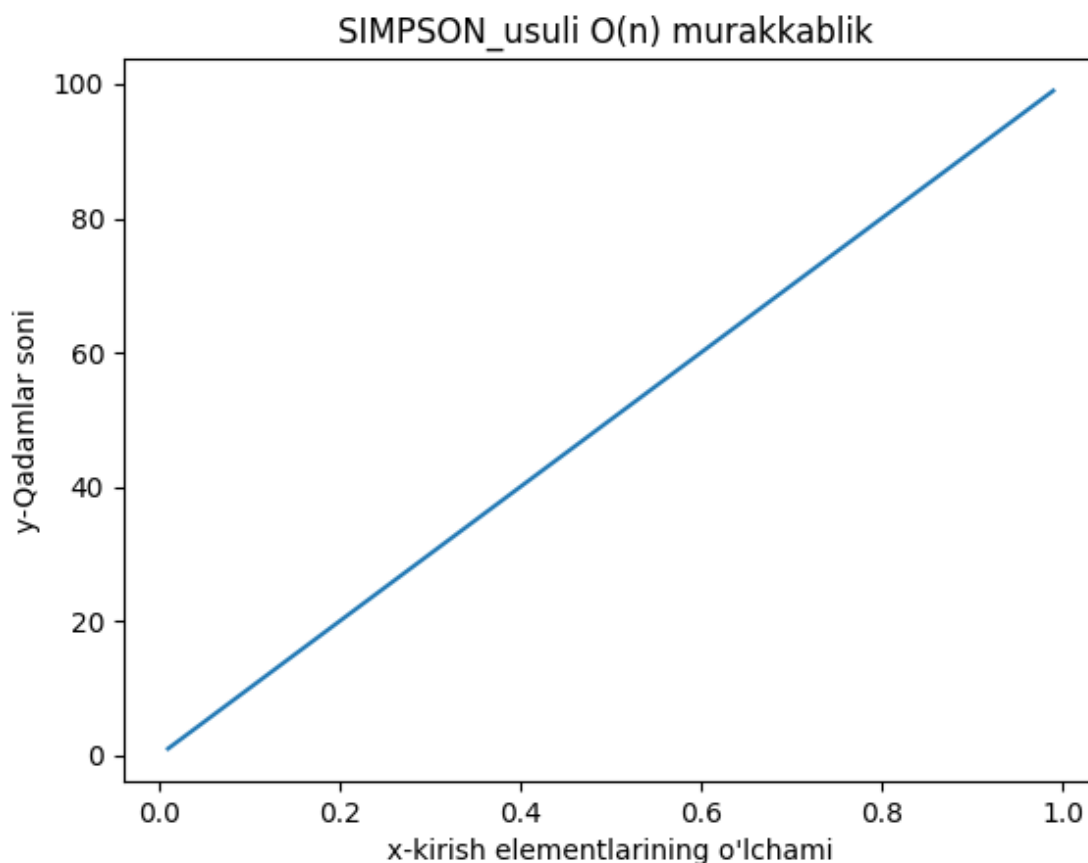
s.append(i)
if i % 2 == 0:
sum1 += f(x)
else:
sum2 += f(x)
integral = (h / 3) * (f(a) + f(b) + 4 * sum1 + 2 * sum2)
return integral
def d(x):
return 1 / (1 + x ** 2)
simpson_integral(d, a, b, n)
plt.plot(r,s)
plt.xlabel('x-kirish elementlarining o'lchami')
plt.ylabel('y-Qadamlar soni')
plt.title('SIMPSON_usuli O(n) murakkablik ')
plt.show()

```

### Natija:

**5-rasm.** Simpson usulida berilgan algoritmda kiritilgan elementlarning o'lchamlari bilan qadamlarning bog'liqligi 5-rasmdan ko'rinib turibdiki, Simpson usuli **O(n)** chiziqli murakkablikga ega.

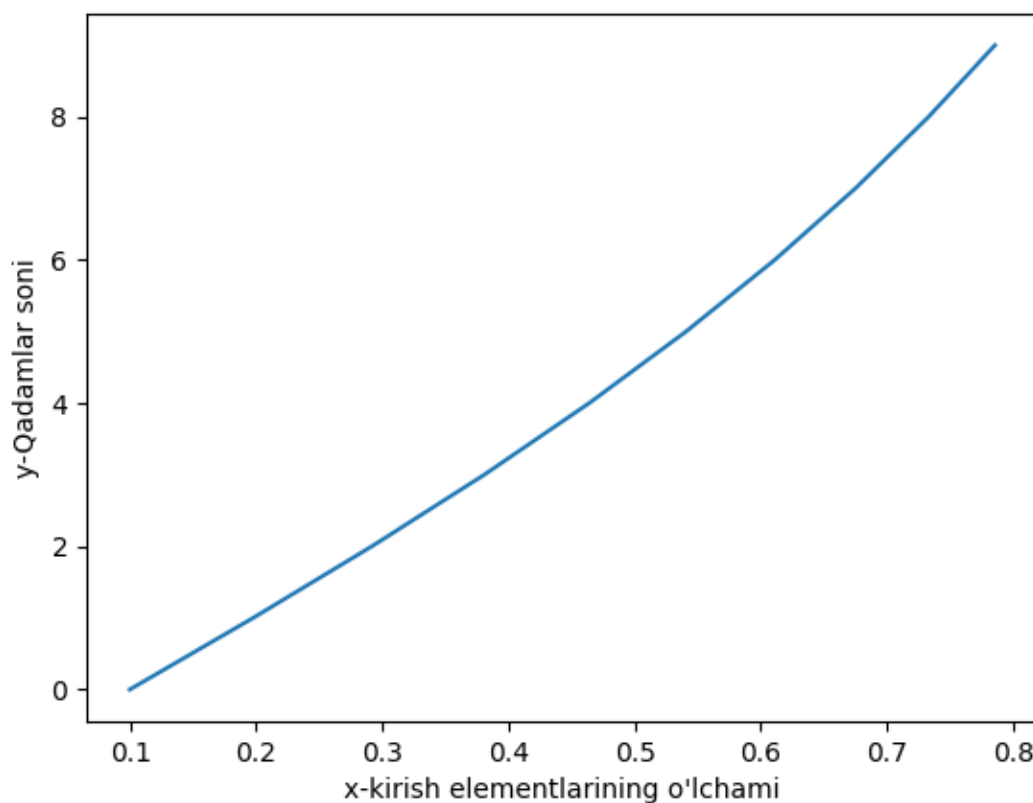
**3-usul:** Berilgan aniq integralni to'g'ri to'rtburchaklar usulida hisoblash dasturini Python dasturlash tilida tuzamiz.



## Natija:

```
# 2-USUL to 'g'ri to 'rtburchaklar
s=[]
r=[]
def turtburchaklar_integral(f, a, b, n):
    h = (b - a) / n
    integral = 0

    for i in range(n):
        x1 = a + i * h
        x2 = a + (i + 1) * h
        integral += f((x1 + x2) / 2) * h
    s.append(i)
    r.append(integral)
    return integral
def d(x):
    return 1 / (1 + x ** 2)
a = 0 # Boshlang'ich nuqta
b = 1 # Tugatish nuqta
n = 10 # Bo'linishlar soni
natija = turtburchaklar_integral(d, a, b, n)
print(s)
print(r)
print(natija)
plt.plot(r,s)
plt.xlabel('x-kirish elementlarining o'lchami')
plt.ylabel('y-Qadamlar soni')
plt.title('TO'RTBURCHAK_usuli O(n) murakkablik ')
plt.show()
```



**6-rasm.** To'g'ri to'rtburchaklar usulida berilgan algoritmda kiritilgan elementlarning o'lchamlari bilan qadamlarning bog'liqligi

6-rasmdan ko'rinib turibdiki, to'g'ri to'rtburchaklar usuli  $O(n)$  chiziqli murakkablikga ega.

### Xulosa

Aniq integralni taqribiy hisoblashda foydalaniladigan trapetsiya, simpson, to'g'ri to'rtburchaklar usullarining algoritmi murakkabligini baholashda erishilgan natijalar quyidagicha: To'g'ri to'rtburchaklar, trapetsiya va simpson usullari bir xil ya'ni chiziqli  $O(n)$  murakkablikga ega. Chunki aniq integralni taqribiy hisoblashda ishlatiladigan to'g'ri to'rtburchaklar, trapetsiya va simpson usullari integralni hisoblashda yuzalarga bo'lib hisoblaydi, demak har bir yuzani hisoblash uchun takrorlanuvchi jarayon sodir bo'ladi. Bu o'z navbatida har qanday dasturlash tili *for* sikliga murojat qilishga to'g'ri keladi. For sikli  $n$  ga bog'liq ravishda chiziqli o'zgarib boradi. Bu esa  $O(n)$  murakkablikni keltirib chiqaradi. Tahlil natijalariga ko'ra algoritmlarning samaradorligi bir xil ekanligi aniqlandi.

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## **ON THE ISSUE OF TEACHING PHONETICS AT A TECHNICAL UNIVERSITY**

*Abstract. Phonetics is a fundamental aspect of linguistics that deals with the study of speech sounds. It is an essential component of language learning and communication. While phonetics is traditionally considered a subject for linguistics students, there is a growing recognition of its importance in technical fields. This article argues that phonetics should be included in the curriculum of technical universities to provide students with a better understanding of human communication and to enhance their technical communication skills.*

*Key words: phonetics, technical communication, technical universities, linguistics.*

**Introduction.** Phonetics is the study of the sounds of human speech. It is concerned with the production, perception, and acoustics of speech. Phonetics is a fundamental aspect of linguistics, and it has applications in a wide range of fields, including linguistics, speech-language pathology, education, and engineering or technical fields, who often need to be able to communicate effectively with people from other countries.

There are a number of different approaches that have been taken to teaching phonetics at a technical university. One approach is to focus on the theoretical aspects of phonetics, such as the different types of sounds that exist in human languages and the rules that govern how these sounds are combined. Another approach is to focus on the practical aspects of phonetics, such as how to pronounce and recognize the sounds of a particular language.

There is currently no consensus on how best to teach phonetics at a technical university. Some experts believe that the best approach is to focus on the theoretical aspects of phonetics, while others believe that the best approach is to focus on the practical aspects. There is also no consensus on the best way to assess student learning of phonetics.

In recent years, there has been a growing recognition of the importance of phonetics in technical fields. For example, engineers need to understand phonetics in order to design effective communication systems. They also need to be able to understand and interpret technical jargon, which is often based on phonetic principles.

There are several advantages to teaching phonetics as a separate course. First, it allows students to develop a strong foundation in the basic principles of

phonetics. Second, it allows students to focus on the application of phonetics to their field of study.

However, there are also some disadvantages to teaching phonetics as a separate course. First, it can be time-consuming, especially for students who are already taking a full course load. Second, it can be difficult to find qualified instructors to teach phonetics at a technical university.

An alternative approach is to integrate phonetics into other courses. This can be done by dedicating a few lectures to phonetics in a course on acoustics or linguistics. Alternatively, phonetics can be taught as part of a laboratory course.

The integration of phonetics into other courses can be beneficial for several reasons. First, it can help students to see the relevance of phonetics to their field of study. Second, it can help students to develop a deeper understanding of the material by applying it to real-world problems.

However, there are also some challenges associated with integrating phonetics into other courses. First, it can be difficult to fit phonetics into an already crowded curriculum. Second, it can be difficult to find instructors who are comfortable teaching phonetics in a non-phonetics course.

**Importance of phonetics:** Phonetics is an important foundation for many fields, including linguistics, speech-language pathology, computer science, and engineering. In the technical field, phonetics can be used to develop speech recognition systems, speech synthesis systems, and natural language processing systems.

Despite the growing importance of phonetics in technical fields, it is not typically included in the curriculum of technical universities. This is a significant oversight, as phonetics can provide technical students with a number of benefits.

**Benefits of Teaching Phonetics at Technical Universities:** There are a number of benefits to teaching phonetics at technical universities. These benefits include:

➤ **Improved understanding of human communication:** Phonetics provides students with a better understanding of how human communication works. This understanding can be helpful in a variety of technical fields, such as engineering, computer science, and information technology.

➤ **Enhanced technical communication skills:** Phonetics can help students to improve their technical communication skills. This is because phonetics provides students with a better understanding of how to pronounce technical terms and how to speak clearly and concisely.

➤ **Increased awareness of cultural diversity:** Phonetics can help students to become more aware of cultural diversity. This is because phonetics provides students with an understanding of the different ways in which languages are spoken around the world.

**Proposed Curriculum:** The following is a proposed curriculum for teaching phonetics at technical universities:

✓ Introduction to phonetics: This course would provide students with a basic understanding of the principles of phonetics.

✓ Phonetics of English: This course would focus on the pronunciation of English, which is the most widely used language in the world of technology.

✓ Phonetics of other languages: This course would provide students with an overview of the pronunciation of other languages that are relevant to their field of study.

✓ Applied phonetics: This course would focus on the applications of phonetics in technical fields.

**Challenges of teaching phonetics:** One challenge of teaching phonetics at a technical university is that students may not have a strong background in linguistics. Another challenge is that students may not be familiar with the technical applications of phonetics.

**Recommendations for teaching phonetics:** There are a number of recommendations for teaching phonetics at a technical university. One recommendation is to use a variety of teaching methods, such as lectures, discussions, and laboratory experiments. Another recommendation is to use real-world examples to illustrate the concepts of phonetics.

In light of the lack of consensus on how best to teach phonetics at a technical university, the following recommendations are made:

❖ More research is needed on the different approaches that have been taken to teaching phonetics at a technical university.

❖ There is a need for more effective ways to assess student learning of phonetics.

❖ More resources need to be made available to support the teaching of phonetics at a technical university.

**Future of phonetics:** Phonetics is a rapidly growing field with a number of potential applications in the technical field. As technology becomes more complex, the need for effective communication between engineers and technicians will grow. Phonetics can provide valuable insights into the nature of speech and can help engineers and technicians to communicate more effectively.

**Conclusion:** Phonetics is a fundamental aspect of linguistics that has applications in a wide range of fields, including engineering, computer science, and information technology. There are a number of benefits to teaching phonetics at technical universities, including improved understanding of human communication, enhanced technical communication skills, and increased awareness of cultural diversity. I would recommend that technical universities consider including phonetics in their curriculum.

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## **PROVIDING OPTIMUM OPERATION MODES OF SMALL PHOTOELECTRIC PLANTS FOR AUTONOMOUS ELECTRICITY CONSUMERS**

*Abstract. This article presents a number of considerations on improving the efficiency of solar panels used as an alternative energy source for autonomous electricity consumers, in homes, by ensuring the optimal operating mode.*

*Key words: electric consumers, energy-saving technology, green energy, solar panels, energy efficiency improvement.*

**1 6.02.2023** of the President of the Republic of Uzbekistan No. PQ-57 of the year Decision **on measures to accelerate the introduction of renewable energy sources and energy-saving technologies in 2023** ( <https://lex.uz/uz/docs/-638571> ) in paragraph 15:

Starting from April 1, 2023, the "Sunny house" program (hereinafter - the Program) to encourage the installation of small power (total capacity up to 50 kW) solar panels in the territories of the republic should be implemented.

In 2023, the plan to install small capacity renewable energy sources in 37,000 households should be approved in accordance with Appendix 4.

Within the program:

a) a subsidy of 1,000 soums is allocated from the State budget for each kilowatt-hour of electricity produced by solar panels installed in objects belonging to individuals and transferred to the unified electric power system in excess of its own consumption (hereinafter referred to as subsidy). In this:

the subsidy is calculated based on the amount of positive difference between the amount of energy transferred by individuals to the single electric energy system and the amount of electricity consumed from the system by the end of each month;

subsidy ransom demands physical of individuals total income to the composition not included;

subsidy tax organs by each " Tax " mobile per month app through report from month next until the 25th of the month citizens bank plastic cards through \_ is given;

b) physical persons by the only one electricity energy to the system transmitted electricity energy size:

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c) " Territorial electricity networks " by AJ for free received electricity energy income as account not taken.

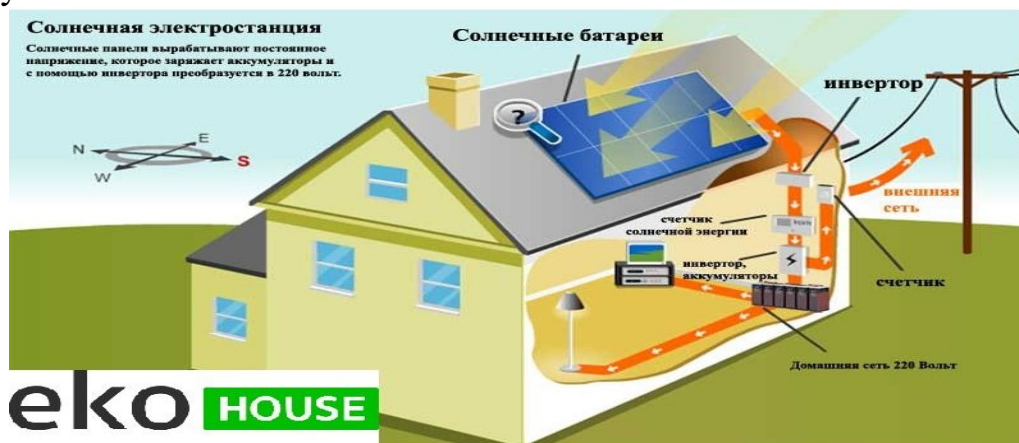


Figure 1. The sun electricity station the apartment for

Currently, solar panels are being installed on the roofs of residents' houses in order to use alternative energy sources. The solar panel is installed at an angle of 45 degrees to the roof.



Figure 2. Technology of using solar energy

This panel works in the nominal operating mode in the range of 23-35 degrees and produces electricity. In the territory of Uzbekistan, the climate in the summer season is 40-45 degrees. This affects the energy efficiency of the solar panel. If the efficiency of the solar panel exceeds 35 degrees, the efficiency of electricity production will partially decrease. In this case, to increase the efficiency of the solar panel, it is necessary to keep the temperature of the solar panel at the same temperature. Then the energy efficiency of the solar panel will

partially increase. To overcome this problem, the following processes are implemented.

### **1.Solar panel surface cooling system.**

To moderate the temperature of the surface of the solar panel, drive the water with a temperature of 25 degrees to the surface of the solar panel and check the temperature of the water and the temperature of the solar panel according to the second law of thermodynamics, that is, the law of heat exchange.

### **2. 25 degree temperature water transfer system for solar panel surface.**

Transfer liquid to the surface of the solar panel using the solar panel, thermocouple, pump unit, water filtration system, pipes, etc.

OK. How does this system work? The pump unit is installed at a depth of 2 meters from the ground to drive water with a temperature of 25 degrees. Then thermocouples are placed on the solar panel. The function of the thermosensor is to start the pump unit when the solar panel exceeds the specified nominal temperature. Pipes connected to the pump unit are used to transfer liquid through the pump unit. Water filtration system - used for cooling the surface of solar panels and processing of collected water. So, we have considered all the system dependent processes and we can consider the sequence of system operation. In the summer season, the temperature of the sun is 35-40 degrees, the temperature of the solar panel is 5-10 degrees, as a result, the temperature set on the solar panel is 45-50 degrees. We set the temperature of the thermometer placed on the solar panel as 45 degrees. When the temperature of the solar panel exceeds 45 degrees, the thermometer is activated and through the pump unit, the water of 25 degrees is driven to the surface of the solar panel, and according to the above law, the temperature of the surface of the solar panel decreases. By driving water on the surface of the solar panel, we achieve the following results.

1. Achieving energy efficiency by keeping the temperature of the solar panel moderate.

2. Providing technical service to the surface of the solar panel (the surface of the solar panel is washed with water).

3. Extending the duration of solar panel operation.

Water falling from the surface of the solar panel is transferred to the filtration system through pipes. The filtered water is poured into the 2nd tank and stored until its temperature drops to 25 degrees. When the temperature reaches 25 degrees, the thermosensor opens the valve and directs it to the 1st tank and pours it.

We can conclude from this that using the above system, we can optimize the operation mode of the solar panel and achieve a number of advantages.

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## **VINE GROWING TECHNOLOGY IN FERGANA VALLEY REGIONS**

*Annotation.* The article provides information on the issues related to the large-scale cultivation of vines in the Fergana Valley of the Republic of Uzbekistan and the regular supply of this vitamin-rich plant product to the population.

*Key words:* grapes, planting of a grape plantation, vitamins, grape berries, grape bush care, seedlings, agricultural technology, fertilizers, harvest, yield.

On July 7, 2021, a video selector meeting of the Pre-resident of the Republic of Uzbekistan was held on measures to grow grapes, develop their industrial processing and establish ecotourism in the regions. At the meeting, special attention was paid to the rapid development of viticulture in our republic, to increase the yield of grapes, to improve the quality of the product, and to increase the number of products made from them in the processing industry, to fully satisfy the demand for grapes of our people, and to widely introduce science and innovations in the field.

Supplying the population of our republic with high-quality industrial grapes and processed wine products is one of the urgent tasks facing the winegrowers. The soil and climatic conditions of Uzbekistan make it possible to provide our people with inexpensive, vitamin-rich, tasty grape products and wines all year round. In our republic, great attention is paid to the rapid development of viticulture, increasing the yield of grapes, improving the quality of the product, and increasing the number of products made from them in the processing industry to fully satisfy the demand for grapes of our people.

Agrotechnics of planting and maintenance of vineyards. Our republic is famous for its sweet and sugar healing grapes along with all the agricultural fields. In the region, early, medium and late ripening varieties of grapes are grown on mountain slopes at an altitude of 350 to 600-1000 meters above sea level, and abundant quality crops are grown. The sugar content of grape varieties grown in Fergana region is on average 16-18% in early ripening varieties. is 18-21% in mid-ripening varieties and 22-27% in late-ripening varieties.

Land preparation and planting for vine planting. Before creating a vineyard, i.e. a vineyard, a site is selected and a plan is drawn up depending on the climatic conditions, wind paths, waterways and soil conditions of the site. Before planing, the land is plowed and leveled. Mineral and organic fertilizers are added to the soil before plowing. 25-30 tons of manure, 120-140 kg of phosphorus, 60 kg of potassium (pure) mineral fertilizers are applied to 1.0 ha. ROU-6, ROU-5, NRU-05 aggregates can be used for mixing mineral and organic fertilizers. For plowing, it is plowed to a depth of 30-35 cm using a PYa-3-35 plow, then it is leveled.

During leveling, hollows and deep places of the earth are filled. For leveling, it is done on the P-4, PA-3 unit.

Before planting seedlings, the area is planned. During the planning period, attention is paid to irrigation ditches, main roads (10-12 m) and intermediate roads (7-8 m) after every 100 meters.

Sizot waters are deep in typical gray soils, for vertical symbagaz - in 3x3, 3x2.5 scheme, for curved symbagaz - in 3.5x2.5, 3.5x2, schemes.

In irrigated vineyards on gravelly soils, upright symbagaz-3x1.5, 3x2, 3x2.5 schemes. On the land where the water is located on the surface, for vineyards with steep symbionts - 3x3, 3x2.5, in the scheme. It is recommended to plant cypresses in 3.5x3.5, 4x3.5, 3.5x2.5 schemes.

In order to ensure the good growth and early harvest of young vines planted in early spring, it is advisable to plant vegetable crops between the rows of young vines for 2 years, because this requirement is due to the additional fertilization of crops during the vegetation period, and between the rows. additional processing is carried out, most importantly, weeding is done to create normal conditions for vineyards.

Young vineyards are irrigated up to 16-20 times during the vegetation period, depending on the soil conditions. The current's affinity for water is not the same in different phases of its development. Therefore, in the first period of vegetation, soil moisture should be maintained at the level of 70-80% of the field moisture capacity, and in the second period at 60-65%.

A single irrigation during the growing season on heavy loamy soils is 700-800 cubic meters per hectare, and on light loamy and stony soils it is 400-500 cubic meters per hectare.

In the autumn-winter period, 1200-1500 cubic meters of reserve water is supplied per hectare.

Shaping, cutting and trimming the vine bush. Pruning is an important agrotechnical method that regulates vine growth and fruiting. In order to obtain abundant and high-quality harvest from the vine every year, the number of shoots on the bushes is classified according to varieties, taking into account the growth strength and fruiting characteristics of the vine.

Pusthi type, Nimrang, Husayni, Surhak Kitabskiy, as well as Kara kishmish and Aq kishmish, which are strong growing varieties with low fruiting, have more buds left. Reinforced fertile joints are left in the sleeves, fertile branches are cut leaving 10-15 cells, 200-300 cells are left in one bush. 160-200 eyes left on a bush with a feeding area of 3x2.5 m for Bayan Shirey variety.

The number of buds is up to 150-180 in medium-growing Rikatsiteli, Muscat Rozovi varieties.

In the conditions of Fergana region, depending on the growth strength of the variety and specific branch (stronger branches are cut long), branches are cut to different lengths, leaving 6-8, 9-12, 12-15 buds.



Make a ham. As soon as the salt appears on the vine, khometok is made. With the formation of inflorescences on the branches, it is possible to distinguish the fruitful branches from the unfruitful ones and remove the excess. When the length of the branches reaches 40-50 cm, they are tied to the symbagaz. If instead of a flower, curls appear, this branch will be barren. Early pruning of non-productive branches will encourage the development of additional branches, including those that do. Therefore, it is necessary to finish the khumtok as soon as possible. If two or three green branches have grown from the same place of fruitful and substitute branches, then the fruitful branch is left and the unfruitful ones are removed. The first khumtok is carried out after the clear formation of the khumtok, and the khumtok, which is done after the khumtok vine has fully flowered, is called ghora khumtok. During this period, the size of the caves is approximately the size of a mash, and in some varieties of vines, the size of a pea. 3-4 of the strong branches that have grown from the sun are left during the period of the shora khometok, and the rest are cut without leaving a stump. 3-4 remaining branches will be used in the future to rejuvenate old rusts. In the making of khora khumtok, the surplus left in the salty khumtok and the small branches that have grown from the axils of this year's branch are removed by hand, gradually slanting to one side before the body hardens into wood. After each knot, the branches are tied to the basket by pulling it a little. If pruning is carried out on time, the complex biological processes that take place in the vine in the first half of the summer will also take place under normal conditions, thereby preparing the ground for a rich harvest next year.

Fertilization. In vineyards grown on irrigated gray soils, the main norm of mineral fertilizers is Nitrogen 120 kg, Phosphorus 90 kg, Potassium 45 kg (pure).

Also, it is recommended to increase the potassium and phosphorus rate to 90-120 kg in vineyards grown on sandy and rocky lands.

Along with potassium and phosphorous mineral fertilizers, organic fertilizers are given mainly in the autumn before plowing, 15-20 tons per hectare every two years. Nitrogen fertilizers are applied in the spring after bud awakening at the rate of 30 kg/ha in pure form, 35-45 kg/ha in fruiting, and 35 kg/ha (in pure form) after picking. In vineyards, young seedlings are treated with ammonium sulfate or AFU nitrogen fertilizer 90-100 g 2 times per bush during the vegetation period.

Watering. Irrigation of the vines is carried out taking into account the characteristics of their varieties and soil and climatic conditions. In the Fergana valley, the method of irrigation is mainly spread by irrigation, the distance between the irrigation depends on the soil of the vineyard and the width of the rows. The vine's need for water changes in different stages of development and depending on soil conditions, i.e. during growth, it is watered 2-4 times in heavy soils, 7-8 times in sandy, stony soils. Sizot water is carried out depending on the level of moisture in nearby soils. It is recommended to stop watering in the middle of September, depending on the weather conditions for the ripening of the vine



branches, the preparation of the branches for the winter and the ripening of the crop. The vines are also watered during burial, because moist soil is necessary for burying 30-40 cm. The vines are watered twice in the winter season with chilled water.

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## **ASSESSMENT OF OLIVE PLANT TOLERANCE TO WINTER COLDS IN THE CONDITIONS OF FERGANA VALLEY**

*Annatsiya.* The article is devoted to the adaptation and phenology of acclimatized olive varieties to the soil and climatic conditions of the republic.

*Key words:* *olea europaea l, varieties, biological features, productivity, agriculture technology methods, yield capacity.*

**Introduction.** According to the results of studies on cold resistance of olive varieties, olive leaves die at temperatures of 10-12°C, and branches at temperatures of 17-22°C. When the air temperature exceeds 22°C, all above-ground branches of the olive plant die. If 14-17°C frost is short-term, the tree will not be damaged much, if the frosts are long-term and at 17-22°C, the above-ground part of the tree will completely die. But the underground part remains.

Some olive branches were damaged in experiments at 13-15°C, temperature

When it reached 17-20°C, it was observed that the roots were frostbitten. The authors note that not only winter frosts are dangerous for olives, but also spring frosts, and sometimes in spring, in the second half of March (when the movement of aphids begins in the cells), severe frosts occur, and olive trees are damaged by frost.

In our field experiments, protection of olive varieties from frost was carried out in 4 ways: researching the frost resistance of olive varieties branches in the laboratory, for this purpose, the branches prepared from them were kept in a cold room for 24 hours at different low temperatures;

- olive seedlings were wrapped with polyethylene films in November-February (without heating);
- olive seedlings were dug 1.0 meters deep and planted in trenches;
- seedlings were left in the open field.

Laboratory analyzes showed that the Izumrud variety stood out with the most resistance of its leaves to artificial cooling. A temperature below 10°C was required for its leaves to be completely frostbitten. At this time, the leaves of the control Gaziantep cultivar died completely at -10°C (see Table 1).

**Table 1****Cold resistance of acclimatized olive varieties, 2020-2022**

Weld tag type	The degree of resistance to various low temperatures, %					
	0 °S	-2 °S	-4 °S	-6 °S	-8 °S	-10 °S
In the leaves						
Izumrud	1,2	6,7	25,6	58,9	88,6	94,2
Qorako'z	1,3	7,8	27,8	60,2	90,3	95,6
Gaziantep – naz. 1	1,8	11,3	35,9	75,8	97,5	99,8
In the branches						
Izumrud	-	1,7	6,1	19,3	33,5	41,2
Qorako'z	-	2,3	7,2	20,5	35,8	44,8
Gaziantep – naz. 1	-	3,4	8,5	24,8	39,7	52,6

A similar situation was noted in the Karakoz variety. The degree of preservation of the leaves of this acclimatized cultivar at the lowest studied temperature, i.e. -10 °C, was 95.6%, which is 3.0% higher than this indicator of the control cultivar (98.6%). means

The data in the table show that the frost resistance of the branches of acclimatized olive varieties was better than the control options. In this case, the lowest studied Izumrud variety, i.e., 41.2%, was 41.2%, which is 11.4% higher than the control - Gaziantep variety (52.6%). It's done.

Such a situation regarding cold resistance of olive branches was also noted in the Karakoz variety. The lowest studied preservation level of the branches of this variety at 10 °C was 44.8%, while this indicator of the control variety reached 50.1%. It can be seen that the frost resistance of the acclimatized Karakoz variety branches is 6.3% higher than the control option.

In the field experiments, 25 leaves and 5 one- and two-year-old branches were cut from each variety of olive during the winter. The cells of the obtained leaves and branches were cut and viewed under a microscope, and glycerin was dripped on the cut place for better visibility. In this case, the affected leaf tissue turns brown, on the contrary, the leaf tissue that has not been hit by cold does not lose its color.

The degree of frost damage of olive leaves and branches was determined on a 5-point scale.

In order to determine the degree of frost damage to the above-ground and below-ground parts of plants, a special sharp knife was taken, and the lower necks of 3-5 trees were cut and it was found that they were damaged:

that the trunk of the tree was not damaged by frost when it was cut, but 5-10% of the leaves showed signs of frostbite;

low damage - a slight crack in the skin of the olive trunk was noticed when it was cut;

- 20% damage was detected in the trunk barks of trees;

- it was observed that the bark, cambium and wood were completely damaged when it was heavily damaged.

Cold resistance of olives was determined in the field in winter: after frosts.

To determine the frost resistance of olives, 10 trees of each variety were taken and studied on a 5-point scale. The degree of frost damage by olive varieties: in the Karakoz variety, 1 tree out of 10 trees, according to years, 1 tree 1 point, 1 tree

3 damaged on a scale of 2 points, 2 trees in 2020, and 2 trees in 2020-2022 (see Table 1.2).

Table 2

**Frost damage of acclimatized olive varieties, 2020-2022**

Olive varieties	Years	Damaged trees according to the following scores, pcs				
		1 ball	2 ball	3 ball	4 ball	5 ball
Izumrud	2020	1	1	1	-	-
	2021	-	1	1	1	-
	2022	2	2	-	-	-
Qorako'z	2020	1	2	1	-	-
	2021	1	1	1	-	-
	2022	1	1	1	-	-
Gaziantep	2020	2	3	1	1	-
	2021	2	2	1	-	-
	2022	1	2	1	-	-

There was no degree of frost damage with 4-5 points in the acclimatized blackberry variety. In the acclimatized emerald variety, only in 2020, 1 tree was damaged by frost with a score of 4, and frost damage with a score of 5 was not observed in this variety either. However, in the Izumrud variety, frost damage with a score of 2 was recorded in 3 trees in 2020 and in 2 trees in 2021-2022. Among the studied olive varieties, the most frost damage was observed in the Krymskaya 172 variety, out of 10 trees studied in 2020 5 of them: 1 of them was affected by frost with 1-2 points, 2 with 3 points, and 1 with 5 points. It was noted that these laws were also observed in 2021-2022.

In the first year of 2021, 5 grains of the Gaziantep variety were damaged by frost, 2 of them with 1 point, the remaining 3 with 2-4 points, and in the next 2-3 years, 4 grains were damaged with 1-3 points. The results of the study of the degree of frost damage of olive varieties show that the newly introduced Izumrud and Karakoz olive varieties in our republic are more resistant to cold than the Gaziantep varieties, and ripen 5-11 days earlier.

In the winter of 2021, seedlings of more than 100 olive varieties in the experimental area overwintered outdoors. The height of some seedlings is 156-167 cm, some of them are around 56-100 cm, and it was observed that these seedlings are resistant to winter frosts.

In the Gaziantep variety, the leaves on the upper part of the stem were not affected by frost, but the leaves on the second branch were found to be 90% damaged by frost. However, in these olive varieties, it was noted that the peels on the body part were not damaged by cold. It was found that if the olive varieties

are in the dormant period, frosts are not dangerous, and the temperature drop to -12-14 0C when plant cells wake up is harmful for branches and leaves.

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## SOME METHODS OF INTEGRATION OF IRRATIONAL FUNCTIONS

*Abstract.* The article discusses the issues of teaching and learning mathematics. The integration of functions, which is one of the main concepts of mathematics, is taught to students in simple ways. For this, it is taught from the integration of the simplest functions to the integration of irrational functions.

*Key words.* Irrational number, irrational function, integral, binomial integral, Euler substitutions, integration of irrational functions, methods of integration.

**1. Integration of irrational functions.** If the function  $y=f(x)$  consists of an algebraic expression with fractional levels of the argument  $x$ , we call it an irrational function.

❖ Originally called the binomial integral an

$$I(r, s, p) = \int x^r (a + bx^s)^p dx$$

we look at the integrals that appear. Here  $r, s, p$  represent rational numbers and  $a, b$  represent real numbers. If all three numbers  $r, s, p$  are integers, then a rational function is formed under the integral, and in this case, the binomial integral is expressed in elementary functions. If at least one of the numbers  $r, s, p$  is not an integer, then an irrational function is formed under the binomial integral. It was proved by the great Russian mathematician P. L. Chebyshev (1821-1894) that the binomial integral can be expressed in elementary functions only in the following three cases:

1)  $p$  is an integer. In this case, we make a substitution ( $m$  is the common denominator of the numbers  $r$  and  $s$  under the integral). If we take  $r=k/m, s=q/m$ , then and is a binomial integral

$$I(r, s, p) = m \int t^{k+m-1} (a + bt^q)^p dt$$

takes the form and comes to the integral obtained from the rational

function.  $I = \int \frac{dx}{x(1 + \sqrt[3]{x})^2}$

we calculate the integral. This is a binomial integral with parameters  $r=-1, s=1/3$  and  $p=-2$ , and calculating it using substitution based on the above, we get

$$\begin{aligned} \text{this result: } I &= \int \frac{3t^2 dt}{t^3(1+t)^2} = 3 \int \frac{dt}{t(1+t)^2} = 3 \left[ \int \frac{dt}{t} - \int \frac{dt}{t+1} - \int \frac{dt}{(t+1)^2} \right] = \\ &= 3 \left[ \ln|t| - \ln|t+1| + \frac{1}{t+1} \right] + C = 3 \left[ \ln \left| \frac{\sqrt[3]{x}}{1 + \sqrt[3]{x}} \right| + \frac{1}{1 + \sqrt[3]{x}} \right] + C. \end{aligned}$$



2)  $n=(r+1)/s$  – whole number. In this case, if  $p=k/m$ , then the substitution  $a+bx^s=tm$  is used. In this

$$(a+bx^s)^p = t^k, \quad x^r = \left(\frac{t^m - a}{b}\right)^{\frac{r}{s}}, \quad dx = \frac{m}{bs} \left(\frac{t^m - a}{b}\right)^{\frac{1}{s}-1} t^{m-1} dt$$

is, and the binomial integral comes to the following integral with rational fractions:

$$I(r, s, p) = \frac{m}{b^n s} \int (t^m - a)^{n-1} t^{k+m-1} dt.$$

3)  $n=p+(r+1)/s$  – whole number. In this case, if  $p=k/m$ , then The substitution  $ax-s+b=t$  is used. In this

$$x = \left(\frac{a}{t^m - b}\right)^{\frac{1}{s}}, \quad (a+bx^s)^p = x^{ps} (ax^{-s} + b)^p = \left(\frac{a}{t^m - b}\right)^p t^k,$$

$$x^r = \left(\frac{a}{t^m - b}\right)^{\frac{r}{s}}, \quad dx = -\frac{ma}{s} \left(\frac{a}{t^m - b}\right)^{\frac{1}{s}-1} \frac{t^{m-1}}{(t^m - b)^2} dt$$

$$I(r, s, p) = -\frac{ma^n}{s} \int \frac{t^{k+m-1}}{(t^m - b)^{n-1}} dt.$$

❖  $I = \int R(x, x^{\frac{m}{n}}, \dots, x^{\frac{r}{s}}) dx$  we look at integrals of the form In this case, only rational operations are expressed with respect to the variables  $x, x^{m/n}, \dots, x^{r/s}$  included in  $R$ , and  $m, n, \dots, r, s$  are natural numbers. To calculate this integral, we find the common denominator  $k$  of the fractional degrees participating in it and perform substitution. In this case,  $x, x^{m/n}, \dots, x^{r/s}$  fractional exponent degrees are represented by whole degrees of the new variable  $t$ , and as a result we create a rational fractional integral. Calculating this integral and taking the result as  $t=x^{1/n}$ , we find the given indefinite integral.  $I = \int R \left[ x, \left(\frac{ax+b}{cx+d}\right)^{\frac{m}{n}}, \dots, \left(\frac{ax+b}{cx+d}\right)^{\frac{r}{s}} \right] dx$  Let's

look at the integral in the form Here the conditions set in the previous integral for  $R, m, n, s, r$  are preserved. For real numbers  $a, b, c$  and  $d$  in fractions, we set the condition  $a/b \neq c/d$ , because if this condition is not fulfilled

$$\frac{ax+b}{cx+d} = \frac{b}{d} \cdot \frac{\frac{a}{b}x+1}{\frac{c}{d}x+1} = \frac{b}{d}$$

and the irrationality in the integral disappears.

If the common denominator of fractions  $m/n, \dots, r/s$  is  $k$ , then to calculate this integral

$$\frac{ax+b}{cx+d} = t^k, \quad t = \sqrt[k]{\frac{ax+b}{cx+d}}$$

we will do the exchange. In this case

$$x = \frac{b - dt^m}{ct^m - a}, \quad dx = \frac{mt^{m-1}(ad - bc)}{(ct^m - a)^2} dt,$$

that is,  $x$  and  $dx$  are rationally represented by a new variable  $t$ . Therefore, as a result of the above substitution, we get the integral of the rational function for the given integral. By calculating this integral and replacing  $t$  with its above expression in the resulting result, we find the answer of the given integral  $I$ .

For integrals of the form Such integrals with an irrational expression are reduced to rational fractional integrals and calculated using the substitutions proposed by the great Swiss mathematician L. Euler (1707-1783). Three cases are considered here.

Case I. In this case, the considered IE is taken as  $a > 0$  in the integral. In this case, the integral from the variable  $x$  to the new variable  $t$  is called Euler's

$$\text{substitution } It = x\sqrt{a} - \sqrt{ax^2 + bx + c} \Rightarrow \sqrt{ax^2 + bx + c} = x\sqrt{a} - t$$

is passed through the visible switch. In this case, IE is expressed as a rational fraction through the new variable  $t$  in the integral  $x$ , and  $dx$ . So, the considered IE integral was reduced to a rational fractional integral, and the intended goal was achieved.

**II hol.** Now

$$I = \int \frac{dx}{x\sqrt{x^2 + 4x - 4}}$$

Let  $c > 0$ . In this case, we use this Euler substitution II to calculate the integral IE:

$$\sqrt{ax^2 + bx + c} = xt + \sqrt{c}.$$

As a result of this substitution, we arrive at a rational fractional integral. As an example, we calculate this integral:

$$I = \int \frac{(1 - \sqrt{1+x+x^2})^2}{x^2 \sqrt{1+x+x^2}} dx$$

According to Euler's substitution II, we get:

$$\sqrt{1+x+x^2} = xt + 1 \Rightarrow 1+x+x^2 = x^2t^2 + 2xt + 1 \Rightarrow x = \frac{2t-1}{1-t^2} \Rightarrow$$

$$dx = \frac{2t^2 - 2t + 2}{(1-t^2)^2} dt, \quad \sqrt{1+x+x^2} = xt + 1 = \frac{t^2 - t + 1}{1-t^2} \Rightarrow 1 - \sqrt{1+x+x^2} = \frac{-2t^2 + t}{1-t^2}.$$

We put these generated expressions into the given integral:

$$\begin{aligned} \int \frac{1 - \sqrt{1+x+x^2}}{x^2 \sqrt{1+x+x^2}} dx &= \int \frac{(-2t^2 + t)^2 (1-t^2)^2 (1-t^2)(2t^2 - 2t + 2)}{(1-t^2)^2 (2t-1)^2 (t^2-1)^2 (t^2-t+1)} dt = \\ &= -\frac{2(\sqrt{1+x+x^2}-1)}{x} + \ln \left| \frac{x + \sqrt{1+x+x^2} - 1}{x - \sqrt{1+x+x^2} + 1} \right| + C. \end{aligned}$$

**III hol.** The quadratic triangle under the considered IE integral has real roots  $\alpha$  and  $\beta$ , that is, let the discriminant be  $D = b^2 - 4ac > 0$ . In this case

$$\sqrt{ax^2 + bx + c} = (x - \alpha)t$$

using Euler's III substitution in the form, we convert the expression under the integral into the form of a rational fraction.

Here the quadratic triangle  $2+x-x^2$  has real roots  $\square=-1$  and  $\square=2$  and can be written as  $2+x-x^2 = (x+1)(2-x)$ . Therefore, we use Euler's substitution III and from it we get the following equations:

$$\begin{aligned}\sqrt{2+x-x^2} &= t(x+1) \Rightarrow \sqrt{(x+1)(2-x)} = t(x+1) \Rightarrow \sqrt{2-x} = t\sqrt{x+1} \Rightarrow \\ &\Rightarrow 2-x = t^2(x+1) \Rightarrow x = \frac{2-t^2}{t^2+1} \Rightarrow dx = \left(\frac{2-t^2}{t^2+1}\right)' dt = -\frac{6tdt}{(t^2+1)^2}.\end{aligned}$$

$$\sqrt{2+x-x^2} = t\left(\frac{2-t^2}{t^2+1} + 1\right) = \frac{3t}{t^2+1}$$

using the fact that, we calculate the above

integral as follows:

$$\begin{aligned}\int \frac{dx}{x\sqrt{2+x-x^2}} &= -6 \int \frac{tdt}{\frac{2-t^2}{t^2+1} \cdot \frac{3t}{t^2+1} (t^2+1)^2} = -2 \int \frac{dt}{2-t^2} = \\ &= -2 \int \frac{dt}{2-t^2} = -\frac{1}{\sqrt{2}} \ln \left| \frac{\sqrt{2}+t}{\sqrt{2}-t} \right| + C = -\frac{1}{\sqrt{2}} \ln \left| \frac{(t+\sqrt{2})^2}{2-t^2} \right| + C = \\ &= -\frac{1}{\sqrt{2}} \ln \left| \frac{(t+\sqrt{2})^2}{2-t^2} \right| + C = -\frac{1}{\sqrt{2}} \ln \left| \frac{t^2+2+2t\sqrt{2}}{2-t^2} \right| + C.\end{aligned}$$

We express the fraction under the logarithm by x and, simplifying,

$$\int \frac{dx}{x\sqrt{2+x-x^2}} = -\frac{1}{\sqrt{2}} \ln \left| \frac{2\sqrt{2}\sqrt{2+x-x^2} + x + 4}{3x} \right| + C$$

we get the result.

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## **БИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ХИЩНЫХ МЛЕКОПИТАЮЩИХ**

*Аннотация. В статье рассматриваются особенности биологии хищных млекопитающих. Хищные млекопитающие являются необходимыми элементами в естественных экосистемах, улучшают стабильность популяций жертв, удерживая их в определенных пределах.*

*Ключевые слова: популяция, экосистема, населения, структура, ареал, размножения.*

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## **BIOLOGICAL FEATURES OF CARRIATIVE MAMMALS**

*Annotation. The article discusses the features of the biology of predatory mammals. Carnivorous mammals are essential elements in natural ecosystems and improve the stability of prey populations by keeping them within certain limits.*

*Key word: population, ecosystem, population, structure, habitat, reproduction.*

Увеличение численности населения и освоение целинных земель привело к сокращению природных ресурсов, в том числе снижению разнообразия ресурсов животного мира и исчезновению популяций. Особенно на фоне урбанизации усиление прессинга охоты стало причиной сокращения природных биотопов и негативного изменения структуры ареала хищных животных. В этой связи определение роли хищных животных в биоценозе и управление их природными популяциями имеют важное научно-практическое значение. В мире особое внимание уделяется исследованиям биологии и хозяйственному значению хищных млекопитающих.

Хищные (Carnivora)— отряд млекопитающих, включающий более 270 видов. Отряд хищные делится на 2 подотряда: кошкообразные и псообразные. Главным отличием псообразных млекопитающих является их более вытянутая форма морды и невыдвижные когти, по сравнению с кошкообразными.

В отряд Carnivora входят 15-16 семейств хищных млекопитающих, 3 из которых относятся к водным животным, а остальные — наземные.

Хищные распространены во всем мире, Серый волк и макензийский равнинный волк, а также бурый медведь когда-то жили на большей части Северного полушария, но их ареалы уменьшились после разрушения мест обитания, сокращения кормовой базы и преследования человека из-за конкуренции. В Африке и Южной Азии такая же ситуация с тиграми и львами. Многочисленные кошки, медведи и некоторые тюлени стали редкими и подвергаются угрозе исчезновения.

подавляющее большинство видов являются наземными, некоторые виды хорошо приспособлены для жизни в воде.

Хищные млекопитающие, обладают рядом различных видов зубов: резцы, клыки, премоляры и моляры сзади. У большинства хищников есть хищные зубы, которые функционируют для разрезания мяса и жестких сухожилий. Хищные зубы обычно формируются четвертым верхним премоляром и первым нижним моляром.

Несколько особенностей скелета характерны для отряда Carnivora. Мышечки на нижней челюсти образуют полуцилиндрический шарнир, который позволяет челюсти двигаться только в вертикальной плоскости и со значительной прочностью. Ключицы либо значительно уменьшены, либо отсутствуют, и, если они есть, обычно встраиваются в мышцы без соединения с другими костями. Это обеспечивает большую гибкость в области плеча и предотвращает поломку ключиц, когда животное охотится за своей добычей.

Мозг большой по отношению к весу тела, и он содержит сложные извилины, характерные для высокоинтеллектуальных животных. Желудок простой и слепая кишка, прикрепленная к кишечнику, обычно уменьшена или отсутствует.

Хищные показывают высокие уровни интеллекта среди млекопитающих. Большой мозг по отношению к размеру тела — показатель их высоких умственных способностей. Высоко развитое обоняние более четкое зрение.

Хищные животные склонны создавать территории. Территории часто являются ограниченными и защищенными от других представителей своего рода. Такие области иногда могут быть помечены мочой, фекалиями или специальными железами.

Среди хищных существует широкий спектр социальных моделей. Многие виды хищных являются одиночными, за исключением сезона

размножения. Некоторые виды хищников остаются в паре на протяжении всего года или иногда бродят в парах. Другие виды, например, как волки, гиеновидные собаки обычно охотятся в стаях или группах. Различные водные виды хищников образуют сидячие колонии в течение сезона размножения.

Системы спаривания варьируются между семействами, начиная от моногамии у волков и полигинии у большинства медведей.

Хищные млекопитающие имеют большую хозяйственную значимость. Некоторые виды хищников имеют самые роскошные натуральные меха, например, как норка, соболь и др. Многие виды, нападая на сельскохозяйственных животных приносит ущерб фермерам.

Хищные млекопитающие находятся на вершине пищевой цепи и образуют самый высокий трофический уровень в экосистемах. поддерживают «баланс природы» в этих системах. Уничтожая хищных млекопитающих люди нарушают этот баланс.

Численность хищников ограничена доступностью пищи, более крупными хищниками или болезнями. Многие виды хищников становятся чрезвычайно многочисленными, создавая идеальную среду для распространения инфекций. Болезнь, которая больше всего беспокоит людей — это бешенство, передающееся со слюной через укусы, хищники также распространяют чуму, токсоплазмоз и лептоспироз.

Таким образом, хищные млекопитающие являются необходимыми элементами в естественных экосистемах, улучшают стабильность популяций жертв, удерживая их в определенных пределах. Они, находясь на вершине пищевой цепи, образуя самый высокий трофический уровень в экосистемах. поддерживают «баланс природы» в этих системах.

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## **ИССЛЕДОВАНИЕ ОПРЕДЕЛЕНИЯ ПРОДОЛЬНОЙ ЖЕСТКОСТИ ПАКЕТНЫХ КОНСТРУКЦИЙ**

*Аннотация. В высотных сооружениях используются конструкции в виде пакета плоских элементов, сжатых продольным усилием. В статье исследована задача определения их продольной жесткости, величиной которой необходимо оперировать при проектировании такой конструкции.*

*Ключевые слова: высотные сооружения; пакет; плоский элемент; сжатие; продольное усилие; продольная жесткость; изгибная жесткость; метод диакоптики; методы конечных элементов; феноменологическая функция.*

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## **RESEARCH OF DETERMINATION OF LONGITUDINAL STIFFNESS OF PACKAGE STRUCTURES**

*Annotation. In high-rise constructions designs in the form of a package of the flat elements squeezed by longitudinal effort are used. In article the problem of determination of their longitudinal rigidity with which size it is necessary to operate at settlement determination of size of flexural rigidity of such design by some techniques is investigated.*

*Keywords: the high-altitude buildings; the package; the flat element; the compression; the longitudinal effort; longitudinal acerbity; flexural acerbity; the method diakoptik; the methods final element; the phenomenological function.*

При строительстве высотных сооружений используются конструкции в виде пакета плоских элементов, сжатых продольным усилием, сообщаемым специальным натяжным тросом. Плоские элементы могут иметь одинаковые или изменяемые по определенной закономерности форморазмерные характеристики, а также быть изготовлены из одинакового

или различного материала [1]. Основной целью применения подобных конструкций является увеличение изгибной жесткости несущих элементов рабочих органов машин и высотных сооружений.

Однако для расчетного определения величины увеличения изгибной жесткости при этом по некоторым методикам необходимо оперировать величиной продольной жесткости этой конструкции, что само по себе является непростой задачей. При исследованиях подобных сложных объектов в последнее время большую эффективность обеспечивают методы диакоптики и конечных элементов, а также феноменологии. Основанные на разделении объекта исследования на отдельные части методы диакоптики и конечных элементов требуют индивидуализации задач в высокой степени или применения очень мощных ЭВМ.

Метод феноменологического анализа, основанный на изучении объекта исследования в целом, без его расчленения на части и позволяющий отвлечься от физики процессов в нем в данном случае может оказаться эффективным. Выполняя феноменологический анализ работы пакетной конструкции мы будем пренебрегать физико-механическими явлениями, происходящими при этом в его объеме и будем изучать закономерность изменения величины ее продольной жесткости при изменении величины усилия сжатия пакета [2,3].

Из предварительных наших теоретических и экспериментальных исследований, подтверждаемых другими авторами известно, что при увеличении величины усилия сжатия пакета от нулевого значения происходит следующее:

Неуклонно увеличивается величина продольной жесткости. При этом численные значения жесткости асимптотически приближаются к ее расчетным значениям, определенным для пакетной конструкции, работающей как монолитная. Монолитная в этом смысле пакетная конструкция могла бы быть выполнена, например, склеиванием плоских элементов.

Темп роста величины продольной жесткости неуклонно снижается с максимального значения при нулевом значении усилия сжатия, асимптотически приближаясь к нулевому значению.

По результатам экспериментов, иногда по крайней мере экстраполяцией этих результатов всегда можно определить значения усилия сжатия пакета  $N_0$ , при которых значения изгибной жесткости не будут отличаться от расчетных их значений, определенных для расчетной модели в виде монолитной пакетной конструкции не более, чем заранее определенная конечная малая величина.

Практические диапазоны изменения функции увеличения продольной жесткости и уменьшения темпов ее роста ограничены техническими условиями и механическими параметрами пакетной конструкции.

Анализируя приведенное выше можно прийти к выводу, что темп роста величины продольной жесткости пакетной конструкции при соответствующих значениях величины усилия сжатия пакета  $T$ , в первом приближении можно считать пропорциональным значениям усилия сжатия.

Отметим, что величина усилия сжатия во всем диапазоне своего изменения  $[0, N_0]$  возрастает прямолинейно, с учетом этого факта можно также с грубым приближением принять, что значение усилия сжатия в этом диапазоне равна полусумме его величин в граничных точках диапазона, т.е.

$$N = \frac{O + N_0}{2} = \frac{N_0}{2}.$$

Исходя из этих предпосылок, можем выполнить математическое исследование и разработать математические модели процессов изменения продольной жесткости пакетной конструкции в зависимости от изменения величины усилия сжатия пакета. На основе принятых положений и допущений можем считать, что приращения величины продольной жесткости при изменении величины усилия сжатия пакета при каждом его значении пропорциональны разности  $C_{pn} - C_n$ , и обратно пропорциональны величине  $\frac{N_0}{2}$ , т.е.

$$dC_n = \frac{2(C_{pn} - C_n)}{N_0} dN; (1)$$

Здесь:  $dC_n$ , – приращение продольной жесткости пакетной конструкции;

$C_{pn}$ , – величина продольной жесткости, рассчитанная для монолитной пакетной конструкции;

$C_n$ , – текущее значение величины продольной жесткости пакетной конструкции.

Величину влияния всех остальных неучтенных факторов также в первом, грубом приближении определим феноменологической функцией неучтенных факторов  $A_n$ , которую пока принимаем постоянной. Тогда (1) переписывается в следующем виде:

$$dC_n = \frac{2A_n(C_{pn} - C_n)}{N_0} dN (2)$$

Решение полученного уравнения имеет вид:

$$C_n = C_{pn} \left( 1 - e^{-\frac{2A_n N}{N_0}} \right) = C_{pn} \eta_n (3)$$

где  $\eta_n$  – феноменологическая функция продольной жесткости пакетной конструкции.

Выражение для продольной жесткости  $C$ , пакетной конструкции, состоящей из чередующихся двух видов плоских элементов и работающей как монолитное тело, имеет вид:

$$C_{pn} = \frac{(l_p + l_n)E_p F_p E_n F_n}{l_n E_p F_p + l_p E_n F_n}.$$

Здесь:  $l_p, l_n$  – толщины плоских элементов двух видов;

$E_p, E_n, G_p$  и  $G_n$  – модули упругости материалов плоских элементов;

$J_p, J_n, J_{pp}$  и  $J_{pn}$  – осевые и полярные моменты площадей поперечных сечений плоских элементов.

Теперь на основании последней формулы и решения (3) можем написать выражение для определения величины продольной жесткости пакетной конструкции  $C_n$  в следующем виде:

$$C_n = \frac{(l_p + l_n)E_p F_p E_n F_n}{l_n E_p F_p + l_p E_n F_p} \left( 1 - e^{-\frac{2A_n N}{N_0}} \right) = \frac{(l_p + l_n)E_p F_p E_n F_n}{l_n E_p F_p + l_p E_n F_p} \eta_n$$

В результате исследования мы получили феноменологический способ определения продольной жесткости пакетной конструкции.

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## **ПРИМЕНЕНИЕ КОНСЕРВАТИВНЫХ ЛЕЧЕНИЙ И ДИСТАНЦИОННОЙ ЛИТОТРИПСИИ ПРИ ЛЕЧЕНИИ МОЧЕКАМЕННОЙ БОЛЕЗНИ**

*Аннотация. В статье представлен обзор по современным методам диагностики и направлениям в лечении мочекаменной болезни (МКБ) – использование консервативного лечения и дистанционной литотрипсии (ДЛТ), уретерореноскопии (УРС), перкутанной нефролитотомии (ПНЛ). При рациональном использовании различных медикаментозных методов лечения положение дел у пациентов с МКБ может быть улучшено и во многих случаях можно избежать применения методов активного удаления камней. ДЛТ произвела революцию в лечении МКБ, а прогресс, возникший в этой области, способствовал расцвету «эры эндоурологии». ДЛТ рассматривается многими авторами как первый метод лечения при камнях почек и мочеточников, он связан с минимальным количеством осложнений и использованием только анальгезии. Лучшее понимание физики ударных волн (УВ), оптимизация лечения для снижения частоты и степени повреждения почки, лучший отбор пациентов будут приводить к успешной ДЛТ, будут способствовать максимальной пользе, как пациентам, так и врачам.*

*Ключевые слова: консервативное лечение, ДЛТ (дистанционная литотрипсия), МКБ (мочекаменная болезнь).*

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## **APPLICATION OF CONSERVATIVE TREATMENTS AND REMOTE LITHOTRIPSY IN THE TREATMENT OF URILOSTICAL DISEASE**

*Annotation. In article there is review on modern methods of diagnostics and trends in the treatment of stone disease – mainly the use of medial treatment and extracorporeal shock wave lithotripsy (ESWL), ureterorenoscopy (URS), percutaneous nephrolithotomy (PCNL). With the appropriate use of various medical regimens the situation for patients with stone disease can be significantly improved and in many situations active stone removal can be avoided. ESWL was the revolution in treatment of stone disease, and the progress associated with it began the era of endourology. It is still considered by most the first option for renal and most ureteral stones, associated with a minimal number of complication*

*and only analgesia. Research towards better understanding the physics of shock wave (SW) delivery, optimization of the treatment with limiting renal damage and better selection of patients with a high possibility of success with ESWL will offer the maximum benefit to both patients and physicians.*

*Keywords: conservative treatment, EL (external lithotripsy), urolithiasis (urolithiasis).*

**Актуальность.** Современные принципы дистанционной литотрипсии. Открытие электрогидравлического принципа генерации сфокусированных ударных волн (УВ) для дробления камней в почках человека 26 лет назад профессором К. Шосси было значительным шагом в лечении МКБ, который привел к эре применения ДЛТ. До внедрения ДЛТ значительная часть пациентов подвергалась открытым операциям для удаления камней. Первые результаты лечения этим методом были впечатляющими: у 498 пациентов частота отхождения осколков камней после ДЛТ составила 90%. В других исследованиях с использованием литотриптера Dornier HM-3 была показана эффективность через 3 месяца только 72-77,4%.

Однако имеется много нерешенных проблем. Достижения в технологии литотрипсии не улучшили результаты лечения методом ДЛТ. Сегодняшние машины являются «дружественными» по отношению к пациентам, но их эффективность мало изменилась.

**Методы исследования.** В данной статье были использованы материалы: опубликованные в научных журналах и в учебных пособиях, также были использованы материалы с научных баз как cyberleninka, pubmed, google scholar за последние 10 лет.

**Результаты исследования.** Сегодня во всем мире установлено >3000 литотриптеров и >1 миллиона пациентов в год получают лечение методом ДЛТ. Целями минимально инвазивного лечения является максимальное очищение почки от камней при минимальных осложнениях. Прогресс в технологиях ДЛТ привел к удобствам для врача и пациента и значительным изменениям: 1) появление новых генераторов УВ (электромагнитный, пьезоэлектрический или электрокондуктивный), 2) создание небольшого фокуса, что минимизирует боль при сохранении эффективности, 3) отсутствие необходимости анестезии, только аналгезия, 4) возможность выполнения ДЛТ в амбулаторных условиях, 5) рентгенологическая и УЗ-локализация камней, что улучшает контроль лечения и дает возможность снижать общую дозу радиации на пациента и персонал, 6) небольшое количество осложнений, 7) расширение показаний (лечение крупных и коралловидных камней, МКБ при наличии аномалий развития и выраженной сопутствующей патологии), 8) устранение ванны, проводящая среда используется только в УВ-головке.

Отбор пациентов для ДЛТ Уролог должен всегда помнить о вероятности того, что большинство небольших камней отойдут под



влиянием консервативного лечения. Компьютерная томография (КТ) помогает лучше подбирать пациентов для ДЛТ. Pareek и соавт. нашли выраженную обратную связь между частотой полного отхождения осколков и единицами Хоунсфилда (ЕХ) - пациенты с наличием резидуальных камней после ДЛТ имели  $\approx 956,2$  ЕХ (плотные камни), пациенты с полным отхождением осколков:  $\approx 551,2$  ЕХ.

Пациенты, которым ДЛТ не показано. При плохой эффективности ДЛТ возникают резидуальные камни, которые требуют более инвазивных методов лечения, подобно уретерореноскопии (УРС) или перкутанной нефролитотомии/-трипсии (ПНЛ). Результаты лечения методом ДЛТ зависят от размеров, локализации, анатомии почки и состава камней, локализации камней в н/чашке почки. ДЛТ камней, находящихся в нижних чашках, имеет низкую эффективность - 52,9% при ДЛТ, по сравнению 90% при ПНЛ. Это объясняется плохой способностью нижних чашек к очищению и плохой уродинамикой, чашечно – мочеточниковым углом 3 см., соотношением длины воронки чашки к её диаметру  $>7$ , диаметром воронки чашки 2 см. ПНЛ должно быть лечением первой линии. При инфекционных камнях дополнительно используются антибиотики. В исследовании было показана эффективность ДЛТ 37% и ПНЛ 95%. При распределении больных в зависимости от размера камня, результаты также были, очевидно, лучше в пользу ПНЛ. Некоторые авторы предлагают даже камни 11-20 мм лечить методом ПНЛ, при отсутствии существенных различий в частоте осложнений и качестве жизни.

Методы повышения эффективности ДЛТ. Результаты ДЛТ с использованием аппарата НМ-3 до сих пор не улучшены литотриптерами «нового поколения». Факторы, которые препятствуют этому - неполное понимание того, как работают УВ, как они фрагментируют камни и как дробят камни человека. Продолжаются поиски по улучшению эффективности литотриптеров. Определен точный размер камня и пределы для ДЛТ: Lingeman и соавт. рекомендуют, что ДЛТ должно быть лечением первой линии для камней почек (верхний и средний отделы) и камней в/3 мочеточника 1см.; - ДЛТ и УРС - методы лечения камней н/3 мочеточника. - ДЛТ и УРС – методы лечения камней н/3 мочеточника  $>1$ см. В Европейских стандартах лечения МКБ, опубликованных в 2001 г., при каждом камне  $>6-7$  мм. ДЛТ *in situ* рекомендуется как лечение первой линии - при любой локализации камня в мочеточнике. Исключением являются камни мочевой кислоты, где установка стента и оральный литолиз являются более эффективными методами лечения. КТ обеспечивает получение более точных данных, имеет дополнительные преимущества, снижает количество неудач при ДЛТ и в настоящее время рекомендуется для диагностики в комбинации с обзорной урографией.

**Вывод.** При рациональном использовании различных медикаментозных методов лечения положение дел у пациентов с МКБ

может быть улучшено и во многих случаях можно избежать применения методов активного удаления камней. ДЛТ произвела революцию в лечении МКБ, а прогресс, возникший в этой области, способствовал расцвету «эры эндouroлогии». ДЛТ рассматривается многими как первый метод лечения при камнях почек и мочеточников, он связан с минимальным количеством осложнений, может использоваться амбулаторно с использованием только анальгезии. Лучшее понимание физики УВ, оптимизация лечения для снижения частоты и степени повреждения почки, лучший отбор пациентов, которые будут иметь высокую вероятность успеха ДЛТ, будет способствовать максимальной пользе, как пациентам, так и врачам.

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## **СОВЕРШЕНСТВОВАНИЕ МЕХАНИЗМОВ АДЕКВАТНОЙ АДАПТАЦИИ УЧАЩИХСЯ К ИЗМЕНЯЮЩЕЙСЯ УЧЕБНОЙ СРЕДЕ**

*Аннотация. Изучение природных процессов, знание происходящих в них изменений издавна интересовало человечество. Экологические факторы, влияющие на окружающую среду, можно разделить на: абиотические (неживая природа); биотические (живое существо); антропогенные (воздействие человека на природу). В настоящее время влияние деятельности человека на окружающую среду, изменения в экосистеме становятся огромным.*

*Ключевые слова: экология, природа, социально-экономическая, научно-техническая, окружающий мир, экологическое воспитание и культура, экологический подход.*

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## **IMPROVING MECHANISMS FOR ADEQUATE ADAPTATION OF STUDENTS TO A CHANGING LEARNING ENVIRONMENT**

*Annotation. The study of natural processes, the knowledge of changes occurring in them has long been of interest to mankind. Environmental factors affecting the environment can be divided into: abiotic (inanimate nature); biotic (living being); anthropogenic (human impact on nature). Currently, the impact of human activity on the environment and changes in the ecosystem is becoming enormous.*

*Keywords: ecology, nature, socio-economic, scientific and technical, the surrounding world, environmental education and culture, ecological approach.*

При постановке и решении задачи моделирования исследователь сталкивается с различными проблемами. Одним из главных вопросов

является то, что называют объектом моделирования, каковы его общие характеристики и какими свойствами он будет обладать? Поэтому задачу моделирования можно начать с изучения моделируемого объекта.

С проблемой моделирования мы сталкиваемся преимущественно в двух случаях: во-первых, в когнитивных процессах, т.е. создании когнитивной модели объектов и процессов, и во-вторых, в процессах управления, т.е. при целенаправленном управлении объектом, т.е. управлении человеком. для достижения заявленной цели.

В процессе познания создается модель познания. Эта модель по существу отражает механизм работы объекта. Примером такого моделирования является изучение окружающей нас природы. Уметь объяснять свойства природы, их взаимосвязь, анализировать механизмы и т. д. Основная цель моделей – создание моделей, отражающих важные для человека природные объекты. Такие характеристики выражаются представлением связей ввода-вывода в каждом объекте или событии по-разному.

Все входные каналы объекта представляют собой влияние внешней среды на объект и являются определенными функциями состояния и времени среды. Однако из-за отсутствия модели внешней среды входные каналы объекта естественным образом можно рассматривать как случайные функции времени, то есть статистические свойства этих случайных функций времени, как правило, неизвестны.

Для того, чтобы сделать наш мир лучше, очень необходимо более разумно использовать ресурсы, данные нам природой, вкладывать основы экологического образования в сознание подрастающего поколения. Делать это следует в самом раннем возрасте, потому что тогда дети очень восприимчивы к любой информации, и если она будет подана правильно, они сохранят ее в своей памяти.

Известно, что детям лучше всего запомнить любую информацию в игровой форме. Разработано множество дидактических игр экологического содержания, требующих правильных ответов от самых простых людей, до сложных для детей раннего возраста, которые рассчитаны на большую аудиторию.

Экологическое воспитание посредством дидактических игр прививает детям любовь к окружающей природе, начиная с самого маленького цветка. Чтобы научить их обращать внимание на все вокруг, нам нужно научить детей быть простыми, любить их.

Общение с природой, радость от удивления уникальным и разнообразным миром расширяет кругозор ребенка. Задача учителя – собрать пшеницу. Экологические игры соответствуют возрасту, а задания не очень простые, поэтому ребенок может справиться с ними самостоятельно.

Дидактические игры для детей по экологии.

### «Волшебные круги»

Для игры понадобится картонный круг, разделенный на четыре сектора, каждый из которых символизирует определенное время года, и цвет круга вывешивается на висящую ткань. Взрослые отгадывают загадки или задают вопросы, а ребенок, знающий ответ, втыкает булавку в соответствующее место. Эта игра может быть на любую другую тему.

### «Найди нужную вещь»

На стол кладется картинка и воспитатель предлагает выбрать те, которые относятся к названному персонажу. Например: «желтый» — это солнце, курица, банан и т. д. Или «мокрый» — дождь, туман, лужа.

Дети кладут руки за спину, а воспитатель дает им фрукты или овощи. Затем он становится перед ними и в свою очередь похож на новорожденных младенцев. Задача детей определяет то, что с ними связано. Когда он узнал, что было в руке ребенка, он побежал к воспитателю.

На уроках естествознания в средней школе преподают основы экологии, но более сложным способом, чем игра. Есть элементы географии и биологии. Улучшение предварительных знаний детей, выполнение различных практических тем по экологии. В теплое время года их проводят после землетрясения в парке или других природных зонах, после чего помогают с уроками за столом.

Экология, окружающая среда, живая и неживая природа, экологическое сознание, экологическая культура, зрелость, методы, методы. Экологическое образование учит и дает указания реализовать на практике цель экологической науки, сделать окружающую среду настолько естественной и экологически чистой, насколько мы хотим. «Экология» — греческое слово и представляет собой науку, изучающую условия жизни живых существ и их взаимодействие с окружающей средой, а также законы, возникающие на этой основе. Экология – не древняя наука. Наука экология не является наукой, возникающей из интереса человека, мыслящего в познании.

Попользовавшись им, не прекращая, он привел его в такое состояние, когда он был невидим, и теперь, ради своей выгоды, он почувствовал свой долг перед будущим поколением и пришел к выводу о своей ошибке восстановить его естественный вид. назвать наукой. Наука экология естественным образом зародилась в Европе. Потому что в самом социальном развитии человечества влияние природной среды изначально было в Европе. Потому что развитие общественного сознания человека, достижения в производстве человеческих благ, развитие общества были изначально в Европе. Термин экология был введен в науку в 1866 году немецким зоологом Гекселем. До недавнего времени этот термин был известен только специалистам. Теперь стало ясно, что игнорирование природных богатств окружающей среды может нанести серьезный ущерб всей планете. Возникла необходимость решения проблем взаимоотношений



человека и природы. В связи с этим улучшение экологической ситуации стало одной из главных задач. Формирование экологической культуры учащихся, обучение их взаимодействию с природой и окружающей средой стало важнейшей темой педагогической теории и школьной практики. Потому что по мере увеличения сознания человека появляется прогрессивное общество, поскольку возрастает роль человека на поверхности земли и увеличивается количество людей на поверхности земли. Нужно было оставаться на пути. Согласно статье 18 Конституции Узбекистана, обязанностью человека является охрана земли и недр, водных ресурсов, флоры и фауны, использование этих ресурсов на научной основе, поддержание чистоты воздуха и воды, а также охрана окружающей среды. обеспечить постоянное увеличение природных ресурсов. Подчеркивалось, что необходимо принимать меры и мероприятия по улучшению окружающей среды. Закон Республики Узбекистан «Об охране природы», принятый 9 декабря 1992 года, во исполнение Приказа «За здоровое поколение», Государственной программы под этим названием «Концепция экологического образования и образования». Фонд «Экосан» указывает, что в стране приступили к устранению экологических проблем. В частности, организация экологически ориентированных классов в общеобразовательных школах и формирование на этой основе школ-лицеев показывают, что молодое поколение серьезно занимается воспитанием подрастающего поколения в духе любви к природе. Каждый молодой человек, окончивший школу и начавший самостоятельную жизнь, независимо от специальности, должен обладать теоретическими и практическими знаниями в области экологии и охраны природы. Прежде всего, читатели учат, что охрана природы стала одной из главных проблем современности. Фактически в результате чрезмерного использования природных ресурсов, непланового освоения новых земель резко изменился экологический баланс, а также произошло загрязнение окружающей среды. В частности, особенность выращивания хлопка, неправильное планирование сельского хозяйства, чрезмерное использование химических удобрений вызвали рост экологических проблем. Такая ситуация оказывает негативное влияние на мир животных и растений. В последующие 30 лет природные ресурсы были использованы настолько, что сравнялись с природными ресурсами, использованными за всю историю человечества. Итак, чем выше уровень экономического развития общества, тем выше уровень его воздействия на природу. В результате быстрого роста населения возрастают и экологические проблемы. Только обеспечение населения землей, водой, энергией и продовольствием становится глобальной проблемой во всем мире. Водоемы загрязняются из-за расположения вблизи воды множества растений, наносящих вред природе. Здоровье людей, проживающих на территории Центральной Азии, ухудшается, заболеваемость растет. Различные заболевания широко распространяются в



островных регионах Республики Каракалпакстан, Хорезмской области. Таким образом, комфортная жизнь человека на краю земли теперь зависит от решения экологических проблем. Большое значение имеет научное, экономическое, техническое, гигиеническое, юридическое, эстетическое, педагогическое направление экологических проблем. Потому что экологические проблемы вызваны деятельностью человека. Самое главное, что если будет решена эта педагогико-экологическая проблема, будет создана почва для решения других экологических проблем. Обеспечивается педагогическое, экологическое образование и обучение. Экологическое образование означает передачу учащимся знаний, отражающих взаимоотношения природы и человека. Экологическое образование – это воспитание отношения к окружающей среде. Экологическое образование является новой формой и компонентом общего образования и преподается в школе наряду со всеми предметами. Ее главная цель – формирование осознанного отношения к окружающей среде у молодого поколения.

состоит из формирования. Высший класс с низким уровнем общественного сознания вторичен по отношению к народу, народы не могут легко выйти из экологической депрессии. Хотя они и смеются над природой, то, что они делают, противоречит этому. Наши предки уделяли вопросу образования детей особое внимание и создали в этом отношении образцовые традиции. В семейном кругу детям говорят: «Не плюй в воду!» Не загрязняй ее, потому что все животные будут ее пить». Они сказали: «Не ломай цветущую плодую ветвь, она принесет плод, и ты будешь есть ее сам». Основная задача системы образования – научить молодежь беречь природную флору нашей страны и ее блага. В содержание подготовки к экологическому образованию входят: - окружающая среда и ее влияние на духовный мир личности; - Определить природу и ее значение; - сотрудничество школы и семьи в развитии любви к природе; - Повышать интерес к уходу за растениями в озеленении своего города, села и школьного двора; - Обязанности детей по охране окружающей среды; - Образцовая роль родителей в охране природы; - Обучение бережному отношению к природе, флоре и фауне в семье и в школе; - Знание природы; Восстановление национальных традиций и традиций экологического воспитания молодежи. Изменение окружающей среды, показывающее величину ее загрязнения в числовом выражении, положительно влияет на экологическое образование, обеспечиваемое математикой. Детей в экологических кружках учат не причинять вред природе, наслаждаться красотой природы, любить окружающую среду. Такие темы, как «Давайте уважать природу», «Природа и человек», «Экология и человек», «Остров просит о помощи», которые читаются на групповых занятиях, повысят интерес учащихся к природе. В процессе экологического образования учащимся необходимо знать следующее. - Понимание природы, природной среды, природных факторов и их связи; - экономное использование

природных ресурсов и их охрана; - Защита от загрязнения окружающей среды; - Стремление оставить природу в ее естественном состоянии для будущих поколений. На основе вышеперечисленных факторов экологическое образование вызывает у учащихся интерес к регулярному наблюдению за природой, побуждает их бороться за охрану природы и сохранение ее красоты.

Экологическая идеология опирается на универсальные ценности, которые не только универсальны, но и уникальны для природы и человеческой жизни. Для этого необходимо формировать у учащихся экологическое образование и воспитание, экологическое сознание и мировоззрение, экологическое мышление и культуру. Экологическая культура – это культура охраны природы, культура рационального использования природных ресурсов и сознательного изменения экологической системы. Экологическую культуру учащихся общеобразовательных школ желательно формировать следующим образом:

1. Воздействие на эмоции ученика;
2. Пробудить в сердцах учащихся любовь к природе и окружающей среде;
3. Формирование в сознании учащихся охраны природы и рационального отношения к ней;
4. Постоянное продолжение экологического образования;
5. Практическое применение полученных теоретических знаний. необходимо формировать квалификации и навыки и т. д. Открытие широкого пути к современным знаниям, совершенствование образования, эффективное использование педагогических технологий для формирования таких качеств у младших школьников – одно из главных требований сегодняшнего дня.

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## **ФОРМИРОВАНИЕ ЭКОЛОГИЧЕСКОГО МЫШЛЕНИЯ У УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ**

*Аннотация. Учащиеся начальных классов должны приобретать знания, умения и навыки, связанные с наукой. Эти навыки тесно связаны с экологическим мышлением. Учащимся начальных классов необходимо знать природу, иметь научный источник о взаимосвязи деятельности человека и природы. Процесс использования инновационных методов в формировании экологического мышления у младших школьников, охрана окружающей среды в обучении, методы обучения, средства, положительные установки и взгляды младших школьников на экологию и взаимосвязь природы. Представлены аспекты усвоения научных источников.*

*Ключевые слова: Начальный класс, экологическое мышление, форма, метод, инструментарий, урок, педагогические технологии, интегративный подход.*

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## **FORMATION OF ECOLOGICAL THINKING IN PRIMARY CLASS STUDENTS**

*Abstract. Primary school students should acquire knowledge, skills and abilities related to science. These skills are closely related to ecological thinking. Primary school students need to know nature, to have a scientific source about the relationship between human activity and nature. The process of using innovative methods in the formation of ecological thinking in elementary school students, environmental protection in teaching, teaching methods, tools, positive attitudes and views of elementary school students regarding ecology and the relationship between nature Aspects of absorption of scientific sources are presented.*

*Key words: Primary class, ecological thinking, form, method, tools, lesson, pedagogical technologies, integrative approach.*

Существуют научные, экономические, технические, гигиенические, правовые, эстетические, педагогические и психологические аспекты

экологических проблем. Педагогическое направление предусматривает экологическое образование и воспитание. Экологическое образование означает систему знаний, отражающую взаимоотношения природы и человека, которую необходимо передать населению. Экологическое воспитание – это воспитание отношения человека к окружающей среде. Основная цель экологического образования – сформировать осознанное отношение к окружающей среде и ее проблемам у людей разного возраста. Экологическая грамотность и культура учащихся младших классов реализуется в образовательных учреждениях и в семье. При экологическом воспитании учащихся начальных классов основное внимание следует уделять национальным особенностям и аспектам. Это: вода, земля, почва, воздух, считающиеся священными. Недаром наши предки говорили: «Вода – дар природы, источник жизни». Предоставление такой информации должно стать основной задачей учителей при экологическом воспитании учащихся в школе. Известно, что пренебрежение окружающей средой и природными ресурсами наносит серьезный вред всей планете. Возникла необходимость решения проблем между человеком и природой. Формирование экологической культуры у студентов, обучение взаимодействию с природой и окружающей средой стало актуальной проблемой теории и практики педагогики. Особенно в общеобразовательных школах серьезно начинать воспитание в духе любви к природе необходимо со школы [2,18].

Содержание экологического образования в образовательных учреждениях включает в себя:

- окружающая среда и ее влияние на духовный мир человека;
- понимание природы и ее значения;
- сотрудничество школы и семьи в формировании любви к природе;
- интересоваться озеленением своего района, города, села и школьного двора, даже уходом за растениями в классе;
- обучение бережному отношению к природе, флоре и фауне в семье, в школе, уходу за животными и птицами;
- восстановление национальных традиций и обычаев в экологическом воспитании молодежи, повышение внимания к ним.

Также на уроках естествознания учитель способен выделиться в индивидуальной самостоятельной работе и использовать разные формы, методы и инструменты. На практике педагогическим условием всего образовательного процесса, начиная с начального образования, является содействие проявлению внутреннего потенциала учащегося на основе создания условий. Использование образовательных методов в ходе урока направлено на превращение ученика из пассивного наблюдателя в активного участника. Только так проверяются, развиваются, корректируются, совершенствуются и закрепляются социально-педагогические и природоохранные навыки школьника. Социально-

педагогической необходимостью является изучение научного литературного наследия мыслителей Средней Азии и достижение эффективности формирования экологического мышления у студентов на основе их взглядов на отношение человека к экологической среде. Эта объективная необходимость базируется на экологических знаниях, умениях и компетенциях, предоставляемых учащимся начальных классов в общеобразовательных школах и во внеклассной среде. Начальное образование является важным этапом в ознакомлении учащихся с научно-теоретическими и практическими представлениями, связанными с природой. Следующей основной и важной педагогической и психологической задачей является определение эффективных форм, методов и средств донесения до учащихся вышеуказанных экологических знаний. Здесь, выдвигая предложение использовать форму и метод передачи знаний под названием «Экологический отдых (пауза)», связанный с формированием и воспитанием экологического мышления у учащихся младших классов, можно отметить его эффективность [4, 69].

Организуется беседа, в которой учащиеся рассказывают о своем понимании тополей, о том, сколько тополей у них во дворах и на улицах, кто их посадил. Активным, талантливым ученикам дается задание написать небольшое стихотворение о тополях. В конце интервью преподаватель рассказывает ученикам, что если каждый житель нашей страны в течение одного года посадит по одному дереву с плодами или без них, наша страна может превратиться в зеленый сад. При этом учащиеся объясняют, что если мы не сажаем деревья, то необходимо защитить существующие деревья от гибели. Эту необходимость обосновывают на следующем примере: для изготовления 1 тонны бумаги необходимо срубить 17 деревьев. Если 750 кг бумаги производить из бумажных отходов вместо древесины, то загрязнение воздуха снизится на 86%, а загрязнение воды - на 25-44%. Говорят, что так и должно быть. Приводится другой пример: если каждый школьник в республике сэкономит четверть страниц тетради, за месяц будут спасены сотни гектаров леса. Если бы учащиеся берегли свои тетради и не рвали их понапрасну, то необходимость рубить деревья и делать из них бумагу в определенной степени снизилась бы. Это действие также предотвращает загрязнение воздуха. Воздух содержит пыль, в нем всегда присутствуют различные микробы [5,43].

При организации занятий по естествознанию в начальных классах экологические проблемы возникают из-за антропогенных изменений состояния природной среды, сильного антропогенного воздействия человека на живые и неживые компоненты, загрязнения атмосферы промышленными продуктами создают экологические проблемы, на земле необходимо объяснить студентам, что резкое увеличение регионов с экологическим кризисом, опасность глобального экологического кризиса реальна [3,28]. Учащиеся должны понимать, что охрана природы состоит из



рационального использования природных ресурсов и сохранения окружающей среды с учетом потребностей нынешнего и будущих поколений. В связи с этим студентам предоставляется информация об экологии и экологических понятиях.

В частности, экология — самостоятельная наука, изучающая жизненные процессы собственными методами. Развиваются и отрасли экологии, непосредственно связанные с общественной жизнью. При этом аспекты экологических проблем изучаются в рамках различных дисциплин. «Экология» — наука, изучающая законы жизнедеятельности живых организмов (любой формы, гармонизированные на всех уровнях) под воздействием человеческого фактора в естественной среде, в которой они обитают. Поэтому баланс законов природы не должен нарушаться. Поэтому необходимо с детства прививать молодежи, будущему поколению, чувство доброты к природе. Основная цель экологического воспитания — сформировать у молодого поколения осознанное отношение к окружающей среде [4, 102].

В заключение следует сказать, что при изучении социально-педагогических основ определения и закрепления положительных качеств отношения к окружающей среде при формировании экологического мышления у младших школьников повышается эффективность процесса формирования системы гуманистического воспитания. подход ко всем живым существам. Усвоение учащимися своего жизненного опыта, своего эмоционального отношения к миру, творческого опыта, практики взаимодействия с природой, усвоение норм этого отношения приводит наряду с формированием личности и индивидуального отношения к миру. социализация.

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## **САХАРНЫЙ ДИАБЕТ 2 ТИПА У ЖЕНЩИН В ИЗБАСКАНСКОМ РАЙОНЕ АНДИЖАНСКОЙ ОБЛАСТИ**

*Аннотация. Проведено исследование с участием женщин проживающих в Избасканском районе (район, расположенный в северной части Андижанской области). 60% женщин не осведомлены о значении влияния массы тела и нарушений углеводного и липидного обмена на развитие и прогрессирование сахарного диабета 2 типа и осложнений. У женщин (в возрасте 40–65 лет) с индексом массы тела (ИМТ) выше 25 кг/м<sup>2</sup> и индексом талии/бедро выше 0,85, маркеры углеводного обмена (глюкоза сыворотки крови – натощак и постпрандиальная, гликозилированный гемоглобин) и показатели липидного обмена – общий холестерин (ОХ), триглицериды (ТГ), липидограмма (холестерина липопротеидов низкой плотности – ХС ЛПНП, липопротеидов очень низкой плотности – ХС ЛПОНП, индекс атерогенности – ИА достоверно выше, а ХС липопротеидов высокой плотности – ХС ЛПВП значимо ниже, чем у женщин с нормальной массой тела. При проведении корреляционного анализа, выявлена достоверная положительная связь между возрастом, ИМТ, ИА, уровнем глюкозы в сыворотке крови. Оценка маркеров углеводного и липидного обмена должны входить в перечень обязательных обследований пациентов в возрасте выше 40 лет, быть строго индивидуальными, исходя из клинико-anamnestических данных. Имеется взаимосвязь прогрессирования нарушений углеводного обмена и изменения показателей липидного обмена у обследованных женщин. Женщины должно быть широко проинформированы о факторах риска развития сахарного диабета 2 типа, прогрессирования осложнений этого заболевания.*

*Ключевые слова: Сахарный диабет 2 типа, липидный обмен, индекс атерогенности, глюкоза, гликированный гемоглобин, инсулин, индекс массы тела, углеводный обмен.*

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## **TYPE 2 DIABETES IN WOMEN IN IZBASKAN DISTRICT OF ANDIJAN REGION**

*Abstract. A study was conducted with the participation of women living in the Izbaskansky district (an area located in the northern part of the Andijan region). 60% of women are not aware of the importance of the influence of body weight and disorders of carbohydrate and lipid metabolism on the development and progression of type 2 diabetes mellitus and complications. In women (aged 40-65 years) with a body mass index (BMI) above 25 kg/m<sup>2</sup> and a waist/hip index above 0.85, markers of carbohydrate metabolism (fasting and postprandial serum glucose, glycosylated hemoglobin) and lipid metabolism indicators – total cholesterol (OH), triglycerides (TG), lipidogram (low-density lipoprotein cholesterol – LDL cholesterol, very low-density lipoproteins – VLDL cholesterol, atherogenicity index - IA is significantly higher, and high-density lipoprotein cholesterol - HDL cholesterol is significantly lower than in women with normal body weight. During the correlation analysis, a significant positive relationship was revealed between age, BMI, IA, and serum glucose levels. The assessment of markers of carbohydrate and lipid metabolism should be included in the list of mandatory examinations of patients over the age of 40 years, be strictly individual, based on clinical and anamnestic data. There is a correlation between the progression of carbohydrate metabolism disorders and changes in lipid metabolism in the examined women. Women should be widely informed about the risk factors for the development of type 2 diabetes mellitus, the progression of complications of this disease.*

*Key words: Type 2 diabetes mellitus, lipid metabolism, atherogenicity index, glucose, glycated hemoglobin, insulin, body mass index, carbohydrate metabolism.*

**Актуальность:** Сахарный диабет 2-го типа возникает у людей с предрасположенностью к нему при сочетании нескольких условий, наиболее частым фактором риска является ожирение или повышенный индекс массы тела, а также артериальная гипертония и дислипидемия [Строков, 2021].

Диагностика сахарного диабета второго типа затруднена тем, что его симптомы часто слабо выражены, и заболевание диагностируется уже при возникновении осложнений через несколько лет после его возникновения.

Термин “Сахарный диабет” по определению Всемирной Организацией Здравоохранения (ВОЗ) означает нарушение обмена веществ множественной этиологии для которого характерна хроническая гипергликемия с нарушениями метаболизма углеводов, жиров и белков в результате нарушений секреции инсулина и/ действия инсулин. Диабет – единственное неинфекционное заболевание (имеется ввиду особо опасные инфекции – чума, оспа и др.) взятое под контроль Организацией Объединенных Наций (ООН) Сахарный диабет (СД) – 2 типа самое распространенное эндокринное заболевание, представляет серьезную медико-социальную проблему в связи с повсеместным прогрессирующим ростом заболеваемости, хроническим течением и высокой частотой инвалидизирующих осложнений [1; 4]. По прогнозам © 2011–2019 Science for Education Today (до 2018: Вестник Новосибирского государственного педагогического университета) Science for Education Today 2019, том 9, № 1 <http://sciforedu.ru> ISSN 2658-6762 210 к 2040 г. их общее число достигнет 642 млн<sup>1</sup> [4]. Каждые 6 сек. в мире умирает один человек от сахарного диабета и его осложнений<sup>2</sup>.

1 Атлас диабета IDF. 7-е изд. 2015 [Электронный ресурс]. URL: <http://www.diabetesatlas.org> (дата обращения: 09.12.2018) 2 Там же. 3 Petri C., Stefani L., Bini V., Mascherini G., Francini L., De Angelis M., Galanti G. Life style and nutrition habits in type 2 diabetes [Электронный ресурс]. URL: <https://www.researchgate.net/publication/278024473> (дата обращения: 09.12.2018).

Формированию сахарного диабета 2 типа, как правило, предшествует состояние предиабета, для которого также характерно не только нарушение углеводного обмена и механизмов его регуляции, но и другие метаболические и гормональные сдвиги [24–25]. Огромное влияние оказывает на углеводный обмен изменение липидного обмена и массы тела. В настоящее время среди ведущих причин, вызывающих нарушения углеводного обмена, выделяют нездоровый образ жизни, в частности неправильное питание, низкую двигательную активность, эмоциональные

стрессы и т. д.<sup>3</sup> [27]. Это побудило разработать правила поведенческой терапии для людей, имеющих нарушения углеводного обмена, которые включают 7 основных принципов: 1) здоровое питание; 2) физическая активность; 3) мониторинг глюкозы в крови; 4) прием медикаментов 5) предупреждение стрессов; 6) уменьшение рисков; 7) правильное поведение при болезни [17; 21; 23]. Наиболее распространенным нарушением углеводного обмена является гипергликемия, которая характеризуется стойким повышением уровня глюкозы в крови (выше 6,1 ммоль/л натощак в венозной крови) и является одним из основных симптомов сахарного диабета.

**Цель:** оценить показатели и роль нарушения углеводного и липидного обмена, как фактора риска развития сахарного диабета 2 типа и осложнений у женщин проживающих в Избасканском районе Андиганской области.

**Материалы и методы:** В исследование включены 280 женщин, проживающих в Андиганской области, в возрасте от 40 до 65 лет, средний возраст составил  $47,0 \pm 2,26$  [Me 45,5; 95%ДИ 41,6-46,5] лет.

В контрольную группу вошли 50 женщины аналогичного возраста без нарушений углеводного и жирового обменов. Средний возраст  $47,4 \pm 3,69$  [Me 45,5; 95%ДИ 45,1- 47,6] лет. С обследуемыми женщинами было проведено собеседование и анкетирование на основе специального опросника составленного эндокринологами нашей кафедры, определяли индекс массы тела (ИМТ) (по классификации избыточной массы у взрослых в зависимости от ИМТ по ВОЗ. 1997г.; 16- 18.5 кг/м<sup>2</sup> недостаточная масса тела, норма 18,5-24,9 м/кг<sup>2</sup>, избыточная масса тела 25- 29.9 кг/м<sup>2</sup>, ожирение 1 степени 30- 34.9 кг/м<sup>2</sup>, ожирение 2 степени 35- 40 кг/м<sup>2</sup>, 40 кг/м<sup>2</sup> и более ожирение 3 степени ), абдоминальное ожирение по ВОЗ с расчетом соотношения окружности талии (ОТ) к бедер (ОБ) измеренное в сантиметрах ОТ и ИМТ ( более 0,85 и 30 кг/ м<sup>2</sup> соответственно у женщин считается ожирением), уровни глюкозы на тощак, инсулина, гликированный гемоглобин, уровни общего холестерина (ОХС), триглицеридов (ТГ), липопротеидов высокой плотности (ХСЛПВП), липопротеидов низкой плотности (ХСЛПНП), липопротеидов очень низкой плотности (ХСЛПОНП) в венозной крови на тощак. Был рассчитан индекс атерогенности (ИА), по формуле  $КА=(\text{общий холестерин} - ЛПВП/ЛПВП)$  норма коэффициента – 3.0.

**Результаты и обсуждение:** Работа проведена с 2020–2022 годы в Андиганском государственном медицинском институте. Анализ результатов обследования женщин показал: 70% женщин не были осведомлены о значении влияния массы тела и нарушений углеводного и липидного обмена на развитие и прогрессирования сахарного диабета 2 типа и осложнений. Избыточная масса тела выявлена у 90 (32% женщин), ожирением страдали 40 (15%) женщин), дефицит массы тела отмечался у 20



(8% женщин). Среди 90 женщин с избыточной массой тела, у 75 уровни глюкозы в крови натощак были 5.2 – 5.9 ммоль/л, у 9 женщин 6 – 6.9 ммоль/л, гликированный гемоглобин 6.5 – 6.7%, у 63% обследованных женщин на липидограмме показатели ЛПВП были ниже нормативных значений. Из 40 пациентов, ожирением (ИМТ > 30 кг/м<sup>2</sup>) страдали 16 (40%) женщины. Пациенты с высокими показателями ИМТ, в сравнении с контрольной группой, имели статистически значительно высокие уровни ХС ЛПНП и значительно более высокие уровни инсулина (норма 3 – 25 мкЕд/л у взрослых) и гликированного гемоглобина в крови, также сравнительно высокие показатели общего холестерина ( $4,97 \pm 0,43$  ммоль/л vs  $3,38 \pm 0,32$  ммоль/л;  $P = 0,05$ ) и ТГ ( $2,03 \pm 0,30$  ммоль/л vs  $0,94 \pm 0,10$  ммоль/л;  $P = 0,05$ ), а также более высокий ИА ( $3,33 \pm 0,27$  против  $1,91 \pm 0,35$ ;  $P = 0,01$ ). Тогда как уровни ХСЛПВП ( $1,13 \pm 0,03$  ммоль/л) были значимо ниже, чем в группе без нарушения углеводного обмена. Содержание ХС ЛПОНП у женщин с повышенными показателями ИМТ было соответственно повышенным ( $2,20 \pm 0,21$  ммоль/л;  $P = 0,14$ ), коррелировало с возрастом.

В группе контроля вышеуказанные показатели липидного обмена были в пределах нормативных значений.

#### **Выводы:**

1. Женщины с повышенными значениями ИМТ в возрасте 40 – 65 лет проживающих в Избасканском районе имели нарушение гликемии натощак, гликированного гемоглобина, также значения ОХС, ТГ, ХСЛПНП, ХСЛПОНП и ИА достоверно выше, а ХСЛПВП значимо ниже, чем у женщин с нормальной массой тела.

2. Нарастание уровня АИ в крови ассоциируется с более старшим возрастом, повышением ИМТ и наличием нарушений углеводного обмена, проведение корреляционного анализа, выявило достоверную положительную связь между возрастом, ИМТ и АИ у женщин.

3. Женщины должны быть проинформированы о влиянии нарушений углеводного и липидного обмена на развитие сахарного диабета 2 типа и обучены мерам профилактики прогрессирования заболевания.

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### **ЗНАЧЕНИЕ ФИТОМЕЛИОРАТИВНЫХ МЕРОПРИЯТИЙ В ВОССТАНОВЛЕНИИ БИОЛОГИЧЕСКОГО РАЗНОБРАЗИЯ ПРЕДГОРНЫХ ПАСТБИЩНЫХ РАСТЕНИЙ**

*Аннотация. В статье устанавливается научная, практическая и экономическая важность приведения к фитомеративной активности богатства растительного комплекса предгорных пастбищ, в результате чего основой научных исследований является увеличение урожайности пастбищ в 2-3 раза в растительном покрове пастбищ биологического сорта вместе с растением.*

*Ключевые слова: Дередация, фитомератив, агрофитосиноз, эфемер, эфемероид, урожайность, водный режим.*

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### **THE IMPORTANCE OF PHYTOMELANIORATIVE MEASURES IN THE RESTORATION OF BIOLOGICAL DIVERSITY OF PITCHMOUNTA PASTURE PLANTS**

*Abstract. The article establishes the scientific, practical and economic importance of bringing the richness of the plant complex of foothill pastures to phytomerative activity, as a result of which the basis of scientific research is an increase in pasture yield by 2-3 times in the vegetation cover of biolic pastures together with the plant.*

*Key words: Deedition, phytomerative, agrophytosinosis, ephemeral, ephemeroïd, yield, water regime.*

**Актуальность:** Вопрос повышения продуктивности пустынных пастбищ в нашей Республике одной из главных задач является проведение ряда научных исследований, для его решения в ее институтах проводятся научные исследования. В результате многолетней научно-исследовательской работы, проведенной на пустынных пастбищах, было разработано несколько методических рекомендаций по повышению урожайности производимой продукции. Разработанные предложения и рекомендации по искусственному повышению урожайности пастбищ включают в себя ряд задач, таких как освоение высокогорных пастбищ, интенсификация их использования и оптимизация их экологического состояния. Высокогорное плато занимает почти 4 миллиона гектаров, что составляет 12% всего плато. Горные луга южной части нашей республики 65% в Самаркандской и Навоийской областях, 49,6% в Кашкадарьинской области и 63,6% в Сурхандарьинской области. В этих районах развилось преимущественно пастбищное животноводство, и наша республика имеет в национальной экономике большое значение. Климатические особенности горных лугов характеризуются засушливым продолжительным летом-осенью, суровыми холодными зимами с очень низким количеством осадков. При этом среднее содержание жира колеблется в пределах 80-160 мм, он выпадает в основном на зимние и весенние месяцы.

**Основная часть:** Отмечается, что в определенные засушливые годы количество осадков будет еще меньше. На лугах этих районов урожайность очень низкая, при ежегодном сборе кормов до 0,6-2,54 ц/га, в неблагоприятные годы может снизиться до 0,5-1,5 ц/га. Такие растения в основном доминируют в неблагоприятных климатических условиях.

Основным кормом для него служит полынь, эфемеры и эфемероиды, однолетние и многолетние рассолы, состоящие из травы и круглогодичного выпаса скота. Учитывая низкую урожайность пастбищ и неуклонный рост поголовья скота, мы рассматриваем деградацию растений в качестве интенсификации, формирование эрозии почв, что вкратке указывает на то, что мы вызываем ухудшение экологической ситуации. Такое сложное улучшение экологического состояния пастбищ в климатических условиях, увеличение круглогодичной кормовой базы скота, деградация растений Профилактикой, наиболее оптимальным способом остановить эрозию почв считаются мелиоративные мероприятия. Важно выбрать перспективные питательные растения, подходящие для данной местности, изучив климатические условия местности, изменения в почвенном и водном режиме. Поэтому мы провели собственное исследование на опытной станции "Нурата", которая является филиалом научно-исследовательского института экологии ежевика и пустынь.

Основной целью нашей исследовательской работы является получение эколого-биологических и ценных хозяйственных характеристик, подходящих для условий горных степей и пустынь перспектива



заключается в выделении культивируемых видов кормовых растений и создании искусственных пастбищ для получения кормов с их участием.

Задача нашей работы - выделить наиболее оптимальные виды на основе развития, урожайности, водного режима изолированных растений, сравнительной оценки химического состава кормов и на их основе создать пастбища.

Район, выбранный для проведения научных исследований, находится в юго-западной части горы Нурата, на высоте 660-670 метров над уровнем моря. Температура колеблется от абсолютной, между днем и ночью, а также между зимними и летними температурами. Разница имеет четкий указатель. Количество осадков в среднем составляет 200-206 мм. организовано и распределено неравномерно между сезонами года. Дожди выпадают зимой и в весенние месяцы, а в летние и осенние месяцы осадков в целом не наблюдается нами. Среднегодовая температура составляет +13,40°C. Абсолютный минимум при температуре -29°C, абсолютная высокая температура составляет +43,1°C. Территория покрыта полынно-эфемерными лугами и произрастает от эфемероидов до гиацинтов, жуков, кустарников до полыни, янтаков, исфен и однолетних эфемероидов. Наша научно-исследовательская работа была подготовлена учеными в области экологии ежевики и пустынь сравнительное изучение видов растений, основа собранных данных на научных выводах, предложениях и рекомендациях, на разработке которых мы сосредоточились.

В ходе эксперимента в основном была проведена следующая практическая работа. В осенне-зимние месяцы почву обрабатывают, вспахивают и формируют до толщины 22-25 см, а после 2 боронований интервал между рядами при 4 повторениях на 30 м<sup>2</sup> составляет 60 см, изен (3 кг/га), кейрук и терескен (5 кг/га), олово и солянка (6 кг/га), полынь (0,5 кг/га) в норме посадки (100% после обнаружения) высаживается. Фенологические наблюдения, расчет приживаемости куста № 2 проводился 2 раза весной (май) и осенью (октябрь) с учетом появления побегов в дополнение к этим, появления первых вегетативных веток, роста растений ежемесячно (на примере 100 растений). Фенологические наблюдения показывают, что первый год приходится на февраль появились кейрук, терескен, камфоросмон полынный, через 20 дней чугун, солянка и изень. Эта картина повторилась и в последующие годы. В конце мая, в начале июня начали цвести кейрейк, тин, изен, камфоросма, терескен и полынь горькая. Фаза размножения наблюдается в октябре и ноябре. Продолжительность вегетационного периода составляет 235 дней у солянки, 240 дней у терескена, 250 дней у олова, 255 дней у изена, 265 дней у камфоросмы, 255-265 дней у шувока.



Растения, высаженные на опытном поле, регулярно отслеживались в течение 6 лет, определялись и анализировались фенологические показатели, водный режим, урожайность семян и кормов.

**Растения в условиях горной степи, такие как показатели высоты, хрящеватости и плодовитости**

№	Тип растения	Высота см	Сухой корм	Семенная продуктивность
1	Изеп (4-сорт)	85.5	17.1	3.1
2	Чугон (2-тур)	77.6	17.0	2.8
3	Терскен (2-тур)	65.5	9.5	0.8
4	Шувок (3-тур)	60.5	10.0	1.0
5	Комфоросма (2-тур)	50.0	8.0	1.5
6	Кейреук (2-тур)	48.0	17.0	4.1

Густота куста из числа растений составляет изен - 85% за 6 лет. наблюдается сохранение кейрюка - 75%, терескена - 73%, шувока - 51,4%, олова - 45%, комфоросмы - 36%, солянки - 18%. Эти растения развились на разную глубину корневой системы на 5-м году жизни в горно - степных условиях. Чугун - 450 см, кейрюк - 325 см, изен-275 см, солянка 210 куб. см. Развитие растений зависит от климатических условий, в соответствии с ростом шейки улара, они изен получили более высокое проявление. Подведение итогов 6-го года в данном случае можно сказать, что изен 84 см, олово и полынь 77 см, терескен 66 см, комфоросма 49 см, кейрейк 50 см и солянка 40 см получили показатель. Было замечено, что урожайность растений изменилась в среднем на 15-20 ц/га, причем наибольшей была у изена (24 ц/га), кейреука (19 ц/га), чогона (16,4 ц/га). Терескен, камфороз и полынь 9-10 ц/га, а также солянка по 4 ц/га. По урожайности кейрейк достиг 5-6 ц/га, изен - 3,7 ц/га, олово - 3 ц/га, камфоросма - 2 ц/га. С другой стороны, "Терескен" и "солянка" отличались тем, что были в 1-1,5 раза дороже. Из проведенных экспериментов выяснилось, что преобладали собственные разработки, устойчивость и урожайность к нагреванию и обжарке с высоким содержанием растений изен, Каури, терескен и чугон с высокой производительностью, по результатам сравнительного исследования. Отсюда следует, что вышеуказанные многообещающие кормовые преимущества в улучшении состояния высокогорных пастбищ от растений мака-урожайность является целевой и урожайность пастбищ может увеличиться в 4-6 раз. В то же время у этих растений есть своя насыщенность -учитывая, что они богаты ги и витаминами, важно учитывать каракольских овец это важно для повышения производительности. Также горные искусственные луга, образовавшиеся в районе пастбищ Алди, являются экологическим холмом, важным для улучшения тины, предотвращения водной и ветровой эрозии. Поэтому луговая растительность разнообразна-увеличение разнообразия приводит к положительным сдвигам в биологической системе -лади. Выполнение этих

работ осуществляется животноводством республики в рамках его дальнейшего развития, в частности в развитии выпаса скота муксим хас Ахамат.

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## **АНАЛИЗ ЭНЕРГОЭФФЕКТИВНОСТИ РАСЧЁТНЫХ ДАННЫХ ПРОГРАММНОГО КОМПЛЕКСА ENERGYPLUS С ПОСЛЕДУЮЩИМ РАСЧЁТОМ В MATLAB ПРИ ПОМОЩИ НЕЙРОННОЙ СЕТИ**

*Аннотация. В данной статье исследуется энергоэффективность зданий посредством анализа расчёта при помощи программного комплекса EnergyPlus и после исходные данные были введены для последовательного расчёт математической зависимости через Matlab которая в последствии выявила необходимые данные. А также в данном случае составлена математическая зависимость при помощи решения этого вопроса.*

*Ключевые слова: энергоэффективность, здания, анализ, расчёт, программа, данные, matlab, EnergyPlus, ресурсы, потребление.*

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## **ANALYSIS OF ENERGY EFFICIENCY OF CALCULATED DATA OF THE ENERGYPLUS SOFTWARE COMPLEX WITH SUBSEQUENT CALCULATION IN MATLAB USING A NEURAL NETWORK**

*Abstract. This article examines the energy efficiency of buildings by analyzing the calculation using the EnergyPlus software package and after the initial data was entered for a sequential calculation of the mathematical dependence through Matlab, which subsequently identified the necessary data. And also in this case, a mathematical relationship was compiled using the solution to this issue.*

*Keywords: energy efficiency, buildings, analysis, calculation, program, data, matlab, EnergyPlus, resources, consumption.*

Энергоэффективность зданий – это способность здания использовать энергию максимально эффективно и минимизировать потребление ресурсов для поддержания комфортных условий внутри помещений. Это очень важная тема, так как она позволяет не только снизить расходы на отопление

и кондиционирование воздуха, но и уменьшить негативное воздействие на окружающую среду.

Растущий спрос на энергию в секторе коммерческих зданий, среди других факторов, вызван многочисленными вновь построенными коммерческими зданиями с кондиционированием воздуха, особенно в мегаполисах [1]. Использование инструментов моделирования энергопотребления, таких как EnergyPlus, Esp-r и Designer's Simulation Toolkit (DeST) с искусственными нейронными сетями (ИНС), оказалось хорошим инструментом для получения точной информации о прогнозировании электроэнергии в коммерческих зданиях[1].

ИНС как часть современного подхода к энергетическому анализу представляют собой неалгоритмические, нецифровые и сильно параллельные системы обработки информации. Они изучают взаимосвязь между входными и целевыми переменными, изучая ранее записанные данные. ИНС напоминает биологическую нервную систему, состоящую из слоев параллельных элементарных единиц, называемых нейронами. По сути, нейрон получает входные данные по своим входящим соединениям, объединяет входные данные, выполняет нелинейную операцию, а затем выводит окончательные результаты [ 2 ].

Растущий спрос на энергию в секторе коммерческих зданий, среди других факторов, вызван многочисленными вновь построенными коммерческими зданиями с кондиционированием воздуха, особенно в мегаполисах [1]. Использование инструментов моделирования энергопотребления, таких как EnergyPlus, Esp-r и Designer's Simulation Toolkit (DeST) с искусственными нейронными сетями (ИНС), оказалось хорошим инструментом для получения точной информации о прогнозировании электроэнергии в коммерческих зданиях[1].

Программное обеспечение SketchUp 2019 использовалось для моделирования особенностей здания и обозначения тепловых зон с указанием характеристик строительных материалов и нагрузок на здание.

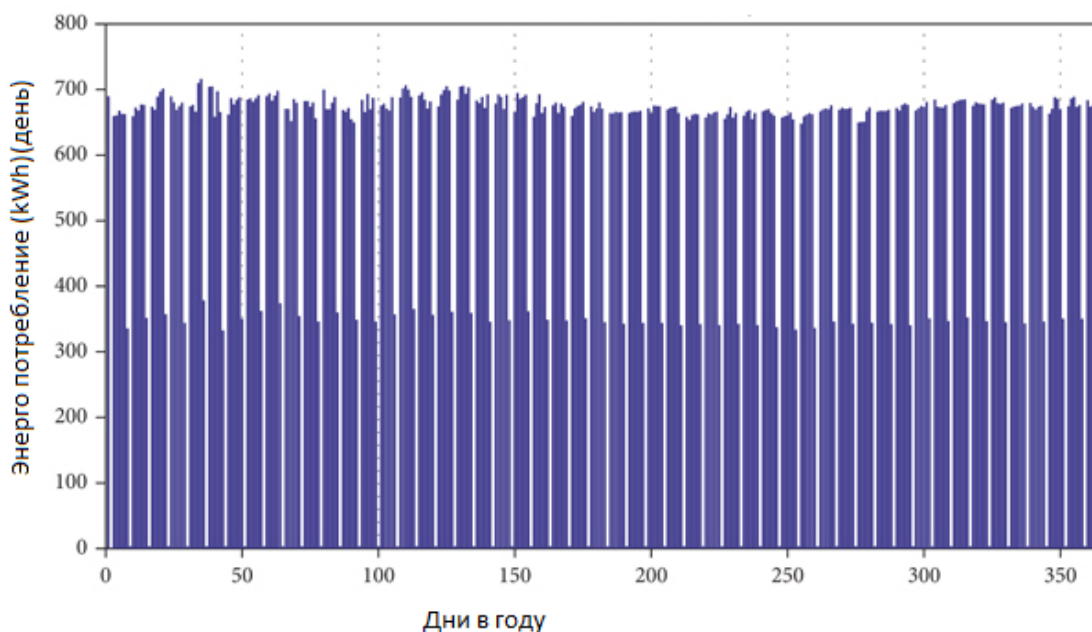
Ключевые рассматриваемые характеристики включают типы поверхностей и основу категоризации по созданию тепловых зон, поверхностям зданий, поверхностям окон, внутренней массе, затенению и деталям площадки, а также классам конструкции. Строительный класс позволил указать строительные элементы здания. Эти элементы в большинстве случаев отражают характеристики здания. Типичными из них являются стены, окна, перегородки, крыша и пол.

Оценка энергопотребления для домена была получена на основе смоделированного здания с использованием данных о геометрии здания, внутренних коэффициентов усиления и местных данных о погоде в EnergyPlus. EnergyPlus — это программа моделирования, предназначенная для моделирования зданий со всем связанным с ними оборудованием для отопления, вентиляции и кондиционирования воздуха [ 3 ]. Программы

моделирования зданий содержат наборы математических моделей (нелинейные динамические модели, линейные динамические модели, модели передаточной функции и т. д.), которые стремятся количественно объяснить, как каждый компонент здания ведет себя в данных обстоятельствах. EnergyPlus использует данные геометрии здания, описывающие смоделированное здание, а также данные о погоде. Результаты программы моделирования были использованы при разработке модели нейронной сети.

Нейронная сеть, как она определена, изучает взаимосвязь между входными и выходными переменными, изучая ранее записанные данные. Проектирование нейронных сетей включало в себя ряд хронологических этапов, которых в целом было пять. Эти шаги включают сбор данных, предварительную обработку данных, построение сети, обучение сети и тестирование производительности сетевой модели [ 4 ]. Модель нейронной сети была спроектирована в MATLAB R2016b с использованием пакета NNTool.

Чтобы убедиться в достоверности моделирования модели EnergyPlus и подтвердить результаты моделирования, потребление EnergyPlus по рисунку 1, административного блока за каждый день сравнивалось с реальной потребностью блока в энергии за каждый день.



Из работы следует, что солнечное излучение оказывает прямое влияние на потребляемую энергию, на энергию, используемую для освещения, причем увеличение солнечного излучения приводит к низкому потреблению на освещение, поскольку видимости достаточно, и наоборот, к уменьшению солнечного излучения. Это означает, что использование тяжелых затворов и жалюзи, препятствующих проникновению дневного света в офисы, способствует высокому потреблению энергии. Кроме того,

ежедневная температура и холодовая нагрузка имеют положительную связь в отличие от освещения и солнечной радиации. Повышение температуры вызывает тепловой дискомфорт в результате повышения температуры в помещении, что приводит к использованию в офисах устройств кондиционирования воздуха. Этим объясняется высокий расход энергии на охлаждение в некоторые периоды года.

Модель ИНС, разработанная и обученная для прогнозирования энергетических нагрузок блока на год, показала большую предсказательную способность. Результаты прогнозирования модели по сравнению с фактическим потреблением энергии были построены и проанализированы для выявления областей завышения и недооценки. Модель оказалась эффективной и может использоваться для оценки будущего энергопотребления блока при обучении с использованием дополнительных наборов данных.

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## **ПОЛУЧЕНИЯ КАРБАМИДНОГО КОМПЛЕКСНОГО УДОБРЕНИЯ С ФИЗИОЛОГИЧЕСКИ АКТИВНЫМИ ВЕЩЕСТВАМИ**

*Аннотация. Изучена возможность получения карбамида с физиологически активными веществами (ФАВ). В исследованиях применяли спектрофотометрические методы определения, статистическая обработка результатов. Разработан метод контроля ФАВ в составе модифицированного карбамида, а также технология получения удобрения.*

*Ключевые слова: физиологически активные вещества, карбамид, N-окись-2,6-диметилпиридин, бензимидазолин-2-она и 5-хлорбензимидазолин-2-она, спектрофотометр, метод, спектры, статистическая обработка результатов, пик, максимум, bathochromic shift, состав.*

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## **OBTAINING UREA COMPLEX FERTILIZER WITH PHYSIOLOGICALLY ACTIVE SUBSTANCES**

*Abstract. The possibility of obtaining urea with physiologically active substances (PAS) has been studied. The studies used spectrophotometric methods of determination and statistical processing of results. A method for monitoring PAS in the composition of modified urea, as well as a technology for producing fertilizer, has been developed.*

*Key words: physiologically active substances, urea, N-oxide-2,6-dimethylpyridine, benzimidazolin-2-one and 5-chlorobenzimidazolin-2-one, spectrophotometer, method, spectra, statistical processing of results, peak, maximum, bathochromic shift, compound.*

Физиологически активных веществ в состав удобрений, несмотря на их относительно высокую стоимость, дает положительный эффект при их низких (от 0,03 до 0,05 мас.%) концентрациях в комплексном удобрении. На

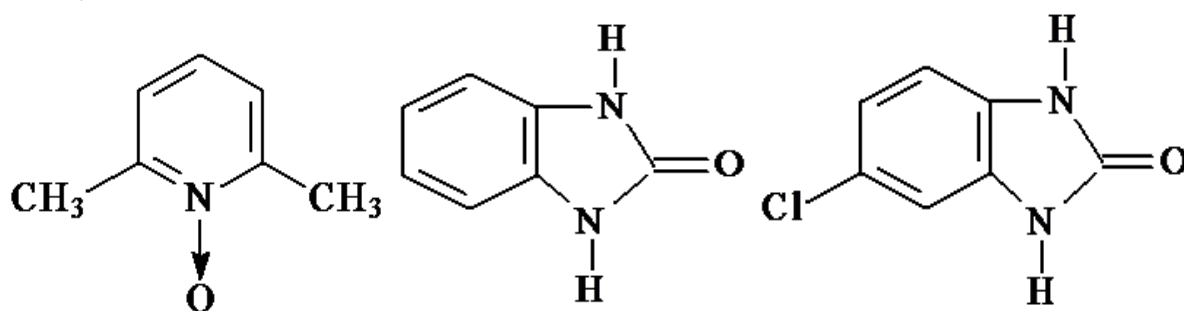
основе проведенных исследований показано получения ряд стабильных композиции, изучение которых показало их эффективность для сельского хозяйства в качестве стимуляторов роста растений, кроме основной функции [1, 2].

На основе карбамида получены модифицирование гранул приллированного магнийсодержащие карбамида и разработана технология получения комплексных NK- и NMg- удобрений на его основе, а также показано возможность модификации формальдегидом карбамида для применения в легкой промышленности [3, 4].

Твердофазным способом получены полимерные комплексы содержащие физиологически активные вещества [5-9].

Производство удобрений, содержащих физиологически активных веществ (ФАВ), не сопряжено со значительными удельными капиталовложениями на реконструкцию существующих технологических схем, однако, при этом необходимо решить ряд технологических проблем, связанных с организацией узлов дозировки ФАВ, смешения ФАВ с большим потоком удобрения, аналитическим контролем качества готового продукта. В связи с этим, рассмотрены вопросы и проведены исследования по разработке способов введения ФАВ в состав удобрений, и получения карбамида, модифицированного ФАВ. Для разработки технических условия и постановки продукции на производстве необходимы надежные методы контроля и определения содержания исследуемых ФАВ в составе готового продукта. Нами разработаны методики определения ФАВ в карбамиде спектрофотометрическим методом [10-14].

В качестве ФАВ выбрано следующие соединения - N-окись-2,6-диметилпиридин (ИВИН), бензимидазолин-2-она (БИОН) и 5-хлорбензимидазолин-2-она (5-ХБИОНА) структурная формула которых следующее:



В лабораторных условиях были получены образцы удобрений путем выпарки при 100°C растворов карбамида, содержащих различные количества ИВИНА. При выполнении исследований применялись перекристаллизованные соли квалификации "ч.д.а." и "х.ч." и синтезированные лабораторным путем БИОН, 5-ХБИОН, ИВИН.

УФ-спектры снимали - на спектрометре "Hitachi-EP5-3T" (растворитель - этанол) и на спектрометре СФ-4А (растворитель - метанол).

Суть метода заключается в том, что определяют оптические плотности стандартного раствора ФАВ ( $A_{ст}$ ) и исследуемого раствора композиции ( $A_x$ ). Учитывая разбавления исследуемых растворов и навески исследуемых образцов композиций по известной формуле:

$$C_x = (C_{ст} * A_x) / A_{ст}$$

находим процентное содержание ФАВ в композициях, где:  $C_x$ - искомая концентрация ФАВ, мг/мл,  $A_x$ - оптическая плотность исследуемого раствора композиции,  $C_{ст}$ - концентрация стандартного раствора ФАВ, мг/мл,  $A_{ст}$ - оптическая плотность стандартного раствора ФАВ.

Исследовано УФ-спектры ИВИНа и карбамида (рис.1). Из рисунка видно, что при  $\lambda = 260$  нм влияние карбамида на полосу поглощения ИВИНа практически отсутствует и поэтому эта полоса выбрана в качестве характеристической для количественного определения ИВИНа в ИВИН-содержащем карбамиде.

Изучение политермических систем и спектрофотометрический анализ показал, что ИВИН не подвергается физическим и химическим изменениям. Содержание ИВИНа в образцах находилось на одном уровне с аналогичными "сухими композициями".

При сплавлении карбамида и ИВИНа в течение 10 - 15 минут при температуре  $135^{\circ}\text{C}$  и перемешивании с последующим охлаждением, установлено, что в выбранном интервале варьирования параметров ИВИН не подвергался изменениям и сохраняет все свойства физиологически активного соединения (рис.1 и 2, табл. 1).

Содержание ИВИНа в ИВИН-содержащем карбамиде определяется с точностью до 0,003%.

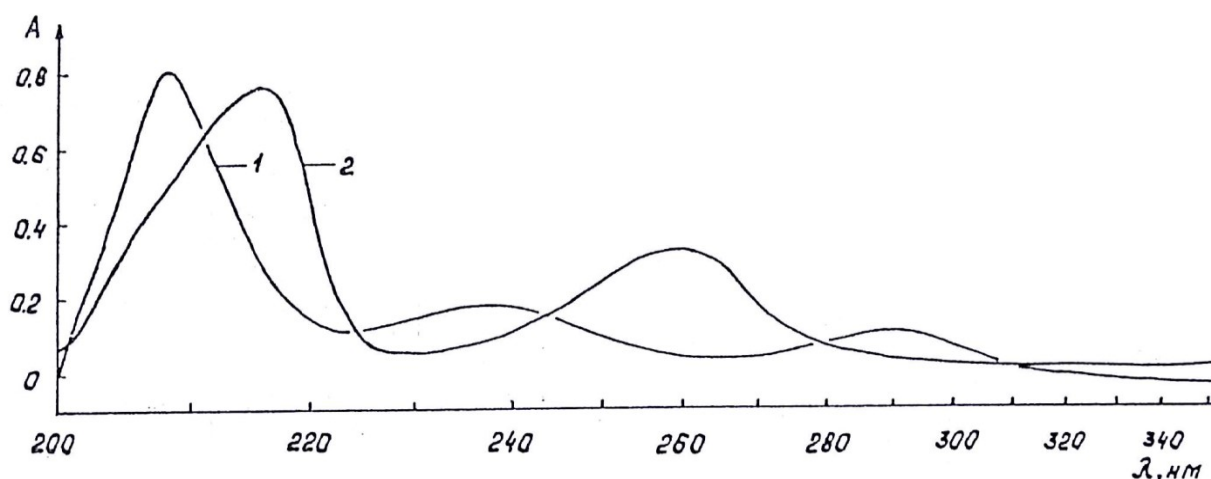


Рис.1. УФ-спектры: 1-карбамид, 2-  $\text{C}_7\text{H}_9\text{NO}$

Таблица 1

Статистическая обработка результатов анализа ИВИНа в ИВИН-  
содержащем карбамиде

№	Взято, %	Найдено, %	$\Delta X$	$\Delta X_i - \Delta X^+$	$(\Delta X_i - \Delta X^+)^2$	S	$S_x$	$\xi, \%$
1	0.050	0.049	0.001	-0.0054	$2.916 \cdot 10^{-5}$	$4.64 \cdot 10^{-3}$	$1.4 \cdot 10^{-5}$	0.003
2	0.070	0.071	0.001	-0.0054	$2.916 \cdot 10^{-5}$			
3	0.100	0.105	0.005	-0.0014	$0.20 \cdot 10^{-5}$			
4	0.300	0.298	0.002	-0.0044	$1.94 \cdot 10^{-5}$			
5	0.500	0.503	0.003	-0.0034	$1.16 \cdot 10^{-5}$			
6	0.700	0.702	0.002	-0.0044	$1.94 \cdot 10^{-5}$			
7	1.0	0.989	0.011	0.0046	$2.12 \cdot 10^{-5}$			
8	2.0	2.013	0.013	0.0066	$4.36 \cdot 10^{-5}$			
9	3.0	2.988	0.012	0.0056	$3.14 \cdot 10^{-5}$			
10	4.0	3.989	0.011	0.0046	$2.12 \cdot 10^{-5}$			
11	5.0	5.009	0.009	0.0026	$0.68 \cdot 10^{-5}$			

В связи с тем, что БИОН и 5-ХБИОН не растворимы в водных растворах карбамида, их ввели в горячий плав карбамида, имеющего температуру 135°C. Разработан метод контроля содержание ФАВ в карбамиде.

Нами исследовано УФ-спектры карбамида, БИОНа (1) и 5-ХБИОНа (2). Спектры (1) и (2) характеризуются соответствующими тремя максимумами.

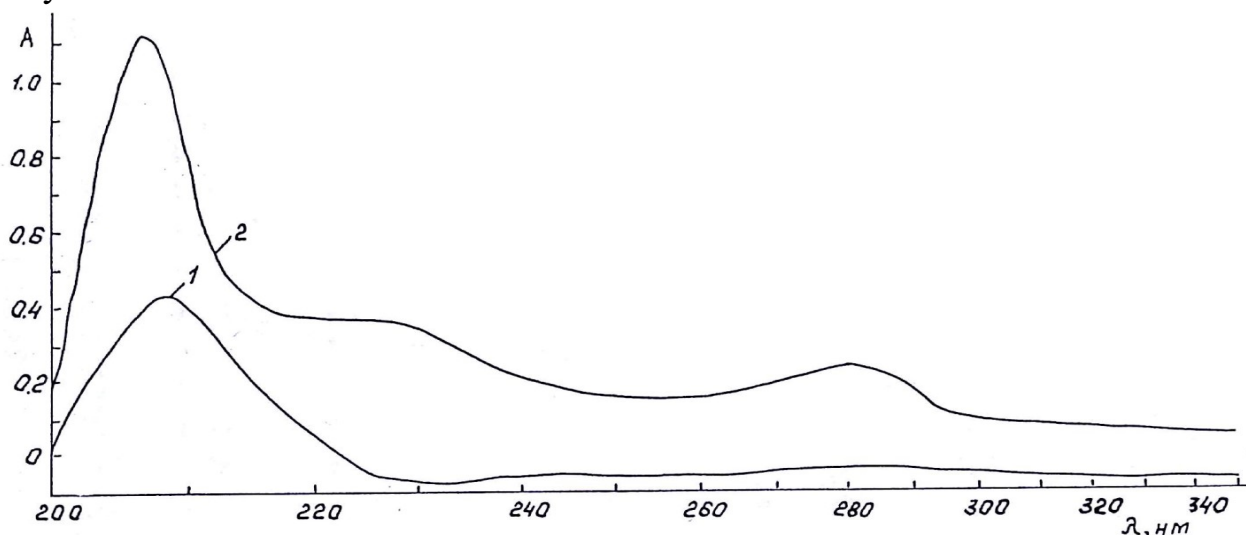


Рис.2. УФ-спектры: 1-карбамид; 2-  $C_7H_6N_2O$

Анализ кривых поглощения четко фиксирует батохромный сдвиг всех трех полос (2) по сравнению с (1), что объясняется наличием заместителя электроотрицательного атома хлора в положении "5" соединения (2).

Содержание (1) имеет следующие полосы поглощения:  $\lambda=206\text{нм}$  ( $\lg\xi=3.57$ ),  $\lambda=225\text{нм}$  ( $\lg\xi=2.08$ ) и  $\lambda=280\text{нм}$  ( $\lg\xi=1.89$ ), тогда как (2):  $\lambda=208\text{нм}$  ( $\lg\xi=2.43$ ),  $\lambda=227\text{нм}$  ( $\lg\xi=1.83$ ) и  $\lambda=288\text{нм}$  ( $\lg\xi=1.68$ ).

Наиболее оптимальными для проведения спектрофотометрического определения (1) и (2) в составе карбамида является для (1)  $\lambda=280\text{нм}$  (табл. 2, рис. 2) и для (2)  $\lambda=288\text{нм}$  (рис 3, табл. 3), где влияние поглощения карбамида минимальное.

Таблица 2

Статистическая обработка результатов анализа БИОНа в БИОН-содержащем карбамиде

№	Взято, %	Найдено, %	$\Delta X$	$\Delta X_i - \Delta X^+$	$(\Delta X_i - \Delta X^+)^2$	S	$S_x$	$\xi, \%$
1	0.010	0.013	0.003	-0.005	0.000025	0.0065	0.0025	0.0061
2	0.030	0.028	0.002	-0.006	0.000036			
3	0.050	0.048	0.002	-0.006	0.000036			
4	0.10	0.083	0.017	0.009	0.000081			
5	0.30	0.314	0.014	0.006	0.000036			
6	1.0	1.076	0.0014	0.006	0.000036			
7	2.0	2.010	0.010	0.002	0.000004			

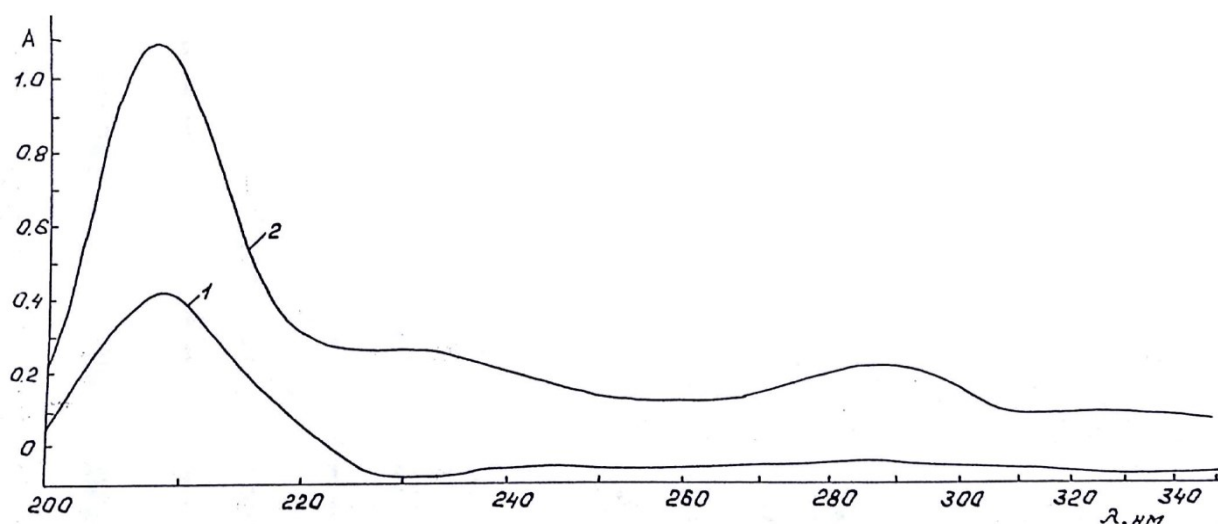


Рис.3.УФ-спектры: 1-карбамид; 2-  $C_7H_5N_2OCl$

Таблица 3

Статистическая обработка результатов анализа 5-ХБИОНа и 5-ХБИОН-содержащем карбамиде

№	Взято, %	Найдено, %	$\Delta X$	$\Delta X_i - \Delta X^+$	$(\Delta X_i - \Delta X^+)^2$	S	$S_x$	$\xi, \%$
1	0.010	0.013	0.003	-0.0055	0.003025	0.072	0.026	0.026
2	0.030	0.032	0.002	-0.0060	0.003600			
3	0.050	0.056	0.006	-0.0025	0.000625			
4	0.10	0.099	0.001	0.0075	0.005625			
5	0.30	0.314	0.014	0.0055	0.003025			
6	0.50	0.515	0.015	0.0065	0.004225			

7	1.0	1.018	0.018	0.0950	0.009025			
8	2.0	1.983	0.017	0.0085	0.007225			

Таким образом, разработанный метод определения ФАВ в модифицированном карбамиде позволяет контролировать технологический процесс. Содержание БИОНа и 5-ХБИОНа в композициях "карбамид-1" и "карбамид - 2" определены с точностью 0,0061 и 0,026%, соответственно. Проведенные исследования показывают, что организация крупнотоннажного производства карбамида содержащих ИВИН, БИОН, 5-ХБИОН, не представляет особых затруднений.

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**ИЗУЧЕНИЕ АЗОТНО-ФОСФОРНЫХ УДОБРЕНИЙ СОДЕРЖАЩИХ  
ФИЗИОЛОГИЧЕСКИ АКТИВНЫХ ВЕЩЕСТВ**

*Аннотация. Показано возможность получения комплексных минеральных удобрений на основе карбамида и аммофоса, содержащие физиологически активные вещества. Для изучения растворимости фаз в водно-солевых системах использовался визуально-политермический метод анализа. Полученные удобрения изучены визуально-политермическим методом.*

*Ключевые слова: растворимость, бинарные, система, эвтектика, компоненты, визуально, N-окись-2,6-диметилпиридин, ортофосфорная кислота,  $\beta$ -(2-тетрагидрофурил) пропионитрил, жидкая фаза, бензимидазолон, 5-хлорбензимидазолон, дигидроортофосфат аммония, гидроортофосфат аммония, карбамид, аммиак, температура, концентрация, интервал, идентификация, плав, твёрдая фаза.*

*Abidov I.**associate professor**Namangan Institute of Engineering and Technology***STUDY OF NITROGEN-PHOSPHORUS FERTILIZERS CONTAINING  
PHYSIOLOGICALLY ACTIVE SUBSTANCES**

*Abstract. The possibility of obtaining complex mineral fertilizers based on urea and ammophos containing physiologically active substances is shown. To study the solubility of phases in water-salt systems, a visual-polythermal method of analysis was used. The resulting fertilizers were studied using a visual-polythermic method.*

*Keywords: solubility, bi-nary, system, eutectics, components, visual, N-oxis-2,6-dimethylpyridine,  $\beta$ -(2-tetrahydrofuryl) propionitrile, benzimidazolone, 5-chlorobenzimidazolone, dihydroorthophosphate ammonium, hydroorthophosphate ammonium, urea, ammonia, orthophosphoric acid, temperature, concentration, interval, identification, plav, solid phase, trace phase.*

**Введение.** До настоящего времени получение комплексных удобрений, с добавками физиологически активных веществ, основано на механическом смешении твердых компонентов [1, 2]. Получить, таким

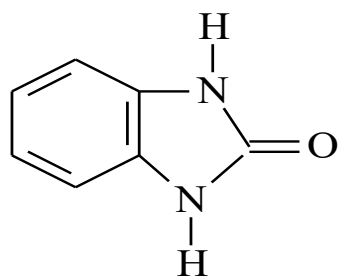
образом, однородную смесь с постоянным соотношением между компонентами по всей массе практически невозможно, так как содержание физиологически активного вещества в соответствующей смеси сравнительно небольшое. Поглощение растениями физиологически активных веществ, сверх определенной дозы, может оказать отрицательное, а порой и губительное действие [3, 4]. Равномерного распределения ФАВ можно достигнуть только в жидкой фазе. Следовательно, для физико-химического обоснования и разработки технологии получения удобрений с физиологически активными веществами прежде всего требуется знание растворимости и взаимодействия в системах, включающих изучаемые компоненты [5-15].

**Методы и материалы.** Для изучения растворимости фаз в водно-солевых системах использовался визуально-политермический метод анализа, разработанный А.Г.Бергманом. Сущность визуально-политермического метода заключается в определении температуры кристаллизации визуальным наблюдением температуры появления первых кристаллов, которые выделяются при медленном охлаждении и энергичном перемешивании раствора, и температуры исчезновения последних кристаллов при нагревании, после чего строится диаграмма состав-температура кристаллизации [15].

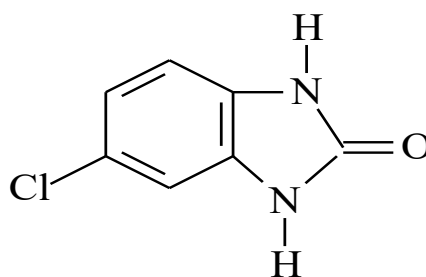
Диаграмма растворимости системы изучалась с помощью внутренних политермических разрезов. На основании полученных данных разрезов и двойных систем, строили полную политерму растворимости тройных систем в виде прямоугольного треугольника, по методу Розебома. Концентрации растворов выражали в массовых процентах. С целью уточнения узловых точек и крутизны поверхности кристаллизации строились проекции политермы на боковые стороны системы [16].

При выполнении исследований применялись перекристаллизованные соли квалификации "ч.д.а." и "х.ч." и синтезированные лабораторным путем БИОН, 5-ХБИОН [9].

Структурные формулы бензимидазолин-2-она (1) и 5-хлорбензимидазолин-2-она (2) следующие:



(1)



(2)

Роль фуранпроизводных соединений с кумаринами в растительном мире разнообразна. Они являются ингибиторами роста, другие стимулируют прорастание семян, гербициды, защитные свойства при

некоторых заболеваниях растений, народной медицины, сельском хозяйстве. Слеживаемость устанавливалась с помощью прибора для спрессовывания образцов [17].

**Результаты и обсуждение.** Растворимость компонентов в системе  $C_7H_6N_2OCl-H_3PO_4-H_2O$  изучена с помощью шести внутренних разрезов: пять разрезов направлены от водных растворов ортофосфорной кислоты в сторону 5-хлорбензимидазолин-2-она и один - от вершины  $H_2O$  на сторону  $H_3PO_4-C_7H_6N_2OCl$ .

Характеристика узловых точек системы приведена в таблице 1. На основании данных для разрезов и двойных систем построена полная диаграмма растворимости этой тройной системы при температурах от  $-85,1$  до  $70,0^{\circ}C$ . Выделены поля кристаллизации льда,  $C_7H_6N_2OCl$ ,  $2H_3PO_4-H_2O$ , КОТОРИЕ СХОДЯТСЯ В ТРОЙНОЙ ТОЧКЕ. Эвтектическая точка системы соответствует составу раствора  $0,02\%$   $C_7H_6N_2OCl$ ,  $62,6\%$   $H_3PO_4$ ,  $37,38\%$   $H_2O$  при температуре  $-85,1^{\circ}C$ .

5-хлорбензимидазолин-2-она незначительно растворяется в водных растворах ортофосфорной кислоты, вследствие этого на диаграмме основная часть ее соответствует кристаллизации  $C_7H_6N_2OCl$ .

С повышением концентрации ортофосфорной кислоты от 0 до  $89,72\%$  растворимость 5-хлорбензимидазолин-2-она возрастает от 0 до  $0,5\%$ .

Таблица 1

**Двойные и тройные точки системы 5-хлорбензимидазолин-2-он - ортофосфорная кислота-вода**

Состав раствора, мас. %			Температура кристаллизации, $^{\circ}C$	Твердые фазы
$C_7H_6N_2OCl$	$H_3PO_4$	$H_2O$		
0,5	89,7	9,80	28,1	$2H_3PO_4 \cdot 2H_2O + C_7H_6N_2OCl$
0,13	84,0	15,87	14,4	То же
0,05	77,0	22,95	-6,1	То же
0,03	70,0	29,97	-45,1	То же
0,02	62,6	37,38	-85,1	Лед + $2H_3PO_4 \cdot H_2O + C_7H_6N_2OCl$
0,02	60,0	39,98	-74,1	Лед + $C_7H_6N_2OCl$
0	62,6	37,40	-85,0	Лед + $2H_3PO_4 \cdot H_2O$

Данная система простого типа без образования новых фаз и химических соединений. Система  $NH_3-H_2O$  достаточно полно исследована. Для исследования использованы растворы  $NH_4OH$  различной концентрации: 18, 20, 16, 25%  $NH_3$ . Исследования показали, что бензимидазолин-2-он и 5-хлорбензимидазолин-2-он очень плохо растворимы в растворах  $NH_4OH$ .

Таблица. 2.

**Двойные точки системы бензимидазолин-2-он - аммиак - вода**

Состав раствора, мас.%			Температура кристаллизации, °С	Твердые фазы
$C_7H_6N_2O$	$NH_3$	$H_2O$		
0,05	16,0	83,95	-27,9	Лед + $C_7H_6N_2O$
0,044	18,0	82,956	-33,5	То же
0,042	20,0	79,958	-36,7	То же
0,04	25,0	74,96	-54,6	То же

Все полученные разрезы состоят из двух ветвей кристаллизации, соответствующие исходным компонентам. Новых химических соединений и фаз не образуются, т.е. химического взаимодействия между компонентами не происходит. С увеличением концентрации  $NH_3$  в системах, растворимость  $C_7H_6N_2O$  и  $C_7H_6N_2OCl$  практически не меняется, даже несколько уменьшается (табл. 2, 3).

Таблица 3

**Двойные точки системы 5-хлорбензимидазолин -2-он - аммиак - вода**

Состав раствора, мас.%			Температура кристаллизации, °С	Твердые фазы
$C_7H_6N_2OCl$	$NH_3$	$H_2O$		
0,045	16,0	83,955	-27,9	Лед + $C_7H_6N_2OCl$
0,036	18,0	82,964	-33,5	То же
0,032	20,0	79,968	-36,6	То же
0,028	25,0	74,972	-54,8	То же

Изобразить результаты в виде политермической тройной системы нам не удалось, так как  $C_7H_6N_2O$  и  $C_7H_6N_2OCl$  практически не растворимы в воде и получить подтверждающие данные со стороны  $C_7H_6N_2O-H_2O$  и  $C_7H_6N_2OCl-H_2O$  не удалось.

На диаграмме в изученном интервале температур и концентраций определены ветви кристаллизации  $C_7H_6N_2O-CO(NH_2)_2$ . Характеристика узловых точек дана в таблице 5.

Таблица 5.

**Данные по растворимости в системе бензимидазолин-2-он - карбамид**

Состав раствора, мас%		Температура кристаллизации °С	Твердые фазы
$CO(NH_2)_2$	$C_7H_6N_2O$		
1	2	3	4
100	0	132,6	$CO(NH_2)_2$
99,5	0,5	132,1	То же
99,0	1,0	131,3	То же
98,75	1,25	130,6	То же
98,5	1,5	130,4	То же
98,0	2,0	129,9	То же
97,5	2,5	129,5	То же
97,5	2,5	129,5	То же
96,5	3,5	129,0	$CO(NH_2)_2$
96,0	4,0	128,8	То же

95,5	4,5	128,5	То же
95,0	5,0	128,2	$C_7H_6N_2O + CO(NH_2)_2$
94,5	5,5	131,8	$C_7H_6N_2O$

Эвтектическая точка системы отвечает составу 95,0%  $CO(NH_2)_2$  5,0%  $C_7H_6N_2O$  при температуре 128,2°C, где совместно кристаллизуются бензимидазолин-2-она и карбамид. Выше эвтектической точки кристаллизуется  $C_7H_6N_2O$ . Система простого типа без образования химических соединений.

**Выводы.** Таким образом, анализируя полученные данные глав 3 и 4, можно сделать следующее заключение, что при изучении ряда систем, состоящих из компонентов минеральных удобрений, Физиологически активных веществ и воды. Визуально-политермическим методом изучено восемь тройных систем: из них четыре  $C_7H_9NO - NH_4H_2PO_4 - H_2O$ ,  $C_7H_9NO - (NH_4)_2HPO_4 - H_2O$ , сложного типа с образованием новых химических соединений; четыре  $C_7H_6N_2O - H_3PO_4 - H_2O$ ,  $C_7H_6N_2O - NH_3 - H_2O$ ,  $C_7H_5N_2OCl - H_3PO_4 - H_2O$ ,  $C_7H_5N_2OCl - NH_3 - H_2O$  простого типа.

Впервые установлено образование двух новых химических соединений  $C_7H_9NO * H_2O$ ,  $C_7H_9NO * CO(NH_2)_2$ .

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## **ДИДАКТИЧЕСКИЕ ПРИЁМЫ ГЕНДЕРНОГО РАВЕНСТВА У ДЕТЕЙ РАННЕГО ВОЗРАСТА**

*Аннотация. Статья рассказывает о роли воспитателя в формировании гендерного равенства у детей дошкольного возраста. Автор подчеркивает важность использования различных методов и приемов, таких как игры и упражнения, рассказы и истории, обучение правилам поведения в обществе и использование различных материалов и технологий для обучения. Кроме того, автор отмечает необходимость создания условий для полноценного развития каждого ребенка, включая формирование гендерного равенства.*

*Ключевые слова: Гендерное равенство, дети, воспитание, образование, игры, общение, роли, стереотипы, родитель, педагог.*

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## **DIDACTIC TECHNIQUES OF GENDER EQUALITY IN EARLY CHILDREN**

*Abstract. The article talks about the role of the teacher in the formation of gender equality among preschool children. The author emphasizes the importance of using various methods and techniques such as games and exercises, stories and stories, teaching social behavior and using various materials and technologies for learning. In addition, the author notes the need to create conditions for the full development of every child, including the formation of gender equality.*

*Key words: Gender equality, children, upbringing, education, games, communication, roles, stereotypes, parent, teacher.*

Гендерное равенство у детей дошкольного возраста является важным аспектом развития общества и создания условий для полноценного развития каждого ребенка. В современном мире все больше людей выступают за равноправие полов, что означает, что каждый ребенок должен иметь равные возможности и права независимо от своего пола.

Однако, к сожалению, до сих пор существует множество случаев нарушения прав девочек и мальчиков в детских садах и школах. Это может проявляться в виде дискриминации при приеме на работу, ограничении

доступа к образованию или другим ресурсам, а также физическом и психологическом насилии.

Чтобы предотвратить подобные случаи, необходимо проводить образовательные программы и мероприятия, направленные на повышение осведомленности родителей и педагогов о проблемах гендерного равенства. Важно обучать их методам борьбы со стереотипами и предубеждениями, которые могут привести к нарушению прав детей.

Кроме того, необходимо создавать условия для развития творческого мышления и самостоятельности у детей. Это поможет им осознавать свою индивидуальность и уникальность, а также научит их уважать других людей независимо от их пола.

В целом, гендерное равенство является ключевым фактором для достижения успеха в жизни каждого ребенка. Оно позволяет обеспечить равные возможности для всех детей, независимо от их пола, и способствует созданию условий для полноценного развития каждого ребенка.

Дидактические приёмы гендерного равенства у детей дошкольного возраста могут включать следующие методы:

1. Игры и упражнения, направленные на развитие творческих способностей и самостоятельности у детей. Например, можно предложить детям игрушки разных цветов и форм, чтобы они могли выбирать те, которые им нравятся. Также можно проводить игры, где дети должны решать задачи вместе, независимо от их пола.

2. Рассказы и истории, которые подчеркивают важность уважения к различиям между людьми. Например, можно рассказать детям историю о том, как мальчик и девочка нашли общий язык и стали лучшими друзьями.

3. Обучение правилам поведения в обществе. Например, можно провести занятие по правилам безопасности на улице или в школе. Дети должны знать, что они несут ответственность за свои поступки и должны уважать других людей.

4. Использование различных материалов и технологий для обучения. Например, можно использовать компьютерные программы или интерактивные игры для развития навыков коммуникации и сотрудничества.

5. Организация мероприятий, направленных на укрепление дружеских отношений между детьми разных полов. Например, можно провести конкурс рисунков или танцев, где дети будут выступать вместе и делиться своими талантами.

6. Проведение занятий по развитию эмоциональной интеллектуальности у детей. Например, можно провести занятие по распознаванию эмоций других людей или обсуждение тем, связанных с чувствами и эмоциями.

7. Создание условий для участия детей в различных социальных проектах и мероприятиях, направленных на укрепление дружеских

отношений между детьми разных полов. Например, можно организовать лагерь или клуб, где дети смогут общаться и узнавать друг друга лучше.

Воспитатель играет важную роль в формировании гендерного равенства у детей дошкольного возраста. Он должен быть готов к тому, чтобы помочь детям осознать свою индивидуальность и уникальность, а также научить их уважать других людей независимо от их пола.

Для этого воспитатель должен использовать различные методы и приемы, такие как игры и упражнения, рассказы и истории, обучение правилам поведения в обществе и использование различных материалов и технологий для обучения.

Важно также обратить внимание на то, какие примеры поведения и отношения к людям дети видят вокруг себя. Воспитатель должен показывать им хорошие примеры поведения и отношения к людям, а также учить их уважать различия между людьми.

Кроме того, воспитатель должен быть готов к тому, чтобы помочь детям преодолеть возможные трудности и конфликты, связанные с различиями между ними. Для этого он должен уметь слушать и понимать потребности каждого ребенка, а также находить компромиссы и решения, которые будут устраивать всех участников конфликта.

В целом, воспитатель должен стремиться к тому, чтобы создать условия для полноценного развития каждого ребенка, включая формирование гендерного равенства. Он должен быть готов к тому, чтобы помочь детям осознать свою индивидуальность и уникальность, а также научить их уважать других людей независимо от их пола.

Гендерное равенство является ключевым фактором для достижения успеха в жизни каждого ребенка. Воспитатель играет важную роль в формировании гендерного равенства у детей дошкольного возраста, используя различные методы и приемы, такие как игры и упражнения, рассказы и истории, обучение правилам поведения в обществе и использование различных материалов и технологий для обучения.

Статья содержит полезную информацию для воспитателей и родителей, которые хотят помочь своим детям осознать свою индивидуальность и уникальность, а также научить их уважать других людей независимо от их пола. Автор подчеркивает важность использования различных методов и приемов, таких как игры и упражнения, рассказы и истории, обучение правилам поведения в обществе и использование различных материалов и технологий для обучения.

Также автор отмечает необходимость создания условий для полноценного развития каждого ребенка, включая формирование гендерного равенства. Это может быть достигнуто путем проведения занятий по развитию творческих способностей и самостоятельности у детей, а также организации мероприятий, направленных на укрепление дружеских отношений между детьми разных полов.

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## **СУЩНОСТЬ СИСТЕМЫ МЕНЕДЖМЕНТА КАЧЕСТВА НА ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЯХ И ЭТАПЫ ИХ РАЗВИТИЯ**

*Аннотация: в данной статье представлена информация о сущности процессов разработки концепций системы менеджмента качества, её роль в современной жизни человека и этапах их развития.*

*Ключевые слова: качество, менеджмент, продукция, экспорт, конкурентоспособная отечественная продукция, предприятие.*

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## **THE ESSENCE OF THE QUALITY MANAGEMENT SYSTEM AT INDUSTRIAL ENTERPRISES AND THE STAGES OF THEIR DEVELOPMENT**

*Abstract: this article provides information about the essence of the processes for developing concepts of a quality management system, its role in modern human life and the stages of their development.*

*Key words: quality, management, products, export, competitive domestic products, enterprise.*

В «Стратегии развития нового Узбекистана на 2022-2026 годы» важным направлением является продолжение промышленной политики, направленной на обеспечение стабильности национальной экономики и увеличение доли промышленности в валовом внутреннем продукте, увеличение объемов производства промышленной продукции в 1,4 раза. Это, в свою очередь, ставит на повестку дня необходимость решения вопросов управления качеством и стандартизации, совершенствования действующей системы управления предприятиями в целях экспорта



выпускаемой продукции и обеспечения ее высокого рейтинга на внешних рынках.

Повышение качества и конкурентоспособности местной промышленной продукции не только на внутреннем, но и на внешнем рынке играет решающую роль в развитии экономики. Из мирового опыта известно, что развитие любой страны напрямую зависит от качества продукции (работ и услуг), создаваемой на ее предприятиях и организациях. Причина в том, что если качество разрабатываемой продукции (работы, услуги) высокое, цена относительно низкая, а потребительская ценность дешевая, то конкурентоспособность этой продукции или услуги относительно высока.

Обеспечение конкурентоспособности национальной продукции и повышение ее экспортного потенциала напрямую связано с обеспечением качества и безопасности продукции. Поэтому в условиях становления и развития цифровой экономики в республике сегодня широкое внедрение современной системы менеджмента качества и международных стандартов в приоритетных отраслях и секторах экономики является одной из важных задач.

Интерес к проблеме управления качеством напрямую связан с развитием технологий производства и прошел несколько этапов с конца XIX века до наших дней. Эти этапы не имеют четких границ, поскольку процесс разработки и управления некоторыми методами производства технологий начался не сразу и продолжается до сих пор. Систему менеджмента качества условно можно разделить на 4 этапа.

На первом этапе системы менеджмента качества большое внимание уделяется контролю параметров и характеристик продукции, начало этого этапа соответствует концу XIX – началу XX века. Сущность первого этапа характеризуется обращением пристального внимания на качество продукта и выявлением проблем в продукте. В этот период на заводах были созданы крупные службы контроля качества, которые занимались проверкой каждого изделия. Проверка обычно проводится в конце производственного цикла и требует привлечения специально обученных инспекторов.

Второй этап примерно соответствует 20-50-м годам 20 века. Этот этап называется этапом «управления процессом». Основное внимание уделяется управлению производством продукции. Контроль и управление процессами привели к развитию статистических методов. В результате удалось значительно сократить затраты на контроль и повысить качество продукции.

Третий этап проходил с 1950-х по начало 1980-х годов. В значительной степени возникновение этого этапа связано со стремлением японских компаний повысить конкуренцию своей продукции. Этот этап можно назвать этапом «улучшения качества» или «этапом обеспечения качества». В этот период суть управления качеством сосредоточена на комплексном совершенствовании производственных процессов, процессов

управления и закупок, управления персоналом, сбыта продукции и подобных подсистем предприятия.

Четвертый этап начал формироваться в начале 70-х годов 20 века. В этот период управление качеством было связано с концентрацией внимания на наиболее важных для потребителя особенностях продукта, поскольку конкуренция между производителями в этот период значительно возросла. Поэтому на этом этапе управление качеством начинает уделять больше внимания планированию качества, и его можно назвать «стадием планирования качества».

Система менеджмента качества формируется исходя из требований потребителей, поскольку потребители заинтересованы в продукции (услугах), удовлетворяющей их потребностям и требованиям. Потребности и ожидания потребителей меняются, поэтому компании всегда находятся под давлением конкурентной среды (рынка) и технологического развития. Чтобы удовлетворить потребности клиентов, компании должны постоянно совершенствовать свои продукты и процессы. Система менеджмента качества компании, как один из инструментов управления, дает уверенность высшему руководству компании в том, что клиенты компании могут поставлять продукцию, полностью соответствующую их требованиям (требуемое качество, необходимое количество).

Система менеджмента качества основана на восьми принципах управления качеством:

1. Ориентация на клиента. Процветание бизнеса зависит от клиентов, поэтому они должны понимать их текущие и будущие потребности, удовлетворять их требования и стремиться превзойти их ожидания.

2. Управление лидерством. Лидеры объединяют цель и направление деятельности предприятия. Они должны полностью вовлекать людей в выполнение задач предприятия, создавать и поддерживать необходимую внутреннюю среду.

3. Вовлеченность сотрудников – сотрудники всех уровней являются опорой предприятия, поэтому их полное участие в решении проблем позволяет предприятию использовать свои возможности с пользой.

4. Процессный подход – желаемый результат достигается более эффективно, если процессы и связанные с ними ресурсы управляются как процесс.

5. Системный подход к управлению – выявление, понимание и управление взаимосвязанными процессами как системой помогает повысить эффективность и результативность достижения целей предприятия.

6. Постоянное улучшение – постоянное улучшение предприятия следует рассматривать как его постоянную цель.

7. Принятие решений должно основываться на четких фактах и анализе данных.

8. Взаимовыгодные отношения с поставщиками. Бизнес и его поставщики взаимозависимы, поэтому взаимовыгодные отношения повышают способность обеих сторон создавать ценность.

На современном этапе развития менеджмент качества имеет большую теоретическую базу, объединяющую элементы многих дисциплин. Его основная задача – планировать, создавать (продукты, систему управления, процессы, инфраструктуру, среду обитания и т. д.) и обеспечивать высокую производительность. Решение этой проблемы обеспечивается путем создания практичных систем, которые внедряются и используются в различных компаниях.

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## **ОСОБЕННОСТИ РАЗБУРИВАНИЯ РАДИАЛЬНОГО БУРЕНИЯ ДЛЯ ОСВОЕНИЯ ТРУДНО ДОБЫВАЕМЫХ МЕСТОРОЖДЕНИЙ**

*Аннотация. В статье рассматриваются методы разбуривания, проблемы и решения трудно добываемых месторождений с использованием новых технологий, как радиальное бурение. Технологии восстановления и улучшения добывающих нефтегазовых скважин с использованием наклонно - гибкими и насосно - компрессорными трубами. Приведённая технология представляет собой большое преимущество по сравнению с действующими технологиями при повышении добычи.*

*Ключевые слова: разбуривания, радиальное бурение, глубинно-насосный способ, нефтегазовые скважины, повышению добычи, месторождения Южный Кемачи, Северный Уртабулак, Западный Крук, Крук, Жейнав, Култук, Кукдумалак.*

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## **FEATURES OF DRILLING RADIAL DRILLING FOR THE DEVELOPMENT OF DIFFICULTLY PRODUCED FIELDS**

*Annotation. The article discusses drilling methods, problems and solutions for hard-to-produce deposits using new technologies such as radial drilling. Technologies for restoration and improvement of oil and gas production wells*

*using inclined flexible pipes and tubing. The technology presented represents a great advantage over existing technologies in increasing production.*

*Key words: drilling, radial drilling, deep-pumping method, oil and gas wells, increasing production, fields South Kemachi, North Urtabulak, West Kruk, Kruk, Zheinav, Kultak, Kukdumalak.*

Принцип работы технологии заключается в том, что на необходимой глубине специальным инструментом прорезается обсадная колонна и после выемки инструмента спускается гибкая НКТ с наконечником (соплом).

Раннее закрытие скважины и освоение трудно добываемых месторождений являются большими проблемами и актуальны для многих нефтегазовых компаний. Часто бывают случаи, что после закрытия скважин оставшиеся ресурсы на залежах не могут быть использованы из-за высокого капитального вложения в восстановление добывающего производства. К настоящему времени в мире пробурено более 26000 ГС, более 1300- в России, в том числе около половины – в Татарстане и Башкирстане, в том числе в Узбекистане начиная 2000 г около 20 горизонтальных скважин.

Уникальная технология управляемого механического бурения радиальных каналов "Перфобур" позволяет бурить сеть радиальных каналов длиной до 15 метров и диаметром от 58 до 68 мм, количеством до 4 каналов различной траектории на одном ярусе. Технология по микрогоризонтальному (радиальному) бурению предназначена для освоения трудно добываемых месторождений. Данная технология представляет большое преимущество по сравнению с действующими технологиями по повышению добычи. Радиальное бурение представляет собой технологию для восстановления и улучшения добывающих условий нефтегазовых скважин с использованием наклонно - гибким непрерывными насосно - компрессорными трубами. При применении данной технологии течение жидкости с высоким давлением может пробивать боковой ствол диаметром 50 мм, расстояние бурения по радиальному направлению от скважин до 100 м. Бурение бокового ствола производится по одному направлению, также по несколько направлений. На практике часто имеет место недостаточно точное определение гипсометрического положения точки входа в продуктивный пласт. Вследствие этого вместо рекомендуемой преимущественно нисходящей формы условно горизонтального участка в действительности получают синусоидальные, v-образные и другие почти случайные конфигурации наиболее ценного и важного участка ствола ГС и МГ практически вне связи с геологическими условиями. Чрезвычайная сложность управления процессом бурения ГС и МГ без надежной информации о продуктивном пласте, фактическом геологическом положении бурового инструмента относительно кровли пласта, ВНК или ГНК приводит к снижению эффективности скважины.

Особое внимание следует уделять проблеме восстановления бездействующего фонда скважин. Одним из способов решения этой проблемы является разбуривания вторых стволов из эксплуатационных колонн.

Техническая эффективность при радиальном (МГ) бурении на стволе скважины образуется стволы в нужных направлениях от взрыва, вызванного течением жидкости с высоким давлением.

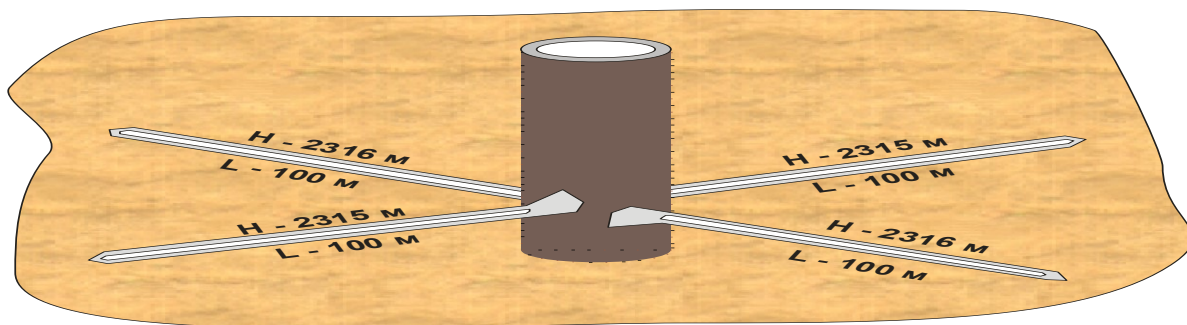
Размер ствола скважин зависит от крепости конструкций, нагрузки от напряжения породы и скорости пробивания наконечника течения жидкости. По результатам испытаний, средний диаметр ствола составляет 4 – 5 см.

При процессе радиального бурения, поднимают насосно - компрессорные трубы, спускают буровые инструменты с направленным уклономером, поднимают фрез обсадные трубы, спускают буровые инструменты с наконечником течения и промывки скважин. 2 дня требуется для обработки 4 боковых стволов. [3,4] Если сопоставлять длины проникновения радиального и традиционного бурения, средняя длина проникновения традиционного бурения 20"-60", а средняя длина проникновения радиального бурения (от 10 до 100 м). [3,4]

Умения использования горизонтальных и микрогоризонтальных скважин, общепризнано, что применение горизонтальной технологии с соблюдением вполне четко определенных условий позволяет решить ряд важных проблем разработки нефтяных, нефтегазовых и газовых месторождений.

Согласно заключенного контракта №03-ИК/К-12й от 20.03.2015 года с компанией "Radial Drilling Services Inc" на выполнение услуг по радиальному вскрытию пласта (РВП) для увеличения добычи нефти и газа, выполнены работы в 2012 году, начиная с июля месяца на скважинах №№ 68, 70, 76 месторождения Южный Кемачи; №№ 1, 15, 44, 55, 61, 88, 102, 103, 107 месторождения Крук; №№ 44, 48 месторождения Западный Крук; №№ 93, 101, 121 месторождения Северный Уртабулак. В 2015 году, начиная с апреля месяца на скважинах №№ 17, 25, 22 месторождения Западный Крук; №№ 117, 115, 62, 112 месторождения Южный Кемачи. (Дата начала РВП – 21.07.12 г, дата завершения РВП-27.07.15г, дата ввода в эксплуатацию - 01.08.15г.)





*Рисунок-1. Траектория для проведения радиального бурения в скважине.*

На рисунке-1 приведено место интервала перфорации и длина радиального вскрытия пласта. С целью определения эффективности радиального вскрытия пласта, совместно с сотрудниками ОАО «ИГиРНИГМ» и лабораторией ОАО «Нефтегазисследования», индивидуально на каждой скважине проводились промысловые газоконденсатные исследования до и после проведения мероприятий. Необходимо отметить, что на всех скважинах наблюдается прирост жидких углеводородов в суточных дебитах по жидким углеводородам. А на скв №№68, 70, 76 Южный Кемачи отмечается рост плотности жидких углеводородов после проведения РВП, что свидетельствует о вовлечении в разработку не дренированных зон нефтяной залежи, которое несомненно необходимо отнести к положительному результату проведенных работ и данное обстоятельство, по нашему мнению, обеспечивает продолжительную работу скважин по добычи жидких углеводородов за счет предотвращения образования конусов газа и воды в призабойной зоне скважин. На скважинах № 68,70,76 Южный Кемачи увеличение плотности жидких углеводородов соответственно, (с 0,821 г/см<sup>3</sup> до 0,841 г/см<sup>3</sup>, с 0,825 г/см<sup>3</sup> до 0,860 г/см<sup>3</sup>, с 0,808 г/см<sup>3</sup> до 0,850 г/см<sup>3</sup>.)

В отчетных данных по добычи нефти за ноябрь и декабрь месяцев 2012 года, добыча нефти на месторождение Крук резко снизилась по сравнению с предыдущими месяцами в основном с возникшими проблемами по оптимизации режима работы нефтедобывающих скважин с газлифтным способом добычи, из-за гидратообразования в системе подачи газа для газлифта и резкого продолжительного похолодания погоды. Так в ноябре, декабре месяцев на 18 скважинах (№ №15, 41, 28, 94, 63, 59, 12, 51, 68, 21, 44, 65, 104, 71, 96, 66, 1, 104) в течении 64 суток проводились работы с ревизией НКТ и регулировкой пусковых муфт для газлифтной добычи нефти.

На 11 суток в периоды с 01.11.15 г по 03.11.15 г., с 12.11.15 г. по 14.11.15 г., с 21.11.15 г по 23.11.15 г., с 30.12.15 г. по 31.12.15 г. весь фонд нефтедобывающих скважин, работающих газлифтным способом добычи нефти остановились из-за гидратообразования в коллекторе подачи газа с месторождения Южный Кемачи на месторождение Крук, для газлифта. На

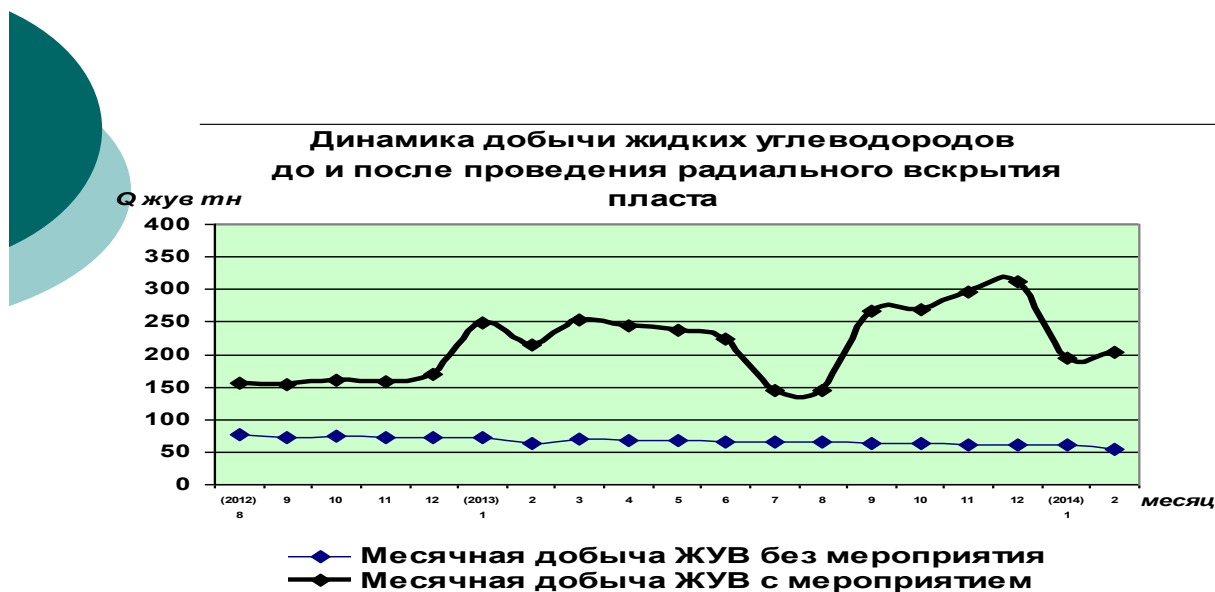
скважинах №№ 21, 61 проводились строительно-монтажные работы по замене шлейфовой трубы длиной 50 и 220 м соответственно, работы проводились в течении 8 и 12 суток соответственно. В течении 2-х месяцев проводились работы по оптимизации работы скважин.

Коэффициент эксплуатации газлифтных скважин по месторождению Крук составляло 0,28 в ноябре и 0,14 в декабре месяцев 2015г., что естественно повлияло на уровень добычи нефти по месторождению. На промысле Крук, выполнена огромная работа направленная на повышение температуры подаваемого газа для газлифта (монтаж теплообменников (Т-101, Т-102), печи подогрева ПП-063, замена угловых штуцеров на 4 скважинах, до спуск пусковых муфт на 12 скважинах, разделение скважин на группы по давлению подаваемого газа для газлифта, замена шлейфов, монтаж дозаторных насосов и пуск системы подачи метанола для предотвращения гидратообразования с двух точек в систему газлифта, оптимизация режима работы скважин и т.д.). В результате проведенных вышеперечисленных работ в январе месяце 2016 года удалось вывести на прежний режим работы газлифтных скважин и восстановить прежний уровень добычи нефти по месторождению.

Радиальное вскрытие пласта также проводилось на скважинах № 33 Жейнав и скважине № 432 Кукдумалак, из-за продолжительного проведения работ по радиальное вскрытие пласта (РВП), скважина №33 Жейнав и скважина №432 Кукдумалак долгое время находились в освоении. Поэтому оценить эффективность по этим месторождениям на данном этапе не представляется возможным.

На месторождении Северный Уртабулак скважина № 121 после проведения мероприятия РВП, была переведена с газлифтного способа добычи на глубинно-насосный способ добычи, путем установки высокопроизводительных глубинных насосов типа Ротофлекс. Кроме того, на скважинах глубиной выше 2500 м возникли проблемы по спуску специальных оборудований и гидромониторной насадки связанные с не доходом до намеченной глубины и многократными спуска - подъемными операциями. Одна скважинно-операция по РВП на скважинах Южный Кемачи, Крук, Западный Крук составлял в среднем 7 дней, а на скважинах месторождений Жейнав, Култук и Кокдумалак в среднем 24 дней. Что свидетельствует о необходимости доработки результатов данной технологии для работы на скважинах с глубиной свыше 2500 м.

Однако следует отметить, что данная технология выполняется впервые на месторождениях УДП «Мубарекнефтьгаз» и контракт является пилотным. В связи с чем, выбор скважин осуществлялся по разным условиям, отличающихся критериями пласта.



**Рисунок-2. Динамика добычи жидких углеводородов после проведения радиального вскрытия пласта на месторождение Южный Кемачи скважина № 68**

Согласно с требованиями технологии “Radial Drilling Services Inc“ RDS для проведения радиального вскрытия пласта, текущее пластовое давление должно быть не ниже 70% от начального, обводненность не более 80%, в интервале пласта не должно быть сужение колонны. Оценка эффективности радиального вскрытия пласта в условиях неустановившегося режима работы скважин, которое носит временной характер и естественно влияет на месячный объем добычи нефти по месторождению по нашему мнению некорректно. Скорее всего было бы правильной, для оценки эффективности сравнить объем суточного дебита скважин по жидким углеводородам до и после проведения мероприятия радиальное вскрытие пласта. (РВП).

Однако следует отметить, что данная технология применяется для всех условий горных пород и скважин глубиной от 2000 до 8000 м так как, экономическая эффективность этой технологии, расширяет диапазон добычи нефти в различных условиях.

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## **ПРОЕКТНЫЕ ТЕХНОЛОГИИ В ИНТЕГРАЦИИ ХИМИИ И ГЕОГРАФИИ**

*Аннотация. В статье показано, что междисциплинарные связи химии с географией раскрываются с помощью метода проектного обучения. Это, в свою очередь, объясняется примерами, основанными на творческом подходе.*

*Ключевые слова: междисциплинарность, методология, проект, технология.*

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## **INTEGRATION OF CHEMISTRY AND GEOGRAPHY DESIGN TECHNOLOGIES**

*Annotation. The article shows that interdisciplinary connections of chemistry with geography are revealed using the method of project learning. This, in turn, is explained by examples based on a creative approach.*

*Keywords: interdisciplinarity, methodology, project, technology.*

Интеграция знаний по различным учебным дисциплинам – одна из эффективных форм научного познания химии и географии неразрывно связаны между собой. Поэтому мы хотели в этой статье рассказать и показать креативный подход виде проектной технологии [1,2,3.4].

Почему так происходит? С этого вопроса начинается любая наука и география, и химия. Сегодня задает этот вопрос одновременно и учитель химии, и учитель географии [5,6].

Почему так происходит? Такие вопросы были заданы нашим ребятам заранее. Было предложено использовать возможность интернета, подготовить презентации и опытное подтверждение. Итак, почему так целительна атмосфера озера Чарвак?

Креативный подход географа. Под воздействием солнца, воды, ветра, подвижек земной коры на протяжении миллионов лет скалы Кокшетау получили загадочные формы, в которых можно найти сходство с фигурами животных, сказочных героев, а издали принять за руины замков и крепостей. Множество сказаний и легенд сложено о появлении этого уникального уголка – Чарвак. Его часто сравнивают со Швейцарией. Но

Чарвакскую жемчужину и Швейцарские Альпы объединяет единственное – это горы. Но не более! Чарвак — это уникальная, неопишуемой красоты природа. Чарвак – это множество легенд и сказаний. Легенды Бостанлыка из тех, что можно слушать снова и снова. И удивляться, глядя на каменные изваяния, фантазии природы и фантазии человека: природы - потому что создала такое чудо, человека - потому что услышал, что рассказали ему горы и степи [7].

Креативный подход химика. Почему так целительна атмосфера озера Чарвак? У нас на этот счет свое мнение. В районе озера много зеленых насаждений, в том числе сосновый лес. При окислении хвои сосновых деревьев образуется газ озон. Это газ голубого цвета с резким запахом. Озон аллотропное видоизменение кислорода. В природе озон образуется из кислорода. В природе озон образуется из кислорода по уравнению  $3\text{O}_2 \rightarrow 2\text{O}_3$ . Человек, попадающий на отдых чувствует, что ему легко и приятно дышится, у него появляется аппетит и радость жизни. Почему? Озон обладает бактерицидным действием, и является хорошим окислителем. В атмосфере озона все реакции идут в два раза быстрее, это нестойкое вещество, сразу разлагается с образованием атмосферного кислорода  $\text{O}_3 \rightarrow \text{O}_2 + \text{O}$ . Атомарный кислород химически активен и убивает микробы [8].

Почему в Мертвом море нельзя утонуть?

Креативный подход географа: Мертвое море - бессточное соленое озеро между Израилем и Иорданией. Мертвое море это один из самых соленых водоемов на Земле, соленость достигает 33,7%. Длина озера 67 км, ширина 18 км в самом широком месте, максимальная глубина 378 м. Когда американские истребители летали около мертвого моря, которое ниже уровня океана, то, при переходе нулевой отметки, вся электроника сбрасывалась, и они поворачивались, думая, что летят с другой стороны Земли; само море является самой низкой точкой на поверхности Земли, так как оно располагается на 403 метра ниже уровня моря [9].

Креативный подход химика. Мертвое море содержит наибольший процент соли. (его площадь 728 кв. км, здесь находится около 10,5 млрд. тон соли)

В этом море архимедова сила из-за специфической плотности воды огромная, вода выталкивает человека на поверхность, не давая погрузиться в нее. Химический состав морской воды Мертвого моря уникален, он содержит меньше хлорида натрия, чем в других морях. Задание: составить электронную формулу иона натрия, содержащегося в морской воде. Наша вода далека от морской, но и она содержит соли. Если солей много, то такую воду называют жесткой. Вот опыт - определение жесткости воды - мыло в жесткой воде образует хлопья [10]. Почему озеро называется черным, хотя его воспринимают синим или голубым?

Креативный подход географа: Черное море- внутреннее море бассейна Атлантического океана. Проливом Босфор соединяется с



Мраморным морем, далее, через пролив Дарданеллы с Эгейским и Средиземным морями. Существует турецкая легенда, согласно которой в водах Чёрного моря покоится богатырский меч, который был брошен туда по просьбе умиравшего волшебника Али. Из-за этого море волнуется, пытаясь выплеснуть из своих пучин смертоносное оружие, и окрашивается в чёрный цвет. Турки и другие завоеватели, пытавшиеся покорить население побережья моря, встречали яростный отпор со стороны адыгов (черкесов), абхазов и других племён, за что и прозвали море - Чёрным, негостеприимным; по мнению ряда исследователей, может быть тот факт, что во время штормов вода в море сильно темнеет. Впрочем, штормы в Чёрном море не слишком часты, а темнеет вода во время бурь во всех морях земли; ещё одна гипотеза происхождения названия основывается на том, что металлические предметы (например якоря), опущенные в воду моря глубже 150 м на длительное время, покрывались налётом чёрного цвета благодаря действию сероводорода. Другая гипотеза связана с принятым в ряде азиатских стран «цветовым» обозначением сторон света, где «чёрный» обозначал север, соответственно Чёрное море — северное море. Одной из наиболее распространённых гипотез является предположение о том, что название связано с воспоминаниями о прорыве Босфора 7500-5000 лет назад, следствием чего стало катастрофическое повышение уровня моря почти на 100 метров, что в свою очередь привело к затоплению обширной шельфовой зоны и образованию Азовского моря [11,12].

Креативный подход химика: почему море называют Черным, хотя все его воспринимают синим или голубым? У нас, химиков, есть версия названия Черного моря, она связана с химической реакцией. В далекие времена, измеряя глубину моря, было установлено, что при опускании на дно блестящего медного лота вынимали его покрытым черной пленкой. Дело в том, что придонный слой Черного моря содержит в довольно больших концентрациях сероводород. При его взаимодействии с оксидом меди, находящимся на поверхности лота, протекала реакция образования сульфида меди [13,14]. Сульфид меди имеет черный цвет. Во-первых, сероводород  $H_2S$  газ – спутник всего живого, он образуется при разложении белковых веществ.  $H_2S$  ядовитый, плохо пахнет. Вот уравнение реакции  $H_2S + CuSO_4 = CuS\downarrow + H_2SO_4$

Почему озеро Босумтви взрывается?

Креативный подход географа: Красивейшее озеро Босумтви находится в Республике Гана, в тропических африканских лесах, километрах в 30 на юго-восток от города Кумаси. Оно известно как самый непредсказуемый водоем в мире. Многие месяцы оно хранит тишину и спокойствие, как вдруг неожиданно взрывается: в глубине его словно бы лопаются гигантский воздушный пузырь, вверх взлетают огромные каскады воды, поверхность озера кипит и бушует. Постепенно Босумтви успокаивается. Из-за таких взрывов гибнет много рыбы, и аборигены

сачками собирают добычу. Ученые полагают, что причиной взрывов являются донные отложения, в которых происходит распад органических веществ. Выделяющиеся газы накапливаются до максимального предела, а затем бурно вырываются из недр озера. Босумтви — настоящая загадка. Одни исследователи считают, что озеро образовалось в результате падения на Землю гигантского метеорита, другие придерживаются гипотезы о взрыве антивещества, не оставившего после себя никаких осколков и обломков. И наконец, самая правдоподобная версия — это образование Босумтви в результате вулканической деятельности. Вполне вероятно, что находящееся в горном районе озеро занимает дно разрушенного конуса вулкана, существовавшего в древние времена. Оно известно как самый непредсказуемый водоем в мире [15,16].

Креативный подход химика: это озеро временами взрывается, в глубине его словно лопаются гигантский воздушный пузырь, вверх взлетают огромные каскады воды, поверхность озера кипит и бушует. Причина — данные отложения, в которых происходит распад органических веществ. Выделяющиеся газы накапливаются до предела, а затем бурно вырываются из недр озера. Возможно, происходит вот такая реакция. Опыт 1. «Стреляющая бутылка». В бутылку помещаем немного мрамора и соляную кислоту. Бутылку закрываем пробкой, и через некоторое время она вылетает. Опыт 2. В высокий стакан помещаем палочку и сахар, растертый в ступе, приливаем немного воды до образования кашицы [17,18].

Почему образовались миниатюрные айсберги в озере Натрон?

Креативный подход географа: Озеро Натрон — солевое озеро, расположенное на севере Танзании, на границе с Кенией. Озеро имеет глубину не больше трех метров, и изменяет береговую линию в зависимости от времени года и уровня воды. Озеро Натрон покрыто коркой соли, которая периодически окрашивается в красный и розовый цвет. Это результат жизнедеятельности микроорганизмов, которые живут в озере. Озеро является средой обитания миллионов фламинго. Натрон — единственное место размножения Малого фламинго. Воды щелочного озера Натрон на севере Танзании (близ кенийской границы) окрашиваются в красный цвет из-за сезонного цветения здешних солелюбивых водорослей. Углекислый натрий из озера кристаллизуется в плиты соды, похожие на миниатюрные айсберги [19,20].

Креативный подход химика: Озеро Натрон в Танзании, воды которого содержат карбонат натрия или углекислый натрий. Эта соль огромными воронками вырывается на поверхность озера и кристаллизуется в плиты соды, похожие на миниатюрные айсберги. Можно дать задания: установите молекулярную формулу углекислого натрия, если массовые доли элементов в нем составляют 43,4 % (Na), 11,3 % (C), 45,3% (O) (ученик решает задачу) В настоящее время на озере Натрон сооружается предприятие по добыче соды для производства стиральных порошков. Опыт: «облако из колбы». В

большую колбу насыпаем  $\text{Na}_2\text{CO}_3$  и приливаем  $\text{NH}_4\text{OH}$ , чтобы слой накрыть и тонкой струей  $\text{HCl}$  концентрированную. Думаю, что происходит именно так.

Таким образом, креативный подход проектные интегрированные уроки – эффективная форма получения интегративных знаний, способствующих углублению познания закономерности природы.

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## **О СТРУКТУРЕ ПОПУЛЯЦИИ И ПЛОДОВИТОСТИ БОЛЬШИХ ПЕСЧАНОК (*RHOMBOMYS OPIMUS*) В СЕВЕРО-ЗАПАДНЫХ КЫЗЫЛКУМАХ**

*Аннотация. В статье приведены сведения о периоде размножения большой песчанки (*Rhombomys opimus*), распространенной в Нукусском песчаном участке Кызылкумов, известно, что в депрессиях численности большой песчанки часто сохраняются в виде групп с различным количеством жилой колоний.*

*Ключевые слова: размножение, распространение, количество, количество эмбрионов.*

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## **ON THE POPULATION STRUCTURE AND FERTILITY OF GREAT GERBILS (*RHOMBOMYS OPIMUS*) IN NORTHWESTERN KYZYL KUM**

*Annotation. The article presents information about the breeding season of the great gerbil (*Rhombomys opimus*), common in the Nukus sandy area of the Kyzylkum region. It is known that in depressions the numbers of the great gerbil are often preserved in the form of groups with different numbers of residential colonies*

*Key words: Reproduction, distribution, quantity, number of embryos.*

Наблюдения за численностью и размножению большой песчанки в 2022-2023 гг. в Северо-Западном Кызылкумах проведены в районе Нукусских грядово-ячеистых песках. Материал собирали в разные сезоны,

в том числе и в зимний период. Всего добыто и исследовано 210 песчанок. Приложено около 60 км автомобильных и пеших маршрутов.

В условиях Нукусских песков большая песчанка имеет сезонную приуроченность к определенным местообитаниям [1, с.52-54; 3, с.125.]. В ранневесенний период начинается размножение большой песчанки и рассредоточение его по основным местообитаниям (Таблица 1).

**Таблица 1**  
**Динамика размножения большой песчанки в Нукусском песках**

годы	Число зверьков	Всего							Число эмбрионов											число
		Молодые		Взрослые		Достигшее половой зрелости			3	4	5	6	7	8	9	10	11			
		♂	♀	♂	♀	беременные	Рожавши	Яловые												
2022	96	19	17	32	28	15	11	2	3	8	7	1	-	-	-	-	-	82		
		42,2%		29,2%	28,6%	39%	45,8%	15,2%	47,8%		43,5%			8,7%						
2023	110	21	24	31	34	15	16	3	6	3	4	2	4	2	-	-	-	106		
		30,3%		32,4%	37,3%	41%	36%	23%	36%		40%			24%						
Всего	206	41		63	62	30	27	5	27	44	55	18	42	24	-	-	-	202		
		33,6%		33%	33,3%	41,3%	34,2%	24,3%	31,2%		46,1%			21,7%						

Питается большая песчанка преимущественно зелеными частями травянистых растений и ветками кустарников, особенно саксаула. Весной основной пищей служат эфемеры, а с конца весны до осени - зеленые веточки саксаула и других древовидных солянок, а также верблюжьей колючки, джингила, кандыма, тамариска, полыней. Осенью в песчанки собирают большие запасы веточек саксаула и других кустарников [4, с.28-29; 2, с.28-29].

**Таблица 2**  
**Половая структура популяции большой песчанки в Нукусском песке Кызылкума.**

Годы	Добыто		
	всего	Самцы (%)	Самки (%)
2022	96	51,1	48,9
2023	110	52,2	47,8
всего	206	53,7	46,3



Наблюдения показали преобладание самцов над самками (таб.2). Возможно, в этом сказалась несколько более выраженная подвижность и активность самцов.

**Таблица 3**

**Число эмбрионов у большой песчанки в годы наблюдений.**

Годы	Вскрыто самок	Число эмбрионов	
		среднее	пределы
2022	28	4,5	2-6
2023	34	4,6	1-8

Число эмбрионов у большой песчанки, имеющие две генерации в год, довольно резко изменилось по годам, увеличиваясь или уменьшаясь почти на 36% (табл.3). В размножении участвовало 92-96% всех самок. В помёте встречали от 1-8 детёнышей.

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## **НОРМАТИВНО-ПРАВОВЫЕ И ЭКОНОМИЧЕСКИЕ ОСНОВЫ ПРОИЗВОДСТВА ОРГАНИЧЕСКОЙ СЕЛЬСКОХОЗЯЙСТВЕННОЙ ПРОДУКЦИИ В УЗБЕКИСТАНЕ**

*Аннотация. В статье на основе анализа опыта некоторых зарубежных стран показана нормативная, правовая и экономическая основа производства органической сельскохозяйственной продукции в Узбекистане.*

*Также проанализированы прогнозные показатели перехода от традиционного производства к органическому производству отдельных видов продукции сельского и лесного хозяйства в Узбекистане и разработаны принципы органического производства.*

*Ключевые слова. Органический продукт, экологически чистый продукт, закон, концепция, сертификация, принцип, экономическая выгода.*

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## **REGULATORY AND ECONOMIC FOUNDATIONS FOR PRODUCTION OF ORGANIC AGRICULTURAL PRODUCTS IN UZBEKISTAN**

*Annotation. The article, based on an analysis of the experience of some foreign countries, shows the regulatory, legal and economic basis for the production of organic agricultural products in Uzbekistan.*

*The forecast indicators of the transition from traditional production to organic production of certain types of agricultural and forestry products in Uzbekistan were also analyzed and the principles of organic production were developed.*

*Keywords. Organic product, environmentally friendly product, law, concept, certification, principle, economic benefit.*

Органическое сельское хозяйство означает сельскохозяйственную производственную деятельность, направленную на поддержание здоровья населения и улучшение окружающей среды. Органическое сельскохозяйственное производство в Евразии начало развиваться в начале 2000-х годов. Основными инициаторами являются Продовольственная и

сельскохозяйственная организация при ООН (ФАО), а также местные и зарубежные предприниматели. Тогда была создана первая международная организация, специализирующаяся на производстве органической продукции

На следующем этапе были созданы хозяйства с сертификатами производства органической продукции, соответствующей международным стандартам. Постепенно национальные законодательные и исполнительные органы власти заинтересовались развитием органического сельскохозяйственного производства, и к 2010 году оно было институционализировано.

Армения была одной из первых стран, принявших в 2008 году Закон об органическом сельском хозяйстве, который вступил в силу в 2009 году.

В Беларуси вопросы органического сельского хозяйства рассматриваются узко, и традиционный способ ведения сельского хозяйства не меняется на органический. Однако посредством разработки правовых норм развития территорий и фермерских хозяйств органическое производство в сельском хозяйстве определяется как приоритет «зеленой экономики».

В Послании Президента Республики Казахстан в народу Казахстана в 2012 году был поднят вопрос развития производства экологически чистой продукции. Производителей органической сельскохозяйственной продукции предлагается поддерживать со стороны государства.

Официальные документы правительства по производству органической сельскохозяйственной продукции в Кыргызстане начали разрабатывать в 2018 году. Постановление Жогорку Кенеша Кыргызстана №3108-VI принято 12 июня 2019 года. Решение предусматривает перевод всех регионов страны на производство органической сельскохозяйственной продукции в течение десяти лет. Это важная инициатива для государств-членов Евразийской организации экономического сотрудничества.

В 2012 году при Минсельхозе России была создана рабочая группа по развитию органического сельского хозяйства. На базе этой группы были сформированы два ведущих национальных союза – Союз органического земледелия и Национальный органический союз. С этого момента наука, орган по сертификации, экспертное сообщество, местные и международные организации объединились в настоящую сеть в движении органического сельского хозяйства.

Первоначально производство органической сельскохозяйственной продукции во многих странах начало развиваться эволюционным путем. Первоначально инициативу взяли на себя отдельные инициативные компании и их зарубежные партнеры, имеющие опыт производства и (или) формирования стандартов производства органической продукции.

Идея производства органической сельскохозяйственной продукции в Узбекистане была решена в 2020 году с разработкой закона «О выращивании органической сельскохозяйственной продукции».

Несмотря на наличие благоприятных условий и возможностей, отсутствие внимания к развитию органического сельского хозяйства в нашей стране отрицательно влияет не только на окружающую среду, здоровье человека, производство высококачественной продукции, но и на увеличение экспортного потенциала регионов и расширение его географии.

По данным Института исследований органического сельского хозяйства (FiBL), 103 страны мира приняли законы об органическом сельском хозяйстве, а 6 стран разрабатывают законодательство.

25 апреля 2022 года принят Закон Республики Узбекистан «Об органической продукции».

Принят Указ Президента Республики Узбекистан от 18 мая 2020 года №ПФ-5995 «О дополнительных мерах по обеспечению соответствия показателей качества и безопасности сельскохозяйственной продукции международным стандартам». Постановлением утверждена «Концепция развития органического сельского хозяйства и производства экологически чистой пищевой продукции в Республике Узбекистан».

В Республике Узбекистан разработана «дорожная карта» по реализации концепции развития органического сельского хозяйства и производства органической пищевой продукции, согласно которой прогнозные показатели постепенного перехода к органическому производству на землях сельскохозяйственного назначения и лесного фонда в 2020-2025 гг.

Н/п	Направления	Индикаторы	Этапы				
			2021 год	2022 год	2023 год	2024 год	2025 год
<b>1. На землях сельскохозяйственного назначения</b>							
1.	При выращивании хлопкового сырья	По отношению к общей площади, засеянной хлопком	1	2	3	4	5
2.	При выращивании зерновых, зернобобовых и масличных культур	По отношению к общей площади, засеянной зерновыми, бобовыми и масличными культурами	1	2	3	4	5
3.	В садоводстве	По отношению к общей площади продуктивных садов	2	4	6	8	10
4.	В виноградарстве	По отношению к общей площади собранных виноградников	2	5	8	12	15

Н/п	Направления	Индикаторы	Этапы				
			2021 год	2022 год	2023 год	2024 год	2025 год
5.	В овощеводстве	По отношению к общей площади выращивания овощей	0,5	1	1,5	2,5	3
<b>2. На землях лесного фонда</b>							
6.	На пашне	По отношению к общей посевной площади	2	3	5	6	8
7.	В фисташковых и миндальных рощах	По отношению к общей площади фисташек и миндаля	3	7	10	12	15
8.	Сбор каперсов	По отношению к общей площади, на которой собрана корова	10	15	20	25	30
9.	Сбор ягод	По отношению к общей площади, на которой растут ягоды	5	10	15	20	25
10.	При сборке коврика (ферулы).	По отношению к общей площади, на которой будет собран ковер	5	6	7	8	10
11.	При сборе лекарственных растений	По отношению к общей площади сбора лекарственных растений	3	4	7	8	10
<b>3. В сфере животноводства</b>							
12.	В мясном производстве	По отношению к общему объему производства мяса	1	2	3	4	5
13.	В молочном животноводстве	По отношению к общему объему производства молока	2	3	5	6	8
14.	При выращивании мяса индейки	По количеству голов птицы	5	10	15	20	25

Анализ прогнозных показателей показывает, что если правительство обеспечит полную реализацию концепции органического сельскохозяйственного производства, Узбекистан будет перейти от органического производства к органическому производству планируется при выращивать хлопок, зерновые, бобовые и масличные культуры через 100 лет, в садоводстве - через 50 лет, в виноградарстве - через 33,3 года, а в садоводстве - через 50 лет, в овощеводстве за 166,7 лет.

Также в землях лесного фонда 62,5 года по отношению к общей посевной площади, 33,3 года по фисташковым и миндальным рощам, 16,7 года по сравнению с общей площадью посевных площадей под каперсами,

20 лет по сравнению с общей площадью посевных ягод. переход на органическое производство через 50 лет в случае сбора покрова (ферулы) по отношению к общей площади сбора покрова, через 50 лет в случае сбора лекарственных растений.

Также переход на органическое производство в землях лесного фонда 62,5 года по отношению к общей посевной площади, 33,3 года по фисташковым и миндальным рощам, 16,7 года по сравнению с общей площадью посевных площадей под каперсами, 20 лет по сравнению с общей площадью посевных ягод, через 50 лет в случае сбора покрова (ферулы) по отношению к общей площади сбора покрова, через 50 лет в случае сбора лекарственных растений.

Из вышеизложенного видно, что производство органической сельскохозяйственной продукции в Узбекистане поднято на уровень государственной политики, а переход от традиционного к органическому производству планируется осуществлять эволюционным путем.

В 2015 году «Международная федерация движений за органическое сельское хозяйство» (IFOAM) продемонстрировала основные принципы органического сельскохозяйственного производства, такие как здоровье, экология, справедливость и забота.

1. Принцип здоровья – вся планета, почва, флора, домашний скот и люди едины и неделимы, органическое сельское хозяйство должно поддерживать и улучшать их здоровье.

2. Принцип экологии – органическое сельское хозяйство должно быть основано на существовании естественных экологических систем и жизненных циклов, принципах работы с ними, проживания и поддержки их.

3. Принцип справедливости – органическое сельское хозяйство должно основываться на отношениях, гарантирующих социальную справедливость с учетом окружающей среды и жизненных возможностей.

4. Принцип заботы должен быть основан на управлении органическим сельским хозяйством, защите окружающей среды и обеспечении здоровья и благополучия нынешнего и будущих поколений<sup>25</sup>.

Кроме того, основные принципы производства органической продукции в сельском хозяйстве Узбекистана должны включать следующее:

обеспечение здоровья почвы, воды, растений, животных и людей с учетом системы и круговорота природы, а также сохранение естественного баланса между ними;

способствовать сохранению биологического разнообразия в природе;

повышение ответственности людей за эффективное использование природных и энергетических ресурсов;

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<sup>25</sup> Нурбеков А, Аксой У, Муминджанов Х и Шукуров А. Органическое сельское хозяйство в Узбекистане: состояние, практика и перспективы. Продовольственная и сельскохозяйственная организация ООН (ФАО) Ташкент, 2018 г.



обеспечение выращивания сельскохозяйственной продукции и переработки пищевой продукции в соответствии с методами органического производства;

неиспользование генной инженерии при производстве органической сельскохозяйственной продукции и другие.

В издании «Мировой статистики органического сельского хозяйства» Института исследований органического сельского хозяйства (FiBL) и Международной федерации движения за органическое сельское хозяйство (IFOAM) за 2019 год Республика Узбекистан входит в десятку стран мира с благоприятными условиями для выращивания фруктов, а наша республика производит экологически чистые фрукты, отмечается, что она имеет удобные земельные участки.

В Узбекистане серьезное внимание уделяется внедрению мировых стандартов Organic and Global G.A.P. в целях производства продукции в соответствии с требованиями международных стандартов, развития систем регулирования и координации повышения показателей качества и безопасности продукции сельского и лесного хозяйства, расширения географии экспорта.

В настоящее время реализовано 1276 стандартов, касающихся аграрного сектора. Из них 309 являются международными стандартами и 6 – зарубежными стандартами. Также было принято около семидесяти стандартов ООН, касающихся сельскохозяйственной продукции.

В целях внедрения 10 международных стандартов серии ISO 28000 в процессы всех предприятий и организаций, участвующих в создании дополнительной цепочки создания стоимости сельскохозяйственной и пищевой продукции, завершается их принятие.

В 2020 году награду «Global G.A.P.» получают 164 компании страны, в том числе 155 Global G.A.P., 9 экспортеров органической продукции. Утвержден план внедрения и сертификации стандартов «Органик». На данный момент предъявлено 10 сертификатов и получены необходимые документы от 135 предприятий.

В 2017-2019 годах ООО «Санни Фрут Продакшн» в нашей республике вырастило 1848 тонн органического изюма и экспортировало его в Российскую Федерацию, Францию, Германию, Голландию, Италию и Грецию по ценам на 14,7% выше традиционного вида. Изюма и получена чистая прибыль в 4,1 раза больше.

Также в 2019 году 1 тонна органического хлопкового сырья стоила на рынках США дороже – от 155 до 225 долларов по сравнению с традиционным типом.

Эта операция имеет свое место в аграрной истории нашей страны, то есть формировавшаяся веками традиционная овощеводческая и садоводческая культура основана на принципах органического земледелия, предполагающего использование местных удобрений. Это дает

возможность выращивать органические (экологически чистые) фрукты и овощи с высокой пищевой ценностью, уникальными вкусовыми и потребительскими характеристиками, без применения технологий генной модификации.

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## **ПРИНЦИПЫ И МЕТОДЫ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ДЕЯТЕЛЬНОСТИ ПРЕДПРИЯТИЯ**

*Аннотация. В статье рассмотрены принципы и методы повышения эффективности деятельности предприятия, которые являются важной составляющей успешного управления организацией, так как они помогают оптимизировать процессы, улучшить результаты и достичь поставленных целей. Даны основные методы повышения эффективности деятельности предприятия. Сделаны выводы о том, что важно применять эти принципы и методы с учетом специфики и особенностей каждого предприятия.*

*Ключевые слова: предприятие, эффективность деятельности, методы, принципы управления, анализ.*

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## **PRINCIPLES AND METHODS OF INCREASING THE EFFICIENCY OF ENTERPRISE OPERATIONS**

*Annotation. The article discusses the principles and methods of increasing the efficiency of an enterprise, which are an important component of the successful management of an organization, as they help optimize processes, improve results and achieve set goals. The main methods for increasing the efficiency of an enterprise are given. It is concluded that it is important to apply these principles and methods, taking into account the specifics and characteristics of each enterprise.*

*Keywords: enterprise, operational efficiency, methods, management principles, analysis.*

Изучение эффективности деятельности предприятий и способов её повышения является активной областью исследований как в России, так и за рубежом. Множество авторов внесли свой вклад в изучение этой проблематики.

Среди российских авторов, работавших в этой области, можно

выделить А.И. Алексееву, автора книги «Комплексный экономический анализ хозяйственной деятельности» [1], которая рассматривает основные аспекты повышения эффективности предприятия и методы анализа его работы. М.С. Мокий в своей работе «Экономика фирмы» [2] исследует способы оценки и влияния на различные показатели экономической эффективности компаний.

Среди зарубежных авторов, изучающих эффективность деятельности предприятий, следует отметить Питера Друкера, автора книги «Практика менеджмента» [3]. В своих работах Друкер подробно анализирует вопросы управления предприятием, включая эффективность и продуктивность. Майкл Портер, известный американский экономист, в своей книге «Конкурентное преимущество» [4] исследует факторы, влияющие на эффективность предприятий и стратегии их достижения.

Принципы и методы повышения эффективности деятельности предприятия являются важной составляющей успешного управления организацией. Они помогают оптимизировать процессы, улучшить результаты и достичь поставленных целей.

Рассмотрим основные принципы, которые используются при разработке методов повышения эффективности деятельности какой-либо организации:

- Системный подход. Принцип системного подхода подразумевает рассмотрение предприятия как взаимосвязанной системы, где изменения в одной части могут оказывать влияние на другие. Повышение эффективности требует анализа и оптимизации всех ключевых компонентов предприятия, включая процессы, ресурсы, структуру организации и взаимодействие с внешней средой.

- Ориентация на клиента. Важным принципом повышения эффективности является ориентация на клиента. Предприятие должно стремиться понять и удовлетворить потребности и ожидания своих клиентов. Это включает анализ рынка, изучение конкурентов, обратную связь от клиентов и постоянное совершенствование продуктов или услуг, чтобы соответствовать требованиям рынка.

- Непрерывное улучшение. Принцип непрерывного улучшения предполагает постоянное стремление к совершенствованию процессов, методов работы и использования ресурсов. Предприятие должно применять инструменты и методы улучшения, такие как Lean-производство, Six Sigma, Kaizen или др., для идентификации проблемных областей и внедрения изменений, которые приведут к повышению производительности и качества работы.

- Управление рисками. Принцип управления рисками подразумевает анализ и оценку потенциальных рисков, которые могут повлиять на достижение целей предприятия.

- Участие сотрудников. Принцип участия сотрудников подразумевает

вовлечение персонала в процессы улучшения и принятия решений.

- Использование информационных технологий. Принцип использования информационных технологий предполагает эффективное использование современных инструментов и систем для автоматизации и оптимизации бизнес-процессов.

- Инновации и развитие. Принцип инноваций и развития подразумевает стремление предприятия к постоянному поиску новых идей, технологий, методов и подходов.

Эти основные принципы повышения эффективности деятельности предприятия образуют основу для успешного управления и достижения поставленных целей.

Основные методы повышения эффективности деятельности предприятия включают:

- Оптимизация бизнес-процессов. Этот метод направлен на анализ и улучшение ключевых процессов, которые влияют на достижение целей предприятия.

- Внедрение современных технологий и систем. Использование современных информационных технологий и систем управления помогает автоматизировать и оптимизировать бизнес-процессы, улучшить доступность и аналитические возможности данных, сократить время выполнения задач и улучшить точность операций. Внедрение систем управления ресурсами предприятия (ERP), систем

управления отношениями с клиентами (CRM) и других инструментов позволяет сократить издержки, повысить эффективность и обеспечить лучшее взаимодействие с клиентами и партнёрами.

- Обучение и развитие персонала. Квалифицированный и мотивированный персонал играет важную роль в повышении эффективности предприятия. Обучение и развитие персонала позволяют улучшить их знания и навыки, адаптироваться к новым технологиям и методам работы, развивать лидерские качества и творческий потенциал.

- Мотивация и стимулирование сотрудников. Создание мотивационной среды и системы стимулирования позволяет привлечь, удержать и мотивировать квалифицированных сотрудников.

- Установление чётких целей и мониторинг их достижения. Чёткое определение целей и их систематический мониторинг являются неотъемлемой частью повышения эффективности предприятия.

- Управление изменениями. В современном бизнес-окружении изменения являются неизбежными. Предприятие должно активно управлять процессом изменений.

Принципы и методы повышения эффективности деятельности предприятия взаимосвязаны и взаимодополняют друг друга. Их успешная реализация требует системного подхода, адаптации к конкретным особенностям предприятия и постоянного мониторинга результатов.

Комбинация этих принципов и методов позволяет предприятию достигать высокой эффективности и конкурентоспособности на рынке.

Одним из важных аспектов успешного применения принципов и методов повышения эффективности являются лидерство и поддержка высшего руководства.

Кроме того, важно учесть специфические особенности отрасли и конкретного предприятия при выборе и применении принципов и методов повышения эффективности. Каждая отрасль имеет свои уникальные характеристики, требования и вызовы, и подходы к повышению эффективности должны быть адаптированы под них.

Наконец, стоит отметить, что эффективность деятельности предприятия является динамическим процессом. Она требует постоянного обновления и совершенствования. Предприятие должно быть готово к изменениям во внешней среде, реагировать на новые тенденции и технологии, а также стремиться к инновациям и развитию.

Таким образом, принципы и методы повышения эффективности деятельности предприятия играют ключевую роль в достижении успешных результатов. Они способствуют оптимизации процессов, улучшению качества, снижению затрат и увеличению конкурентоспособности. Однако важно применять эти принципы и методы с учетом специфики и особенностей каждого предприятия, а также быть готовыми к непрерывному развитию и изменениям в бизнес-среде.

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## **ХАРАКТЕРИСТИКА ЖЕЛУДОЧНО-КИШЕЧНОГО СИНДРОМА ПРИ ЖЕЛЕЗОДЕФИЦИТНОЙ АНЕМИИ У ДЕВОЧЕК ПОДРОСТКОВ 12-14 ЛЕТ**

*Аннотация. К группе риска по развитию анемии относятся дети, женщины репродуктивного возраста и лица пожилого возраста. Особую группу среди них составляют девочки пубертатного возраста, имеющих высокий потенциал формирования различных органических дисфункций. Целью настоящей работы явилось изучение клинико – анамнестических особенностей желудочно-кишечного синдрома железодефицитной анемии у девочек подростков.*

*Объект и методы исследования: девочки-подростки в возрасте 12-14 лет (n=177) узбекской популяции, соответственно с ЛДЖ (45), ЖДА легкой степени (56) и средней степени тяжести (25), и контрольная группа (51). Для проведения исследования использовались цельная кровь и сыворотка девочек-подростков с ЖДА. Были использованы общеклинические, инструментальные, биохимические и статистические методы.*

*Результаты и выводы: желудочно-кишечный синдром по частоте у девочек ЛДЖ не отличается от такового контрольной группы ( $p > 0,05$ ) и увеличен при I и II степени тяжести ЖДА (26,0% и 38,0%,  $p < 0,001$ ). У девочек с ЖДА I и II степенью частота симптомов ЖКТ распределялся в убывающем порядке следующим образом: глистная инвазия (50,6%), пониженный аппетит (48,9%), тошнота, рвота (46,9%), извращение обоняния (40,7%), извращение аппетита (40,7%), сидеропенический глоссит (24,7%), извращение вкуса (22,2%), сидеропеническая дисфагия (18,5%), хейлоз (18,5%), хронические заболевания желудка (17,8%), кишечника (16,0%), печени и желчевыводящих путей (12,3%). Ключевые слова: железодефицитная анемия, подростки девочки, желудочно-кишечный синдром.*

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## **CHARACTERISTICS OF GASTROINTESTINAL SYNDROME IN IRON DEFICIENCY ANEMIA IN ADOLESCENT GIRLS 12-14 YEARS OLD**

*Abstract: The risk group for the development of anemia includes children, women of reproductive age and the elderly. A special group among them are girls of pubertal age, who have a high potential for the formation of various organ dysfunctions.*

*The purpose of this work was to study the clinical and anamnestic features of the gastrointestinal syndrome of iron deficiency anemia in adolescent girls.*

*Object and methods of research: teenage girls aged 12-14 years (n=177) of the Uzbek population, respectively, with LID (45), mild IDA (56) and moderate severity (25), and a control group (51). The study used whole blood and serum from adolescent girls with IDA. General clinical, instrumental, biochemical and statistical methods were used.*

*Results and conclusions: gastrointestinal syndrome in frequency in girls LID does not differ from that in the control group ( $p>0.05$ ) and is increased in grades I and II severity of IDA (26.0% and 38.0%,  $p<0.001$ ). In girls with IDA degrees I and II, the frequency of gastrointestinal symptoms was distributed in descending order as follows: helminthic infestation (50.6%), decreased appetite (48.9%), nausea, vomiting (46.9%), perversion of smell (40.7%), perversion of appetite (40.7%), sideropenic glossitis (24.7%), perversion of taste (22.2%), sideropenic dysphagia (18.5%), cheilosis (18.5%), chronic diseases of the stomach (17.8%), intestines (16.0%), liver and biliary tract (12.3%).*

*Key words: iron deficiency anemia, teenage girls, gastrointestinal syndrome.*

**Введение:** Полноценность соматического здоровья детей пубертатного возраста связано с формированием репродуктивных функций, фертильностью, детородным прогнозом и уровнем здоровья будущего потомства, определяющих государственный потенциал и развитие страны в будущем. В последние десятилетия не выявлена тенденция к снижению частоты железодефицитных анемий (ЖДА) и проблема остается одной из серьезных тем для обсуждения в службах здравоохранения многих регионов мира [1, 2, 3, 4, 5, 6, 7]. По данным Всемирной Организации Здравоохранения в любой популяции на каждого человека, страдающего ЖДА, приходится три с недостаточностью железа (ЛДЖ). К группе риска по развитию анемии относятся дети, женщины репродуктивного возраста и

лица пожилого возраста. Особую группу среди них составляют девочки пубертатного возраста, имеющих высокий потенциал формирования различных органных дисфункций. На сегодняшний день недостаточность железа является наиболее частой проблемой питания в мире, проявляя свое воздействие на здоровье популяции, влияет на умственный потенциал нации, интеллект и физическое развитие детей, репродуктивное и соматическое здоровье. Интерес к изучению железодефицитных состояний возрастает в связи с тем, что нарушение обмена железа на ранних этапах развития может служить индикатором состояния здоровья ребенка и критерием своевременной диагностики развития отклонений в процессе роста и развития детей.

**Целью** настоящей работы явилось изучение клинико – анамнестических особенностей желудочно кишечного синдрома железодефицитной анемии у девочек подростков.

**Объект и методы исследования:** девочки-подростки в возрасте 12-14 лет (n=177) узбекской популяции, соответственно с ЛДЖ (45), ЖДА легкой степени (56) и средней степени тяжести (25), и контрольная группа (51). Для проведения исследования использовались цельная кровь и сыворотка девочек-подростков с ЖДА. Были использованы общеклинические, инструментальные, биохимические и статистические методы

**Результаты:** В табл. 1. представлены данные о частоте клинических синдромов ДЖ у обследованных девочек.

**Таблица 1**

**Частота встречаемости желудочно-кишечного синдрома у девочек – подростков в зависимости от степени тяжести ДЖ (%)**

№	Характеристика желудочно-кишечного синдрома	Контрольная группа (n=51)		ЛДЖ (n=45)		ЖДА I ст (n=56)		ЖДА II ст (n=25)	
		абс	%	абс	%	абс	%	абс	%
1	2	3	4	5	6	7	8	9	10
1	Хейлоз (ангулярный стоматит, «заеда»)	2	3,92	4	8,9*	9	16,1	6	24,0
2	Сидеропенический глоссит (снижение вкусовых ощущений, покалывание, жжение, чувство распирания на кончике языка, усиливающееся после горячей, кислой и соляной пищи, атрофия сосочков языка - Гюнтеровский глоссит)	4	7,84	6	13,3*	12	21,4	8	32,0
3	Сидеропеническая дисфагия (сухость во рту, нарушение глотания сухой и твердой пищи (синдром Пламера – Виньсона)	-	-	2	4,44*	10	17,9	5	20,0

4	Извращение вкуса: поедание извести, мела, земли, гюльвата льда, замо-роженных продуктов (паго-фагия), сырых круп, теста, мяса (фарша), заварки и т.д.	4	7,84	6	13,3*	11	19,6	7	28,0
5	Извращение аппетита (при-страстие к соляной и острой пище, куртоб, хот-дога, жвачки, злоупотребление газированных напитков	9	17,6	15	33,3	21	37,5	12	48,0
6	Извращение обоняния (при-страстие к запахам бензина, керосина, мазута, выхлоп-ных газов автомашин, стро-ительных красок, ацетона, крема для обуви, лака для ногтей, свежескошенной травы, вспаханной земли	5	9,8	9	20,0*	21	37,5	12	48,0
7	Тошнота, рвота	4	7,84	5	11,1*	25	44,6	13	52,0
8	Пониженный аппетит	6	11,8	9	20,0*	21	37,6	18	60,0
9	Хронический гастрит (гипо- и анацидный)	3	5,88	4	8,9*	9	16,1	5	20,0
10	Хронический колит (диарея, запоры)	2	3,92	6	13,3*	7	12,5*	6	24,0
11	Хронические заболевания печени и желчевыводящих путей	1	1,96	-	-	6	10,7	4	16,0
12	Глистная инвазия	11	21,6	15	33,3*	23	41,1	18	72,0
	леченная	6	11,8	10	22,2	14	25,0	10	40,0
	нелеченная	5	9,8	5	11,1	9	16,1	8	32,0
Частота, f		-	9,10	-	16,4		26,0		38,0
Чувствительность		-	-	-	58,3		75,0		66,7
Специфичность		-	-	-	54,8		52,9		75,4

Примечание: данные статистически достоверны ( $p < 0,05 - 0,001$ ), по сравнению с контрольной группой, кроме отмеченных знаком \*

Как видно из данных таблицы 1, данный синдром по частоте у девочек ЛДЖ не отличается от такового контрольной группы ( $p > 0,05$ ) и увеличен при I и II степени тяжести ЖДА (26,0% и 38,0%,  $p < 0,001$ ). Как свидетельствуют данные таблицы 1, у девочек с ЖДА I и II степенью частота симптомов ЖКТ распределялся в убывающем порядке следующим образом: глистная инвазия (50,6%), пониженный аппетит (48,9%), тошнота, рвота (46,9%), извращение обоняния (40,7%), извращение аппетита (40,7%), сидеропенический глоссит (24,7%), извращение вкуса (22,2%), сидеропеническая дисфагия (18,5%), хейлоз (18,5%), хронические заболевания желудка (17,8%), кишечника (16,0%), печени и желчевыводящих путей (12,3%).

В столь большом распространении желудочно-кишечного синдрома у девочек с ДЖ в возрасте 12-14 лет видимо имеет значение частота нарушения и погрешности питания. Так, школьницы на вопрос: «Любите ли Вы мясные блюда?» ответили утвердительно лишь в 84,5%, 80,0%, 66,1% и 64,0% случаях, соответственно в группах контроль, ЛДЖ, ЖДА I и II степени тяжести анемии ( $p > 0,05$ ,  $p < 0,013$ ,  $p < 0,026$ ).

По мере усиления дефицита железа среди них увеличивалось количество девочек, употребляющих часто мучные блюда, нежели мясные (66,7%, 71,1%, 82,1% и 88,0%,  $p > 0,05$ ,  $p < 0,033$ ,  $p < 0,016$ ). Школьницы в этом возрасте редко употребляли овощные (3,92%, 6,66%, 3,57%,  $p > 0,05$ ), молочные блюда (5,88%, 8,89%, 8,93% и 10%,  $p > 0,05$ ). Употребляющие фрукты не менее 2 раза в неделю среди них существенно снижены как при ЛДЖ (13,3%,  $p < 0,033$ ), Так и при ЖДА I и II степени (16,1% и 8,0%,  $p < 0,05$ ,  $p < 0,024$ ), чем в контрольной группе (27,5%). Такова динамика количества девочек по употреблению овощей (11,1%, 12,5% и 8,0%,  $p > 0,05$ ,  $p > 0,05$ ,  $p < 0,037$ ), чем их сверстниц в контрольной группе (23,5%). Среди девочек, больных с ЛДЖ и ЖДА I и II степени тяжести, увеличена доля нерегулярно питающихся (22,2%, 33,4% и 44,0%,  $p > 0,05$ ,  $p < 0,026$ ,  $p < 0,008$ ), чем в контрольной группе (17,6%). Среди девочек контрольной группы регулярно завтракающих детей составили от 49,0% до 72,5% в неделю, когда как их доля среди девочек I степени ЖДА (41,1-44,6%) и II степени ЖДА (28,0-38,0%) значительно уменьшена ( $p < 0,05-0,01$ ). Девочки с ЖДА I и II степени редко употребляли колбасу, сосиски в завтраке (12,0%, 8,93% против контрольного 23,5%,  $p < 0,05$ ,  $p < 0,01$ ), сливочное масло, кремы для завтрака (33,3%, 14,3% и 12,0% против контрольного 47,1%,  $p < 0,05-p < 0,001$ ).

Среди девочек с ЖДА I и II степени ничтожно малое количество детей (12,5% и 8,0%), употребляющие молочные продукты на завтрак (молоко, сметана, творог, каймак и др.), правда их доля не высока и среди детей контрольной группы (13,7%) и ЛДЖ (17,8%,  $p > 0,05$ ). Дети школьного возраста не зависимо от тяжести ДЖ мало употребляют на завтрак продукты питания, таких как варенье, мёд, яйцо, печенье и сухофрукты (1,96-8,9%). Нами установлено, что среди девочек с ЛДЖ, ЖДА I и II степени тяжести существенно уменьшена доля детей, употребляющих горячий обед с блюдами (63,3%, 51,8% и 40,0%,  $p > 0,05$ ,  $p < 0,05$ ,  $p < 0,01$ ), чем в контроле (74,5%), выше количество детей, обедающих в сухоматку (37,8%, 32,1% и 28,0% против 19,6 контрольного,  $p < 0,01$ ,  $p < 0,05$ ) и употребляющие различные fast - food (13,3%, 16,1% и 20,0% против 5,9% контрольного,  $p > 0,05$ ,  $p < 0,05$ ). Среди больных девочек с ЛДЖ и ЖДА I и II степенью тяжести уменьшена доля детей, употребляющих горячий ужин (66,7%, 64,3% и 56,0%,  $p < 0,05$ ,  $p < 0,01$ ) чем в контроле (86,3%).

Обобщая клинику желудочно-кишечного синдрома при ЖДА I и II степени у девочек в возрасте 12-14 лет необходимо отметить высокую распространенность среди них глистной инвазии (41,1% и 72,0%,  $p < 0,01$  и



$p < 0,001$ ) чем в контрольной группе (21,6%) и ЛДЖ (33,3%). Причем как показывают данные таблицы 3.5, 1/2 школьниц с диагнозом глистная инвазия не проходили курс дегельминтизации. Очевидно, что высокая частота клинических симптомов ДЖ, таких как пониженный аппетит, тошнота, рвота у этих девочек отчасти зависит от высокой частоты глистной инвазии, а также в связи с распространенностью других хронических заболеваний желудка, кишечника, печени и желчевыводящих путей. Эти факторы, видимо, способствуют развитию конкурентной (по дефициту витаминов группы В) дефицитной анемии при глистной инвазии, а также синдром мальабсорбции, мальдигестии при хронических заболеваниях ЖКТ [6, 8,]. Нам представляется, что часть других симптомов таких, как хейлоз (трещины в углах рта, заеды), а также признаки сидеропенического глоссита (21,4% и 32,0%,  $p < 0,01$ ) также связаны с сочетанным нарушением баланса железа и витаминов, микроэлементов [6,8].

Как показано в табл 1 симптомы ЖКТ, характерные для ДЖ, такие как сидеропеническая дисфагия (синдром Пламера-Виньсона), а также нарушение вкуса и обоняния (*pica chloratica*, *pica sideropenica*), более специфичны чем другие симптомы (тошнота, рвота нарушение аппетита). В наших исследованиях для девочек в возрасте 11-14 лет с ДЖ были более характерны извращение обоняния соответственно при I и II степени ЖДА (37,5% и 48,0% против 9,8% и 20,0% у детей в контрольной группе и ЛДЖ,  $p < 0,001$ ), чем частота сидеропенической дисфагии (17,9% и 20,0%,  $p < 0,012$ ,  $p < 0,022$  и извращение вкуса у обследованных девочек (19,6% и 28,0,  $p < 0,057$ ,  $p < 0,012$ ). Мы также различаем извращение аппетита (пристрастие к солёной и острой пище, употребление куртопа, ход-дога, злоупотребление газированными напитками, которые с высокой частотой встречались среди девочек с ЖДА I и II степени тяжести (37,5% и 48,0% против контрольного 17,6%, 17,6%,  $p < 0,01$ ,  $p < 0,001$ ). Данный симптом также увеличен и среди девочек с ЛДЖ (33,3%,  $p < 0,038$ ).

**Выводы:** таким образом, желудочно-кишечный синдром занимает второе место по распространенности среди симптоматики ДЖ и характеризуется полиморфными симптомами нарушения функции желудка, кишечника, печени и желчевыводящих путей. В столь большом распространении желудочно-кишечного синдрома у девочек с ДЖ в возрасте 12-14 лет видимо имеет значение частота нарушения и погрешности питания. Немаловажное значение имеет большое распространённость глистной инвазии.

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## **ХАРАКТЕР ТРАНСФОРМАЦИИ КЛИНИКИ ЖЕЛЕЗОДЕФИЦИТНЫХ АНЕМИИ У ДЕВОЧЕК ПУБЕРТАТНОГО ПЕРИОДА**

*Аннотация. К группе риска по развитию анемии относятся дети, женщины репродуктивного возраста и лица пожилого возраста. Особую группу среди них составляют девочки пубертатного возраста, имеющих высокий потенциал формирования различных органических дисфункций.*

*Целью настоящей работы явилось изучение клинико – анамнестических особенностей динамики и трансформации железодефицитной анемии у девочек подростков.*

*Объект и методы исследования: девочки-подростки в возрасте 12-14 лет (n=177) узбекской популяции, соответственно с ЛДЖ (45), ЖДА легкой степени (56) и средней степени тяжести (25), и контрольная группа (51). Для проведения исследования использовались цельная кровь и сыворотка девочек-подростков с ЖДА. Были использованы общеклинические, инструментальные, биохимические и статистические методы.*

*Результаты: Из данных нашего материала следует, что клиническая картина ЖДА у школьниц несколько трансформировалась и среди них стали преобладать синдром снижения иммунологической резистентности организма и желудочно-кишечный синдром, их частота по сравнению выше указанных авторов увеличивалась более чем в 2 – 5 раза. Клиническая картина железодефицитной анемии у девочек-подростков отличается полиморфностью симптомов и синдромов, что свидетельствует о вовлечении в патологический процесс многих органов и систем. Делается вывод о необходимости обновления данных по клинической симптоматике ДЖ у девочек – подростков в зависимости от возраста, пола и регионов проживания.*

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## **THE NATURE OF TRANSFORMATION IN THE CLINIC OF IRON DEFICIENCY ANEMIA IN GIRLS PUBERTY**

*Annotation. The risk group for the development of anemia includes children, women of reproductive age and the elderly. A special group among them are girls of pubertal age, who have a high potential for the formation of various organ dysfunctions.*

*The purpose of this work was to study the clinical and anamnestic features of the dynamics and transformation of iron deficiency anemia in adolescent girls. Object and methods of the study: adolescent girls aged 12-14 years (n=177) of the Uzbek population, respectively, with LAD (45), mild IDA (56) and moderate (25), and the control group (51). For the study, whole blood and serum of adolescent girls with IDA were used. General clinical, instrumental, biochemical and statistical methods were used.*

*Results: From the data of our material it follows that the clinical picture of IDA in schoolgirls was somewhat transformed and among them the syndrome of decreased immunological resistance of the body and gastrointestinal syndrome began to prevail, their frequency increased by more than 2-5 times compared to the above authors. The clinical picture of iron deficiency anemia in adolescent girls is characterized by polymorphism of symptoms and syndromes, which indicates the involvement of many organs and systems in the pathological process. It is concluded that it is necessary to update data on the clinical symptoms of ID in adolescent girls, depending on age, gender and regions of residence.*

**Введение:** Полноценность соматического здоровья детей пубертатного возраста связано с формированием репродуктивных функций, фертильностью, детородным прогнозом и уровнем здоровья будущего потомства, определяющих государственный потенциал и развитие страны в будущем. В последние десятилетия не выявлена тенденция к снижению частоты железодефицитных анемий (ЖДА) и проблема остается одной из серьезных тем для обсуждения в службах здравоохранения многих регионов мира [1, 2, 3, 4, 5, 6, 7]. Клиника ЖДА у детей различного возраста изучена и описана подробно многими исследователями [4]. Однако, как показывает анализ литературных источников, клиника ЖДА у детей зависит от многих причин – возраста, пола, семейной отягощенности по анемии, региона проживания, степени и стадии дефицита железа и мн.др., что требует периодического обновления информации по данному вопросу. Судя по данным обзора литературы, клинико-анамнестические особенности ЖДА у девочек-подростков изучены недостаточно. Если учесть увязимость данного периода по развитию ЖДА, из-за несоответствия между запасами железа в организме, его поступлением, с одной стороны, и потреблением в железе, с другой [4, 5, 7, 8], то важность изучения данного вопроса становится очевидной.

Как известно, ЖДА у подростков-девочек в течение длительного периода называлась ювенильным хлорозом из-за выраженной бледности кожных покровов с зеленоватым оттенком [91; С.304, 147; Р. 105-107].

Однако в последующем выяснилось, что клиника ЖДА у детей, как у взрослых многогранна и включает множественные синдромы или симптомокомплексы [8].

Некоторые авторы разделяют симптоматику ЖДА у детей на пять больших групп: эпителиальный, желудочно-кишечный, сердечно-сосудистый, астено-вегетативный и иммунологический синдромы [1,2]. С учетом лабильности ВНС и показателей сердечно-сосудистой системы, а также высокой поражаемости ЖКТ у школьников из-за частого нарушения режима питания нам представляется наиболее приемлемым последний вариант синдромального подхода при описании клиники ЖДА у девочек-подростков. При этом необходимо отметить, что чувствительность и специфичность этих синдромов при диагностике ЖДА у детей окончательно не установлены, т.к., часть их симптомов встречается и среди здоровых детей.

**Целью** настоящей работы явилось изучение клинико – анамнестических особенностей динамики и трансформации железодефицитной анемии у девочек подростков.

**Объект и методы исследования:** девочки-подростки в возрасте 12-14 лет (n=177) узбекской популяции, соответственно с ЛДЖ (45), ЖДА легкой степени (56) и средней степени тяжести (25), и контрольная группа (51). Для проведения исследования использовались цельная кровь и сыворотка девочек-подростков с ЖДА. Были использованы общеклинические, инструментальные, биохимические и статистические методы

**Результаты** наших исследований показывают, что ведущее место среди них составляет иммунологический синдром, который обнаруживался соответственно при I и II степени тяжести ЖДА (28,6% и 44,0%,  $p < 0,003$ ,  $p < 0,001$ ), что намного раз превышает данные детей контрольной группы (7,84%) и ЛДЖ (11,1%). На втором месте по распространенности явился желудочно-кишечный синдром (26,0% и 38,0% против 9,1% и 16,4%,  $p > 0,05$ ,  $p < 0,001$ ). Далее по убывающему порядку синдром ДЖ распределился соответственно – сердечно-сосудистый (22,9% и 37,7% против 4,8% и 7,8%,  $p < 0,002$ ,  $p < 0,001$ ), астеновегетативный (21,1% и 30,1% против 5,51% и 7,5%,  $p < 0,006$ ,  $p < 0,002$ ) и эпителиальный синдром (18,6% и 30,9% против 6,54% и 12,2%,  $p < 0,026$ ,  $p < 0,002$ ).

По данным М.Г.Ганиевой (1995), более двадцати лет назад в клинике ЖДА у детей школьного возраста преобладали эпителиальный (93,6%), сердечно-сосудистый (53,4%) и астено-вегетативный синдромы (48,2%), чем иммунологический (40,2%) и желудочно-кишечный синдромы (12,8%).

Из данных нашего исследования становится очевидным, что клиника ЖДА у девочек школьного возраста несколько трансформировалась и среди них стали преобладать иммунологический и желудочно-кишечные синдромы, их частота по сравнению с цитированными авторами

увеличилась в 2-3 раза. Современные школьницы в возрасте 12-14 лет по частоте сердечно-сосудистого (53,4 против 60,6%,  $p > 0,05$ ) и астено-вегетативного синдрома (51,2% против 48,2%,  $p > 0,05$ ) не отличаются от данных предыдущего исследования. Между тем, среди них существенно реже стал встречаться эпителиальный синдром (49,5% против 93,6%,  $p < 0,01$ ). Иммунологический синдром, по мнению исследователей, это собирательное понятие, которое включает в себе группу часто болеющих (более 4 раза в год) детей с респираторными и другими вирусными инфекциями, а также обострение хронических очагов инфекции [8]. Многочисленные работы показывают, что при ДЖ резистентность детей к инфекциям снижается, что обусловлено нарушением обмена железосодержащих ферментов (цитохром, цитохромоксидаза, пероксидаза, каталаза) особенно лейкоцитов (миелопероксидаза, кетонные белки, флавопротеидные ферменты), снижение секреторного Ig A, пропердина, лизоцима и многих иммунологических защитных сил организма.

**Выводы:** Из данных нашего материала следует, что клиническая картина ЖДА у школьниц несколько трансформировалась и среди них стали преобладать синдром снижения иммунологической резистентности организма и желудочно-кишечный синдром, их частота по сравнению выше указанных авторов увеличивалась более чем в 2 – 5 раза.

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## **СОЦИАЛЬНАЯ АДАПТИРОВАННОСТЬ ПОДРОСТКОВ**

*Аннотация. Целью работы являлось изучение состояния вегетативной устойчивости и социальной адаптированности у подростков 14–15 лет, проживающих в промышленном городе и сельской местности. Наиболее низкие показатели социальной адаптированности отмечены у городских школьниц по сравнению с сельскими. Наиболее высокие показатели социальной адаптированности зарегистрированы у сельских школьников. Наиболее низкие показатели вегетативной устойчивости выявлены у юношей гимназистов. Однако наиболее высокие показатели вегетативной устойчивости отмечены у школьниц, проживающих в сельской местности.*

*Подростки с низкими показателями вегетативной устойчивости и социальной адаптированности должны пройти дополнительное обследование*

*и в зависимости от его результатов получить курс реабилитации с участием врача, психолога и педагога.*

*Ключевые слова: адаптированность, подростки, дезадаптация, вегетативная устойчивость.*

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## **SOCIAL ADAPTATION OF ADOLESCENTS**

*Abstract. The purpose of the work was to study the state of vegetative stability and social adaptation in adolescents 14–15 years old living in an industrial city and rural areas. The lowest rates of social adaptation were observed among urban schoolgirls compared to rural ones. The highest rates of social adaptation were recorded among rural schoolchildren. The lowest rates of vegetative stability were found in male gymnasium students. However, the highest rates of vegetative resistance were observed among schoolgirls living in rural areas.*

*Adolescents with low levels of vegetative stability and social adaptation should undergo additional examination and depending on its results, receive a rehabilitation course with the participation of a doctor, psychologist and teacher.*

*Key words: adaptability, adolescents, maladaptation, vegetative stability.*

Школьный период жизни рассматривается большинством авторов как совершенно особый, исключительно важный период жизни человека, оказывающий большое влияние на формирование организма, психической деятельности и личностных черт индивидуума (1,2,3).

Интенсивные процессы созревания отдельных биологических систем организма в сочетании с возрастанием уровня социально-психологических требований, предъявляемых к учащимся, повышают возможность психотравматизации личности. Эти биологические и психологические особенности накладывают определенный отпечаток на распространенность и клинические проявления дезадаптационных (кризисных) нарушений в данной возрастной группе (4,5,6). Все это создает условия для возможного формирования и проявления аномально-личностных характеристик, генезис которых не исключает дальнейшую клинику пограничных состояний и повышает вероятность возникновения нервно-психических и соматических заболеваний. Данные последних лет свидетельствуют, что лишь 16% детей школьного возраста могут быть признаны психически полностью здоровыми. В школьные учреждения поступает до 30% детей, имеющих те или иные отклонения в психической и соматической сферах, а заканчивают школу, с подобными отклонениями уже 80%.

В свою очередь не последнее место в процессе успешного освоения школьной программы занимает вегетативная устойчивость, то есть способность организма достаточно стабильно и адекватно реагировать на различные воздействия внешней среды, в том числе школьной. Вегетативная дисфункция – одно из наиболее распространенных состояний, частота которой, по данным разных авторов, в подростковой популяции достигает 65–72%. Известно, что вегетативная дисфункция приводит к снижению качества жизни подростка, ограничивает возможность выбора профессии и военной службы, негативно влияет на репродуктивное здоровье, ведет к формированию соматоформных расстройств у взрослых (7,8).

**Цель работы:** изучение состояния вегетативной устойчивости и социальной адаптированности у подростков 14–15 лет, проживающих в промышленном городе и сельской местности.

#### **Материалы и методы исследования**

Проведено анкетирование 100 подростков (50 девушек и 50 юношей), проживающих в условиях города Андижан и области, обучающихся в общеобразовательной школе и гимназии, и 89 подростков (60 девушек и 29 юношей) из сельской местности – учащихся общеобразовательной школы в

возрасте 14–15 лет. Показатели вегетативной устойчивости и социальной адаптированности согласно методике подразделяли на хорошие, нормальные и низкие. Оценка вегетативной устойчивости и социальной адаптированности проводилась с использованием двухфакторного опросника, утвержденного Европейским союзом школьной и университетской гигиены и медицины, адаптированного к региональным условиям (Арзикулов А.Ш., 2005). Опросник дает возможность оценить уровень социальной адаптированности (коммуникабельность, самооценка, лидерство и др.) и вегетативной устойчивости (лабильность системы терморегуляции, вестибулярного аппарата, переносимость неприятных ощущений, тревожность и др.) подростков в возрасте 12–18 лет.

Алгоритм оценки вегетативной устойчивости. Сумма баллов по тесту вегетативной устойчивости складывается из отрицательных ответов на вопросы № 2 и № 9 и положительных ответов на остальные вопросы данного теста. Все прочие варианты ответов не учитывались.

Алгоритм оценки социальной адаптированности. Сумма баллов складывается из положительных ответов на утверждения № 1, 3, 5, 6, 7, 10, 12, 15, 17, 19 и отрицательных ответов на остальные утверждения этого теста (№ 2, 4, 8, 9, 11, 13, 14, 16, 18, 20).

Другие варианты ответов не учитывались.

### **Результаты исследования и их обсуждение**

Анализ полученных данных свидетельствует, что у 16% подростков имеет место низкая социальная адаптированность, а у 12% – низкие показатели вегетативной устойчивости. При этом 4% подростков, проживающих в городе, одновременно имели низкие показатели социальной адаптированности и вегетативной устойчивости. При рассмотрении состояния социальной адаптированности и вегетативной устойчивости у подростков в зависимости от пола и места проживания получены следующие показатели. Достоверно наибольший процент хороших показателей социальной адаптированности выявлен среди юношей, проживающих в сельской местности. В то же время пятая часть городских девушек и сельских юношей имеют низкие показатели социальной адаптированности свидетельство того, что эти подростки испытывают трудности в общении со сверстниками, учителями и родителями.

По данным А.А. Баранова, такие подростки могут быть и застенчивыми, и развязными, и хулиганами. Все они нуждаются в дополнительном обследовании психолога. При анализе состояния вегетативной устойчивости установлено, что достоверно наибольшее количество подростков с хорошей вегетативной устойчивостью наблюдалось среди сельских подростков (юношей и девушек). Сельских юношей с низкой вегетативной устойчивостью было достоверно меньше по сравнению с городскими подростками. Подобную картину, с нашей точки

зрения, объясняют условия проживания детей, а именно менее выраженные негативные воздействия на центральную нервную систему подростков в сельской местности (электромагнитные излучения, транспорт, более высокие школьные нагрузки, экология). Показатели социальной адаптированности и

вегетативной устойчивости подростков имели различия в зависимости от типа образовательного учреждения. Показатели хорошей вегетативной устойчивости и социальной адаптированности у подростков, обучающихся в сельской школе, были значительно выше, чем у их сверстников в городской школе и гимназии. Городские жители испытывают большее негативное влияние неблагоприятных факторов окружающей среды (электромагнитные излучения, транспорт, более высокие школьные нагрузки, внеучебная занятость, экология). Процент подростков с низкой вегетативной устойчивостью и социальной адаптированностью не зависел от типа учебного заведения.

Наихудшие показатели социальной адаптированности выявлены у городских школьниц они имели наименьший процент хорошей и достоверно больший процент низкой социальной адаптированности. Эти результаты свидетельствуют о большей социальной дезадаптированности городских девушек. Для объяснения причин этого явления требуется дополнительный углубленный анализ их психологического статуса. У сельских юношей по сравнению с городскими школьниками и гимназистами преобладали показатели хорошей и низкой социальной адаптированности и невысокие значения нормальной.

Показатели нормальной вегетативной устойчивости среди различных групп юношей были стабильными – 56,5–57,9%. В то же время наиболее низкая вегетативная устойчивость была зарегистрирована у юношей гимназистов, проживающих в условиях промышленного города.

Показатель низкой вегетативной устойчивости у девушек, обучающихся в городской и сельской школах, был в два раза выше, чем у гимназисток.

Показатели хорошей вегетативной устойчивости были выше у девушек, проживающих в сельской местности. Подростки с низкими значениями вегетативной устойчивости имеют большое число жалоб различного характера, считают себя больными. Среди них больше часто болеющих. По своим индивидуальным особенностям и состоянию здоровья они плохо переносят повышенные нагрузки любого характера, имеют сниженные адаптивные возможности, нуждаются в дополнительном обследовании врача психолога и оздоровлении. В результате проведенного нами исследования установлена зависимость вегетативной устойчивости и социальной адаптированности подростков от их пола, места жительства и типа учебного заведения. Подростки с низкой вегетативной устойчивостью и социальной адаптированностью требуют дополнительного обследования,

а в дальнейшем – прохождения курса реабилитации с участием, если это необходимо, участкового врача, невролога, кардиолога, психолога и педагога.

### **ВЫВОДЫ**

1. Экспресс метод определения вегетативной устойчивости и социальной адаптированности у подростков с помощью двухфакторного опросника высокоинформативен и заслуживает широкого внедрения в практику школьного врача, психолога.

2. Различия вегетативной устойчивости и социальной адаптированности зависят от пола, типа обучения и места проживания.

3. Наиболее низкие показатели социальной адаптированности отмечены у городских школьниц по сравнению с сельскими. Наиболее высокие показатели социальной адаптированности зарегистрированы у сельских школьников. Наиболее низкие показатели вегетативной устойчивости выявлены у юношей гимназистов. Однако наиболее высокие показатели вегетативной устойчивости отмечены у школьниц, проживающих в сельской местности.

4. Подростки с низкими показателями вегетативной устойчивости и социальной адаптированности должны пройти дополнительное обследование и в зависимости от его результатов получить курс реабилитации с участием врача, психолога и педагога.

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## **ВЗАИМОСВЯЗЬ РОСТОВЫХ ФАКТОРОВ С РАЗВИТИЕМ ЖЕЛЕЗОДЕФИЦИТНЫХ АНЕМИЙ У ДЕВОЧЕК-ПОДРОСТКОВ**

*Аннотация. Объект и предмет исследования. Исходным материалом для определения количества школьников г. Андижан послужил списочный состав (алфавитный) учащихся в возрасте 7-14 лет (12000). Из этого числа учащихся с помощью таблицы Бродфера отобраны 1200 детей в возрасте 7-14 лет (10% ная выборка).*

*Методы исследования: эпидемиологический, клинический, биохимический и статистический.*

*Цель исследования. Изучение влияния ростовых факторов у девочек в возрасте 12-14 лет на формирование железodefицитных анемий.*

*Результаты и обсуждения. Результаты наших исследований свидетельствуют, что у девочек в возрасте 12-14 лет при развитии ЛДЖ по сравнению контрольной группой отмечается увеличение длины тела ( $p < 0,05$ ), длины рук ( $p < 0,05$ ) и ног ( $p < 0,05$ ), а также относительной поверхности тела – ОПТ ( $p < 0,001$ ). Анализируя эти данные можно заметить, что первоначальным инициатором ускоренного роста девочек с ЛДЖ в длину, по-видимому является фактор тканевой гипоксии (гемовая ещё не развилась). По мнению ряда исследователей, за обмен тканевого железа ответственны два фактора: запасы его в организме и эритропоэтическая активность костного мозга. Показано, что гипоксический стресс, активируя эритропоэтическую активность макрофагов костного мозга, почек, одновременно повышает выработку ангиотензина II, простогландинов E, J2 и аденозина, как известно, являются естественными стимуляторами активации симпатического отдела ВНС, вызывающие в свою очередь периферическую вазоконстрикцию и тахикардию.*

*Ключевые слова: железodefицитная анемия, физическое развитие, подростки.*



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## **RELATIONSHIP OF GROWTH FACTORS WITH THE DEVELOPMENT OF IRON DEFICIENCY ANEMIA IN GIRLS TEENAGERS**

*Abstract.*

*Object and subject of research. The source material for determining the number of schoolchildren in Andijan was the list (alphabetical) of students aged 7-14 years (12,000). From this number of students, using the Broadfer table, 1200 children aged 7-14 years were selected (10% sample). Research methods: epidemiological, clinical, biochemical and statistical.*

*Purpose of the study. Study of the influence of growth factors in girls aged 12-14 years on the formation of iron deficiency anemia.*

*Results and discussions. The results of our studies indicate that in girls aged 12-14 years with the development of LID, compared with the control group, there is an increase in body length ( $p<0.05$ ), arm length ( $p<0.05$ ) and legs ( $p<0.05$ ), as well as the relative body surface area – RSA ( $p<0.001$ ). Analyzing these data, it can be noted that the initial initiator of the accelerated growth of girls with LHD in length is apparently the factor of tissue hypoxia (heme hypoxia has not yet developed). According to a number of researchers, two factors are responsible for the exchange of tissue iron: its reserves in the body and the erythropoietic activity of the bone marrow. It has been shown that hypoxic stress, activating the erythropoietic activity of bone marrow and kidney macrophages, simultaneously increases the production of angiotensin II, prostaglandins E, J2 and adenosine, which are known to be natural stimulators of activation of the sympathetic division of the ANS, which in turn cause peripheral vasoconstriction and tachycardia.*

*Key words: iron deficiency anemia, physical development, adolescents.*

Актуальность данной проблемы определяется не только широким ее распространением, но также в связи с развитием при ней полисистемных нарушений, дистрофией внутренних органов, что часто ассоциируется с низкой физической и умственной дееспособностью взрослых и детей [1,2, 3, 4]. Разнообразие анемий, легкость их возникновения и тяжесть течения среди групп высокого риска, к которым относятся и дети подросткового периода, делает необходимым проводить периодическое обновление данных по изучению частоты и закономерности развития ЖДА в зависимости от географических, социально-бытовых условий проживания,

возрастно-полового характера, темпа физического и полового развития детей-подростков (5,6,7).

Решение этих вопросов позволило бы конкретизировать методы диспансерного наблюдения за подростками с дефицитом железа и разработать более эффективные методы профилактики и терапии по гемоглобиновому оздоровлению школьников с ЖДА на ее ранних стадиях (8,9,10,11).

**Объект и предмет исследования.** Исходным материалом для определения количества школьников г. Андижан послужил списочный состав (алфавитный) учащихся в возрасте 7-14 лет (12000). Из этого числа учащихся с помощью таблицы Бродфера отобраны 1200 детей в возрасте 7-14 лет (10% ная выборка).

**Методы исследования:** эпидемиологический, клинический, биохимический и статистический.

**Цель исследования.**

Изучение влияния ростовых факторов у девочек в возрасте 12-14 лет на формирование железодефицитных анемий.

**Результаты и обсуждения.**

Результаты наших исследований свидетельствуют, что у девочек в возрасте 12-14 лет при развитии ЛДЖ по сравнению контрольной группой отмечается увеличение длины тела ( $p < 0,05$ ), длины рук ( $p < 0,05$ ) и ног ( $p < 0,05$ ), а также относительной поверхности тела – ОПТ ( $p < 0,001$ ). Анализируя эти данные можно заметить, что первоначальным инициатором ускоренного роста девочек с ЛДЖ в длину, по-видимому является фактор тканевой гипоксии (гемовая ещё не развилась). По мнению ряда исследователей, за обмен тканевого железа ответственны два фактора: запасы его в организме и эритропоэтическая активность костного мозга. Показано, что гипоксический стресс, активируя эритропоэтическую активность макрофагов костного мозга, почек, одновременно повышает выработку ангиотензина II, простагландинов E, J2 и аденозина, как известно, являются естественными стимуляторами активации симпатического отдела ВНС, вызывающие в свою очередь периферическую вазоконстрикцию и тахикардию. Хотя возрастание сердечного выброса является первичной компенсаторной реакцией при уменьшении кислородтранспортной емкости артериальной крови, изменение микроциркуляции может значительно влиять на транспорт кислорода на уровне тканей.

Таблица 1.

**Основные показатели антропометрии девочек подростков в зависимости от степени тяжести дефицита железа (M±m)**

№	Показатели антропометрии	Контроль группа n=51	ЛДЖ n=45	P <sub>1-2</sub>	ЖДА I ст n=56	P <sub>1-3</sub>	P <sub>2-3</sub>
1	Масса тела, кг	41,3±1,12	43,6±1,21	Н.д.	44,8 ±0,87	<0,05	Н.д.
2	Длина тела, см	149,6±0,7 6	153,2±0,7 1	<0,05	153,5±0,8 6	<0,01	Н.д.
3	Окружность головы, см	54,4 ±0,14	54,7 ±0,17	Н.д.	55,1 ±0,20	<0,01	<0,05
4	Окружность груди, см	74,0 ±0,96	75,2 ±1,01	Н.д.	75,1 ±0,73	Н.д.	Н.д.
5	Длина руки, см	65,1 ±0,74	68,0 ±0,44	<0,001	68,3 ±0,47	<0,001	Н.д.
6	Длина ноги, см	78,1 ±0,54	79,5 ±0,37	<0,05	81,1 ±0,58	<0,001	<0,05
7	АПТ (м <sup>2</sup> )	1,31 ±0,02	1,36 ±0,02	Н.д.	1,38 ±0,02	<0,05	Н.д.
8	ОПТ (см <sup>2</sup> /кг)	418,8±17, 6	649,4±8,7 6	<0,001	537,5±9,0 3	<0,001	<0,001

**Примечание:** 1. АПТ и ОПТ соответственно абсолютная и относительная поверхность тела

2. Н.д. – статистически недостоверно (p>0,05)

Таблица 2.

**Основные показатели антропометрии девочек подростков в зависимости от степени тяжести дефицита железа (M±m)**

№	Показатели антропометрии	Контроль группа n=51	ЖДА II ст n=25	P <sub>1-4</sub>	P <sub>2-4</sub>	P <sub>3-4</sub>
1	Масса тела, кг	41,3±1,12	47,3 ±0,63	<0,001	<0,05	<0,05
2	Длина тела, см	149,6±0,76	155,4 ±0,86	<0,001	<0,05	Н.д.
3	Окружность головы, см	54,4 ±0,14	55,3 ±0,20	<0,001	<0,05	Н.д.

4	Окружность груди, см	74,0 ±0,96	78,2 ±0,66	<0,001	<0,05	<0,01
5	Длина руки, см	65,1 ±0,74	69,3 ±0,44	<0,001	<0,05	Н.д.
6	Длина ноги, см	78,1 ±0,54	81,9 ±0,43	<0,001	<0,01	Н.д.
7	АПТ (м <sup>2</sup> )	1,31 ±0,02	1,43 ±0,014	<0,001	<0,01	<0,05
8	ОПТ (см <sup>2</sup> /кг)	418,8±17,6	520,6 ±8,34	<0,001	<0,001	Н.д.

**Примечание:** 1. АПТ и ОПТ соответственно абсолютная и относительная поверхность тела

2. Н.д. – статистически недостоверно ( $p > 0,05$ )

При этом нами выявлено явление – увеличение ОПТ девочек при стадии ЛДЖ, соответствует известному закону поверхности, согласно которому интенсивность энергетического обмена гомойотермных организмов, пропорционально возрастает по мере увеличения их относительной поверхности тела. Известно, что конечности ребенка из-за наличия в них шунтово-противоточной системы теплообмена, играют важную роль в его росте в длину и ширину, т.е., периферический вазоспазм способствует усиленному росту в длину (в том числе конечностей), а при вазодилатации происходит интенсивный рост в ширину и соответственно этому усиленная прибавка массы тела и дифференцировка тканей. Необходимо иметь в виду и то, что значительный прирост массы тела сопровождается и увеличением числа закладываемых ядер окостенения, когда происходит окончательное формирование основных очагов медуллярного кроветворения в губчатом веществе скелета, преимущественно в плоских костях и позвонках. Нами выявленная морфометрическая ситуация у девочек с ЛДЖ, характеризующаяся интенсивным ростом в длину, и сочетающаяся с длиннорукостью и длинноногостью, подтверждает вышеуказанную физиологическую закономерность с одной лишь разницей, что сдвиги происходят в более ранние сроки (12-14 лет), а не в период наиболее интенсивного роста и созревания (15-17 лет), т.е., во время второго пубертатного скачка. Как видно из данных таблицы 1. у обследованных девочек с ЖДА I степени наряду с высокими значениями длины тела, рук, ног по сравнению с контрольной группой также увеличена масса тела ( $p < 0,05$ ), окружность головы, АПТ ( $p < 0,01$ ), а ОПТ по сравнению с девочками с ЛДЖ снижалась ( $p < 0,001$ ).

При II степени тяжести ЖДА у девочек изученные показатели антропометрии по сравнению с их сверстниками контрольной группы и ЛДЖ существенно увеличены ( $p < 0,001$ ), однако их различия при сравнении I и II степени ЖДА становятся не существенными ( $p > 0,05$ ), кроме массы тела ( $p < 0,05$ ), окружности груди ( $p < 0,01$ ) и АПТ ( $< 0,05$ ). При

корреляционном анализе содержания сывороточного железа и масс тела девочек ( $r = +0,457 \pm 0,02$ ,  $p < 0,05$ ) и АПТ ( $r = +0,427 \pm 0,04$ ,  $p < 0,01$ ), обнаруживается тесная положительная связь, а с длиной тела – такая связь отсутствовала ( $r = +0,285 \pm 0,13$ ,  $p > 0,05$ ). Более того, эта связь при усиленной прибавке массы тела ( $r = +0,619$ ) и АПТ ( $r = +0,622$ ) становится более тесной. Эти данные свидетельствуют о том, что усиленный прирост массы тела и опосредованное ею увеличение АПТ является компенсаторной морфометрической реакцией для сохранения запасов железа, что уменьшается при усиленном их росте в длину.

В связи с этим нам представляется, что преждевременный, усиленный рост девочек в длину (при ЛДЖ), как ускоренный ход конвейера на заводе, может сопровождаться большей вероятностью «ошибки сбора» из-за диссонанса роста и дифференцировки организма девочек и явиться причиной гипоксической «альтерации». Эти факторы у девочек с ЖДА II степени тяжести могут быть первопричинами нереализации максимально возможного роста в длину (низкий рост в зрелом возрасте), из-за укорочения срока пубертатного спурта (скачка), привести к более раннему усиленному росту в ширину, т.к., масса тела (у них масса, окружность груди и АПТ увеличены), что видимо, способствует раннему половому созреванию [486 142]. В литературе есть указания на то, что наступление первой менструации наблюдается у девочек при достижении определенной массы тела, независимо от условий, в которых они находились.

Показано, что с появлением первой менструации у девочек интенсивность роста в длину резко замедляется.

В период полового созревания эстрогены совместно с андрогенами ответственны за созревание костей скелета и появление вторичных половых признаков, при этом эстрогены обладают более выраженной способностью стимулировать созревание, а андрогены – рост костей скелета. В связи с этим можно предположить о том, что в стадии ЛДЖ, более выражено влияние андрогенов, чем эстрогенов на половое развитие девочек.

**Выводы:** Таким образом, результаты исследования антропометрических индексов, свидетельствующие о возрастных сдвигах взаимосвязи МТ, ДТ и ОГК у девочек в возрасте 12-14 лет с различными степенями ДЖ значительно изменены. Это у девочек при развитии ЛДЖ проявляется усиленным ростом в длину, приводящие к уменьшению МТ и жировотложения в грудной клетке (индекс Кетле, Эрисмана). При развитии манифестных форм ДЖ (ЖДА), особенно её II степень тяжести у девочек наблюдается усиленная прибавка в МТ (индекс Кетле) и последняя сочетается с увеличением жировотложения на грудной клетке и замедлением темпа их роста в длину (индекс Пинье и «стении»). При этом уровень сывороточного железа положительно коррелирует с индексом Кетле ( $r = +0,481 \pm 0,14$ ) и отрицательно с индексом Пинье ( $r = -0,432 \pm 0,11$ ).

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## **ФИНАНСОВАЯ БЕЗОПАСНОСТЬ ОРГАНИЗАЦИИ: ПОНЯТИЕ, ФАКТОРЫ И УГРОЗЫ**

*Аннотация. Финансовая безопасность является ключевой составляющей экономической безопасности организации. Она играет важную роль в эффективном управлении компанией, обеспечении резервов роста и своевременной диагностике существующих проблем. В статье затрагивается тема содержания финансовой безопасности организации. Рассмотрены и проанализированы подходы разных авторов к определению «финансовой безопасности». Выявлены основные факторы и угрозы финансовой безопасности.*

*Ключевые слова: финансовая безопасность, экономическая безопасность, стратегия, факторы, угрозы, финансовая устойчивость.*

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## **FINANCIAL SECURITY OF AN ORGANIZATION: CONCEPT, FACTORS AND THREATS**

*Abstract. Financial security is a key component of the economic security of an organization. It plays an important role in the effective management of the company, providing growth reserves and timely diagnosis of existing problems. The article touches on the topic of the content of the financial security of an organization. The approaches of various authors to the definition of “financial security” are considered and analyzed. The main factors and threats to financial security are identified.*

*Keywords: financial security, economic security, strategy, factors, threats, financial stability.*

Понятие «финансовая безопасность» относительно новое определение для российской практики хозяйствования и единого мнения по ее обеспечению в настоящее время нет. Если рассматривать финансовую безопасность в составе экономической безопасности, то можно заметить,

что изменения в любой сфере деятельности организации как внешние, так и внутренние, повлекут за собой определенное воздействие на финансовую составляющую. Поэтому можно, сделать вывод, что финансовая безопасность является ключевой частью экономической безопасности любого предприятия. В связи с нарастающими рисками возникновения кризиса или банкротства организациям необходима разработка эффективной системы управления финансовой безопасностью.

На сегодняшний день существуют различные подходы к пониманию сущности понятия «финансовая безопасность». Определения различных авторов представлены на рисунке 1 [1,2,3,4].

ПОДХОДЫ К ПОНИМАНИЮ СУЩНОСТИ ПОНЯТИЯ "ФИНАНСОВАЯ БЕЗОПАСНОСТЬ"	АВТОР	ПОНЯТИЕ
	Папехин Р.С.	Финансовая безопасность компании - комплексное понятие, отражающее такое состояние финансов, при котором предприятие способно стабильно развиваться, сохраняя свою финансовую безопасности в условиях дополнительного риска
	Воробьева М.А.	Финансовая безопасность - финансовое состояние, характеризующееся сбалансированностью и качеством совокупности финансовых инструментов; устойчивостью к внутренним и внешним угрозам; способностью финансовой системы компании обеспечить реализацию его финансовых интересов и, тем самым, обеспечить развитие всей финансовой системы
	Никитская Е.Ф.	финансовой сферы предприятия, гарантирует способность предприятия эффективно формировать, сберегать от обесщечения и использовать финансовые ресурсы для обеспечения экономического развития и обслуживания
	Бланк И.А.	Финансовая безопасность - способность компании самостоятельно разрабатывать и проводить финансовую стратегию в соответствии с целями общей корпоративной стратегии, в условиях неопределенной и конкурентной среды

Рис. 1. Подходы к пониманию сущности понятия «финансовая безопасность компании» различных авторов

Анализируя представленные подходы, можно сделать вывод, что финансовая безопасность говорит об эффективности использования ресурсов компании и об эффективности построения ее финансовой стратегии, поведения, что позволяет компании быть стабильной. Вместе с тем, авторы неоднозначно трактуют в своих определениях характерные составляющие финансовой безопасности. У Папехина Р.С это комплексное понятие, Воробьева М.А и Никитская Е.Ф. основной упор ставят на качество финансовых инструментов и ресурсов, а Бланк И.А акцентирует внимание на необходимости разработки финансовой стратегии компании.

Финансовая безопасность включает следующие компоненты: финансовые интересы, угрозы и уровень финансовой безопасности (рис. 2) [5].

Финансовые интересы – потребность в финансовых ресурсах для осуществления финансовой деятельности предприятия на всех этапах его развития. Угрозы представляют собой влияние внешних и внутренних факторов, которые оказывают воздействие на деятельность организации.

Такие авторы как Е.В. Цупко и О.Н. Бадаева связывают понятие угрозы финансовой безопасности с совокупностью условий и факторов, которые влекут за собой возможность и намерение нанесения ущерба финансовым интересам предприятия [6].

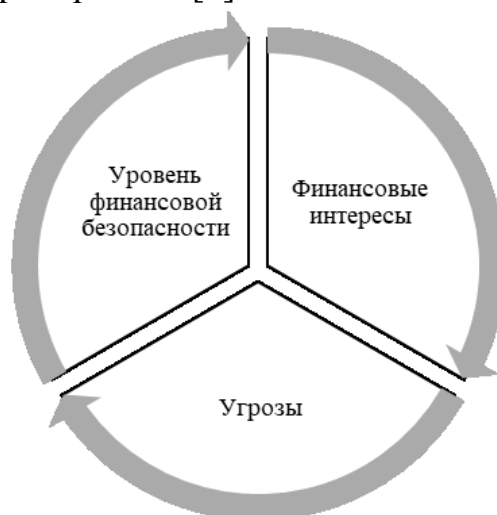


Рис. 2. Компоненты финансовой безопасности компании

Среди факторов финансовой безопасности выделяются:

– общеэкономические факторы, связанные с состоянием инфляции и безработицы, объемом национального дохода, уровнем доходов населения, налоговой системой, регулирующим законодательством);

– рыночные факторы, связанные с емкостью внутреннего рынка; активностью фондового рынка; монополизмом на рынке; состоянием валютного рынка;

– операционные факторы, связанные со структурой текущих затрат, уровнем использования основных средств, диверсифицированным ассортиментом продукции;

– инвестиционные факторы, связанные с состоянием фондового портфеля, уровнем объемов прибыли по реализованным проектам; качеством инвестиционного менеджмента;

– финансовые факторы, связанные со структурой активов, соотношением собственного и заемного капитала [7].

Внешние и внутренние угрозы, по мнению Н.В. Якушина, представлены на рис. 3 [8]. Анализ внешних и внутренних угроз позволяет разрабатывать комплексный подход к формированию финансовой безопасности организации, обеспечивая защиту ее финансовых интересов [8].

Уровень финансовой безопасности подразумевает способность минимизировать угрозы или полностью устранить их воздействие.

В целом, по мнению А.М. Мугаллимова и Ю.Я. Рахматуллина, финансовая безопасность предприятия предполагает наличие определенного резерва для обеспечения стабильного положения на рынке при воздействии неблагоприятных факторов внешней среды [5].

По мнению С.С. Еремеевой, «финансовая безопасность выражает определенное финансовое состояние компании, а также возможность противостоять различным угрозам, которые могли бы подорвать ее деятельность» [9, С. 18].

Целью обеспечения финансовой безопасности является разработка необходимых мер для стабильного роста в краткосрочной перспективе (стабилизация финансового состояния предприятия) и долгосрочной перспективе (сохранение важнейших финансовых пропорций) [9]. Задачи финансовой безопасности представлены на рисунке 4 [9].

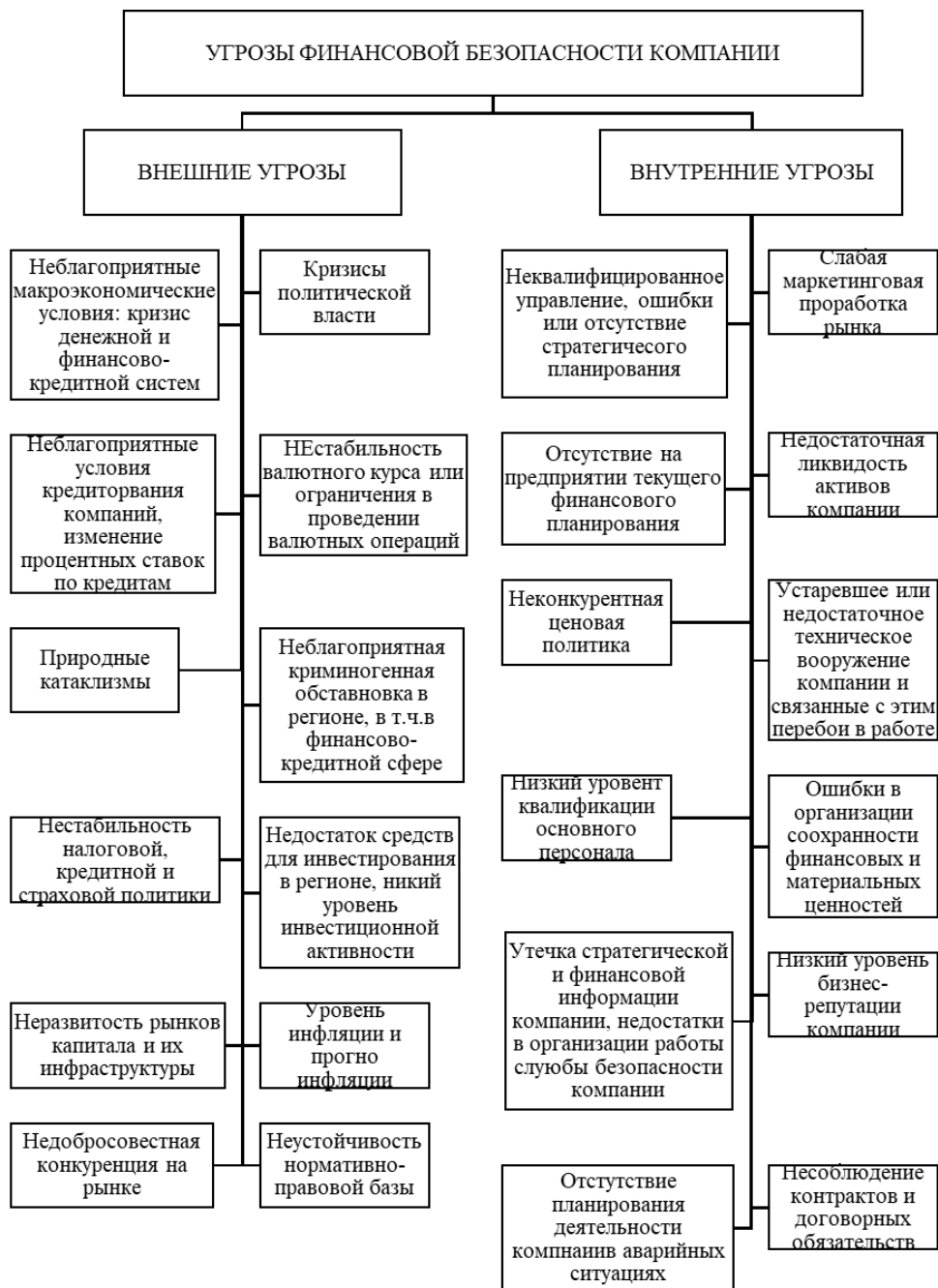


Рис. 3. Внешние и внутренние угрозы финансовой безопасности

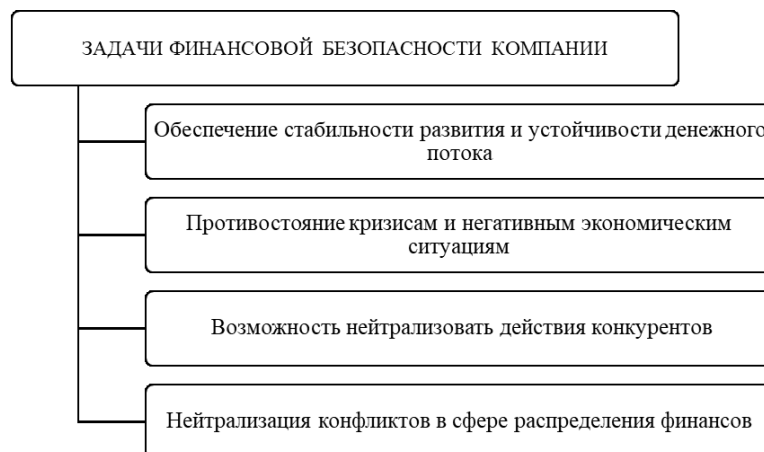


Рис. 4. Задачи финансовой безопасности компании

Анализируя различные точки зрения на сущность финансовой безопасности, можно сделать вывод, что финансовая безопасность является ключевой составляющей экономической безопасности организации и отождествляет финансовую устойчивость. При этом экономическая безопасность включает в себя также информационную, кадровую, технико-технологическую, правовую и экологическую безопасности, которые также имеют воздействие на финансовую составляющую.

Таким образом, автор связывает финансовую безопасность со способностью компании «отстаивать» свое положение на рынке в конкурентной среде, нивелируя возникающие угрозы, и обладать достаточными финансовыми ресурсами для обеспечения финансовой устойчивости компании.

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## **ТЕОРЕТИЧЕСКИЕ И ОРГАНИЗАЦИОННО ПРАВОВЫЕ ОСНОВЫ СУДЕБНО-БУХГАЛТЕРСКОЙ ЭКСПЕРТИЗЫ**

*Аннотация. В статье исследованы этапы навыков правильного выбора подвида судебно-бухгалтерских экспертиз для правильного разрешения дела в правоприменительной практике.*

*Ключевые слова: судебная экспертиза, учет, аудит, процессы управления, правовые основы.*

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## **THEORETICAL AND ORGANIZATIONAL LEGAL FRAMEWORKS OF FORENSIC ACCOUNTING**

*Annotation. The article examines the stages of skills in correctly choosing a subtype of forensic accounting examinations for the correct resolution of a case in law enforcement practice.*

*Key words: forensic examination, accounting, audit, management processes, legal framework.*

Судебно-бухгалтерская экспертиза в своем историческом развитии прошла длительный период становления и развития, обусловленный совершенствованием бухгалтерского учета, финансового контроля, развитием деятельности экономических субъектов и правовой системы Узбекистана.

Судебная экспертиза в числе других видов доказательств появилась в различных видах российского судопроизводства значительно позже, чем в других европейских странах (Франции, Германии, Швеции, Голландии, Бельгии и др.).

В России во второй половине XIX в. в процессе реформы судопроизводства встречаются одни из первых упоминаний о производстве различных судебных экспертиз. Так, в ст. 326 Устава уголовного судопроизводства (1864 г.) указывалось, что в качестве экспертов приглашаются различные специалисты, и среди сведущих лиц назывались и казначеи.

После судебной реформы 1864 г. в России была создана новая система судопроизводства и законодательства, подобная той, которая сложилась в западноевропейских странах (процессы стали открытыми, их могли посещать все желающие, появились институты присяжных и адвокатов). Экономические преступления исследовал суд. Если раньше суд обращался к услугам экспертов-бухгалтеров в исключительных случаях, то теперь это стало нормой. Судьи стали уже не в состоянии самостоятельно разобраться во всех деталях экономического преступления. Они были вынуждены обращаться к специалистам и приглашать их в качестве экспертов<sup>[1]</sup>.

В конце XIX — начале XX в. бухгалтерский учет и бухгалтерская экспертиза получают широкое признание в обществе. Производство бухгалтерской экспертизы требовало квалифицированных работников, и в стране дважды (в 1889 г. и 1910 г.) делались попытки создать институт присяжных бухгалтеров — профессиональное объединение счетных работников. Однако нестабильная политическая и экономическая обстановка в стране не позволила реализовать усилия по созданию новых институтов финансового контроля.

Новая экономическая политика и возникновение новых хозяйственных связей потребовали формирования специализированных организаций, основной целью которых было проведение судебно-бухгалтерских экспертиз.

В первые годы Советской власти был проведен ряд мероприятий по организации судебно-бухгалтерской экспертизы, и ее выводы начали широко использоваться при решении уголовных и гражданских дел своим декретом о судах предоставил судам право при рассмотрении гражданских дел, которые требуют специальных знаний, по своему решению привлекать в свой состав специалистов с правом соглашательного голоса.

В 1920 г. происходит становление профессиональных организаций работников учета, одной из задач которых было проведение судебно-бухгалтерских экспертиз. Данными организациями контролировалось проведение экспертиз и обобщение положительного опыта их проведения. Техническое товарищество был образован Отдел учета хозяйственной деятельности, включавший в себя бюро бухгалтерской экспертизы и консультаций, которое обслуживало суды и арбитражи.

Положительную роль в повышении качества судебно-бухгалтерской экспертизы и росте квалификации кадров экспертов-бухгалтеров сыграли объединения работников учета при губернских отделах профсоюза советских и торговых служащих. Одной из задач этих объединений стало проведение судебнобухгалтерских экспертиз.

Негативно на работу Института влияло то обстоятельство, что большинство его сотрудников работали совместителями в других научно-исследовательских учреждениях и не всегда могли выполнять задания

правоохранительных органов по проведению судебно-бухгалтерских экспертиз.

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**НЕДОСТАТОЧНОСТЬ РАЗРАБОТКИ МЕТОДОЛОГИИ  
ЭКСПЕРТНЫХ ИССЛЕДОВАНИЙ В СУДЕБНО-БУХГАЛТЕРСКОЙ  
ЭКСПЕРТИЗЕ**

*Аннотация. В статье исследованы этапы навыков правильного выбора подвида судебно-бухгалтерских экспертиз для правильного разрешения дела в правоприменительной практике.*

*Ключевые слова: судебная экспертиза, учет, аудит, процессы управления, правовые основы.*

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**LACK OF DEVELOPMENT OF EXPERT RESEARCH  
METHODOLOGY IN FORENSIC ACCOUNTING**

*Annotation. The article examines the stages of skills in correctly choosing a subtype of forensic accounting examinations for the correct resolution of a case in law enforcement practice.*

*Key words: forensic examination, accounting, audit, management processes, legal framework.*

Существенным недостатком указанной формы продаж страховых продуктов является возможное несоблюдение посредником своих обязательств по перечислению необходимого объема страховых премий (взносов).

Реформирование экономики Республики Узбекистан, постоянно происходящие преобразования в деятельности хозяйствующих субъектов объективно предполагают обязательность взаимодействия рыночных процессов и их государственного регулирования. Использование экономических экспертиз, в том числе и бухгалтерской экспертизы, как одного из источников доказательств либо гармонизации общественных и государственных интересов, либо выявления экономических правонарушений имеет неоправданно односторонний и ограниченный характер.

Недостаточность разработки методологии экспертных исследований достоверности учетной и отчетной информации существенно сужает сферу



применения бухгалтерской экспертизы, ограничивая её обеспечением потребностей судебно-следственных органов. Принципиально новые экономические и правовые отношения между хозяйствующими субъектами различных организационно-правовых форм и государственными органами, появление новых способов сокрытия прибыли, искажения бухгалтерской финансовой отчетности обуславливают необходимость всестороннего исследования теоретических, методологических и организационно-методических аспектов проведения бухгалтерских экспертиз.

Потребность в проведении подобных исследований вызвана происходящими модификациями традиционных форм ведения бухгалтерского учета, формированием современной отечественной концепции бухгалтерского учета, принципов сбора и обработки учетной и отчетной информации, ориентированных на рекомендации МСФО. Эти обстоятельства в значительной степени меняют информационную, теоретическую и организационную базу экспертного бухгалтерского исследования. Изучение существующей методологии и практики проведения бухгалтерских экспертиз с позиций информационного обеспечения защиты экономических интересов участников хозяйственного процесса в рыночной экономике позволяет констатировать несоответствие между содержанием ранее разработанных методических документов, которые по ряду причин в современных условиях не могут быть использованы в качестве основополагающих, и официальными требованиями к качеству и срокам проведения экспертных бухгалтерских исследований, направленных на получение объективной, понятной всем пользователям, надежной и исчерпывающей аналитической информации, прежде всего, о финансовых результатах.

Автором предпринята попытка исследования методологии и обобщения практики бухгалтерской экспертизы как источника получения доказательств не только при выявлении правонарушений экономической направленности, но и для оценки состояния бухгалтерского учета организации.

Очевидная актуальность проблематики, незавершенность теоретических разработок в области бухгалтерской экспертизы и практическая востребованность научного обоснования методик ее проведения, способствующих выявлению негативных тенденций и принятию соответствующих решений по их устранению, обусловили выбор темы диссертационной работы, предмет, объект и ее содержание.

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## **АНАЛИЗ И ОЦЕНКА КАЧЕСТВА ПИТАНИЯ ДЕТЕЙ В ДОШКОЛЬНО-ОБРАЗОВАТЕЛЬНЫХ УЧРЕЖДЕНИЯХ**

*Аннотация. Анализ фактического питания дошкольников показывает, что рацион питания не соответствует физиологической норме, а в суточном рационе количество мяса и мясных, молока и молочных продуктов ниже нормы.*

*Ключевые слова. дошкольники, питание, нутриенты, суточный рацион, белки, жиры и углеводы.*

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## **ANALYSIS AND ASSESSMENT OF QUALITY OF CHILDREN'S NUTRITION IN PRESCHOOL INSTITUTIONS**

*Annotation. Analysis of the actual nutrition of preschoolers shows that the diet does not correspond to the physiological norm, and in the daily diet the amount of meat and meat, milk and dairy products is below normal.*

*Keywords: preschoolers, nutrition, nutrients, daily diet, proteins, fats and carbohydrates.*

**Актуальность проблемы.** Здоровое питание детей дошкольного возраста имеет не только медицинское значение как фактор сохранения

здоровья и развития ребенка. Но и как фактор, определяющий здоровье будущего поколения [1-3]. Организм ребенка отличается от взрослого бурным ростом и развитием, формированием органов и систем, увеличением мышечной массы, что определяет высокую потребность в пищевых веществах и энергии. Для питания детей и подростков имеет значение как проблема его недостаточности, в первую очередь общее недоедание или дефицит микронутриентов [4].

**Цель.** Анализ и оценка фактического питания детей Андижанской области в возрасте от 3 до 7 лет и выявление нарушения суточного рациона дошкольно-образовательных учреждений.

**Материалы и методы.** В работе использованы материалы выборочного обследования рациона питания детей в дошкольно-образовательных учреждениях Андижанской области №3 и 65 в период 2018-2019 гг. В связи с этим были изучены первичные материалы питания детей, полученных в соответствии с показателями, обозначенными в СанПиН 0348-2017 «Гигиенические требования к организации полноценного и безопасного питания в дошкольно-образовательных учреждениях Республики Узбекистан». СанПиН 0348-2017. Исследования проводились 2 раза в год (в зимне-весеннем и летне-осеннем периодах), в течение 7 дней. Были рассчитаны среднесуточные показатели количества продуктов питания, употребляемые детьми. В дневном рационе количество основных пищевых веществ и энергетическая ценность рационов рассчитана по таблицам химического состава пищевых продуктов,

Для статистической обработки результатов опроса использовался стандартный пакет прикладных программ Excel.

**Результаты и обсуждения.** Анализ фактического питания детей, проживающих в Андижанской области и г. Андижана показывает, что в организованных дошкольно-образовательных учреждениях суточный рацион не соответствует физиологической норме питания, большинство потребляемых детьми продуктов ниже рекомендуемых норм питания на 55,5-87% в зависимости от сезона года. Исключением является потребление хлебобулочных изделий. Круп и картофеля, количества которых в рационе детей было на 53,5/62,8 ниже физиологической нормы питания для соответствующих поло-возрастных групп.

При оценке качества питания дошкольников не выявлено существенных различий среднестатистических показателей потребления детьми продуктов в разных дошкольных образовательных учреждениях, поэтому данные 2018-2019 гг рассмотрены нами в целом для всех исследованных ДООУ Андижанской области.

Таблица 1

Средние величины фактического потребления продуктов дошкольников от 3 до 7 лет Андижанской области и города Андижана (зима-весна)

Продукты	Физиологические нормы	Используемые продукты зима-весна, (г)	% к норме
Молоко и молочные продукты	548,0	338,0±20,55	66,6/ 61,1
		335,0±14,53	
Фрукты	168,0	90,8±4,58	61,1/ 60,2
		90,0±4,71	
Овощи	200,0	130,0±6,77	54,0/ 65,8
		125,0±6,52	
Хлеб и мучные изделия	183,0	135,0±5,99	53,5/ 62,8
		128,0±6,76	
Картошка	150,0	70,0±3,45	65/ 70
		85,0±3,89	
Мясные продукты	100,0	67,0±3,38	62,5/ 67,5
		65,0±3,18	
Сахар	50,0	33,0±1,72	73,7/ 74,8
		32,0±2,04	
Рыба	25,0	0	0
		0	
Растительное масло	8,0	8,0±0,37	46,6/ 60,0
		7,0±0,43	
Животный жир	20,0	15,7±0,70	56,6/ 64
		14,7±0,81	
Яйцо (шт)	0,5	0,1±0,01	67/ 63,6
		1,0±0,05	

Отсюда следует, что дефицит потребления детьми продуктов не зависит от пола и ни от сезона года. И хотя в летне-осенний сезон года потребления таких продуктов, как картофель, овощи и бахчевые, фрукты и ягоды достоверно возрастает, абсолютное количество продуктов кроме хлебопродуктов и картофеля не достигает физиологической нормы.

Расчеты рационов питания детей показали, что дефицит в потреблении мяса и мясных продуктов составляет в зимне-весенний период до 37,5/32,5%, а в летне-осенний отмечается дефицит 33,3%, молока и молочных продуктов.

Таблица 2

Средние величины фактического потребления продуктов дошкольников от 3 до 7 лет Андижанской области и города Андижана(лето-осень)

Продукты	Физиологические нормы	Используемые продуктылето-осень, (г)	% к норме
Молоко и молочные продукты	548,0	335,2±12,13	66,6/ 61,1
		330,0±17.95	
Фрукты	168,0	110,6±4,07	61,1/ 60,2
		105,6±5.74	
Овощи	200,0	140,0±7,27	54,0/ 65,8
		135,0±6.29	
Хлеб и мучныеизделия	183,0	137,0±7,59	53,5/ 62,8
		130,0±6.26	
Картошка	150,0	90,0±4,72	65/70
		96,0±4.76	
Мясные продукты	100,0	63,6±2,90	62,5/ 67,5
		66,6±2.77	
Сахар	50,0	31,7±1,59	73,7/ 74,8
		8,0±0.50	
Рыба	25,0	0	0
		0	
Растительное масло	8,0	8,0±0,41	46,6/ 60,0
		8,0±0.50	
Животный жир	20,0	13,4±0,74	56,6/ 64
		15,4±0.67	
Яйцо ( шт)	0,5	0,1±0,004	67/ 63,6
		1,0±0.034	

Необходимо указать что в рационе питания дошкольных образовательных учреждений Андижанской области фактически отсутствуют рыба и рыбные продукты. Рыба имеет особое значение для обеспечения роста и развития детей, а также поступления в организм Омега 3-Омега 6, витаминов А, D и группы В, йода и селена.

При дефиците основных питательных веществ в суточном рационе относительно физиологических норм, суточная энергетическая ценность восполняется повышенным потреблением хлеба и хлебобулочных изделий - на 43,3%. Анализ суточного рациона показывает, что, хотя дефицит основных продуктов в суточном рационе как, мяса, молока, рыбы, но с большим количеством употребления хлебобулочных изделий среднесуточная энергетическая ценность рационов составляла 1881 ккал.

Было установлено, что недостаточное содержание общего белка в ежедневном рационе детей составляет 33,8–34,5%, а в летне-осенний период - 24–33%. Употребление растительных масел в зимне-весенний период - до



87,5%, летне-осенний-до100%. Избыток углеводов составляет 270–336г, 200–220г. Так, зимой-весной и летом-осенью углеводы потреблялись более чем на 56,6% от нормы. Недостаток минералов в летне-осенний период: кальций 30,5%, магний 22,5%, фосфор 20,6% и железо 46,7%. Количество микроэлемента йода тоже в недостаточном количестве нормы. А-48,3%, В<sub>1</sub> - 26,0%, В<sub>2</sub> - 34,7%, РР - 30,9% и С - 20,0%; Недостаток минеральных веществ в зимне-весенний период включает: кальций 24,7%, магний 25,4%, фосфор 15,9% и железо 43,7%. Дефицит витаминов зимнее-весенний период выглядит следующим образом: А - 52,2%, В<sub>1</sub> - 35,0%, В<sub>2</sub> - 34,3%, РР - 48,5% и С - 21,5%.

Таким образом, проведенные анализы качества питания дошкольников Андижанской области доказывают, что суточный рацион питания не соответствует физиологической норме питания, за счет этого у дошкольников увеличивается алиментарно-зависимые заболевания, как эндемический зуб, железодефицитная анемия, ожирение и нарушение роста-весового индекса массы тела и.т.д.

**Выводы:** Фактическое питание всех исследованных групп детей дошкольного возраста является не адекватным по физиологическим потребностям: на 20-30 % пониженное содержание белков; низкое на 40-50 грамм ниже нормы содержание питания жиров; несбалансированность основных пищевых веществ (1:0,4:6,5-1:0,4:6,5 вместо 1:1:4; дефицит витамина А (53%) и витамина С; недостаточное содержание в рационе кальций и фосфора (в 1,4-1,8 раз ниже нормы). Указанный дефицит пищевых веществ обусловлен низким уровнем потребления таких групп продуктов, как рыба и рыбопродукты (дефицит до 76%), мясо и мясопродукты (дефицит-до 62%), молоко и молочные продукты (дефицит-до 58%). После внесения коррекции в состав и количество продуктов, используемых в питании дошкольников, показатели качества питания улучшились, но в большинстве случаев не достигли требований физиологической нормы. В наибольшей степени это относится к низкому содержанию в питании детей жиров, витамина А, кальций и фосфора. Очень низкой количества содержания железа и йода.

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## **ЎЗБЕКИСТОНДА КИЧИК БИЗНЕС ВА ТАДБИРКОРЛИК ФАОЛИЯТИНИ ИННОВАЦИОН РИВОЖЛАНТИРИШДА ИНВЕСТИЦИЯЛАРДАН САМАРАЛИ ФОЙДАЛАНИШ**

*Аннотация. Мақолада Ўзбекистонда кичик бизнес ва тадбиркорлик фаолиятини ривожлантиришда инвестициялардан самарали фойдаланиш масалалари ёритилган. Шунингдек, бу борада мамлакатимизда амалга оширилаётган ишлар, инвестицияни жалб қилишнинг замонавий шакллари, асосий йўналишлари ва уларга берилаётган имтиёзлар тўғрисида баён этилган.*

*Калит сўзлар: тадбиркорлик, бизнес, кичик бизнес, инвестиция, инновация, самарадорлик.*

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## **O'ZBEKISTONDA KICHIK BUSINESS VA TADBIRKORLIK FAOLYATINI INNOVATION RIVOZHANTIRISHDA INVESTMENTALARDAN SAMARALI FOYDALANISH**

*Abstract. The article covers the issues of effective use of investments in the development of small business and entrepreneurship in Uzbekistan. Also, in this regard, the works carried out in our country, modern forms of investment attraction, main directions and the privileges given to them are described.*

*Key words: entrepreneurship, business, small business, investment, innovation, efficiency.*

Дунёда ривожланган ва ривожланаётган давлатларда кичик бизнес ва тадбиркорлик ижтимоий-иқтисодий ривожланишни белгилаб берувчи муҳим куч ҳисобланади. Шу боисдан, Ўзбекистон Республикаси иқтисодиётини юксалтириш учун инвестицияларни жалб қилиш, хусусан, кичик бизнес ва тадбиркорлик соҳасида фаолият юритувчи хўжалик субъектларни замонавий техника ҳамда жиҳозлар билан таъминлаш, янги корхоналарни ташкил этиш, бозор талабига жавоб берадиган рақобатбардош ва экспортбоп маҳсулотлар ишлаб чиқариш бугунги куннинг асосий талабидир. Бу борада Президентимиз Ш.Мирзиёев ўзининг Олий Мажлисга Мурожаатномасида “Иқтисодиётни юқори суръатлар билан

ривожлантириш учун фаол инвестиция сиёсатини изчил давом эттириш зарур” деб таъкидлаб ўтганлар. Маълумот ўрнида фйтиш мумкинки,” 2022-2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида”ги Ўзбекистон Республикаси Президентининг фармони 26-мақсадида мамлакатда инвестиция муҳитини янада яхшилаш ва унинг жозибадорлигини ошириш, келгуси беш йилда 120 миллиард АҚШ доллари, жумладан, 70 миллиард доллархорижий инвестицияларни жалб этиш чораларини кўриш вазифалари белгиланган. Бундан кўриниб турибдики, кичик бизнес ва тадбиркорлик мамлакатимиз ижтимоий-иқтисодий ривожланишининг муҳим драйверларидан бирига айланмоқда. Шу қаторда, иқтисодиётни модернизациялаш шароитида кичик бизнес ва тадбиркорликни янада ривожлантириш, уни молиявий қўллаб-қувватлаш чора-тадбирларига Ўзбекистон ҳукумати иқтисодий сиёсатининг устувор йўналиши сифатида алоҳида эътибор қаратиб келмоқда. Таъкидлаш жоизки, кичик бизнес субъектлари фаолиятини янада ривожлантириш бевосита уларнинг ишлаб чиқариш жараёнини техник ва технологик жиҳатдан қайта қуроллантиришга боғлиқ.

Бу эса, уларнинг инвестицион харажатларини молиялаш амалиётини такомиллаштириш заруриятини юзага келтириб чиқаради. Кўриниб турибдики, Ўзбекистон Республикаси Президентининг фармонларида аҳолини тадбиркорлик фаолиятига кенгроқ ва фаол жалб этишга тўсқинлик қилувчи, биринчи навбатда, давлат органларининг тадбиркорлар билан мулоқот қилишнинг амалий ва шаффоф тизими мавжуд эмаслиги билан боғлиқ бўлган бир қанча салбий омиллар сақланаётганлигини кўрсатиб ўтиш мумкин.

Инвестицион жозибадорлик маълум бир инвестор томонидан инвестиция объектини баҳолашни назарда тутати ва инвестиция муҳити объектив характерга эга бўлиб ва субъективликни инкор қилади. Демак, инвестиция жозибадорлигини баҳолаш, инвесторларнинг мақсад ва имкониятларига боғлиқ бўлади, инвестиция муҳити эса инвестиция фаолияти ёки жараёнининг турли субъектлари учун доимий қийматдир. Сўнгги йилларда республикада инвестицияларни жалб қилиш ва бизнесни юритиш учун қулай муҳит яратиш, тадбиркорликни ривожлантириш, тадбиркорларнинг қонуний манфаатларини ҳимоя қилишнинг ҳуқуқий кафолатларини мустаҳкамлаш соҳасида кенг кўламли ишлар амалга оширилмоқда. Шу ўринда, солиқ тизими тубдан ислоҳ қилинди, рухсат берувчи ҳужжатларни олиш тартиби сезиларли даражада соддалаштирилди, тадбиркорлик субъектларининг молиявий-хўжалик фаолияти билан боғлиқ бўлмаган режали текширишлар бекор қилинди. Шу қаторда кичик бизнес субъектларига давлат дастурлари асосида имтиёзли кредитларнинг берилиши уларнинг инвестицион фаолиятини амалга оширишга қулай шароит яратмоқда.

Ўзбекистон Республикасида амалга оширилаётган чора-тадбирлар натижасида кичик бизнес субъектларининг ялпи ички маҳсулотдаги улуши 2020 йилда 60,5 фоизни ташкил этди, 2021 йилда бу кўрсаткич 65.4 фоизни ташкил этган.

Зеро, кичик бизнес бозор шароитида зарур ҳаракатчанликни таъминлайди, у энг катта товар ва хизматларни ишлаб чиқарувчи, энг катта иш берувчи, илмий ва технологик тараққиётнинг катализаторидир. Кичик бизнес субъектларига инвестиция жалб қилиш билан боғлиқ муаммоларни кўриб чиқиш, кичик бизнес ва тадбиркорликка қулай шарт-шароитлар яратиш, инвестициялардан самарали фойдаланиш ва самарадорлигини ошириш йўллари ишлаб чиқиш лозим. Бинобарин, саноат тармоқларига инвестицияларни жалб қилиш ҳажмини кўпайтириш лозим, чунки охириги йилларда кичик бизнес субъектларнинг саноатдаги улуши камайиб бормоқда. Умумий ҳолатда оладиган бўлсак ҳам, мамлакатда саноатнинг ривожини сезиларли даражада эмас. Шу билан бир қаторда, кичик бизнес ва тадбиркорликка жалб қилинаётган инвестициялар миқдорини ошириш ва бу жараённи давлат томонидан қўллаб қувватлаш механизмини такомиллаштириш бўйича мазкур илмий таклиф ва амалий тавсиялар ишлаб чиқилди:

1. Инвестиция лойиҳаларини амалга ошириш, ишлаб чиқаришни ривожлантириш ва модернизация қилиш учун корхоналарнинг молиявий маблағларидан унумли фойдаланиш масаласини йўлга қўйиш лозим;

Мамлакат ишлаб чиқариш ва хизмат кўрсатиш соҳаларини ривожлантиришга қаратиш мақсадида инвестиция қўйилмаларини амалга оширувчи корхоналарга солиқ юklarини янада камайтириш лозим;

2. Мамлакат ишлаб чиқариш ва хизмат кўрсатиш соҳаларини ривожлантиришга қаратиш мақсадида инвестиция қўйилмаларини амалга оширувчи корхоналарга солиқ юklarини янада камайтириш лозим;

3. Мамлакат иқтисодий тармақини тараққий топтириш йўлида корхоналарни тўлиқ ривожлантириш ва ишчиларнинг моддий турмушини яхшилаш механизмини ишлаб чиқиш даркор;

Иқтисодий инвестицион фаолиятни амалга ошираётган корхоналарда ишлаб чиқариш самарадорлигини ошириш ҳисобига фойдани кўпайтириш тавсияларини ишлаб чиқиш керак;

4. Иқтисодий инвестицион фаолиятни амалга ошираётган корхоналарда ишлаб чиқариш самарадорлигини ошириш ҳисобига фойдани кўпайтириш тавсияларини ишлаб чиқиш керак;

5. Республика иқтисодий тармақини инвестиция фаолиятини янада такомиллаштириш мақсадида тармоқлараро ва ички тармоқ кооперацияни ривожлантириш асосида баланслашган ишлаб чиқариш муҳитини шакллантириш лозим;

6. Инвестицияларни рағбатлантиришда давлат ва хусусий шерикчилик муносабатларини яратиш ҳамда улар иштирокини таъминлаш зарур;

7. Корхона ва аҳоли маблағлари, тижорат банк кредитлари ресурсларидан фойдаланганлик учун аниқ ўлчов ва меъёрларни белгилаш керак;

8. Республикамиз ҳудудларида инвестицион лойиҳалар фабрикаси ва тадбиркорлик фаолияти бўйича турли тренинглар, маслаҳат марказларини ташкил этиш, шунингдек, туман ва ҳудудларларнинг тадбиркорлик лаёқатига кўра тадбиркорлик фаолиятини ихтисослаштириш лозим.

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## **ОЦЕНКА ПОТЕНЦИАЛА ОРГАНИЧЕСКОГО СЕЛЬСКОГО ХОЗЯЙСТВА В УЗБЕКИСТАНЕ**

*Аннотация. Значимость органического сельского хозяйства определяется такими свойствами как устойчивость, безвредность, экологичность, поскольку производители органической продукции применяют натуральные методы ведения сельского хозяйства и современные научные знания в области экологии, стремясь тем самым максимально оздоровить экосистему на долгосрочную перспективу, повысить ее продуктивность и качество продукции. В статье на основе SWOT-анализ выявлены сильные и слабые стороны, риски и возможности развития органического сельского хозяйства в Узбекистане.*

*Ключевые слова: органическое сельское хозяйство, органическое производство, стандартизация, сертификация, экосистема, эффективность.*

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## **ASSESSMENT OF THE POTENTIAL OF ORGANIC AGRICULTURE IN UZBEKISTAN**

*Annotation. The importance of organic agriculture is determined by such properties as sustainability, harmlessness, and environmental friendliness, since producers of organic products use natural farming methods and modern scientific knowledge in the field of ecology, thereby trying to maximize the health of the*

*ecosystem in the long term, increase its productivity and product quality. The article, based on a SWOT analysis, identifies the strengths and weaknesses, risks and opportunities for the development of organic agriculture in Uzbekistan.*

*Key words: organic agriculture, organic production, standardization, certification, ecosystem, efficiency.*

В Узбекистане, как и во всех странах, природно-климатические, погодные изменения наряду с последствиями деятельности людей приводят к усилению деградации почв, ограничению водных ресурсов и ухудшению их качества, сокращению биоразнообразия. Так, по данным Министерства сельского хозяйства Республики Узбекистан, из имеющихся в республике 44,9 млн. га около 10% или 4,3 млн. га составляют орошаемые земли, из которых около 2 млн. га (45%) подвержены вторичному засолению, 800 тысяч гектаров пострадали от водной эрозии и более чем 2 млн. га земель - от ветровой эрозии. Показатели использования пресной воды в Узбекистане составляет 169 процентов от водных запасов, т.е. уровень нагрузки на водные ресурсы оценивается экспертами ФАО как критический, при этом 90% отводимых объемов свежей воды в стране приходится на сельское хозяйство. Обеспокоенность в глобальном масштабе вызывает и состояние биоразнообразия в стране, к примеру, под угрозой исчезновения находится 207 видов и подвидов животных, из которых 184 занесены в Красную книгу Республики Узбекистан. В Красную книгу занесены также 341 вид растений.

Эффективным методом при формировании устойчивых продовольственных систем и обеспечении устойчивости к изменению климата может стать органическое сельское хозяйство. Такое заключение обосновано результатами продолжительных исследований американских ученых, анализировавших экологические, энергетические и экономические затраты и преимущества органического выращивания сои и кукурузы по сравнению с традиционным. В частности, Дэвид Пиментел, профессор экологии и сельского хозяйства Корнельского университета (ведущий автор исследования), утверждает, что «органическое земледелие предлагает реальные преимущества для таких культур, как кукуруза и соя, использование методов органического земледелия для этих культур приводит не только к уменьшению в среднем на 30 процентов ископаемой энергии, но и сохраняют больше воды в почве, вызывают меньшую эрозию, поддерживают качество почвы и сохраняют больше биологических ресурсов, чем обычное сельское хозяйство». [5]

Наряду с решением экологических проблем органическое сельское хозяйство обеспечивает население доброкачественными продуктами питания. Согласно оценкам Продовольственной и сельскохозяйственной Организации Объединенных Наций (РАО), свыше полумиллиона тонн запрещенных, вышедших из употребления и невостребованных пестицидов

угрожают окружающей среде и здоровью человека. Ежегодно в мире от отравления пестицидами умирает около 200 тысяч человек. [3]

Экономическая эффективность органического производства в Узбекистане обоснована посредством осуществления сравнительного анализа показателей органического и традиционного методов выращивания хлопка на полях кластера ИП ООО «Textile Technologies Group». В результате получены следующие параметры сравнения:

1. За счет экономии на минеральных удобрениях, пестицидах, гербицидах и других химических препаратах агротехнические расходы на 1 га сократились на 2 513 000 сум или примерно 266 дол. США.

2. За счет использования натуральных удобрений (навоза, компоста) в вегетационный период при получении эффективной солнечной энергии период созревания хлопчатника сократился на 7-15 дней, что дало возможность собрать качественный урожай до наступления дождливого периода. Для сравнения: внесение минеральных удобрений, пестицидов и гербицидов приводит к возникновению «стресса», вследствие чего происходит смещение сроков вегетации и созревания в среднем на 4-5 дней.

3. Использование натуральных удобрений способствовало сохранению качества земли и насыщению растения всеми питательными веществами. Волокна не накапливали в себе пестициды, инсектициды, тяжёлые и вредные металлы.

4. Поливная вода сэкономлена на 10% за счет сокращения количества поливов. Это связано с тем, что навоз удерживает влагу и способствует максимальному пропитыванию почвы водой.

5. Если учесть, что цены на органические продукты выше в 2-3 раза, а из 1 тн. хлопка-сырца получают: 320 – 340 кг волокна, а из этого количества волокна можно произвести 3500 – 4000 м<sup>2</sup> ткани; 560 – 590 кг семян, а из семян – 112 кг масла; 30-35 кг линта, 270 кг жмыха, 170 кг шелухи, то сравнив рыночную цену этих продуктов, выращенных органическим и традиционным методом, легко определить разницу в получаемых доходах. [2]

Кроме того, специалисты ИП ООО Textile Technologies Group отмечают, что побочные продукты (жмых и шелуха) органического хлопка, используемые в животноводстве в виде кормов, также способствуют получению более качественного, экологически чистого мяса, молока и продуктов их переработки.

**Таблица 1. SWOT-анализ развития органического сельского хозяйства в Узбекистане**

Внутренние факторы	СИЛЬНЫЕ СТОРОНЫ (STRENGTHS)	СЛАБЫЕ СТОРОНЫ (WEAKNESS)
	Богатое аграрное наследие и потенциал. Разнообразие природных биоресурсов.	Слабый уровень культуры здорового питания у населения и недостаточное пропагандирование потребления органической продукции.

	<p>Принятие нормативно-правовых документов, создающих правовые основы для развития органического сельского хозяйства.</p> <p>Государственная поддержка производителей органической продукции.</p> <p>Предоставление субсидий на производство сертифицированной органической продукции.</p>	<p>Высокая затратность органического земледелия, связанная с сертификацией продукции, со сравнительно высокой стоимостью органических удобрений и т.п.</p> <p>Недостаточность инвестирования в органическое сельское хозяйство.</p> <p>Низкий научный потенциал и уровень знаний в области органического сельского хозяйства.</p> <p>Отсутствие маркетинговых служб по продвижению органической продукции.</p>
Внешние факторы	<b>ВОЗМОЖНОСТИ (OPPORTUNITIES)</b>	<b>УГРОЗЫ (THREATS)</b>
	<p>Рост производства и потребления здоровых, органических продуктов.</p> <p>Обучение, просвещение потребителей.</p> <p>Усиление взаимодействия науки с органическим производством, внедрение экоагротехнологий в сельское хозяйство.</p> <p>Развитие бизнес-коммуникаций в органическом сельском хозяйстве.</p> <p>Создание ассоциации фермеров, занимающихся органическим земледелием.</p> <p>Экспорт сельскохозяйственной органической продукции.</p>	<p>Технико-технологическое отставание отрасли.</p> <p>Нехватка лабораторий, осуществляющих анализ почвы, семян и готовой продукции для сертификации предприятия.</p> <p>Пробелы в законодательных актах в сфере органического сельского хозяйства.</p> <p>Несоответствие национальных стандартов международным.</p> <p>Низкий уровень покупательной способности и доходов местного населения.</p> <p>Рост цен на услуги электротеплового снабжения.</p>

Оценить текущую и будущую конкурентоспособность органического сельского хозяйства можно с помощью анализа внутренней и внешней среды предприятий, производящих органический продукт. Анализ состояния развития деятельности производителей органической сельскохозяйственной продукции позволили сформировать перечни сильных и слабых сторон, возможностей и угроз их развития в республике (табл. 1).

Развитие органического сельского хозяйства будет способствовать не только решению многих проблем продовольственного характера, но и создаст условия для сохранения здоровой экосистемы для будущего поколения. Органическое производство признан сегодня как самый устойчивый и наименее разрушительный метод ведения сельского хозяйства.

Вместе с положительными моментами, стоит признать и тот факт, что общая разница в урожайности органических и неорганических культур составляет 20–25 % в пользу последних и, следовательно, чтобы обеспечить население экологически чистыми продуктами необходимо использовать больше земли. [13]. Эти данные, также доказанные многолетними исследованиями, ставят под сомнение эффективность и устойчивость

органического сельского хозяйства, но не стоит забывать и о том, что снижение урожайности наблюдается в основном в первые годы ведения органического хозяйства и при одновременном сокращении потребления энергии, воды и пестицидов на 30%. [4]

В последующие годы в результате улучшения структуры и плодородия почвы за счет использования севооборота, органических удобрений, мульчи или бобовых кормовых растений для внесения азота в цикл почвенного плодородия объем урожая, полученного органическим путем, может быть выше, чем при традиционной земледелии. Как уже было отмечено, образование гумуса, способного удерживать влагу в почве более продолжительное время, снижает производственные риски в засушливые годы.

Органическое сельское хозяйство увеличивает биоразнообразие сельскохозяйственных ландшафтов и прилегающих к ним территорий на 30 % по сравнению с традиционным. Наибольший положительный эффект органическое сельское хозяйство оказывает на дикорастущие растения и насекомых-опылителей. [6]

Однако, как показывает опыт практикующих органическое производство фермеров, есть некоторые трудности, препятствующие развитию отрасли, к примеру, рыночная стоимость органических удобрений значительно выше, чем минеральных, что приводит к дополнительным издержкам; существуют большие временные затраты, связанные с прохождением сертификации, кроме того, высокие стандарты для сертификации приводят к повышению себестоимости и стоимости органической продукции. Подобного рода проблемы могут быть решены за счет оптимизации и развития технологий. Целесообразно создание кластеров, кооперативов и центров логистики, имеющих инфраструктуру, необходимую для производства и экспорта органической продукции. Высокий потребительский спрос на органическую продукцию и вышеназванные положительные экстерналии при ведении органического сельского хозяйства с условием увеличения затрат на дальнейшие исследования и внедрение инноваций, привлечение потенциальных инвесторов будет способствовать развитию и повышению конкурентоспособности данной сферы.

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## **ОСНОВНЫЕ АСПЕКТЫ РАЗВИТИЯ ФИНАНСОВОЙ ГРАМОТНОСТИ ПЕДАГОГОВ**

*Аннотация. В данной статье изложены значение и основные аспекты финансовой грамотности населения, педагогов. Проведен анализ понятия финансовая грамотность ведущих ученых и соискателей. Указаны основные направления развития как благоприятная среда для образования в системе общего среднего образования.; поднятие на новый уровень системы общего среднего образования; повышение статуса педагогических кадров, развитие их знаний и квалификации в соответствии с международными стандартами; широкое привлечение частного сектора для развития общего среднего образования; обучение учащихся современным знаниям и навыкам путем развития системы профессионального образования.; широкое внедрение инновационной деятельности во всех направлениях, поддержка научных исследований и инновационных инициатив. В заключении отражены основные аспекты развития финансовой грамотности.*

*Ключевые слова: финансовая грамотность, экономика, политика, финансы, налоги, бюджет, банковское дело, экономическое образование, финансовое благополучие, благополучие и жизнь человека, качество ценностей, знания, компетентность, навыки.*

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## **MAIN ASPECTS OF DEVELOPING FINANCIAL LITERACY OF TEACHERS**

*Abstract. This article outlines the meaning and main aspects of financial literacy of the population and teachers. The concept of financial literacy of leading scientists and applicants was analyzed. The main directions of development are indicated as a favorable environment for education in the general secondary education system.; raising the general secondary education system to a new level; improving the status of teaching staff, developing their knowledge and qualifications in accordance with international standards; widespread involvement of the private sector for the development of general secondary education; teaching students modern knowledge and skills through the development of a vocational education system; widespread introduction of*

*innovative activities in all directions, support for scientific research and innovative initiatives. The conclusion reflects the main aspects of the development of financial literacy.*

*Key words: financial literacy, economics, politics, finance, taxes, budget, banking, economic education, financial well-being, well-being and human life, quality of values, knowledge, competence, skills.*

В современном мире финансовая грамотность становится все более важной компетенцией, которая необходима каждому человеку. Но особое значение она имеет для педагогов, ведь они не только передают знания своим ученикам, но и играют ключевую роль в формировании их финансовых навыков и осознанного отношения к финансовым ресурсам, финансовым отношениям. В частности, формировании финансовых, налоговых и соответственно экономических отношений.

В Стратегии развития нового Узбекистана на 2022-2026 годы особое место уделено на реформу образования и обучение учащихся современным знаниям и навыкам. В этом направлении намечено «Поднятие на новый уровень системы дошкольного образования и обеспечение полного охвата детей; Реализация программы «Благоприятная среда для образования» в системе общего среднего образования.; Поднятие на новый уровень системы общего среднего образования; Повышение статуса педагогических кадров, развитие их знаний и квалификации в соответствии с международными стандартами; Широкое привлечение частного сектора для развития общего среднего образования; Обучение учащихся современным знаниям и навыкам путем развития системы профессионального образования.; Широкое внедрение инновационной деятельности во всех направлениях, поддержка научных исследований и инновационных инициатив» [1., 6].

Вышеизложенные направления предназначены для повышения и развития знаний и навыков в широком спектре, в частности, развитие экономических и финансовых знаний, которые направлены на повышение финансовой грамотности с одной стороны учащихся и с другой стороны педагогического персонала.

При этом на данной статье мы хотели обратить Ваше внимание на сущность, и основные аспекты финансовой грамотности.

Данное направление проведены научные исследования и настоящее время проводятся научные работы соответственно многими научными работниками, ведущими специалистами во многих сферах отрасли. Но при этом каждое из них отражаются с разной стороны поднятия вопроса, т.к. в дошкольных и образовательных учреждениях со стороны воспитанников и учащихся возникают вопросы касающихся финансов, налогов, государственного бюджета, бухгалтерии и других. В данной ситуации от педагогического персонала соответственном порядке потребуются ответ этим

вопросам. Данная ситуация требует обучение или повышение квалификации в направлении финансовой грамотности.

Авторы статьи ведущих экономистов А.В. Вахабова, О.С. Дусмухамедова «Совершенствование теоретических основ понятия финансовой грамотности» отмечают что, «для правильного и точного анализа уровня финансовой грамотности населения в проведении исследования нужно исходить от масштаба вопроса. Масштаб финансовой грамотности можно сгруппировать как индивидуальный, по хозяйству, региону, бизнесу, по определенной отрасли экономики и в целом по, государству. На основе группировки и анализа возникает возможность оценить уровень финансовой грамотности населения и влияние его на экономику. [2., 23-24].

Для развития финансовой грамотности педагогов существует множество способов и ресурсов, таких как курсы и тренинги по финансовой грамотности, онлайн-ресурсы и приложения, специализированные книги и журналы. Главное, чтобы педагоги проявляли интерес и заинтересованность в развитии своих финансовых знаний и навыков, и стремились к их постоянному развитию и совершенствованию.

По анализу Организации экономического развития и сотрудничества (ОЭСР) на определение финансовой грамотности высказывают следующее мнение: «На сегодняшний день всеми признано, что в результате развития финансовых рынков, а также демографических, экономических и политических изменений финансовая грамотность стала жизненно важным навыком» [3, с.44].

Продолжая мнение аналитиков, Организация экономического сотрудничества и развития (ОЭСР) под финансовой грамотностью понимает «комбинацию осведомлённости, знаний, навыков, установок и поведения, которые необходимы для принятия правильных финансовых решений и достижения индивидуального финансового благополучия» [4, с. 129].

Всемирный Банк лаконично определяет термин финансовой грамотности как «способность человека принимать обоснованные решения по использованию и управлению своими деньгами» [5, с. 15].

Различные трактовки определения финансовой грамотности представлены в работах зарубежных ученых. А.В. Зеленцова характеризует финансовую грамотность как «способность физических лиц управлять своими финансами и принимать эффективные финансовые решения» [6, с. 7].

О.Е. Кузина пишет: «Финансовую грамотность принято определять, как знание о финансовых институтах и предлагаемых ими продуктах, а также умение их использовать при возникновении потребности и понимание последствий своих действий» [7, с. 157].

Развитие финансовой грамотности педагогов играет важную роль в формировании финансовой культуры учеников. Если педагоги сами грамотны в финансовых вопросах и способны передать эти знания и навыки своим ученикам, то это поможет им лучше понять и управлять своими финансами, достичь финансовой независимости и благополучия.

Исходя из вышеизложенных мнений, по нашему мнению для повышения финансовой грамотности у педагогического персонала целесообразно обратить особое внимание обучение основам финансов, налогов, бухгалтерии, банковской системы и вообще экономическим знаниям. На основе этого по нашему мнению основные аспекты развития финансовой грамотности у педагогов должны включать следующие:

1. Обучение основам финансов. Педагогам необходимо овладеть базовыми понятиями и принципами финансовой деятельности, такими как бюджетирование, инвестирование, кредитование, налогообложение и др. Они должны знать, как правильно управлять своими финансами и принимать рациональные финансовые решения.

2. Развитие навыков планирования и бюджетирования. Педагогам необходимо научиться составлять свой личный бюджет, определять свои финансовые цели и планировать свои доходы и расходы. Это поможет им управлять своими финансами эффективно и избегать лишних расходов.

3. Обучение инвестированию. Педагогам необходимо знать основы инвестирования и различные инструменты инвестирования, такие как акции, облигации, паи в инвестиционных фондах и др. Это позволит им эффективно использовать свои финансовые ресурсы и получать доходы от своих инвестиций.

4. Развитие навыков финансового планирования на длительную перспективу. Педагогам необходимо уметь планировать свои финансовые потребности на долгосрочный период, такой как пенсионное обеспечение, создание резервных фондов и др. Это позволит им обеспечить свое финансовое благополучие на будущее.

5. Развитие навыков управления финансовыми рисками. Педагогам необходимо знать, как правильно оценивать и управлять рисками, связанными с финансовыми операциями. Они должны быть готовы к возможным рискованным ситуациям и уметь правильно реагировать на них.

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## **ИННОВАЦИОННЫЙ ПРОЦЕСС КАК ОСНОВНОЙ ФАКТОР РАЗВИТИЕ ЭКОНОМИКИ**

*Аннотация. В статье рассмотрены инновационные процессы развития в экономике. Рассмотрены особенности и специфика развития инновационных процессов в Узбекистане. Также проведен анализ научных подходов ведущих экономистов по развитию инновационных процессов, факторов способствующих инновационному развитию экономики, являются научно-технический прогресс, государственная поддержка и предпринимательская активность.*

*Ключевые слова: анализ, инновации, инновационные процессы, факторы, образование, научно-технический прогресс, предпринимательство, инвестиции, стимулирование, бюджет, налоги, макроэкономические показатели.*

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## **INNOVATION PROCESS AS THE MAIN FACTOR OF ECONOMIC DEVELOPMENT**

*Annotation. The article examines innovative development processes in the economy. The features and specifics of the development of innovation processes in Uzbekistan are considered. An analysis of the scientific approaches of leading economists on the development of innovative processes, factors contributing to the innovative development of the economy, are scientific and technological progress, government support and entrepreneurial activity.*

*Key words: analysis, innovation, innovation processes, factors, education, scientific and technological progress, entrepreneurship, investments, incentives, budget, taxes, macroeconomic indicators.*

В Узбекистане в направлении реформирования национальной экономики приняты действенные меры по либерализации внешнеторговой, налоговой и финансовой политики, поддержке предпринимательства и гарантированию неприкосновенности частной собственности, организации глубокой переработки сельскохозяйственной продукции, а также обеспечению ускоренного развития регионов.



На основании выполнения поставленных задач **«Стратегия развития нового Узбекистана на 2022 — 2026 годы»** [1] наращиваются темп роста макроэкономических процессов и её стабильный рост. Благодаря сформированной нормативно-правовой базе экономики, бюджета и налоговых, а также финансовых отношений, которые напрямую отражаются в развитии инновационных процессов. В частности, одной из основных целей **«Широкое внедрение инноваций в экономику, развитие кооперационных связей промышленных предприятий и научных учреждений.»**, которое предусматривает **«Освоение технологий производства инновационной продукции в районах, трансформируемых в инновационные зоны, создающие качественную продукцию, до 50% более дешёвую по сравнению с существующими аналогами, с добавленной стоимостью, в 2-3 раза превышающей стоимость сырья, в том числе реализация всего 195 проектов стоимостью 165,9 миллиардов сумов.»** [1].

Следующее направление **«Улучшение позиции Республики Узбекистан в Глобальном инновационном индексе и включение в топ-50 стран рейтинга до 2030 года.»** [1] на основании этого Улучшение позиции Узбекистана по низким индикаторам, зафиксированным в Глобальном инновационном индексе.

Создание широких возможностей по всем направлениям для реализации инновационных проектов, внедрение современных механизмов поддержки исследований и инновационных инициатив.

В 2022 году Узбекистан «занял 10-е место среди стран группы с доходом ниже среднего и 3-е место среди стран Центральной и Южной Азии после Ирана и Индии. Среди стран Центральной и Южной Азии Узбекистан занимает лидирующие позиции по таким индексам, как институты, человеческий капитал и исследования, инфраструктура, уровень развития внутреннего рынка.

По данным рейтинга сильные показатели Узбекистана на мировом уровне в следующих индикаторах: «Число выпускников в области науки и техники» - 6-е место, «Валовое накопление основного капитала» - 6-е место, «Рост производительности труда» - 7-е место, «Политика поддержки предпринимательства» - 22-е место, «Развитие кластеров» - 27-е место.» [2].

Мы хотели обратить внимание на сущность и цель инновационного развития на индикатор число выпускников в области науки и техники которая взаимосвязано системой высшего образования, вследствие чего образовался новый тип университетов – инновационный, деятельность которого по определению направлена на создание новаций, существенно влияющих на состояние образования, науки, экономики и социальной сферы страны и регионов.

Инновационное развитие экономики - это процесс внедрения новых идей, технологий и методов работы в различные сферы экономики, с целью повышения производительности, конкурентоспособности и роста

национального благосостояния. Инновации играют ключевую роль в современном мире, обеспечивая прогресс и развитие.

В условиях экономических преобразований особое место уделяется инновационным процессам развития. В свою очередь это обосновано процессом перехода к мировым стандартам, к инновационному типу развития экономики и во всех его отраслях и т.п., что предполагает содействие внедрению новых актуальных инновационных подходов для социального, экономического развития всех сферах области деятельности, широкое освоение и применения новых достижений современных технологий и непрерывное обновление процесса развития, а также ускоренное появление новых потребностей и возникновение новых экономических процессов.

По мнению Сальникова Т.С., Мезяков Ю.А. по отношении развития производственных циклов на предприятиях «В сферу инновационной деятельности, как правило, включаются следующие виды процессов, осуществляющиеся на предприятии:

- процессы освоения новых видов продуктов, а также процессы качественного обновления уже выпускающихся продуктов;
- процессы освоения новых способов производства и распределения продукта;
- процессы освоения новых рынков сбыта;
- процессы освоения новых источников снабжения факторами производства;
- процессы освоения новых форм работы с персоналом;
- процессы освоения новых методов управления
- процессы развития новых организационных структур управления;
- процессы реализации новых стратегических ориентиров в деятельности предприятия;
- процессы освоения новых источников и технологий получения финансовых ресурсов;
- процессы реализации новых технологий учета и использования финансовых ресурсов;
- процессы реализация новых технологий взаимодействия с контрагентами предприятия.» [6]

Исходя из вышеизложенного мнения мы хотели сделать ударение на процесс инновационного развития в образование как один из ключевых аспектов инновационного развития экономики.

По мнению кандидата экономических наук М.С.Ашурова «Центральная роль в развитии инноваций принадлежит университетам, которые ведут фундаментальные научные исследования, обучают специалистов, обеспечивают условия для научного сотрудничества и обмена, способствуя появлению новых компаний. В научных инновациях, как правило, преуспевают те страны, которые обеспечивают

государственное финансирование фундаментальных исследований и естественнонаучного образования. [5].

По отношению инновационного развития в образовании доктор педагогических наук Л.И. Миронова отмечает: «система образования в инновационном вузе открыта современным научным исследованиям и современной экономике. Учебный план инновационного вуза содержит такие современные формы обучения, как проектные разработки, тренинги, стажировки на производстве и в научно-исследовательских организациях. Технологическое оснащение учебного процесса в инновационном вузе соответствует уровню передовой науки. [3. 146].

По мнению А.А. Гретченко, в основе инновационного вуза находятся такие инновации, которые направлены на создание инновационной институциональной структуры, конкурентоспособной, финансово эффективной; сфокусированы на учебных программах, отличающихся высоким качеством; ведут к активному взаимодействию с внешними и внутренними партнёрами [4].

Проводя анализ развития инновационных процессов развития образовательных учреждениях мы особо должны обратит на следующие моменты, которые направлены для достижения её цели:

- ✓ процессы освоения новых подходов, а также процессы качественного выпуска специалистов, которые отвечают к требованиям так и международного и национального уровня образования;
- ✓ процессы освоения новых способов обучения;
- ✓ процессы освоения новых трудовых рынков сбыта специалистов по трудоустройству на перспективу;
- ✓ процессы освоения новых источников обеспечения материально технической базы её развития;
- ✓ процессы освоения новых форм и подходов работы с подготовкой педагогического персонала;
- ✓ процессы освоения новых методов управления
- ✓ процессы развития новых организационных структур управления;
- ✓ процессы реализации новых стратегических подходов для качественного развития в учебном процессе;
- ✓ процессы освоения новых источников и технологий получения финансовых ресурсов;
- ✓ процессы реализации новых технологий и подходов для взаимосвязи теории и практики, для повышения навыков знаний;
- ✓ процессы реализация новых технологий взаимодействия с контрагентами в образовательных учреждениях.
- ✓ сформировать в стране образовательный хаб региона. Основой осуществления этой задачи является адаптация сферы науки к современным экономическим условиям, что в свою очередь должно привести к

кардинальным изменениям в структурном, организационном, кадровом и финансовом обеспечении ее развития

Однако, на пути инновационного развития экономики так в образовании возникают также ряд преград. Такой резонанс событий является естественным процессом на основе которых выявляются причины, которые препятствуют к достижению стратегической цели. К ним относятся отсутствие финансирования, слабое правовое регулирование и недостаток специалистов. Для успешного развития инноваций необходимо обеспечить доступ к финансированию, создать условия для защиты интеллектуальной собственности и привлечь высококвалифицированных специалистов.

Инновационное развитие экономики - это сложный и долгосрочный процесс, который требует всестороннего подхода и сотрудничества между государством, бизнесом и научным сообществом. Однако, инновации являются движущей силой экономического прогресса и развития общества, и поэтому вложения и усилия, направленные на их развитие, будут оправданы в будущем.

Исходя из вышеизложенных моментов процессы инновационного развития в образовании могут включать следующие этапы:

1. Идентификация проблемы или потребности: этот этап включает анализ текущего состояния образовательной системы и выявление проблем, которые нужно решить или потребностей, которые нужно удовлетворить.

2. Исследование и разработка: на данном этапе проводятся исследования и разработки новых подходов и методов обучения, а также создание инновационных образовательных технологий и ресурсов.

3. Тестирование: новые подходы и методы обучения тестируются на малом масштабе, например, в рамках отдельных вузов или по отраслям. В процессе тестирования выявляются и исправляются возможные проблемы и сложности.

4. Внедрение и масштабирование: успешно протестированные инновации внедряются в систему образования на более широком масштабе, например, в других школах или регионах. Важным этапом является подготовка педагогического персонала к работе с новыми методами и технологиями.

5. Оценка и анализ результатов: в процессе внедрения инноваций проводится оценка и анализ их влияния на качество образования. Данные о результатах помогают определить, насколько успешными оказались инновационные изменения и нужно ли их дальнейшее развитие или корректировка.

6. Стабилизация и укрепление: после успешного внедрения инноваций происходит их стабилизация и укрепление в системе образования. Это включает в себя поддержку и обновление инновационных методов и технологий, а также развитие профессиональной компетенции педагогов.

В заключении нужно отметить, инновационное развитие в образовании – это процесс создания и внедрения новых подходов, методов и технологий в образовательную сферу с целью улучшения качества обучения и достижения лучших результатов образовательного процесса.

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## **ВЛИЯНИЕ ЖИЗНЕННОГО ЦИКЛА ПРЕДПРИЯТИЯ НА РАЗВИТИЕ КОМПЕТЕНЦИЙ ПЕРСОНАЛА**

*Аннотация. В статье рассмотрены особенности направлений развития персонала в зависимости от стадии жизненного цикла организации. Развитию компетенций персонала предшествует оценка уровня их владения. От стадии жизненного цикла зависят параметры, влияющие на развитие персонала: цели деятельности организации, уровень прибыльности и объём имеющихся финансовых ресурсов, необходимые к развитию компетенции.*

*Ключевые слова: компетенции, управление, персонал, жизненный цикл организации, стадия, развитие.*

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## **THE IMPACT OF THE COMPANY'S LIFE CYCLE ON THE DEVELOPMENT OF PERSONNEL COMPETENCIES**

*Abstract. the article considers the features of the directions of personnel development depending on the stage of the organization's life cycle. The development of staff competencies is preceded by an assessment of their level of proficiency. The parameters that affect the development of personnel depend on the stage of the life cycle: the goals of the organization's activities, the level of profitability and the amount of available financial resources necessary for the development of competence.*

*Keywords: competencies, management, personnel, organization life cycle, stage, development.*

Человеческий капитал в системе факторов экономического развития государств играет важную роль. В своей основе человеческий капитал



складывается из совокупности знаний, умений, способностей и навыков рабочей силы. Эти условия делают актуальным и своевременным применение компетентного подхода в виде формирования моделей компетенций для персонала. Компетенции управленческого персонала становятся стратегическим ресурсом с целью адаптации организации к изменяющейся рыночной среде [1].

Основой процесса управления компетенциями является разработанная на предприятии модель компетенций, в соответствии с которой производится диагностика персонала на предмет её владения и планируется развитие компетенции в условиях, создаваемых предприятием. В основе управления компетенциями лежит совокупность следующих видов деятельности:

- формирование требуемой потребности в умениях и навыках персонала (компетенции);
- отбор персонала в соответствии с требуемыми компетенциями;
- оценка уровня владения компетенциями;
- развитие компетенций персонала;
- разработка системы мотивации на основе имеющихся и требуемых компетенций.

Формирование потребности в персонале производится на основе планируемых показателей деятельности организации. При этом, в процессе отбора кандидатов на работу следует учитывать, какие компетенции необходимы работникам и уровень владения ими.

Оценка персонала по компетенциям предназначена для выявления фактического уровня владения компетенциями и сравнения его с объёмом и уровнем требуемых компетенций. Работник оценивается на предмет наличия у него необходимых профессиональных компетенций, личностных характеристик, свойственных данной работе, личностных установок к работе, адаптивности к различным ситуациям и желания развиваться. Результаты оценки являются базой для разработки направлений обучения и повышения квалификации.

Если в процессе оценки выявлено недостаточное владение отдельными компетенциями, то для их развития можно воспользоваться стратегиями:

- 1) Активное развитие и использование сильно развитых компетенций, что будет перекрывать недостаток в других компетенциях.
- 2) Развитие компетенций с низким уровнем владения до необходимого уровня.
- 3) Сочетание активного использования развитых компетенций и параллельное улучшение слабых.

Таким образом, наиболее эффективна комплексная стратегия, так как она позволяет не только опираться на свои сильные стороны, но и работать

над наименее развитыми компетенциями, достигая баланса и гармонии в развитии, а также эффективности в поведении.

Рассмотрим особенности развития персонала в зависимости от жизненного цикла организации. Классическая теория рассматривает четыре стадии жизненного цикла организации: создание, рост, зрелость, спад.

На стадии создания (зарождения) организации происходит формирование структуры организации, распределение ролей, начинается деятельность по производству товаров и (или) услуг. Руководству свойственна быстрота в принятии решений, происходит разработка кадровой политики, коллектив работает не очень слаженно.

Стадия роста означает активное развитие деятельности организации, привлечение новых клиентов, расширение рынков сбыта. В области управления персоналом происходят процессы интенсивного набора кадров, создание управленческих команд, формирование организационной культуры.

Стадия зрелости характеризуется стабильностью деятельности и коллектива, происходит накопление ресурсов. Развивается система мотивации, построенная на результатах оценки персонала.

На стадии спада сокращаются расходы на организацию, проводится поиск новых направлений деятельности, повышается контроль за работой организации и работников.

Каждая стадия развития организации обладает своей спецификой управления персоналом [2]. В зависимости от стадии жизненного цикла (ЖЦ) организации меняются и подходы к развитию персонала. От стадии ЖЦ зависят следующие параметры, влияющие на развитие персонала:

- цели деятельности организации;
- уровень прибыльности и объём имеющихся финансовых ресурсов;
- необходимые к развитию компетенции.

Особенности процесса развития персонала и требуемые компетенции в зависимости от стадии ЖЦ организации представлены в таблице 1.

Таблица 1 - Особенности процесса развития персонала и требуемые компетенции в зависимости от стадии ЖЦ

Стадия ЖЦ организации	Особенности процесса развития персонала	Необходимые компетенции
Создание организации	Адаптация персонала, первичное обучение персонала для полноценного выполнения необходимых функций, освоения правил трудовой дисциплины	- профессиональные компетенции.
Рост	Обучение работе в команде, развитие организационной культуры, работа с талантами и управление карьерой	- профессиональные компетенции; - инициативность; - работа в команде; - коммуникация;

		- стрессоустойчивость.
Зрелость	Профессиональное развитие персонала, повышение эффективности команд, развитие карьеры.	- профессиональные компетенции; - инициативность; - работа в команде; - коммуникация; - стрессоустойчивость.
Спад	Минимальные затраты на развитие и обучение персонала, сокращение расходов на обучение, переобучение персонала.	Отсутствует возможность приобретения новых компетенций.

Таким образом, процессы развития персонала, их интенсивность и компетентностная направленность напрямую зависят от стадии жизненного цикла организации. Необходимые для развития компетенции определяются потребностями производственной и управленческой деятельности.

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## **ИССЛЕДОВАНИЯ ЗНАНИЙ И НАВЫКОВ В ОБЛАСТИ КОМПЬЮТЕРНЫХ ТЕХНОЛОГИЙ У БУДУЩИХ ПЕДАГОГОВ ДОО**

*Аннотация. В данной статье исследуется как развить навыки работы с компьютером для воспитателей ДОО. В ней представлены различные методики, такие как обучение в детском саду, онлайн-курсы, семинары и тренинги, самостоятельное изучение материалов, общение с коллегами, использование современных технологий и следование за новостями в области IT. Автор подчеркивает важность постоянного обучения и саморазвития в этой области для успешной работы с детьми в цифровой эпохе.*

*Ключевые слова: компьютерная грамотность, воспитатели, обучение, онлайн-курсы, семинары, тренинги, самостоятельное изучение, общение с коллегами, использование современных технологий, следование за новостями в области IT.*

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## **RESEARCH OF KNOWLEDGE AND SKILLS IN THE FIELD OF COMPUTER TECHNOLOGY IN FUTURE ECE TEACHERS**

*Abstract. This article explores how to develop computer skills for preschool teachers. It presents various methods, such as teaching in kindergarten, online courses, seminars and trainings, independent study of materials, communication with colleagues, use of modern technologies and following news in the field of IT. The author emphasizes the importance of continuous learning and self-development in this area for successful work with children in the digital age.*

*Key words: computer literacy, educators, training, online courses, seminars, trainings, independent study, communication with colleagues, use of modern technologies, following news in the field of IT.*

В современном мире компьютерные технологии стали неотъемлемой частью жизни людей. Они используются во многих сферах деятельности, включая образование. Поэтому для того чтобы стать успешным педагогом ДОО (дошкольного образовательного учреждения), необходимо иметь знания и навыки в этой области.

Исследования показывают, что будущие педагоги должны быть хорошо подготовлены к работе с детьми в цифровой эпохе. Это означает, что они должны обладать не только базовыми знаниями о компьютерах и Интернете, но также уметь использовать различные программы и приложения для обучения детей.

Одной из ключевых компетенций будущего педагога является умение создавать интерактивные уроки с использованием цифровых технологий. Для этого нужно знать основы работы с различными программами для создания презентаций, видеоуроков и игр. Также важно понимать принципы работы социальных сетей и мессенджеров, чтобы эффективно коммуницировать со своими учениками.

Кроме того, будущий педагог ДОО должен быть готов к использованию различных онлайн-ресурсов для обучения детей. Например, он может использовать электронные учебники, интерактивные задания и игры на сайтах образовательных платформ. Важно также уметь выбирать подходящие ресурсы для каждого конкретного случая.

Развитие навыков работы с компьютером является важным аспектом профессионального развития воспитателей. Ниже приведены несколько советов, которые могут помочь развить эти навыки:

1. Изучайте новые программы и приложения. Существует множество программ и приложений, которые могут помочь вам улучшить свои навыки работы с компьютером. Вы можете изучать их самостоятельно или пройти курсы по соответствующим темам.

2. Практикуйтесь регулярно. Чем больше вы будете практиковаться, тем лучше будет ваше владение компьютером. Регулярно выполняйте задачи, связанные с работой с компьютером, например, создание презентаций или обработка фотографий.

3. Используйте онлайн-ресурсы. Существует множество онлайн-ресурсов, которые могут помочь вам улучшить свои навыки работы с компьютером. Некоторые из них предоставляют бесплатные курсы, другие – платные. Выберите тот ресурс, который наиболее подходит для вас.

4. Общайтесь с коллегами. Общение с коллегами может помочь вам узнать о новых технологиях и методах работы с компьютером. Вы можете обсуждать свои проблемы и задавать вопросы друг другу.

5. Участвуйте в вебинарах и семинарах. Вебинары и семинары – это отличный способ получить новые знания и навыки работы с компьютером. Они проводятся онлайн, что позволяет участвовать в них из любой точки мира.

6. Не бойтесь экспериментировать. Работа с компьютером – это творческий процесс, поэтому не бойтесь экспериментировать с различными программами и приложениями. Попробуйте новые методы работы и найдите те, которые наиболее подходят для вашей работы.

7. Следите за новостями в области ИТ. ИТ-индустрия развивается очень быстро, поэтому важно следить за последними новостями и трендами в этой области. Это поможет вам быть в курсе всех новинок и использовать их в своей работе.

Компьютерная грамотность – это важный навык для воспитателей, который помогает им эффективно работать с детьми в цифровой эпохе. Ниже приведены некоторые методики, которые могут помочь развить этот навык:

1. Обучение в школе. Многие школы предлагают курсы по компьютерной грамотности для своих учеников. Воспитатели могут присоединиться к этим курсам и получить необходимые знания и навыки.

2. Онлайн-курсы. Существует множество онлайн-курсов, которые помогают развивать компьютерную грамотность. Воспитатели могут выбрать курс, который наиболее подходит для них, и проходить его в удобное время.

3. Семинары и тренинги. Воспитатели могут посещать семинары и тренинги, посвященные компьютерной грамотности. Эти мероприятия обычно проводятся специалистами в данной области и позволяют получить новые знания и навыки.

4. Самообразование. Воспитатели могут самостоятельно изучать материалы по компьютерной грамотности, используя интернет-ресурсы и книги. Это поможет им углубить свои знания и научиться новым методам работы с компьютером.

5. Практика. Лучший способ развить компьютерную грамотность – это практика. Воспитатели должны регулярно использовать полученные знания и навыки в своей работе с детьми.

6. Общение с коллегами. Общение с коллегами может помочь воспитателям узнать о новых технологиях и методах работы с компьютером. Они могут обсуждать свои проблемы и задавать вопросы друг другу.

7. Использование современных технологий. Воспитатели должны использовать современные технологии в своей работе с детьми. Например, они могут использовать интерактивные доски или планшеты для проведения уроков.

8. Следить за новостями в области ИТ. ИТ-индустрия развивается очень быстро, поэтому важно следить за последними новостями и трендами в этой области. Это поможет воспитателям быть в курсе всех новинок и использовать их в своей работе.



В целом, условия работы с компьютером для педагогов в Узбекистане могут быть достаточно хорошими, но все же требуют дополнительных усилий и ресурсов для обеспечения качественного обучения детей в цифровой эпохе.

Таким образом, различные методики развития компьютерной грамотности для воспитателей ДОО. Подчеркивается важность постоянного обучения и саморазвития в этой области для успешной работы с детьми в цифровой эпохе. Он также отмечает, что использование современных технологий и следование за новостями в области IT могут значительно повысить эффективность работы воспитателей.

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## **РАЗВИТИЕ КОМПЕТЕНЦИИ У БУДУЩИХ ПЕДАГОГОВ ДОО В ОБЛАСТИ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ**

*Аннотация. В данной статье рассматривается тема информационно-технологической компетентности, которая является важным элементом современного образования. Описываются основные виды компетенций, такие как компьютерная грамотность, информационная грамотность, коммуникативная грамотность, критическое мышление, умение работать в команде, управление временем и знание основ информационной безопасности. Автор подчеркивает необходимость развития этих компетенций у детей дошкольного возраста и предлагает использовать различные программы и приложения для обучения детей.*

*Ключевые слова: информационно-технологическая компетентность, компьютерная грамотность, информационная грамотность, коммуникативная грамотность, критическое мышление, умение работать в команде, управление временем, информационная безопасность.*

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## **DEVELOPMENT OF COMPETENCE AMONG FUTURE PRESCHOOL TEACHERS IN THE FIELD OF INFORMATION TECHNOLOGY**

*Abstract. This article discusses the topic of information technology competence, which is an important element of modern education. The main types of competencies are described, such as computer literacy, information literacy, communication literacy, critical thinking, teamwork, time management and knowledge of the basics of information security. The author emphasizes the need to develop these competencies in preschool children and suggests using various programs and applications to teach children.*

*Key words: information technology competence, computer literacy, information literacy, communication literacy, critical thinking, teamwork, time management, information security.*

Информационно-технологическая компетентность – это способность человека эффективно использовать информационные технологии для решения задач и достижения целей. В современном мире IT-технологии играют огромную роль во всех сферах жизни, от бизнеса до образования и медицины. Поэтому умение работать с ними является необходимым навыком для успешной карьеры и личного развития.

Информационно-технологическая компетентность включает в себя знание основных принципов работы компьютеров, программного обеспечения, баз данных, сетей и других технических средств. Также важно уметь применять эти знания на практике, создавать и поддерживать сайты, разрабатывать приложения, работать с электронной почтой и мессенджерами.

Однако информационно-технологическая компетентность не ограничивается только техническими навыками. Важно также уметь анализировать информацию, находить нужную информацию в Интернете, оценивать ее достоверность и использовать ее для принятия решений. Кроме того, необходимо уметь работать в команде, общаться с коллегами и клиентами через различные каналы связи, включая видеоконференции и социальные сети.

Для развития информационно-технологической компетентности можно пройти специальные курсы и тренинги, изучить литературу по теме, а также практиковаться в решении различных задач с помощью IT-технологий. Важно помнить, что развитие этого навыка – это постоянный процесс, который требует постоянного обучения и самосовершенствования.

В целом, информационно-технологическая компетентность является важным навыком для современного общества и будет оставаться актуальной еще долгое время. Она позволяет людям эффективно использовать современные технологии для достижения своих целей и улучшения качества своей жизни.

Информационно-технологическая компетентность – это умение использовать современные информационные технологии для решения задач и повышения качества жизни. Это не просто знание компьютера или интернета, а умение эффективно работать с информацией, находить нужную информацию, анализировать ее и использовать для достижения целей.

Для воспитателей дошкольных образовательных организаций важно иметь базовые знания в области информационных технологий. Ведь дети уже с раннего возраста начинают интересоваться компьютерами и

интернетом, поэтому важно научить их правильно пользоваться этими инструментами.

Воспитатели могут использовать различные программы и приложения для обучения детей. Например, существуют специальные программы для развития логического мышления, внимания, памяти и творческих способностей. Также можно использовать интерактивные доски и проекторы для проведения уроков и занятий.

Однако, помимо технических навыков, воспитателям необходимо развивать у детей критическое мышление и умение анализировать информацию. Для этого можно использовать игры и задания, которые помогут детям научиться искать и оценивать информацию.

В современном мире информационные технологии играют огромную роль во всех сферах жизни, включая образование. Компетентность в области IT-технологий становится все более важным качеством для педагогов, так как они должны быть готовы к использованию новых технологий и методик обучения.

В первую очередь, компетентность в IT-технологиях позволяет учителям создавать интерактивные уроки и использовать различные онлайн-ресурсы для повышения эффективности обучения. Это может быть использование интерактивных досок, видеоуроков, онлайн-тестирования и других инструментов.

Кроме того, знание IT-технологий помогает педагогам лучше понимать потребности своих учеников и адаптировать учебный процесс под них. Например, если ученик имеет проблемы со зрением или слухом, то использование специальных программ может значительно облегчить его обучение.

Также компетентность в IT-технологиях помогает педагогам сохранять актуальность своих знаний и навыков. Быстро меняющаяся технологическая среда требует от учителей постоянного обновления своих знаний и умений.

Наконец, компетентность в IT-технологиях помогает педагогам эффективно организовывать свое рабочее время и управлять им. Использование различных онлайн-инструментов для планирования занятий и организации работы позволяет учителям более эффективно использовать свое время и достигать лучших результатов.

Таким образом, компетентность в IT-технологиях является необходимым качеством для педагогов в современном мире. Она позволяет создавать интерактивные уроки, адаптировать учебный процесс под потребности учеников, сохранять актуальность своих знаний и навыков, а также эффективно организовывать свое рабочее время.

Компетентность в IT-технологиях является одним из ключевых факторов успеха современного педагога. Учителя, которые обладают этим качеством, могут создавать интерактивные уроки, адаптировать учебный

процесс под потребности учеников, сохранять актуальность своих знаний и навыков, а также эффективно организовывать свое рабочее время. Поэтому важно, чтобы педагоги не только имели знания в области IT-технологий, но и постоянно развивали свои навыки и умения в этой сфере.

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## **РАЗВИТИЯ ГРАЖДАНСКОГО ОБЩЕСТВА В УСЛОВИЯХ ПРАВОВОГО ГОСУДАРСТВА**

*Аннотация. В данной статье проанализировано развития гражданского общества в условиях правового государства. Самого высокого развитие гражданское общества возникает в условиях правового государства. Исследование гражданского общества остается актуальным в силу укрепления ценностей правового государства.*

*Ключевые слова: гражданское общество, правовое государство, народовластие, демократия, демократическое государство, политический плюрализм, государственная власть.*

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## **DEVELOPMENT OF CIVIL SOCIETY IN THE CONDITIONS OF THE RULE OF LAW**

*Abstract. This article analyzes the development of civil society in the conditions of the rule of law. The highest development of civil society arises in the conditions of the rule of law. The study of civil society remains relevant due to the strengthening of the values of the rule of law.*

*Keywords: Civil society, rule of law, democracy, democracy, democratic state, political pluralism, state power.*



Для начала следует определиться понятиями «Гражданское общество» и «Правовое государство».

По мнению ученого К.С. Гаджиева, : «гражданское общество – это система обеспечения жизнедеятельности социальной, социокультурной и духовной сфер, их воспроизводства и передачи от поколения к поколению, система самостоятельных и независимых от государства общественных институтов и отношений, которые призваны обеспечить условия для самореализации отдельных индивидов и коллективов, реализации частных интересов и потребностей, будь то индивидуальные или коллективные» [Гаджиев К.С. 1991: 30].

Можно отметить, что к социальным, социокультурным и духовным сферам, следует добавить экономическую сферу, в которой реализуются частные интересы и потребности индивидов и в целом общества, регулируемые, гражданским правом и примыкающими к нему отраслями права и законодательства, объединяемых в систему частного права.

Так, профессор З.М. Черниловский полагает, что при составлении определения, относящейся к гражданскому обществу следует принимать в расчет, следующие характеристики [Черниловский З.М. 2002: 142.]:

1) существование гражданского общества невозможно представить без формирования государства, как в его пределах, так и вне их.

2) государство, охватывающее территорию данного гражданского общества, обеспечивает ему необходимую защиту в отношении благосостояния граждан и их специфических целей, при условии их согласованности с законами.

3) гражданское общество имеет право требовать от государства обеспечение защиты жизни, здоровья, безопасности и др.

4) на государстве лежит обязанность осуществления социальных программ, направленных на смягчение социальных различий между разными группами населения.

5) государство, через свою внешнюю политику и оборонную мощь, может гарантировать существование данного общества, а также его материальное и духовное взаимодействие с другими нациями в обеих сферах - материальной и духовной.

В указанных определениях охвачено многое, но, упущены правовые черты гражданского общества, то, что данное понятие, главным образом, что гражданское общество не бывает без правового государства. Следовательно, функционирование многочисленных некоммерческих объединений, ассоциаций, организаций граждан невозможно без правового регулирования и др.

Давайте рассмотрим определения гражданского общества. В настоящее время юристы-правоведы избегают точного определения того, что подразумевается под термином "гражданское общество". Они либо выделяют основные правовые параметры данного понятия, либо

высвечивают ключевые признаки и свойства, необходимые для понимания сути гражданского общества.

Строение и эволюция правового государства напрямую зависят от уровня развития гражданского общества. В этой связи правовое государство создает благоприятные условия для функционирования гражданского общества. Несмотря на видимую прямую связь, для последовательного и непрерывного развития человеческой цивилизации необходимо развитие гражданского общества, являющегося основой для становления демократического правового государства.

Всю историю формирования и развития идей правового государства в России можно разделить, с известной долей условности, на три периода или этапа. Первый этап — со второй половины XIX в. и вплоть до Октябрьской революции 1917 г.; второй — с 1917 по 1985 г.; и третий этап — с 1985 г. и вплоть до настоящего времени [Марченко М. Н., Дерябина Е. М. 2004: 131].

На первом этапе становление и развитие идей правового государства связано с сильным воздействием западных демократических идей. Во второй период их развитие в России осуществлялось в условиях сохранения сильной самодержавной власти. И наконец, в течение третьего периода формирование идей правового государства в России на рубеже XIX-XX вв. осуществлялось на фоне и в контексте бурных дискуссий о соотношении государства и права.

В современном обществе развития гражданского общества невозможно представить без формирования условий для установления правового государства. В связи с этим можно утверждать, что гражданское общество и правовое государство существуют в тесном взаимодействии. Возникающие между ними отдельные противоречия приводят к конфликтам, разрешение которых требует применения правовых механизмов, то есть мирных средств регулирования. Гражданское общество и правовое государство интегрированы в общую правовую систему, выполняя функции сдержек и противовесов друг другу. Взаимодействие гражданского общества и правового государства благоприятно воздействует на совершенствование правовой системы, обеспечивая оптимальные условия для соблюдения прав и свобод граждан.

Итак, дадим определение правовому государству. Правовое государство — это политический уклад общества, где гарантируются и признаются естественные права человека. В таком государстве существует разделение власти на три отрасли: законодательную, исполнительную и судебную. Важным принципом является верховенство закона, и в этой системе соблюдается взаимная ответственность: граждан перед государством и государства перед гражданами.

Основными признаками правового государства являются [Денисенко, М. В. 2012: 101]:

1) принцип верховенства права предполагает, что деятельность государственных органов должна быть в полном соответствии с законом. Однако важно, чтобы сам закон также соответствовал принципам правового порядка, отражая естественные права человека.

2) разделение властей на законодательную, исполнительную и судебную является фундаментальным принципом организации государства.

3) обеспечение взаимной ответственности граждан перед государством и государства перед гражданами способствует укреплению связи и взаимодействия между гражданами и властью.

4) гарантия и соблюдение прав и свобод граждан является неотъемлемой частью демократического общества и государства.

5) важным аспектом правовой системы является соответствие национального законодательства общепризнанным международным нормам, что способствует укреплению мирового правопорядка и защите прав человека на глобальном уровне.

В правовом государстве закон не только является инструментом принуждения и подавления, но также представляет собой меру обеспечения равенства, социальной и человеческой свободы. Правовая система и ее компоненты в таком обществе постоянно улучшаются в интересах общественного развития.

Основные нормы поведения гражданского общества в правовом государстве формируются не под воздействием давления и принуждения, а в соответствии с принципами, закрепленными в правовой системе. Государственная власть обязана признавать эти нормы поведения, но в то же время она не должна нарушать права других людей. Принцип "права человека заканчиваются там, где начинаются права других" должен быть строго соблюдаем.

Нормы поведения гражданского общества играют важную роль в формировании правовой системы и представляют собой средство контроля гражданского общества над государством. Они устанавливают определенные ограничения для всеобщей государственной и политической власти, обеспечивая тем самым баланс интересов и защиту прав граждан.

Политическая власть рассматривается как синоним государственной власти. По нашему мнению, нет необходимости предоставлять другие интерпретации политической власти, отличные от государственной власти, и необходимо рассматривать их как взаимосвязанные понятия. Политика представляет собой искусство управления обществом, и этот процесс осуществляется государственным механизмом. Таким образом, политическая власть является проявлением власти, осуществляемой государством. [Байтин М. И. 1972: 23].

Политическая (государственная) власть отличается целым рядом особенностей и характеристик, позволяющих отграничивать ее от иных

разновидностей социальной сферы (семейной, религиозной, корпоративной и т. д.) [Самойлюк Р. Н. 2015: 17–20].

К этим признакам относятся следующие [Волкова, Н. С. 2019: 275].

Во-первых, государственная власть охватывает обширный круг субъектов, проживающих на территории данного государства.

Во-вторых, ее осуществление зависит от государственного механизма, представляющего собой специальный аппарат органов управления, изолированный от общественных структур, и действующий от имени государства.

В-третьих, государственная власть, как и всякая другая власть, поддерживается применением силы. Эта сила в первую очередь реализуется через систему специальных (правоохранительных) органов.

В-четвертых, государственная власть существует на основе и в рамках исполнения юридических и правовых норм.

В-пятых, дуалистическая природа государства основывается, прежде всего, на связи между государством и правом, либо наоборот.

В правовом государстве достигается гармония между интересами общественно-государственных и частногражданских отношений. Законодательный процесс строится на основе здравого смысла, справедливости и уважения к устоявшимся нормам естественного права в гражданском обществе.

Проблема взаимодействия общества и государства заключается в практической невозможности полного отчуждения государственного контроля из сферы человеческой деятельности. В различных сферах своей жизни человек сталкивается с ограничениями и запретами. В системе государство и человек, где интересы первого всегда стоят выше интересов второго, существует неотъемлемая зависимость. Проще говоря, человек подчиняется государственной власти. Эта зависимость является естественной и неизбежной.

Отсутствие системности и государственного контроля может привести к печальным последствиям, таким как разруха и междоусобные конфликты. С другой стороны, чрезмерный контроль со стороны государства может привести к подавлению свободы мысли и репрессиям. Соблюдение баланса между этими крайностями становится одной из важнейших задач правового государства.

Гражданское общество не может игнорировать законы, которые устанавливаются государством. В основном, отношения между гражданским обществом и правовым государством регулируются нормами публичного права, которые обеспечивают защиту прав и свобод граждан, а также поддерживают работу различных институтов гражданского общества.

В настоящее время соотношение «общество - государство» чаще рассматривается как сложная субординация «гражданское общество» и «правовое государство» [Бондаренко Е.О. 2017: 175].

У общества с древности возникает стремление к справедливому, демократическому и правовому государству. Например, Афинская демократия, широкое развитие получила еще в середине V века до н. э. в которой к решению важнейших государственных дел были допущены широкие слои граждан [Белоусов Л.С.].

Создание единой гармоничной системы, учитывающей интересы индивида, общества и государственного аппарата, является нечто идеальным. При этом целью правового государства должно быть стремление к достижению этого идеала. В настоящее время гражданское общество представляет собой относительно автономную систему, предоставляющую ей право на независимый общественный контроль над государственными структурами. Таким образом, оно дополняет систему сдержек и противовесов. Только в рамках правового государства можно обеспечить соблюдение автономии гражданского общества.

Гражданское общество тесно связано с идеалами свободы, особенно с теми, что выражены в правовых свободах, предоставляемых каждому человеку. Естественные права и свободы различаются по своей природе. Личные и частные права могут быть реализованы через выражение индивидуальной воли. Однако существуют и такие права и свободы, которые затрагивают интересы широкого круга людей и их общности, и могут стать источником конфликтов и беспорядков. Эти права и свободы известны как публичные (общественные). По мнению Е.И. Трошкина, публичные (общественные) права и свободы не могут быть реализованы непосредственным образом, а реализуется через политические институты и государство [Трошкин Е.И. 2011: 54]. Естественно для этого требуется правовое регулирование.

Доктрина правового государства и гражданского общества опирается на принципы естественного права, признающие неотъемлемые права человека. Хотя это ценное положение, исходящее из признания этих прав, важно отметить, что осуществление прав и свобод не должно ограничиваться только опосредованными методами. Большинство таких прав и свобод должны быть непосредственно реализованы через принципы самоуправления, основанные на принципах естественного права. Следовательно, институты гражданского общества должны в основном взаимодействовать с законодательной властью, обходя бюрократические цепочки.

Формирование и развитие гражданского общества не подчиняются универсальной схеме. Инициативы отдельных институтов могут значительно отличаться и даже противоречить друг другу. Нарушение баланса интересов в гражданском обществе может привести к серьезным

последствиям. Для поддержания баланса и порядка государства должно осуществлять справедливое и разумное правовое регулирование. Важно также учесть правоохранительные функции с целью предотвращения беспорядков и обеспечения соблюдения прав и свобод.

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## **ВЛИЯНИЕ ГРАЖДАНСКОГО ОБЩЕСТВА НА СУВЕРЕНИТЕТ**

*Аннотация. В указанной статье обозначено определение суверенитета, выделение народного и государственного суверенитета, Также рассмотрен вопрос влияния гражданского общества на независимость государства. Исследование этого влияния актуально в связи развитием в нашей стране демократического строя.*

*Автором предлагается соблюдения приоритета общественного интереса в социально значимых сферах. Соблюдение баланса публичных и частных интересов.*

*Ключевые слова: Гражданское общество, демократическое государство, государственный суверенитет, народный суверенитет, государственная власть, государственный механизм.*

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## **INFLUENCE OF CIVIL SOCIETY ON SOVEREIGNTY**

*Abstract. This article outlines the definition of sovereignty, the identification of popular and state sovereignty, and also considers the issue of a Society Agreement on the independence of the state. The study of this issue is relevant in connection with the development of a democratic system in our country.*

*The author of the conclusion is considered to be the priority of public interests in socially significant phenomena. Maintaining a balance of state and international interests.*

*Key words: Civil society, democratic state, state sovereignty, popular sovereignty, state power, state mechanism.*

В современном мире важность изучения гражданского общества, все более нарастает. Как, казалось бы, оно находится вне сферы политических (государственных) отношений, но при этом гражданское общество является естественным фундаментом демократического строя. Но для развития демократического режима, должен быть непоколебимый конституционный строй и государственный суверенитет.

В российском энциклопедическом словаре понятие «государственного суверенитета» указано как независимость государства во внешних делах и верховенство государственной власти во внутренних делах [А. М. Прохоров 2000: 1517].

Про суверенитет, также сказано в постановлении Конституционного Суда РФ от 07.06.2000 N 10-П (абз. 2 п. 2.1): «суверенитет, предполагающий, по смыслу статей 3, 4, 5, 67 и 79 Конституции Российской Федерации, верховенство, независимость и самостоятельность государственной власти, полноту законодательной, исполнительной и судебной власти государства на его территории и независимость в международном общении, представляет собой необходимый качественный признак Российской Федерации как государства, характеризующий ее конституционно - правовой статус».

Для дальнейшего исследования используем понятие суверенитета в части: верховенство государственной власти во внутренних делах, из которого предполагается независимость и самостоятельность государственной власти, полнота законодательной, исполнительной и судебной власти государства.

Независимость представляет собой фундаментальную черту суверенитета. Это явление определяется как внешняя самостоятельность государственной власти, проявляющаяся в ее способности принимать и осуществлять решения независимо от внешнего воздействия. Независимость государства подразумевает его способность действовать и обеспечивать исполнение принятых решений, не поддаваясь воздействию как внутренних, так и внешних сил, включая другие государства. Независимость и превосходство власти рассматриваются в тесной взаимосвязи, подчеркивая внутреннюю и внешнюю автономию государства. Независимость и верховенство власти, по мнению Шевцов В.С.: «ибо эти два суверенных свойства государства взаимно дополняют друг друга, тесно сочетаются и немыслимы одно без другого. Если внутри

государства суверенитет выражает верховенство государственной власти, то вовне - ее независимость» [Шевцов В.С. 1979: 31].

В том же постановлении Конституционного Суда РФ (абз. 3 п. 2.1) указано, что Конституция РФ не допускает какого-либо иного носителя суверенитета и источника власти, помимо многонационального народа России, и, следовательно, не предполагает какого-либо иного государственного суверенитета, помимо суверенитета Российской Федерации.

В данном случае, говорится о народном суверенитете, закрепленном в статье 3 Конституции РФ, т.е. народ, является единственным законным и правомерным источником власти и носителем верховной власти.

Также интересен вывод в особом мнении судьи Конституционного суда Российской Федерации В.О. Лучина (п. 1) в том же постановлении: «Системный анализ положений Конституции Российской Федерации, в которых упоминается понятие суверенитета, позволяет сделать вывод, что Конституция Российской Федерации ставит знак равенства между такими понятиями, как "суверенитет в Российской Федерации" (статья 3), "суверенитет Российской Федерации" (статьи 4, 80), "суверенитет государства" (статья 82). В конституции федеративного государства такое допустимо только в случае, если возможность или необходимость альтернативного использования понятия "суверенитет" отсутствует».

Постановка позиции в постановлении, что народный суверенитет и есть государственный, а обособленного суверенитета государства не существует, на мой взгляд, не совсем верна. Даже с учетом того, что под государством в данном случае имеется в виду весь народ и государственный аппарат. Ведь нельзя не замечать государственный механизм, представляющий из себя систему государственных органов, имеющих свой курс движения, не всегда совпадающих с мнением и интересами народа. Как и в любой системе, здесь тоже имеются центры управления и принятие решений: Президент, Правительство и т.д., которые обладают независимостью и самостоятельностью.

Народный суверенитет в Европейской философской мысли еще на рубеже нового времени (XVII—XVIII веках) противопоставлялся самодержавному монарху, против его абсолютистской государственной власти. В настоящее время самодержавных монархов, не осталось, но противопоставление с государственным механизмом осталось. Особенно это чувствительно при взаимоотношениях гражданского общества и государства.

С одной стороны, позиция народный суверенитет равно государственный суверенитет, в полной мере признает народовластие, тем самым указывая, что конечным же управленцем государственного механизма являются граждане. Но с другой стороны получается, что презумптивно, государственные органы всегда выступают в защиту народа,

и представляют его. Проще говоря, позиция такая: народ выбрал главу государства и высшие представительные органы власти, тем самым наделил государственный механизм властью на государственное управление и этот механизм принимает решение за народ и в интересах народа. Тем самым, даже принимая решения не в пользу граждан либо ущемляя их права и свободы, государственные органы как бы выступают в интересах всего народа.

Государственный механизм как система защищает свой курс и свои интересы, в более широком значении это называется защита интересов государства. Конечно же, под защитой интересов государства также значатся и защита интересов граждан повышение качества жизни и благосостояния граждан. Но, например, для защиты конституционного строя, суверенитета, независимости, государственной и территориальной целостности государство в средствах и выборе мер практически неограниченно. В связи, с этим могут пострадать даже те представители гражданского общества, которые не посягали на указанные положения и интересы. При этом это естественное право государства на самозащиту и также практика многих зарубежных стран. Но главный посыл в соблюдении интересов общества и государства. Ведь если государственный механизм беспрецедентно будет защищать свои интересы, не считаясь с интересами и чаяниями гражданского общества, то такое направление неминуемо приведет тоталитаризму.

Стоит отметить определение понятия «публичный интерес». Под публичным интересом понимается совокупность обеспеченных правовой защитой, усредненных личных и групповых интересов, обладающих официальным признанием и поддержкой со стороны государства [Тихомиров Ю.А. 1995: 496]. Осуществление публичных интересов является неотъемлемым элементом реализации частных интересов, развития гражданского общества и его институтов, а также обеспечения устойчивого функционирования государства. Демократическое государство активно реагирует на объективные общественные интересы, выражая их в правовой форме и тем самым трансформируя их в публичный интерес. Эта взаимосвязь содействует поддержанию стабильности в функционировании общества и государства в целом. [Альхименко В.В., Гришконец А.А., Салищева Н.Г. 2011: 107].

В юридической науке давно существует дискуссия, в рамках разграничения интересов общественных и государственных, в том числе права государства на собственные интересы. Так, для решения последнего вопроса правоведа в основном делятся на две группы, каждая из которых придерживается противоположной позиции:

1) государство не имеет собственных интересов, поскольку оно принадлежит и олицетворяется через иные социальные субъекты (общество, социальные группы, индивиды и др.) [Кряжков А.В. 1999: 92];

2) наличие у государства собственных интересов [Субочев В.В. 2006: 125].

Следует отметить, что более верной представляется вторая позиция. Этот момент объясняется тем фактом несовпадения интересов общественных и государственных в ряде случаев.

Государство и общественные интересы считаются взаимосвязанными и взаимоопределяющими силами. Сущность государства проявляется в его основополагающем элементе - власти, которая определяет его содержание, назначение и функционирование. В этом контексте государство является тем, что выражает и трансформирует объективные общественные интересы в правовую форму, создавая тем самым публичный интерес. Эта власть поддерживает стабильность функционирования общества и государства в целом. [Р.А. Ромашова 2005: 137].

В настоящее время конституционно закреплён приоритет интересов личности в отличие от существовавшего в советский период приоритета интересов государства и общества.

Среди правоведов в настоящее время продолжается дискуссия о том, какой интерес является более важным и имеет приоритет. Так, Л.А. Морозова утверждает, что "государственные интересы превалируют над частными и даже над публичными, т.е. интересами общества" [Морозова Л.А. 1998: 30]. В.П. Иванов, не соглашаясь со сказанным, видит "не приоритет государственных интересов над интересами личности, а приоритет сохранения общества при наступлении особых условий и обстоятельств" [Иванов В.П. 2003: 20].

Указанная проблема начинает проявляться в судах. В спорах между государственными органами и представителями гражданского общества. Как уже выше описывалось, что государственный орган презумптивно выступает на стороне народа, отстаивает публичный интерес. А гражданское общество, ассоциируется с частными интересами, даже если иск подан в интересах большого количества людей. Публичный интерес государственного органа на практике оказывается в приоритете.

При этом представители гражданского общества могут нарушать закон и совершать экстремистские действия, все эти действия могут негативно влиять на стабильность в стране и пошатнуть верховенство государственной власти. Государство должно принимать разнообразные меры правового воздействия и выполнять правоохранительные функции для пресечения таких действий. Представители гражданского общества должны руководствоваться только демократическими (законными) способами влияния на государственную власть.

Под экстремистскими действиями (экстремизмом) для данной статьи понимается насильственное изменение основ конституционного строя и (или) нарушение территориальной целостности в соответствии со статьей 1



Федерального закона от 25 июля 2002 г. N 114-ФЗ "О противодействии экстремистской деятельности".

В настоящее время актуальной становится проблема ужесточения ограничений экономических прав граждан с целью обеспечения безопасности государства и общества. Несмотря на то, что такие ограничения представляют собой конституционное право государства, последнее время все чаще высказываются мнения о чрезмерности вмешательства со стороны государства, что может подавлять самостоятельность и инициативность экономических субъектов. В свете текущих событий приоритет отдается публичным государственным интересам перед частными, что считается справедливым. Эти ограничения представляют собой квантитативное сужение возможностей юридически допустимого поведения, устанавливая пределы, но избегая полного запрета. Таким образом, государство стремится установить порядок в сфере экономической деятельности в новых условиях, избежать разрушения экономической основы государства.

Такие ограничения на практике зачастую связаны с ведением дополнительных правил при регистрации, отчетности, особенностей ведения экономической деятельности, новых мер юридической ответственности и др. В зависимости от сферы правоотношений, подлежащих правовому регулированию, зависит и степень жесткости таких ограничений. Эти ограничения призваны для предотвращения вероятности нарушения публичного интереса субъектом экономической деятельности.

И.Д. Ягофарова утверждает, что можно выделить несколько форм неправомерного ограничения экономических прав и свобод [Ягофарова И.Д. 2018:130]:

- 1) изменение качественного содержания, что приводит к противоречию самому существу права;
- 2) изъятия правомочия из их содержания;
- 3) лишения возможности ими пользоваться, что противоречит конституционным целям;
- 4) необоснованное какими-либо целями и основаниями ограничение.

Из этого представляется, что интересы личности невозможно обеспечить без защиты интересов общества. Из этого, следует, что приоритет государственных и общественных интересов не должен существенно различаться, а в случае противоречия акцент должен делаться на последнем.

Общественные интересы должны превалировать в социально значимых сферах правового регулирования. В остальных сферах должен обеспечиваться баланс интересов личности и общества. Государственные интересы должны выступать только для защиты конституционного строя, суверенитета, независимости, укрепления обороны страны, государственной и территориальной целостности. В остальных же случаях



государство должно в первую очередь преследовать общественные интересы и помогать развитию частноправовых отношений.

Основным принципом при формировании баланса между частным и публичным правом является приоритет и защита прав, свобод и законных интересов человека и гражданина. Этот принцип обеспечивает наилучшее взаимодействие между частными и публичными субъектами. Например, для обеспечения уважения к указанным правам и свободам возможно применение как частноправовых, так и публично-правовых методов защиты.

Следует также рассмотреть соотношение между юрисдикционными и неюрисдикционными формами разрешения конфликтов. Характерными чертами юрисдикционных форм являются их сложность, длительность процедур, а также высокая степень бюрократизма. В связи с этим государство внедряет соответствующую политику, направленную на развитие неюрисдикционных средств разрешения конфликтов. В последнем случае, преобладающей чертой становится не добровольность, а принудительность. Например, хотя использование претензионного порядка в разрешении споров по защите прав потребителей необязательно, но действующее законодательство побуждает к его применению. Однако подобная тенденция может иметь непредвиденные последствия, такие как ограничение доступа граждан к судебной защите своих прав. В связи с этим неюрисдикционные механизмы должны привлекать граждан своей легкодоступностью, эффективностью и отсутствием излишних формальностей. [Архипова Е.Ю. 2022: 138].

Основная цель совместного функционирования частного и публичного права заключается в обеспечении законности. При этом государство, как главный представитель публичных интересов, имеет обязанность поддерживать устойчивое взаимодействие между ними, то есть оно должно сбалансировано учитывать государственные, общественные и частные интересы. Стремление к достижению этого равновесия представляет собой естественное развитие общества и не означает исключительное применение ограничений и запретов. Вместо этого речь идет о создании условий, которые позволят индивидам формировать интересы, соответствующие интересам общества и государства, и наоборот.

В юридической науке заявляют, что устойчивой тенденцией настоящего времени является социализация частного права, которая предполагает усиление роли публичного общественного права в частноправовых сферах жизнедеятельности [Санникова Л.В. 2020: 61]. Так, ранее провозглашенные принципы свободы и равенства участников гражданского оборота сегодня уступают место идеям, оправдывающим ограничения и запреты, которые вводятся для решения текущих задач, необходимых для дальнейшего социального развития. Примером такого тренда, поддерживаемого государством, является социальное

предпринимательство. Его деятельность направлена на решение социальных проблем, стоящих перед обществом в целом и его отдельными гражданами, таких как обеспечение занятости социально уязвимых категорий граждан, производство товаров или предоставление услуг для них, а также поддержка наименее защищенных слоев общества. [Харитонов Ю.С. 2016: 42].

На настоящем этапе развития, очевидно, что только государство способно обеспечить защиту частных интересов посредством использования правового регулирования публичных и частноправовых сфер жизнедеятельности. В связи с этим, взаимоотношения отношения между государством и обществом должны находить свое отражение в действующем законодательстве, в котором фиксировать необходимый баланс интересов публичного и частного порядка.

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## **ГРАЖДАНСКОЕ ОБЩЕСТВО КАК ФУНДАМЕНТ НАРОДОВЛАСТИЯ**

*Аннотация. В данной статье проанализировано взаимосвязь гражданского общества и народовластия в Российской Федерации. Гражданское общество как часть народа играет ключевую роль в развитие демократии. Исследование этой взаимосвязи остается актуальным в силу утвержденного принципа «народ является единственным источником власти».*

*Ключевые слова: гражданское общество, народовластие, демократия, демократическое государство, плюрализм, политический плюрализм, государственная власть.*

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## **CIVIL SOCIETY AS THE FOUNDATION OF DEMOCRACY**

*This article analyzes the relationship between civil society and democracy in the Russian Federation. Civil society as a part of the people plays a key role in the development of democracy. The study of this relationship remains relevant due to the approved principle "the people are the only source of power."*

*Keywords: civil society, democracy, democracy, democratic state, pluralism, political pluralism, state power.*

Власть народа (народовластие) в истории нашего государства имеет глубокие корни. Например, народное собрание (вече) на Руси, функцией которого было решением разнообразных общественных вопросов. Вече, представляло собой древнюю форму прямой демократии в древнерусском государстве [В. А. Иванова 2019: 127].

В действующем законодательстве Российской Федерации провозглашается принцип народовластия, тем самым народ представляет собой единственный источник власти. Данное положение утверждено в статье 3 Конституции Российской Федерации (принята всенародным голосованием 12 декабря 1993 с изменениями, одобренными в ходе общероссийского голосования 01.07.2020) (далее – Конституция РФ).

Определение «народ» в политико-правовом значении представляет синоним понятия «нация». Таки образом, под «народом» в данном случае разумеется совокупность граждан определенного государства [В.С. Степин, Новая философская энциклопедия].

Формы волеизъявления народа многообразны, согласно Конституции РФ (ч. 2 ст. 3) народ может осуществлять свою власть непосредственно, либо через органы государственной власти и органы местного самоуправления. Непосредственным высшим выражением власти народа являются референдум и свободные выборы. Тем самым разделяя волеизъявление народа на непосредственную и представительную демократию. Представительное народовластие осуществляется через представительные органы государственной власти и органы местного самоуправления. В настоящее время для Российской Федерации характерно представительная демократия.

Демократия (демократический политический режим) – это форма государственно-политического устройства общества, основанная на принципе признания народа источником власти [В. С. Пусько. 2010: 37]. Из этого следует, что понятия «народовластие» и «демократия» взаимосвязаны и представляют собой одно целое. Хотя определение «демократия» представляет собой более широкое значение. Демократия как политический строй отличается наличием политического плюрализма, где существует законная оппозиция, разнообразные идеологические течения и политические партии. Также она характеризуется преобладанием закона во всех сферах общественной жизни, высокой степенью защиты прав человека, выборностью и периодической сменяемостью органов власти, соблюдением принципа разделения властей и наличием развитого гражданского общества. [Д. Е. Погорелый, В. Ю. Фесенко, К. В. Филиппов 2010: 85]. Демократия (демократическое государство) закреплена в Конституции РФ (ч. 1 ст. 1).

Из этого следует, что под понятием «Демократия» мы понимаем форму политической организации общества, основанную на признании народа источником власти, его права в решении государственных дел в

сочетании с широким кругом прав и свобод. Как уже было указано, одним из принципов демократии является народовластие. Под термином "народовластие" следует понимать осуществление власти народа в управлении государством напрямую или через своих представителей, в строгом соответствии с законами и правовыми актами государства. Проще говоря, это означает, что народ самостоятельно определяет будущее своей страны. Этот принцип народовластия является отражением основ демократического государства. Народовластие представляет из себя суверенитет народа, выраженный в юридически значимых формах. Он является подлинным и единственным фундаментом государства, от которого происходит мандат на создание и функционирование любых институтов государственной власти. [М.В. Баглай 2013: 123].

Государственный и общественный деятель Е. Г. Ясин в своей книге «Приживется ли демократия в России?» указывает на семь признаков демократии [Е.Г. Ясин 2005: 37]:

1) необходимо, чтобы лица, занимающие высшие государственные должности и обладающие полномочиями принятия важных решений и применения государственного принуждения, были выбираемыми гражданами.

2) должна существовать возможность смены власти только через проведение свободных, честных и регулярных выборов.

3) принцип разделения властей должен быть обеспечен, то есть ветви власти (исполнительная, законодательная и судебная) должны быть явно разграничены и функционировать независимо друг от друга. Это не только предотвращает возможность монополии власти, но также создает систему контрольных механизмов и противовесов, обеспечивая общественный контроль над деятельностью государства.

4) гражданская свобода слова и информации гарантирует право каждого гражданина выражать свои взгляды, критиковать деятельность должностных лиц и получать любую необходимую информацию для компетентного суждения об общественных делах. Для обеспечения этого принципа необходимо наличие независимых средств массовой информации, свободных от вмешательства со стороны государства.

5) свобода ассоциаций дает право граждан свободно объединяться в различные ассоциации, включая политические партии, нацеленные на победу на выборах и приобретение власти. Отмечается, что именно ассоциации граждан, а не органы власти, должны разрабатывать предлагаемые избирателям политические программы с целью их реализации в случае прихода к власти

6) общегражданские права должны быть универсальными, обеспечивая равные возможности для всех совершеннолетних граждан участвовать в деятельности вышеперечисленных политических институтов.



7) Право на предпринимательскую деятельность и собственность являются законным основанием функционирования рыночной экономики.

Сам Ясин Е. Г. утверждает, что демократической страной есть только в той стране, где приведенные выше условия существуют целиком, без единого исключения. Ни один из этих элементов по отдельности или в комбинации с несколькими другими не является признаком демократического общества.

Свою же очередь нельзя полностью с ним согласиться. Конечно, выше перечислены важнейшие условия, характеризующее современное демократическое государство. Но многое зависит от конкретной формы демократии в конкретной стране, также необходимо учитывать сложившееся в обществе отношение к власти.

Из вышеуказанных условий и признаков демократического государства особо выделяется гражданское общество. При условии, что сфера гражданского общества является объектом пристального исследования многих ученых правоведов, специалистов по общественным наукам, в настоящее время нет единого, общепринятого определения гражданского общества.

В современном контексте, понимание гражданского общества начало проявляться на рубеже XVIII и XIX веков. Немецкий философ Гегель в своих научных работах считал, что гражданское общество, выступает "не как атомистически распавшееся на единичные лица и собравшееся на мгновение только для единичного временного акта без дальнейшей связи, а как расчлененное на уже раньше конституированные товарищества, общины и корпорации, которые таким образом получают политическую связь" [Г.Ф. Гегель 1990: 346].

Гегель выделяет основные принципы гражданского общества, включая частную собственность, личную свободу, "публичность" и "всеобщую осведомленность". Эти принципы подразумевают свободное формирование общественного мнения, включая справедливые и строго соблюдаемые законы.

Карл Маркс рассматривал гражданское общество как "определенный общественный слой, определенную организацию семьи, сословий или классов" [К.Маркс и Ф.Энгельс 1954: 402].

Более современное и подходящее определение для дальнейшего исследования дано в учебном пособии А.Ю.Мельвиля «Категории политической науки»: «Гражданское общество - совокупность множества межличностных отношений, семейных, социальных, экономических, культурных, религиозных и других ассоциаций и структур, которые развиваются в данном сообществе вне рамок государства и без его непосредственного вмешательства либо помощи». [А.Ю.Мельвиль 2002: 204]. Также важно внести определенное пояснение, а именно уважение

закона (действия в правовом поле) таким обществом, поскольку преступные сообщества (группировки) лучше отделить от данной категории.

Исходя из этого, можно привести короткое определение гражданского общества как совокупность общественных отношений вне рамок государства и без его непосредственного вмешательства либо помощи.

Таким образом, сфера правового регулирования гражданского права охватывает естественное и частное право в общей системе права. В правовом государстве преобладает публичное и позитивное право. При этом гражданское общество не может пренебрегать элементами позитивного права, такими как законы и правовые акты, которые издает государство. Взаимоотношения между правовым государством и гражданским обществом в основном регулируются нормами публичного права, через которые государственные органы обеспечивают защиту прав и свобод граждан, а также различных институтов гражданского общества.

Институтами гражданского общества являются: добровольные общественные организации и общественные движения, включая политические партии (пока они не участвуют в управлении властью); независимые средства массовой информации; общественное мнение как социальный институт; выборы и референдумы, если они способствуют формированию и выявлению общественного мнения, а также защите групповых интересов; элементы судебной и правоохранительной систем, основанные на прямом участии граждан (суды присяжных, народная дружина и т. д.). [Погорелый Д. Е., Фесенко В. Ю., Филиппов К. В. 2010: 74].

Высшей стадией развития гражданского общества считается плюрализация, которая представляет собой переход к модели, характеризующейся всеобъемлющим плюрализмом и толерантностью к разнообразию и новаторству, при условии соблюдения законов. В данном обществе плюрализм преобладает во всех сферах, включая политический, и взаимоуважение к различиям рассматривается как важный принцип. Однако стоит отметить, что данная цель практически труднодостижима.

Политический плюрализм (лат. pluralis - множественный, греч. politike - политика, искусство управления государством) - принцип социально-политической жизни, предполагающий свободное сосуществование различных идеологических течений, партий, политических и общественных организаций, движений, а также многообразие форм политической деятельности и выражения политических интересов. Политический плюрализм является важнейшим признаком демократической политической системы. [Погорелый Д. Е., Фесенко В. Ю., Филиппов К. В. 2010: 182]

Политическое разнообразие является гарантией свободы политических взглядов и активности. Оно основано на деятельности независимых общественных объединений, которые представляют собой проявление гражданского общества.

Принципы плюрализма и свободы мысли являются фундаментом политической практики, предполагая, что граждане могут свободно разрабатывать и пропагандировать различные политические концепции и взгляды через создание политических объединений с определенными политическими целями. Признание разнообразия мнений и целей является неотъемлемой частью функционирования общественных объединений и политических партий.

Цивилизованное общество гарантирует демократическое формирование ключевых государственных институтов, обеспечивает эффективный контроль над их деятельностью в соответствии с законом и правопорядком. В конечном итоге, оно направляет всю конструктивную силу правового государства на служение интересам общества и человека. Принципы плюрализма и свободы мысли остаются фундаментом политической практики, позволяя гражданам свободно формировать и продвигать различные политические концепции и взгляды через создание политических объединений с конкретными целями. Признание разнообразия мнений и целей остается неотъемлемой частью функционирования общественных объединений и политических партий. [С. С. Алексеев 2004: 28]. Только независимое общество может осуществлять беспристрастный и объективный контроль над государственными органами, а также продвигать общественные интересы.

Актуальной проблемой сегодня является пассивное участие граждан в выборах. Причины этого могут быть разнообразными, начиная от неправильного понимания значения института выборов в демократическом обществе и заканчивая недоверием к самому процессу голосования. Недостаток интереса к политике, а также отсутствие кандидата, который бы вызвал симпатию и поддержку, также играют свою роль.

На самом деле, участие в выборах должно быть активным для каждого гражданина, для которого судьба страны и благосостояние народа не остаются равнодушными. Именно через выборы формируются органы публичной власти, и выбранные должностные лица несут ответственность перед обществом.

Избрание органов власти является ключевым элементом в механизме непосредственной демократии. Участие граждан в этом процессе политически мобилизует их, позволяя осознавать себя важной частью политической системы общества. Это не только право, но и обязанность каждого гражданина в стремлении к устойчивому и ответственному управлению. [Д.А. Авдеев 2015: 28]. Также важным аспектом является уровень развития правосознания и правовой культуры каждого отдельно взятого гражданина Российской Федерации и степень его образованности.

В настоящее время в России ещё не утвердились культурно-политические принципы и ориентиры, как со стороны представителей государства, так и со стороны населения. Государство может допускать

отклонения от демократических принципов в пользу традиционных и национальных интересов, что находит поддержку в обществе.

В заключение можно сказать, что общество должно самостоятельно выбирать политический курс, предложенный партиями, соблюдая демократические (законные) методы. Благодаря активному участию гражданского общества, которое не привязано к государственному аппарату, возможно существование политического многообразия. Таким образом, подтверждается формулировка: «гражданское общество как фундамент народовластия».

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## **АВТОРИЗАЦИЯ НА МОБИЛЬНЫХ ПРИЛОЖЕНИЯХ С ИСПОЛЬЗОВАНИЕМ БАЗЫ ДАННЫХ**

*Аннотация. В статье подробно рассмотрен процесс реализации авторизации в мобильном приложении. Он заключается во взаимодействии с самой актуальной на данный момент базой данных Firebase. Сам процесс реализации выполнен на языке Java, так как этот язык доминирует в сфере создания мобильных приложений и является самым удобным. Данная статья предназначена для пользователей, которые имеют базовые знания в создании мобильных приложений.*

*Ключевые слова: авторизация, мобильное приложение, база данных, активити.*

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## **AUTHORIZATION ON MOBILE APPLICATIONS USING A DATABASE**



*Annotation. The article describes in detail the process of implementing authorization in a mobile application. It consists in interacting with the Firebase database, as it is the most up-to-date at the moment. The implementation process itself will be in Java, since this language dominates in this area and is the most convenient. We will use the simplest way to create authorization, using 2 classes, in one to receive data, and in the other to send. This article is intended for users who have basic knowledge in creating mobile applications.*

*Keywords: Development, element, list, file, activity.*

## Введение

Мобильная разработка – это актуальное направление в настоящее время, так как все сферы человеческой деятельности так или иначе связаны с мобильными приложениями. Можно привести в пример корпорации Yandex, Google, Ozon, и других разработчиков, которые имеют свои мобильные приложения.

В статье рассматривается способ подключения базы данных Firebase к созданному проекту на Android Studio, в котором рассматривается способ создания кода для авторизации в приложении. На рисунке 1 приведена форма регистрации в мобильном приложении.

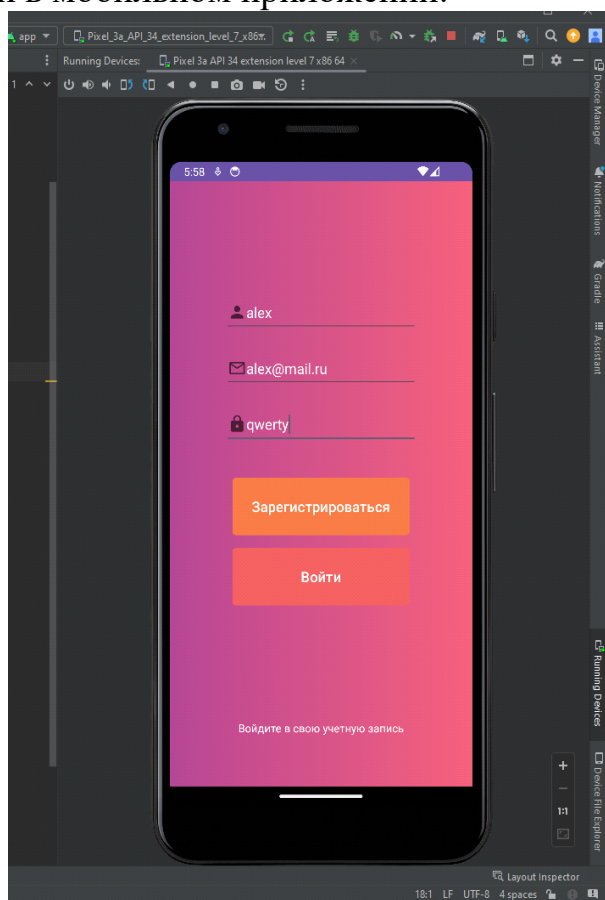


Рис. 1 – Первое активити «Регистрация»



Как видно из рисунка 2, в базу данных добавилась запись после нажатия кнопки “Зарегистрироваться”.

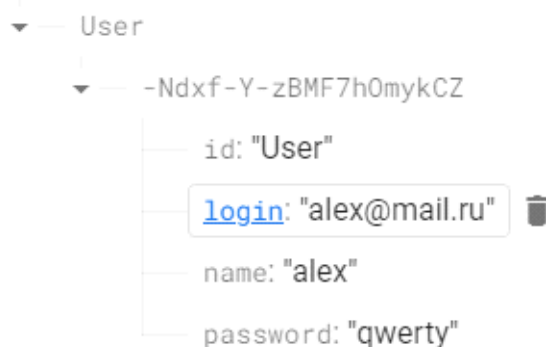


Рис. 2 – База данных Firebase

Рассмотрим способ, при котором создаются три приватных переменных типа «EditText». Приватная переменная типа «DatabaseReference» создается, чтобы получить доступ к базе данных. Эта переменная вмещает в себя ссылку на базу данных Firebase. При этом создается группа под названием «User», чтобы в базе данных заполнить значения. Метод onCreate нужен для создания первого активити. Функция setContentView нужна для отображения layout (ресурса) на активити. Далее рассматривается вызов метода init. Для переменных edName, edLogin, edPassword присваивается id, чтобы работать с ними. Передаем инстанцию нашей базы данных в переменную mDataBase. Через функцию getReference указывается группа, в которую будут передаваться наши данные.

С помощью метода Registraria записываются данные в базу данных по нажатию кнопки “Зарегистрироваться”. Id получаем от базы данных с помощью функции getKey, далее создаем три переменных, в которые запишем текст, полученный из переменных edName, edLogin, edPassword с помощью функции getText(), и присвоим данным тип string.

На рисунке 3 приведено второе окно приложения.

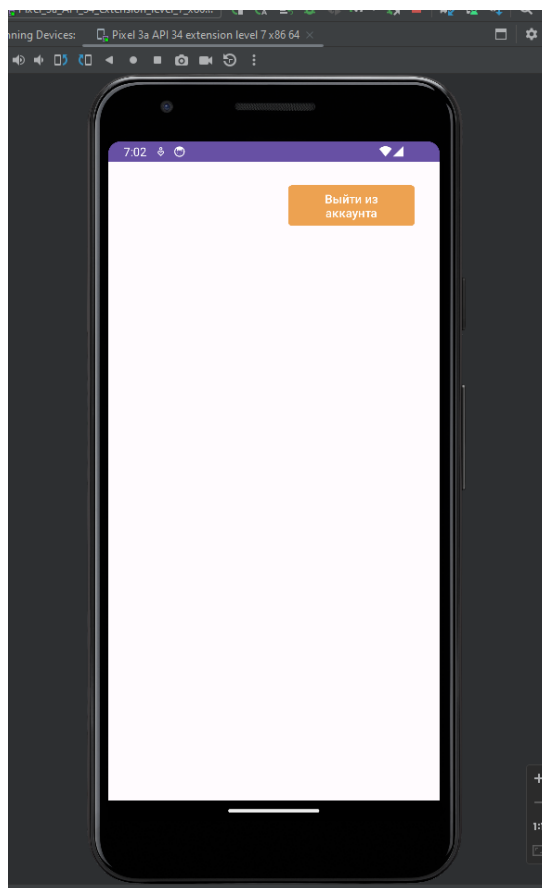


Рис. 3 – Второе активити

Создается класс User, который будет хранить данные из EditText, которые мы вводим в форме регистрации. На следующем шаге создается объект класса new User() в классе MainActivity, в который передаются все элементы из формы регистрации, далее этот объект передает данные в класс User. Класс User будет записываться в созданную базу данных, поэтому передаем данные в него.

Создаем объект класса intent, который позволяет перейти из одного окна в другой. Внутри объекта указываем окно из которого будем переходить (функция «this») в нужное нам окно, в нашем случае MainActivity2.

Метод startActivity(intent) - запускает жизненный цикл активити, в него передается переменная, в которой хранится переход между окнами.

На рисунке 4 приведен код реализации первого окна.

```

public class MainActivity extends AppCompatActivity {

    2 usages
    private EditText edName,edLogin,edPassword;
    3 usages
    private DatabaseReference mDataBase;
    1 usage
    private String USER_KEY = "User";

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        init();
    }

    1 usage
    private void init(){
        edName = findViewById(R.id.edname);
        edLogin = findViewById(R.id.edlogin);
        edPassword = findViewById(R.id.edpassword);
        mDataBase = FirebaseDatabase.getInstance().getReference(USER_KEY);
    }

    1 usage
    public void Registrasia(View view){
        String id = mDataBase.getKey();
        String name = edName.getText().toString();
        String login = edLogin.getText().toString();
        String password = edPassword.getText().toString();
        User newUser = new User(id,name,login,password);
        mDataBase.push().setValue(newUser);
        Intent intent = new Intent( packageContext: this, MainActivity2.class);
        startActivity(intent);
    }
}

```

Рис. 4 – Код первого активити

На рисунке 5 проиллюстрирован код создания класса User.

```

public class User {
    1 usage
    public String id,name,login,password;

    public User() {
    }

    1 usage
    public User(String id, String name, String login, String password) {
        this.id = id;
        this.name = name;
        this.login = login;
        this.password = password;
    }
}

```

Рис. 5 – Код класса User

В классе User сохраняются данные, для одновременной записи информации в каждую переменную, чтобы записывать их сразу все, а не по одному в базу данных.

Создаем 4 публичных переменных id, name, login, password.

Далее создается конструктор этого класса, для этого внедряем пустой класс, и класс со всеми значениями выше.

Класс User запрашивает значения id, name, login, password из основного класса MainActivity и сохраняет эти значения.

Таким образом выполняется авторизация пользователя в мобильном приложении.

### **Заключение**

Материал был подготовлен для начинающих создателей мобильных приложений, для того чтобы они могли опираться на материал статьи и создавать свои первые проекты. Статья в полном объеме раскрывает основные этапы разработки авторизации на мобильных приложениях с использованием базы данных.

Рассмотрен наиболее предпочтительный способ подключения базы данных Firebase к созданному проекту на Android Studio. Рассмотрен способ создания кода для авторизации в приложении.

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## **ОТВЕТСТВЕННОСТЬ, ПРЕДУСМОТРЕННАЯ ЗАКОНОДАТЕЛЬСТВОМ РФ, ЗА НЕСОБЛЮЖДЕНИЕ АДВОКАТОМ РЕЖИМА АДВОКАТСКОЙ ТАЙНЫ**

*В статье рассматриваются виды и пределы ответственности за несоблюдение адвокатом режима адвокатской тайны*

*Ключевые слова: адвокат, ответственность, адвокатская тайна, квалифицированная юридическая помощь.*

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## **LIABILITY PROVIDED FOR BY THE LEGISLATION OF THE RUSSIAN FEDERATION FOR NON-COMPLIANCE BY A LAWYER WITH THE REGIME OF ATTORNEY-CLIENT PRIVILEGE**

*The article discusses the types and limits of liability for non-compliance by a lawyer with the regime of attorney-client privilege*

*Keywords: lawyer, responsibility, attorney-client privilege, qualified legal assistance.*

Для всех граждан РФ законодательно предусмотрено право на получение квалифицированной юридической помощи. Данное право гарантировано всем в соответствии с нормами Конституции РФ и другими законодательными актами.

Законодательством закрепляется основная обязанность членов адвокатского сообщества, которой предусматривается защита прав и интересов доверителей. При этом адвокату надлежит осуществлять это по справедливости, разумно и добросовестно, с использованием любых способов, не запрещенных законодательством РФ. Кроме того, адвокату надлежит использовать значимую информацию так, чтобы это не повлекло за собой причинение какого-либо вреда своему доверителю. С учетом того, что в ходе осуществления профессиональной деятельности может возникнуть ситуация, связанная с несанкционированным доступом к адвокатской тайне, адвокат обязан принять определенные меры защиты.

Следует сказать, что сохранение сведений, которые имеют конфиденциальный характер, является важнейшим принципом адвокатской деятельности. Вытекающее из этого положение свидетельствует о том, что абсолютности адвокатской тайны препятствует ее разглашение, независимо от обстоятельств.

Указанным и обуславливается сущность деятельности адвоката, ведь доверитель должен быть полностью уверен в том, что сведения, которые он сообщает своему защитнику, не будут им разглашены в последующем. Для обеспечения данного условия, защита института адвокатской тайны закреплена на всех уровнях законодательства.

В Рекомендациях по обеспечению адвокатской тайны и гарантий независимости адвоката при осуществлении адвокатами профессиональной деятельности, утвержденными решением Совета Федеральной палаты адвокатов РФ от 30 ноября 2009 г. можно увидеть, что несанкционированное разглашение или использование сведений, являющихся адвокатской тайной, в результате системного подхода к толкованию законодательства, самостоятельно устанавливает режим адвокатской тайны.

Следует проанализировать запреты, которые и устанавливают вышеуказанный режим. Адвокат не вправе:

- при работе с другими клиентами и их «кейсами» использовать информацию, которая является адвокатской тайной;
- в случаях необходимости консультации с коллегами относительно того или иного дела, разглашать адвокатскую тайну без получения письменного согласия доверителя;
- при общении с членами семьи, друзьями и близкими обсуждать работу над конкретным делом с предоставлением подробных данных;
- разглашать адвокатскую тайну в каких-либо личных целях, а также для личного рекламирования.

Несмотря на законодательное закрепление абсолютности адвокатской тайны, ее обеспечение реализуется за счет дисциплинарной и административной ответственности адвоката за разглашение такой тайны.

ФЗ «Об адвокатской деятельности и адвокатуре в России» включает нормы, регламентирующие ответственность за разглашение адвокатом сведений, ставших ему известными в связи с оказанием юридической помощи доверителю без его письменного согласия [6]. При этом если «де-юре» ответственность регламентирована, то «де-факто» вопрос об ответственности детально до сих пор не решен.

Обратившись к пп. 5 п. 4 ст. 6 указанного федерального закона, можно увидеть, что прямая дисциплинарная ответственность за нарушение норм об адвокатской тайне возможна лишь в том случае, если такое разглашение сведений будет осуществлено без получения согласия доверителя.



Таким образом, на практике складывается неоднозначная ситуация, которая явно говорит о пробелах в законодательных нормах и связана с тем, что привлечение к ответственности за использование информации о доверителе возможно лишь в случае прямого разглашения, в то время, как в других случаях такого алгоритма не предусмотрено.

Данная коллизийная ситуация обусловлена специфическими чертами адвокатской тайны:

– предметом регулирования выше обозначенных отношений может быть вся информация, полученная в ходе профессиональной деятельности, а объектом – именно неприкосновенность как черта любых законных интересов доверителя;

– сталкиваясь в практической деятельности с такими ситуациями, участникам процесса крайне сложно представить доказательства собственной выгоды как мотива разглашения рассматриваемых сведений [1, с. 113].

Возвращаясь к абсолюту адвокатской тайны, следует отметить, что в случае необходимости у подзащитного предоставить своему защитнику сведения, которые имеют конфиденциальный характер (например, семейная или корпоративная тайна, и другое) у него должны быть все основания доверять адвокату относительно того, что сообщенные сведения не будут раскрыты, поскольку за разглашение таких сведений законодательством предусмотрена ответственность.

В связи с указанными выше положениями, можно констатировать, что до тех пор, пока законодателем не будет разработан и закреплен механизм законного использования информации защитником, подзащитный как наиболее слабая сторона отношений не будет иметь уверенности в защите и соблюдении своих прав.

В соответствии с п. 2 ст. 6 Кодекса профессиональной этики адвоката, соблюдение профессиональной тайны является безусловным приоритетом деятельности адвоката [3]. Срок хранения тайны не ограничен во времени. Данное положение о бессрочности хранения адвокатской тайны непременно подтверждает то обстоятельство, что у адвоката есть обязанность предпринимать меры к защите конфиденциальной информации, полученной в ходе своей деятельности.

Положения пп. 4 п. 1 ст. 9 Кодекса закрепляют обязанность адвоката о неразглашении сведений, ставших известными в связи с оказанием им помощи.

Кроме того, законодательное закрепление нормы о том, что адвокат должен избегать действий, которые могут подорвать доверие, способствует тому, что между защитником и его доверителем будут развиваться наиболее крепкие правовые и доверительные взаимоотношения (п. 2 ст. 5 Кодекса).

Несмотря на значительное количество норм о защите адвокатской тайны, существует исключение, закрепленное в п. 4 ст. 6 Кодекса: «Без

согласия доверителя адвокат вправе использовать сообщенные ему доверителем сведения в объеме, который адвокат считает разумно необходимым для обоснования своей позиции при рассмотрении гражданского спора между ним и доверителем или для своей защиты по возбужденному против него дисциплинарному производству или уголовному делу». В связи с тем, что защитник в случае возникновения необоснованных претензий со стороны доверителя, вынужден защищаться и сохранить действующий статус, данная норма способствует уравниванию сторон в процессе.

Проведя анализ вышеуказанных норм права, можно однозначно утверждать, что отдельные положения об адвокатской тайне с течением времени перестают отвечать его требованиям, и как следствие, нуждаются в доработке. В то время как отдельные ситуации, складывающиеся вокруг адвокатской тайны, вовсе не урегулированы и требуют закрепления.

Вопросы о раскрытии адвокатской тайны являются актуальными в научной литературе. Изучив правовые дискуссии, можно увидеть, что существует несколько точек зрения.

Исходя из определенных обстоятельств дела, возникают ситуации, в которых адвокат имеет право раскрыть адвокатскую тайну. Стороны дискуссии утверждают, что основаниями для разглашения тайны должны являться: безопасность мирового сообщества, государства, общества. Соответственно, морально-этические критерии, закрепленные на законодательном уровне, обязательны для адвокатов, а запрет на разглашение тайны служит препятствием для гражданского долга.

По мнению ряда ученых, разглашение конфиденциальной информации, необходимое для предотвращения преступления, будет законным, если у адвоката имеются достаточные основания предполагать, что существует реальная вероятность совершения преступления и неизбежно складывается ситуация, когда предупреждение преступления путем разглашения информации является единственной возможностью его предотвращения.

В то же время существует точка зрения о законодательном закреплении права адвоката сообщать о неизбежности совершения тяжкого преступления. При этом любое намерение совершить преступление не может быть правом, которое подлежит защите, и оно не подпадает под защиту ФЗ «Об адвокатской деятельности и адвокатуре в РФ» [1, с. 114].

Адвокатская тайна не может быть раскрыта ни при каких обстоятельствах. Данное мнение основано на том, что адвокаты – это элемент гражданского общества и гарант верховенства закона. Кроме того, в случае дачи показаний адвокатом о готовящемся преступлении, оно не будет являться законным, поскольку предоставленные адвокатом доказательства недопустимы и не будут использованы [4, с. 62].

В рамках данного структурного элемента работы следует рассмотреть вопрос ответственности за нарушение адвокатской тайны. Законодательством на сегодняшний день предусмотрена дисциплинарная и административная ответственность. Особенностью ответственности данного правового института является то, за разглашение адвокатской тайны не предусмотрена уголовная ответственность.

Согласно ст. 183 Уголовного кодекса Российской Федерации от 13.06.1996 № 63-ФЗ (далее – УК РФ) предусматривается ответственность за разглашение сведений, составляющих коммерческую, налоговую или банковскую тайну [5]. Однако адвокатская тайна не входит в перечень, указанный в статье.

Данное обстоятельство также находит отражение во мнениях ряда ученых. Они считают, что в России отсутствуют исследования эмпирического характера в отношении нарушения адвокатской тайны самими адвокатами. При этом отсутствует комплексное изучение правонарушений, а значит, законодателем не выработаны пути по заполнению данных пробелов [4, с. 63].

В отличие от уголовной, административная ответственность закреплена в ст. 13.14 Кодекса Российской Федерации об административных правонарушениях от 30.12.2001 № 195-ФЗ (далее – КоАП РФ) [3]. Данная статья закрепляет нормы об ответственности за разглашение информации, доступ к которой ограничен федеральным законом в связи с выполнением служебных или профессиональных функций. Соответственно, адвокатская тайна входит в данный перечень. Согласно примечанию, адвокаты, которые совершили административное правонарушение по ст. 13.14 КоАП РФ, несут административную ответственность как должностные лица.

Помимо административной ответственности, в отношении адвоката могут быть применены нормы о дисциплинарных взысканиях. К таким можно отнести: замечание, предупреждение, лишение адвокатского статуса и другие.

Проанализировав разъяснения Комиссии по этике и стандартам о применении мер дисциплинарной ответственности, утвержденные Советом ФПА РФ, можно прийти к выводу о том, что наиболее часто к адвокату применяются такие меры дисциплинарной ответственности, как замечания и предупреждения. В свою очередь такая мера ответственности, как прекращение статуса адвоката, может быть применена в случае грубого или неоднократного нарушения адвокатом законодательства об адвокатской деятельности и адвокатуре.

Кроме того, из указанных разъяснений прослеживается, что о тяжести совершенного адвокатом проступка может свидетельствовать допущение адвокатом грубого и явного проявления поведения, которое умаляет авторитет адвокатуры, порочит честь и достоинство адвоката.

Проведя анализ правоприменительной практики, усматривается, что адвокат все же может раскрывать сведения, составляющие адвокатскую тайну.

Первоначально можно решить, что правовые нормы проработаны детально и регулируют гарантии, которые предоставляются адвокату как гаранту права, что влечет сохранение адвокатской тайны. К таким нормам можно отнести: запрет на вызов и допрос адвоката в качестве свидетеля по вопросам, которые стали ему известны в связи с осуществлением своей профессиональной деятельности. Однако в практической деятельности у адвоката возникают проблемы, связанные с использованием информации от имени доверителя и сохранением адвокатской тайны.

В ходе осуществления профессиональной деятельности адвокат вправе раскрывать сведения об адвокатской тайне своим коллегам, партнерам, стажерам, юристам и другим лицам. Однако, в таком случае, гарантии «режима секретности» не могут в полной мере обеспечивать защиту данных, поскольку вышеуказанные лица могут ненадлежащим образом исполнять обязанности по сохранению данных.

Проанализировав нормы законодательства, можно увидеть, что они не содержат в себе конкретных гарантий, которые препятствовали бы разглашению сведений, ставших адвокатской тайной, иными лицами, которым они стали известны. Положениями ФЗ «Об адвокатской деятельности и адвокатуре в РФ» закреплен запрет на разглашение конфиденциальной информации членами адвокатского сообщества (кабинета, коллегии и прочее) [6].

В то же время, к существующему пробелу в области обеспечения гарантии защиты адвокатской тайны, следует отнести то обстоятельство, что в отношении помощников или стажеров адвокатов законодателем не закреплены запреты на разглашение таких сведений. Кроме того, нет запрета на вызов и допрос их в качестве свидетелей по конкретному делу.

Вышеописанные нормы права свидетельствуют о том, что в российском законодательстве существует пробел или «лазейка», поскольку на практике очень часто к работе адвоката привлекаются помощники и стажеры. Также отсутствует прямой запрет на опрос сотрудников адвокатских объединений.

Подводя определенный итог всему вышеизложенному, следует отметить, что в настоящий момент позиция законодателя сводится не столько к принятию мер, направленных на усиление ответственности путем установления уголовно-правового запрета на воспрепятствование адвокатской деятельности и распространение сведений, которые представляют адвокатскую тайну, а, напротив, она направлена на гуманизацию, смягчение возможной меры ответственности.

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## **ЗАРУБЕЖНЫЙ ОПЫТ УПРАВЛЕНИЯ АГРОКЛАСТЕРАМИ**

*Аннотация. В данной статье рассматривается зарубежный опыт управления агрокластерами как инструментом регионального развития и повышения конкурентоспособности экономики. Авторы подчеркивают значимость сотрудничества между предприятиями, образовательными учреждениями, научными организациями и государством. Изучение зарубежного опыта имеет особую ценность для стран, только начинающих развивать агрокластеры, таких как Узбекистан. Анализ кластерных инициатив, осуществленных в разных странах, демонстрирует эффективность кластерной модели управления и ее влияние на конкурентоспособность национальной экономики. Особое внимание уделяется опыту Европейского Союза, где кластерные инициативы являются важной составляющей экономической стратегии.*

*Ключевые слова. Агрокластеры, управление кластерами, региональное развитие, конкурентоспособность, сотрудничество, зарубежный опыт, Европейский Союз.*

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## FOREIGN EXPERIENCE IN AGRICULTURAL CLUSTER MANAGEMENT

*Abstract. This article examines the foreign experience of managing agroclusters as a tool for regional development and enhancing economic competitiveness. The authors emphasize the significance of collaboration among enterprises, educational institutions, research organizations, and the government. Studying foreign experience holds special value for countries that are just beginning to develop agroclusters, such as Uzbekistan. Analysis of cluster initiatives implemented in different countries demonstrates the effectiveness of the cluster management model and its impact on the competitiveness of the national economy. Special attention is given to the experience of the European Union, where cluster initiatives are an important component of the economic strategy.*

*Keywords: agroclusters, cluster management, regional development, competitiveness, collaboration, foreign experience, European Union.*

В современной глобализированной экономике кластеры стали одним из ключевых инструментов регионального развития, позволяющих концентрировать производственные ресурсы, научные исследования и инновации в определенных областях. Многие страны мира активно внедряют кластерную модель управления в своих регионах, которая основана на принципе сотрудничества между предприятиями, образовательными и научными учреждениями, государством и другими участниками экономики в рамках одного кластера. Такое сотрудничество позволяет объединять усилия для достижения общих целей, эффективно распределять ресурсы и находить новые рыночные возможности.

Для стран, только начинающих свой путь в развитии кластерных моделей, таких как Узбекистан, изучение зарубежного опыта имеет особую ценность. Оно позволяет понять, какие методы и инструменты управления наиболее эффективны, какие ошибки можно избежать, и как лучше всего адаптировать успешные практики к национальным условиям. Кроме того, зарубежный опыт может служить источником вдохновения для создания новых инновационных решений и стратегий развития агрокластеров.

Кластерная модель управления завоевала широкое признание во всем мире как эффективный инструмент для стимулирования инноваций, укрепления конкурентоспособности и обеспечения устойчивого экономического роста на региональном и национальном уровнях. В разных странах, в зависимости от их исторического, культурного и экономического контекста, применяются различные подходы к формированию и управлению агрокластерами. Эти различия могут предоставить ценные уроки и наработки для других стран, стремящихся оптимизировать свою кластерную политику и практику.

Анализ кластерных инициатив, реализованных за последние

десятилетия в разных странах, показывает, что их высокая конкурентоспособность основана на сильных позициях отдельных кластеров, которые усиливают ее и оптимизируют управление национальной экономикой.

Следует отметить что интересным опытом является опыт Европы, где кластерные инициативы давно стали неотъемлемой частью развития экономической стратегии многих стран.

Европейский Союз (ЕС) давно признал значение кластеров как важного инструмента для повышения конкурентоспособности регионов и стран. Агротрастеры в ЕС играют ключевую роль в агропромышленном комплексе многих стран, обеспечивая инновации, создание рабочих мест и экономический рост.

Европейская комиссия активно поддерживает развитие агротрастеров через различные программы и инициативы, такие как Европейская политика сельского развития и Программа развития сельских территорий. В ЕС большой акцент делается на формирование сетей сотрудничества между предприятиями, научно-исследовательскими учреждениями, образовательными организациями и государственными структурами. Это обеспечивает обмен знаниями, ресурсами и лучшими практиками. Европейские агротрастеры часто ориентированы на инновации. Имеется множество научно-исследовательских центров и инновационных площадок, специализирующихся на аграрных исследованиях. Европейский опыт управления агротрастерами также акцентирует внимание на экологической устойчивости и внедрении "зеленых" технологий, что в свою очередь способствует созданию устойчивых и экологически чистых продуктов. ЕС активно поддерживает маркетинг и продвижение продукции агротрастеров, особенно на международных рынках. Примером может служить система географических указаний продуктов, которая обеспечивает защиту и продвижение уникальных региональных продуктов.

Европейский опыт характеризуется многоуровневым подходом к управлению, включая взаимодействие на уровне ЕС, национальном, региональном и местном уровнях. Такой подход обеспечивает гибкость и способность адаптироваться к различным местным условиям. ЕС предоставляет значительную финансовую поддержку агротрастерам через различные программы, такие как Общая сельскохозяйственная политика (ОСП). Эти средства направлены на поддержку инноваций, обучение, инвестиции в производство и маркетинг. Европейские стратегии управления агротрастерами часто включают программы профессионального обучения и повышения квалификации для фермеров и других участников агропромышленного комплекса. Европейские агротрастеры активно сотрудничают друг с другом и с другими стейкхолдерами, создавая сети знаний и распространения инноваций. Одним из приоритетов ЕС является обеспечение устойчивого развития

агрокластеров. В этом контексте особое внимание уделяется экологической ответственности, охране окружающей среды и биоразнообразия. ЕС уделяет большое внимание защите качества продукции, созданию брендов и продвижению продукции на мировые рынки. Системы географических указаний и наименований происхождения являются важными инструментами в этой области.

В заключение, европейский опыт управления агрокластерами представляет собой ценный ресурс для изучения и адаптации в других странах. Он демонстрирует, как интегрированный и стратегически подход, подкрепленный активной государственной поддержкой, может способствовать успешному развитию агропромышленного комплекса.

Кластерный подход завоевал популярность в Финляндии. С середины 90-х годов XX века в этой стране главным критерием стало соотношение между долей продукции отрасли в мировом ВВП и долей этой отрасли в мировой торговле. При этом, «сильными» кластерами были признаны два (из девяти), в т.ч. лесной кластер.

Опыт Нидерландов, как критерий для определения наиболее «сильных» кластеров, предлагает те, на которые следует делать ставку при определении основных приоритетов в инновационной политике государства, – анализ «потоков знаний» между кластерами<sup>26</sup>.

Кластеры Германии были структурированы по трём основным типам: высокотехнологичные кластеры (например, аэрокосмическая промышленность); производственные кластеры (например, химическая и автомобильная промышленность); кластеры, ориентированные на сквозные технологии (например, нанотехнологии, метакроника).

Специфика опыта Великобритании чётко разводит кластеры по регионам: южные кластеры сориентированы, преимущественно, на сферу услуг (деловые услуги, программное обеспечение), северные – на промышленную<sup>27</sup>.

Опыт Португалии необычен: кластеры были выявлены как побочный результат осуществления программы М. Портера по изучению конкурентоспособности национальной экономики. Основная часть кластеров имеет естественное происхождение, обусловленное географической близостью компаний, однако внутрикластерный уровень взаимодействия невысок<sup>28</sup>.

Во Франции национальным агентством планирования (DATAR) было

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<sup>26</sup> Меньшенина И.Г. Кластерообразование в региональной экономике: монография / И. Г. Меньшенина, Л. М. Капустина. - Екатеринбург: Изд-во Урал. гос. экон. ун-та, 2008. – 154 с.; Фролов А.В. Формирование кластерной стратегии развития экономики региона: автореф. дисс. ... канд. экон. наук: 08.00.05 / А.В. Фролов. – Оренбург, 2013. - 28 с.

<sup>27</sup> Меньшенина И.Г. Кластерообразование в региональной экономике: монография / И. Г. Меньшенина, Л. М. Капустина. - Екатеринбург: Изд-во Урал. гос. экон. ун-та, 2008. – 154 с.

<sup>28</sup> Фролов А.В. Формирование кластерной стратегии развития экономики региона: автореф. дисс. ... канд. экон. наук: 08.00.05 / А.В. Фролов. – Оренбург, 2013. - 28 с.

идентифицировано 144 функционирующих и 82 находящихся в стадии формирования кластера. В Норвегии выявление кластеров было осуществлено на основе социологического исследования; его результат: 62 потенциальных кластера. Испанские кластеры (в количестве 142) специализируются, в основном, на традиционных отраслях промышленности.

В целом, европейский опыт управления агрокластерами демонстрирует, как интегрированный и стратегический подход может способствовать долгосрочному и устойчивому развитию агропромышленного комплекса.

США, обладая одним из крупнейших агропромышленных комплексов в мире, применяют ряд уникальных методов управления агрокластерами, которые стоит рассмотреть:

В отличие от ЕС, управление агрокластерами в США в большей степени децентрализовано, с активным участием отдельных штатов и местных сообществ. Ведущие аграрные университеты и научно-исследовательские центры США активно участвуют в исследованиях, направленных на инновации в сельском хозяйстве. Приватный сектор играет ключевую роль в финансировании агрокластеров, с активным участием венчурного капитала и агробизнеса. США активно продвигает свою агропродукцию на мировые рынки, используя маркетинговые кампании и международные ярмарки.

Азиатско-Тихоокеанский регион представляет собой мозаику различных экономических систем, культур и агроклиматических условий. Несмотря на это, ряд стран региона демонстрируют успешные примеры управления агрокластерами:

- интенсивное аграрное производство: Страны, такие как Япония и Южная Корея, с успехом применяют интенсивные методы аграрного производства, обеспечивая высокую производительность на ограниченных земельных ресурсах;

- технологические инновации: страны, такие как Сингапур и Израиль (хотя последний и не входит в АТР, его опыт важен для региона), активно внедряют технологические инновации в агросектор;

- сотрудничество и интеграция: АСЕАН (Ассоциация государств Юго-Восточной Азии) активно работает над интеграцией аграрных рынков и формированием региональных агрокластеров;

- поддержка мелких фермеров: во многих азиатских странах, таких как Индия и Таиланд, особое внимание уделяется поддержке мелких фермеров и их интеграции в кластерные структуры.

Азиатский опыт управления агрокластерами иллюстрирует разнообразие подходов и стратегий, применяемых в различных экономических и культурных условиях.

В целом, успешные практики управления агрокластерами в разных

странах основаны на сотрудничестве, инновациях и стратегическом планировании, позволяя достигать выдающихся результатов в аграрном секторе.

Успешные агрокластеры активно внедряют новейшие технологии и методы производства, что позволяет им оставаться конкурентоспособными на мировом рынке. Тесное взаимодействие между всеми участниками кластера, от фермеров до маркетологов и исследователей, является ключевым фактором успеха. Наличие государственной поддержки в виде субсидий, налоговых льгот и инвестиций в исследования и образование также играет важную роль. Эффективные стратегии продвижения и создание сильных брендов помогают агрокластерам расширять рынки сбыта и увеличивать продажи. Внимание к экологической ответственности и устойчивым методам производства делают продукцию агрокластеров более привлекательной для современных потребителей.

Изучая опыт стран, таких как Дания, Нидерланды и Израиль, можно выделить несколько ключевых моментов. В первую очередь, это усиление сотрудничества между научно-исследовательскими учреждениями, производителями и государством. Такое взаимодействие способствует быстрой адаптации инноваций и передовых технологий в аграрном секторе.

Также стоит обратить внимание на применение высокотехнологичных и экологически устойчивых методов сельского хозяйства, которые были успешно внедрены в условиях аридного климата Израиля. Эти методы могут быть адаптированы к условиям Узбекистана, учитывая климатические особенности региона.

Для дальнейшего изучения и внедрения лучших практик управления агрокластерами рекомендуется организация обучающих программ, создание национальной стратегии развития агрокластеров и активное сотрудничество с зарубежными партнерами.

В заключение, интеграция зарубежного опыта в управлении агрокластерами может стать катализатором для развития аграрного сектора Узбекистана, делая его более устойчивым, инновационным и конкурентоспособным на мировом рынке.

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## **ОСНОВНЫЕ ТЕНДЕНЦИИ ГОСУДАРСТВЕННОЙ ПОДДЕРЖКИ МАЛОГО И СРЕДНЕГО БИЗНЕСА В РЕСПУБЛИКЕ БАШКОРТОСТАН**

*Аннотация. В статье автором анализируются основные тенденции государственной поддержки субъектов МСБ на федеральном и региональном уровне. Сделан акцент на проблемы, снижающие эффективность господдержки, определены институциональные условия развития регионального предпринимательства.*

*Ключевые слова: льготы, меры государственной поддержки, малый и средний бизнес, национальный проект, предпринимательство.*

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## **MAIN TRENDS OF STATE SUPPORT OF SMALL AND MEDIUM BUSINESSES IN THE REPUBLIC OF BASHKORTOSTAN**

*Annotation. In the article, the author analyzes the main trends in state support for SMEs at the federal and regional levels. Emphasis is placed on the problems that reduce the effectiveness of state support, and the institutional conditions for the development of regional entrepreneurship are determined.*

*Key words: benefits, government support measures, small and medium-sized businesses, national project, entrepreneurship.*

Одной из стратегических задач развития малого и среднего бизнеса (далее по тексту – МСБ) в Республике Башкортостан является создание конкурентной институциональной среды и благоприятного предпринимательского климата. Органы власти осуществляют административное регулирование бизнеса, целенаправленно воздействуя на параметры предпринимательской деятельности, создавая условия функционирования субъектов МСБ, при которых обеспечивается сопряжение интересов государства, общества и делового сообщества.

Малый и средний бизнес обеспечивает необходимую мобильность в условиях рынка, создает глубокую специализацию и кооперацию, без которых немислима его высокая эффективность. Он способен сравнительно быстро окупаться, создавая атмосферу конкуренции, среду и дух предпринимательства, что составляет основу рыночной экономики. Вместе с тем, именно малое и среднее предпринимательство является наиболее уязвимой сферой экономики. Так, вынужденные меры ограничительного характера, реализуемые в стране в 2020-2022 годах, а также беспрецедентное распространение экономических санкций против России на протяжении последних семи лет, привели к значительному сокращению количества субъектов малого и среднего предпринимательства за последние три года. В таких условиях поддержка МСБ на уровне государства и отдельно взятого региона представляет собой важнейшее самостоятельное системное управление социальной и экономической политикой страны.

В соответствии с Указом Президента Российской Федерации от 21 июля 2020 г. № 474 «О национальных целях развития Российской Федерации на период до 2030 года» Минэкономразвития России разработало новую структуру паспорта национального проекта «Малое и среднее предпринимательство и поддержка индивидуальной предпринимательской инициативы», которая включает четыре федеральных проекта: «Поддержка самозанятых», «Предакселерация», «Акселерация субъектов МСП», «Цифровая платформа МСП» [2].

При разработке новой структуры национального проекта учтены потребности конечного бенефициара в лице малого и среднего бизнеса. Три федеральных проекта учитывают все стадии предпринимательской активности от статуса самозанятого до действующего бизнеса, заинтересованного в развитии, а четвертый федеральный проект, предусматривающий создание Цифровой платформы, выполняет функцию фундамента развития экосистемы взаимодействия бизнеса и власти.

Легальное понятие малого и среднего предпринимательства содержится в п. 1 ст. 3 Федерального закона от 24.07.2007 № 209-ФЗ «О развитии малого и среднего предпринимательства в Российской Федерации» [3]. Так, законодатель отнес к субъектам малого и среднего предпринимательства хозяйствующие субъекты (юридические лица и индивидуальные предприниматели), по условиям и критериям установленным этим законом, к малым предприятиям, в том числе к микропредприятиям, сведения о которых внесены в единый реестр субъектов малого предпринимательства. При этом в соответствии с ч. 1 ст. 4 Закона о малом и среднем предпринимательстве [3] данные субъекты могут иметь разные организационно-правовые формы: это могут быть хозяйственные общества, хозяйственные товарищества, хозяйственные партнерства, производственные кооперативы, потребительские кооперативы, крестьянские (фермерские) хозяйства и индивидуальные

предприниматели (далее по тексту – ИП).

К основным критериям отнесения субъектов хозяйствования к субъектам предпринимательской деятельности малого, среднего и крупного бизнеса относятся численность персонала, доля участия государства в уставном капитале, стоимость активов и ежегодный оборот компании [12, с. 22]. Так, субъектом предпринимательства может быть признан субъект хозяйствования с долей государственного участия в уставном капитале, не превышающей  $\frac{1}{4}$  его часть.

Что касается численности персонала, законом определено, что при численности сотрудников не превышающей 100 человек, субъекты хозяйствования могут быть отнесены к малому бизнесу. При численности от 100 до 250 сотрудников – к среднему бизнесу.

Также необходимо принимать в учет и оборот субъекта МСП. Постановлением Правительства РФ от 04.04.2016 № 265 «О предельных значениях дохода, полученного от осуществления предпринимательской деятельности, для каждой категории субъектов малого и среднего предпринимательства» определены предельно-допустимые значения годового оборота для микро и малых предприятий, а также для средних и крупных предприятий [4]:

- микро-предприятия - 120 млн. рублей;

- малые предприятия - 800 млн. рублей;

- средние предприятия – 2 млрд. рублей;

Доля участия других лиц в капитале:

- не более 25 % в сумме – для государственных образований, общественных и религиозных организаций и фондов;

- 49 % в сумме – для обычных юридических лиц (в том числе и иностранных);

- доля участия субъектов малого предпринимательства – не ограничена [4].

Согласно Единому реестру субъектов малого и среднего предпринимательства, в Республике Башкортостан по состоянию на ноябрь 2023 года зарегистрировано 132140 субъектов МСБ [14]. Вместе с тем, Министерством экономического развития и инвестиционной политики Республики Башкортостан отмечается, что в республике низкий удельный вес малого и среднего бизнеса в валовом региональном продукте; недостаточно эффективная система акселерация субъектов малого и среднего предпринимательства, включая индивидуальных предпринимателей и самозанятых лиц, в том числе в таких сферах, как благоустройство городской среды, научно-технологическая сфера, социальная сфера и экспорт; недостаточный уровень доступа субъектов малого и среднего предпринимательства к финансовым ресурсам, в том числе к льготному финансированию; необходимость создания условий для легкого старта и комфортного ведения малого бизнеса; недостаточная

эффективность обучения и формирования предпринимательской среды и т.д. Обозначенные проблемы определяют необходимость совершенствования мер государственной поддержки субъектов МСБ.

Рассмотрим основные меры государственной поддержки МСБ.

Законодательство РФ предусматривает достаточно большое количество видов поддержки и льгот для субъектов малого бизнеса на федеральном, региональном и местном уровне. Это налоговые льготы, инфраструктурная поддержка, а также финансовая поддержка.

Во-первых, льготы для субъектов МСБ установлены в сфере налогообложения, предоставления статистических отчетов, бухучета и порядка ведения кассовых операций. На основании ст. ст. 14 и 15 НК РФ [1] субъекты Федерации и органы местного самоуправления могут устанавливать региональные и местные налоги, содержащие соответствующие льготы для субъектов малого и среднего предпринимательства. Однако это не обязанность, а право соответствующих органов.

Также в соответствии с п. 4 ст. 346.20 НК РФ [1] субъекты РФ вправе своими законами устанавливать налоговые ставки в размере 0% для налогоплательщиков - индивидуальных предпринимателей, осуществляющих предпринимательскую деятельность в производственной, социальной и (или) научной сфере, а также в сфере бытовых услуг населению и услуг по предоставлению мест для временного проживания, если иное не предусмотрено п. п. 1.1 и 2.1 ст. 346.20 НК РФ [1], сроком на два налоговых периода непрерывно со дня государственной регистрации. Однако это касается лишь налогоплательщиков - индивидуальных предпринимателей, впервые зарегистрированных после вступления в силу указанных законов.

Во-вторых, это создание рынка сбыта путем создания инфраструктуры поддержки субъектов малого и среднего предпринимательства в соответствии со ст. 15 Закона о малом и среднем предпринимательстве [3] при осуществлении закупок для государственных и муниципальных нужд. Данной инфраструктурой является система коммерческих и некоммерческих организаций, осуществляющих свою деятельность и привлекаемых в качестве поставщиков (исполнителей, подрядчиков) для осуществления закупок товаров, работ, услуг для обеспечения государственных и муниципальных нужд при реализации государственных программ и подпрограмм Российской Федерации, субъектов РФ, а также муниципальных программ и подпрограмм.

На 2023-2024 годы Банк России разработал Дорожную карту поддержки малого и среднего бизнеса, ее основная цель – сделать более доступными кредиты. Ключевой блок Дорожной карты нацелен на то, чтобы кредиты, особенно инвестиционные, были более доступны малым и средним предприятиям (МСП). Среди запланированных мер —

сокращение издержек при кредитовании, применение пониженных коэффициентов риска по активам, которые обеспечены поручительствами Корпорации «МСП», оптимизация процесса оценки кредитного риска. Это будет дополнительно мотивировать банки к работе с не крупным бизнесом. Также Регулятор намерен предоставить субъектам МСП доступ к платформе «Знай своего клиента» для проверки контрагентов. Особое направление работы — снижение транзакционных издержек бизнеса за счет приема оплаты через Систему быстрых платежей [13].

Есть и другие меры поддержки, которые предусмотрены на 2023-2024 гг.:

- распространение льготных программ на факторинг;
- расширение возможностей бизнеса по использованию небанковских источников финансирования;
- предоставление малому и среднему бизнесу доступа к сервису «Знай своего клиента» для проверки контрагентов;
- снижение транзакционных издержек благодаря приему оплаты через Систему быстрых платежей.

Основным источником получения информации о мерах поддержки на сегодняшний день является Цифровая платформа МСП. По сути это система персонального подбора услуг, которые можно оформлять дистанционно.

Постановление Правительства РФ от 21.12.2021 №2371 утвердило сроки запуска эксперимента по оказанию поддержки на базе цифровой платформы МСП [5]. Он стартовал с 1 февраля 2022 года и продлится до 1 февраля 2025 года.

Поддержка затрагивает:

- малый и средний бизнес;
- самозанятых;
- граждан, которые только собираются начать свое дело.

Предполагается, что новый подход максимально упростит открытие, ведение и развитие бизнеса. К платформе подключатся федеральные министерства и ведомства, институты развития, банки и страховые организации. Все они будут обмениваться нужной информацией через систему межведомственного электронного взаимодействия.

В Башкортостане реализуются меры государственной поддержки малого и среднего бизнеса в рамках национального проекта «Малое и среднее предпринимательство и поддержка индивидуальной предпринимательской инициативы», соответствующих региональных проектов и государственной программы «Развитие и поддержка малого и среднего предпринимательства в Республике Башкортостан». В 2022 году общая сумма государственной поддержки развития предпринимательства в республике составила 974,4 млн руб. В 2023 году общая сумма государственной поддержки развития предпринимательства в республике



составит более 1,1 млрд. рублей.

Ежегодно на протяжении последних пяти лет в регионе создаются центры «Мой бизнес». В центрах «Мой Бизнес» можно оформить ИП, провести аудит компании, узнать о мерах государственной поддержки и как ими воспользоваться, получить услуги маркетинга и продвижения на рынке. Важно, что в Центрах «Мой бизнес» можно открыть свой бизнес в формате «одного окна», проконсультироваться по кредитованию, налогообложению, бухгалтерскому учету, пройти обучение по предпринимательству [13].

Так, в 2021 году во исполнение постановления Правительства РБ от 15.10.21 № 523 было создано три центра в городах: Белебей, Учалы, Салават [51]. В апреле 2023 года Центр «Мой бизнес» Республики Башкортостан возобновил выезды мобильных офисов. Консультации по интересующим вопросам уже получили предприниматели Сибая, Акъяра и Старосубхангулово. Выездные приемы организованы в рамках реализации в республике национального проекта «Малое и среднее предпринимательство и поддержка индивидуальной предпринимательской инициативы». Согласно отчету о достижении результатов мероприятий регионального проекта «Создание условий для лёгкого старта и комфортного ведения бизнеса» по состоянию на 1 октября 2023 года Центром «Мой бизнес» предоставлен комплекс информационно-консультационных и образовательных услуг для граждан желающих вести бизнес, начинающим и действующим предпринимателям – 5,6 тыс. чел. самозанятым - 0,53 тыс. чел [13].

Положительный эффект от реализации мер государственной поддержки очевиден и выражается в том, что за 2021-2023 годы в Республике Башкортостан количество субъектов МСП увеличилось на 4,1% или на 5211 ед, в т.ч. за счет увеличения микро предприятий. Тем не менее, отмечается снижение количества юридических лиц и индивидуальных предпринимателей на 8,0 и 41,5% соответственно, а количество малых предприятий республики сократилось на 4,4% [13].

Для того чтобы в Республике Башкортостан установилась положительная устойчивая тенденция развития сфер предпринимательской хозяйственной деятельности, региональным властям необходимо совершенствовать организационно-экономические механизмы государственного и рыночного регулирования. На сегодняшний день, институциональная среда предпринимательства характеризуется наличием административных барьеров. Причем эта тенденция характерна для большинства регионов Российской Федерации. Наибольшую трудность в развитии МСБ субъекты предпринимательства республики испытывают в процессе взаимодействия с органами государственного и муниципального управления при реализации последними управленческих решений, а также с организациями, входящими в поддерживающую инфраструктуру.



В Республике Башкортостан проявляется проблема, связанная с развитием инновационных форм предпринимательской деятельности, а также с развитием социально-ориентированного бизнеса. Эта проблема детерминирована консультационно-информационным дефицитом, отсутствием специализированных веб-сервисов с раскрытым информационным контентом и возможностью диалога власти и субъектов предпринимательства в режиме on-line [13].

Одним из важнейших институциональных условий развития регионального предпринимательства является уровень развитости конкурентной среды республики. Для того, чтобы повысить предпринимательскую конкурентоспособность в Республике Башкортостан, необходимо обеспечить предпринимателям:

- открытый, прозрачный доступ к программам муниципальной и региональной поддержки;

- прозрачность в участии предпринимателей в государственном/муниципальном частном партнёрстве, социальном партнерстве и т.д [13].

Таким образом, государственная поддержка предпринимательства в Республике Башкортостан позволила преодолеть влияние кризисных явлений, и обеспечить рост количества субъектов МСП в 2023 году на 4,1% по сравнению с 2021 годом. Анализ актуальных аспектов развития и поддержки предпринимательства в Республики Башкортостан и в Российской Федерации в целом, позволяет сделать вывод о том, что региональная система развития и поддержки предпринимательства зависит от состояния экономики региона, от уровня эффективности государственного регионального и муниципального управления, от уровня распространения институциональных идей. При реализации обозначенных выше направлений, на сегодняшний день возникают проблемы муниципального управления, связанные с поддержкой и развитием предпринимательства на муниципальном уровне. К таким проблемам относится и низкая активность самозанятых граждан и субъектов малого предпринимательства, недостаточный уровень информирования субъектов предпринимательства на муниципальном уровне о проводимых мерах поддержки предпринимательства, наличие административных барьеров и проч.

#### **Использованные источники:**

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2. О национальных целях развития Российской Федерации на период до 2030 года: указ Президента Рос. Федерации от 21 июля 2020 г. № 474. – Доступ из справ.-правовой системы «КонсультантПлюс» (дата обращения: 15.10.2023).

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## **АВТОМОБИЛЬНАЯ ПРОМЫШЛЕННОСТЬ СЛОВАКИИ**

*Аннотация. В статье рассматривается развитие автомобильной промышленности и созданные условия для развития промышленного производства автомобилей Словакии. Выявлены факторы, влияющие на формирование автомобильной промышленности и её влияние, на занятости населения.*

*Ключевые слова: регион, фактор, автомобиль, завод, ресурс, отрасль, рынок, промышленность, предприятие.*

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## **AUTOMOTIVE INDUSTRY OF SLOVAKIA**

*Annotation. The article discusses the development of the automotive industry and the conditions created for the development of industrial production of cars in Slovakia. The factors influencing the formation of the automotive industry and its impact on the employment of the population are identified.*

*Keywords: Region, factor, car, plant, resource, branch, market, industry, enterprise.*

В начале 90-х годов, до распада Чехословацкой Республики, на территории Словакии не было автомобильных заводов. В Братиславском крае существовал только Братиславский завод, выпускающий комплектующие для Пражских автомобилей ŠKODA. Первое автомобильное предприятие построено недалеко от Братиславы в начале 1990-х годов, когда немецкая автокомпания Volkswagen решила создать завод для производства автомобилей, однако значительные перемены в стратегии развития автомобильной промышленности страны стали происходить лишь с начала 2000-х годов, началом строительства новых крупных иностранных транснациональных компании автозаводов как Трнавский Stellantis, в Жилине Kia и Нитре Jaguar Land Rover.

Сегодня Словакия стала одним из ведущих производителей автомобилей в Центральной Европе, в основном благодаря наличие четырех знаменитых мировых автомобильных производителей (Volkswagen, Stellantis, Kia, Jaguar Land Rover) и более чем 360 местным поставщикам мировой лидер в производстве автомобилей на душу населения. Краткие сведения об автомобильных заводах представлены ниже (Табл. 1). Кроме

того, шведская компания Volvo производящая автомобилей премиум-класса выбрала Валалики (Кошице) в качестве безупречного места для своего нового современного производства. Завод по производству автомобилей мощностью 250 000 чисто электрических автомобилей в год будет производить исключительно электрические внедорожники класса люкс [2], в результате созданием таких заводов значительные сдвиги произошли в географии автомобильной промышленности.

География и участие автомобильных заводов в экономике. (Табл.1).

№	Компания	Место положение	Год создание	Количество сотрудников 2022 году	Производство автомобилей 2022
1	Volkswagen	Братислава	1991	10900	268,685
2	Stellantis	Трнава	2003	3677	312,509
3	Kia	Жилина	2004	3565	311,000
4	Jaguar Land Rover	Нитра	2015	4500	150,000
5	Volvo	Кошица	2026*	3300*	250000*

\* планируется. Источник: составлено автором по материалам: [1; 3]

Автомобилестроение стало важнейшим направлением экономики Республики Словакии и ведущей силой экономического развития Словакии. На данный момент — это наиболее сильный сектор по его доле в ВВП страны, экспорту и созданию рабочего места. По данным ассоциации автомобильной промышленности Словакии (Zväz automobilového priemyslu Slovenskej republiky (ZAP SR)) в 2022 года доля автомобильной промышленности в создании ВВП 14,9%, доля промышленности в создании ВВП 28,9%, доля продаж автомобильной промышленности в общем объеме промышленности 51,5%, доля автомобильной промышленности в общем объеме экспорта 53%, прямые сотрудники в автомобильной промышленности 174 000 и общая занятость, созданная автомобильной промышленностью 270 000 работников [6].

Согласно данным ОІСА с 2000 года по 2020 в Словакии с вводом новых заводов, количество производство автомобилей возросло до 1000000 штук. При населении страны в 5,4 миллиона человек в 2022 году было произведено почти 1000000 автомобилей и стала мировым лидером по производству автомобилей на душу населения [8], основная часть которых была экспортирована в другие страны Европы. (Рис.1).

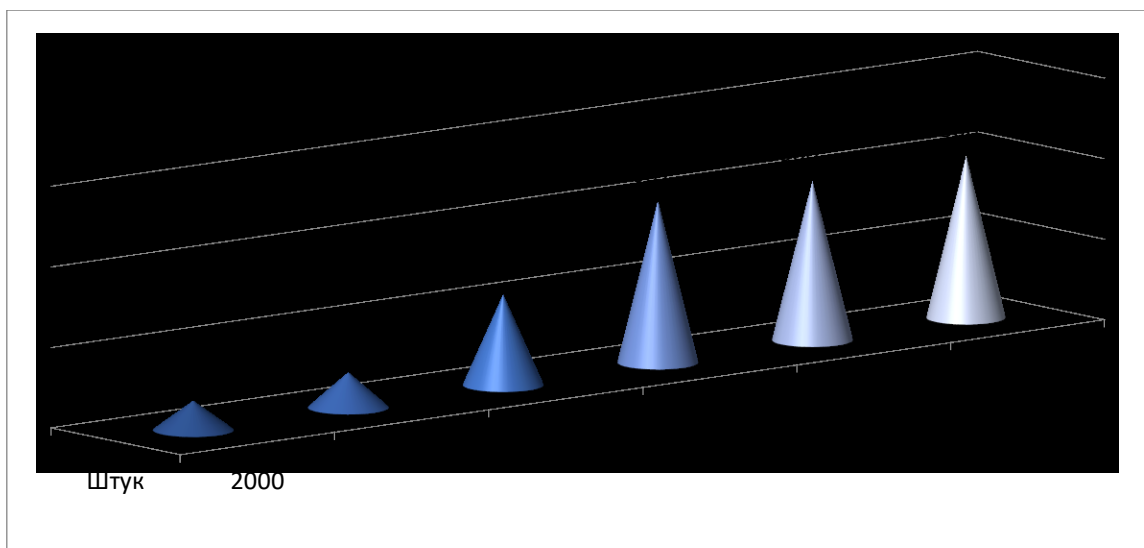


Рис.1 Темпы роста производства автомобилей. Источник: составлено автором по материалам [8].

В 2020 году автомобильная промышленность ЕС производил в среднем 5,3 автомобиля на одного непосредственного сотрудника автомобильного производства, а в Словакии производство автомобилей на одного непосредственного сотрудника автомобильного производства производил 12 автомобилей [5].

Словакия уже несколько лет считается флагманом по количеству производства автомобилей на 1000 человек в мировом рейтинге. Если этот показатель в 2022 году составлял 185 автомобилей на 1 000 жителей, то в 2019 году такой показатель составлял 203 автомобилей для 1000 жителей, и этот показатель считается самым высоким до 2023 года. Соответственно, если в конце 1990-х гг. производство автомобилей в Словакии не достигало 130 тысяч автомобилей в год, а экспорт был ничтожно мал, то в 2015 году производство выросло восьмикратно и стране удалось производить более одного миллиона автомобилей в год, причем до сегодняшнего дня основная часть производимой автомобильной продукции направляется на экспорт. Этот успех был достигнут благодаря мощному притоку в отрасль инвестиций из-за рубежа. Так, инвестиции компании «PSA Peugeot Citroën» в 2006 году составили 739 + 350 миллионов евро, корпорации «Kia Motors Corporation» объем инвестиций 2004-2006-х гг. 1 100 евро + 150 миллионов евро, «Volkswagen» Объем инвестиций в 1991-2006 годах: более 1 300 миллионов евро.

Главные сравнительные преимущественные факторы и условия в становления Словацкой автомобильной промышленности приведенные на сайте The Slovak Investment and Trade Development Agency (SARIO);

Удобное расположение. Словакия имеет не только стратегическое расположение в географическом центре Европы, но, прежде всего, отличное автомобильное и железнодорожное сообщение с основными европейскими



рынками сбыта и поставок. Если в радиусе 1000 км от словацких границ насчитывается более чем 300 миллионов потенциальных клиентов, то в радиусе 2000 км эта цифра составляет 700 миллионов. Словацкий часовой пояс (GMT + 1), который позволяет сотрудничать с клиентами по всему миру, также является преимуществом, особенно для общих сервисных центров.

Безопасность и стабильность. По данным Credendo (Кредитно-страховая группа), Словакия является одной из самых безопасных и политически стабильных стран в Европе. Словакия сообщает о самом низком риске среди стран-членов ЕС, в частности, по следующим категориям: риск политического насилия, риск экспроприации, конвертируемость валюты и риск ограничения переводов.

Членство в Еврозоне. Словакия, как одна из немногих стран региона, является членом Еврозоны с 2009 года. Введение евро в качестве официальной валюты означает для инвесторов снижение транзакционных издержек, снижение риска волатильности валютных курсов и повышение экономической и финансовой стабильности.

Квалифицированная и доступная рабочая сила. Рабочая сила в Словацкой Республике характеризуется высокой квалификацией, лояльностью к работодателю, а также отличными языковыми навыками. Кроме того, затраты на рабочую силу по-прежнему относительно низки по сравнению со странами Западной Европы.

Производительность труда. По данным организации экономического сотрудничества и развития (OECD), в Словакии самая высокая производительность труда в регионе. Это позволяет инвесторам достигать более высоких показателей производства при тех же затратах на рабочую силу по сравнению с другими странами Центральной и Восточной Европы.

Улучшение бизнес-среды. Растущая конкурентоспособность словацкой экономики также отражается в долгосрочном прогрессе в рейтинге глобальной конкурентоспособности (Всемирный экономический форум). Прогресс в рейтинге является результатом долгосрочного и систематического осуществления мер в интересах предпринимателей. Примерами таких мер являются регулярные антибюрократические пакеты, введение принципа "один год - один набор правил" или введение так называемой схемы „Kurzarbeit“.

Инновационная экосистема и передача технологий. Словакия является региональным лидером не только по количеству установленных промышленных роботов на одного работника (Международная федерация робототехники), но и по способности рабочей силы адаптироваться к новым технологиям (Всемирный экономический форум). Статистика подтверждает высокий потенциал для высокотехнологичных промышленных проектов и технологических центров.

Открытость экономики. Словакия уже давно является одной из самых открытых экономик в мире. При сравнении стран, основанных на соотношении экспорта товаров к ВВП, Словакия является наиболее открытым государством-членом ЕС.

Развитая инфраструктура. Через Словакию проходит несколько основных транспортных коридоров ЕС. В связи с передовой и постоянно развивающейся дорожной и железнодорожной инфраструктурой Словакия имеет потенциал стать одним из важнейших логистических центров в Европе.

Привлекательные механизмы поддержки. В Словакии инвесторы могут воспользоваться привлекательной региональной системой стимулирования инвестиций, льготным налоговым режимом для исследований и разработок и другими механизмами поддержки [2].

Несмотря на свои преимущественные факторы и созданные для развития автомобильной промышленности Словакии, проблемы, вызванные пандемией и ее последствия в 2021 году, негативно повлияло на весь автопром. Первоначальные проблемы усугубились другими глобальными проблемами в автомобилестроении, например, отсутствие полупроводников, хрупкость и уязвимость транспорта и логистика, и многие другие. Тем не менее автопроизводителям Словакии удалось избежать большого сокращения производства автомобилей. Но с началом в 2022 году нестабильности в Украине и санкционные политики ЕС влияют экономики Европейских стран не исключено и Словакия, если некоторые промышленные предприятия из-за высоких цен на энергоресурсы приостанавливает или сокращает производство, то некоторые эмигрируют в другие страны. В 2023 году Словакии, чтобы сохранить прошлогодние темпы производства автомобилей надо найти дешевые энергоресурсы, найти новые рынки сбыта или снять санкции, введенные против России, которые сама Словакия страдает от потерянных рынков сбыта и торговлей в сфере автомобилестроения.

Таким образом; можно констатировать, что ключевую ролью в формировании национальной автопромышленности в Словацкой Республике сыграла географические факторы как дешевая и относительно высококвалифицированная рабочая сила, а также наличие рядом крупнейшего рынка сбыта, Евросоюз, куда Словакия экспортирует свою продукцию. Именно нахождения в Евросоюзе позволило увеличить объем производства, в первую очередь для экспорта в этот альянс. Мимо того, вступление страны в Евросоюз в одно региональное интеграционное объединение вместе с промышленно-развитыми странами позволило развития автомобильную промышленность, сделать ее конкурентоспособной на мировом рынке. Автомобильная промышленность стала специализированной отраслью Словакии в международном географическом разделении труда. В 2021 году 25% (26 млрд. долл.) долю

всего экспорта товаров составила автомобильная отрасль и стало экспортоориентированной отраслью экономики страны.

Кроме того, государственная поддержка создавшее необходимую инфраструктуру в развитии национальной инновационной системы, государственного влияния - налогообложение, привлечение инвестиций, которые создают условия для развития промышленности. Огромные инвестиции из-за рубежа превратили автомобилестроение в одну из самых передовых отраслей экономики Словакии.

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**ҚИШЛОҚ ХЎЖАЛИГИ ЙЎНАЛИШИ ОЛИЙ ТАЪЛИМ  
МУАССАСАЛАРИДА МАЪРУЗА МАШҒУЛОТЛАРИНИ ТАШКИЛ  
ҚИЛИШ (ҚИШЛОҚ ХЎЖАЛИГИДА АБОРОТ  
ТЕХНОЛОГИЯЛАРИ) ФАНИ МИСОЛИДА)**

*Аннотация. Мақолада замонавий маърузаларни ташкил этиши, олий таълимда маърузаларнинг юзага келиши тарихи, замонавий маърузаларнинг қишлоқ хўжалиги йўналиши олий таълим муассасасининг “Қишлоқ хўжалигида ахборот технологиялари” фани мисолида таълим тизимидаги ўрни, фанлар бўйича маъруза турлари ва маърузаларни ташкил этиши шакли ва технологияси келтирилган.*

*Калит сўзлар: фан, таълим, маъруза машғулоти, технология, тизим, жараён, ўқитувчи, талаба, педагогик технология.*

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**ORGANIZING LECTURES IN HIGHER EDUCATION INSTITUTIONS  
IN AGRICULTURE (IN THE EXAMPLE OF THE SCIENCE OF  
"TRANSFORMATION TECHNOLOGIES IN AGRICULTURE")**

*Abstract. The article presents the organization of modern lectures, the history of the emergence of lectures in higher education, the role of modern lectures in the agricultural direction of the higher educational institution "Information Technologies in Agriculture" in the educational system, the types of lectures by subjects and the form and technology of organizing lectures.*

*Key words: science, education, lecture training, technology, system, process, teacher, student, pedagogical technology.*

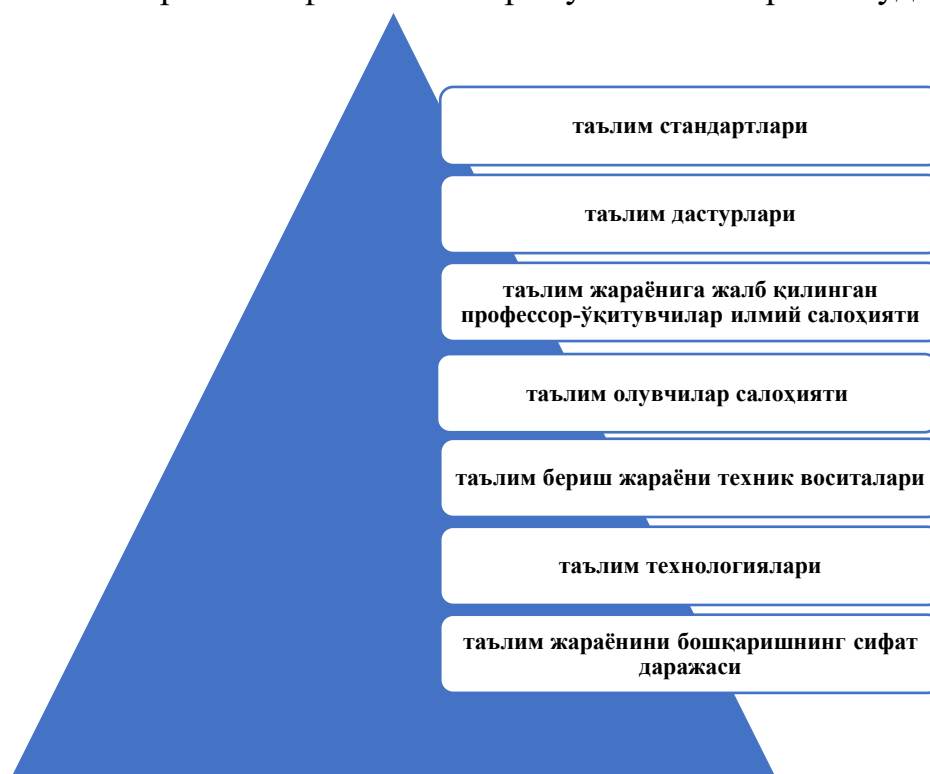
Ўзбекистон Республикаси Президентининг “2022 — 2026 йилларга мўлжалланган Янги Ўзбекистоннинг тараққиёт стратегиясининг «Инсонга эътибор ва сифатли таълим йили»да амалга оширишга оид давлат дастурининг

“Устувор йўналишлар, мақсадлар ва вазифалар” бўлимининг “Фанларни ўқитиш самарадорлигини ошириш ва ўқув юкларини мақбуллаштириш” номли мақсад режасида белгиланган “... ўқув жараёнига янги ахборот-коммуникация ва педагогик технологияларни, электрон дарсликлар ҳамда мультимедиа воситаларини кенг жорий этиш ҳисобига мамлакат мактаблари, касб-ҳунар коллежлари ва лицейларида, олий таълим муассасаларида таълим бериш сифатини тубдан яхшилаш...” дек ўта муҳим вазифалар таълим тизимини юқори сифат даражасида ташкил қилиш зарурлигини кўрсатади.

Олий таълимда маърузаларнинг юзага келиш тарихига эътибор қаратсак, биринчи Европа университетларидан бошланган бўлиб, маърузалар ўқитишнинг асосий бир шакли сифатида юзага келди ва педагогик олий таълим тизимида ҳам ўқитишнинг етакчи шакли сифатида ўқув жараёнида қўлланила бошланган. Маърузалар талабаларга ўқув адабиётлари устида мустақил ишлашга йўналтирувчи машғулот тури сифатида ҳам қарашимиз мумкин.

Жаҳон тажрибаси шуни кўрсатмоқдаки ахборот–коммуникация технологиялари ва Интернетнинг олий педагогик таълим соҳасига кенг кириб келиши таълим хизматларининг глобаллашуви учун ҳам катта йўл очмоқда. Ривожланган давлатлар таълим соҳасида бўлаётган бундай ижобий жиҳатларни эътиборга олган ҳолда олий таълим таълим сифатини юксалтириш учун ахборот-коммуникация технологияларидан оммавий равишда кенг фойдаланиш давр талабага айланиб бормоқда.

Таълим жараёни сифатига таъсир этувчи омиллар мавжуд. 1 – расм.



1-расм. Таълим жараёни сифати омиллари

Олий таълимда ўқитишнинг ташкилий формаси деб таълим жараёнида талаба билан ўқитувчининг турли вариантлардаги ўзаро педагогик мулоқати тушунилади.

Ҳозирги кунда маърузанинг шакли ва услублари ўзгариши замон талаби. Олий таълим муассасаларида маърузалар ўқитишнинг аниқ бир шакли сифатида юзага келгандан ҳозирги кунга қадар ўз моҳиятини замон талабларига мос ҳолда ўзгартириб келган ва қуйидаги кўринишларга эга бўлган.

Маъруза:

- чиройли нутқ санъати, ораторлик қобилияти сифатида;
- ахборотни тўғридан-тўғри узатувчи ўқитиш шакли;
- ахборотни умумлаштирувчи ва муаллифлик талқини (интерпрентацияси );
- диалог кўринишида ўқув машғулоти;
- муаммони ўқув шаклида ёритади;
- ижтимоий ҳодиса сифатида.

Таълимда янги инновацион педагогик технологиялар ва замонавий ахборот-коммуникация воситаларидан фойдаланилаётган бир вақтда таълимнинг ташкилий шакллари қандай бўлиши лозим?. Бундай шароитда маърузалар қандай ўрин тутади? Олий таълимда ўқитишнинг ташкилий формаси деб таълим жараёнида ўқувчи билан ўқитувчининг турли вариантлардаги ўзаро педагогик мулоқати тушунилади.

Мамлакатимиздаги олий таълим муассасаларида маърузага ўқув жараёнида етакчи ўрин берилган ва фан учун ажратилган ўқув юкламасининг деярли 1/2 ёки 1/3 қисми маъруза машғулотлари учун ажратилган. Шунингдек, бугунги кунда таълим жараёнида маърузанинг ўрни ва шакли маълум даражада турли хил баҳсларга сабаб бўлмоқда.

Маълумки, қишлоқ хўжалиги йўналиши олий ўқув юртларида таълим жараёнининг ташкилий формаси маъруза, семинар, амалий машғулотлар, лаборатория ишлари, талабаларнинг мустақил ишлари ва турли амалиётлардан ташкил топган. Жумладан, жорий йилда қишлоқ хўжалиги йўналиши олий таълимида “Қишлоқ хўжалигида ахборот технологиялари” фани барча таълим йўналишларида 24 соат маъруза, 24 соат амалий ва 72 соат талабаларнинг мустақил иши схемаси асосида ташкил этилди.

Қишлоқ хўжалиги олий таълим ташкилий шакллариининг ташкил этувчи элементлари номи қандай янги шакл олмасин, барибир асосий элементлар бўлиб маъруза, амалий машғулотлар, лаборатория ишлари, семинарлар, мустақил ишлар ва амалиётлар бўлиб қолмоқда ва булар ичида маъруза талабаларни назарий билим олишларида, амалий кўникмалар ҳамда малакаларини шакллантиришларида муҳим ўрин тутмоқда.

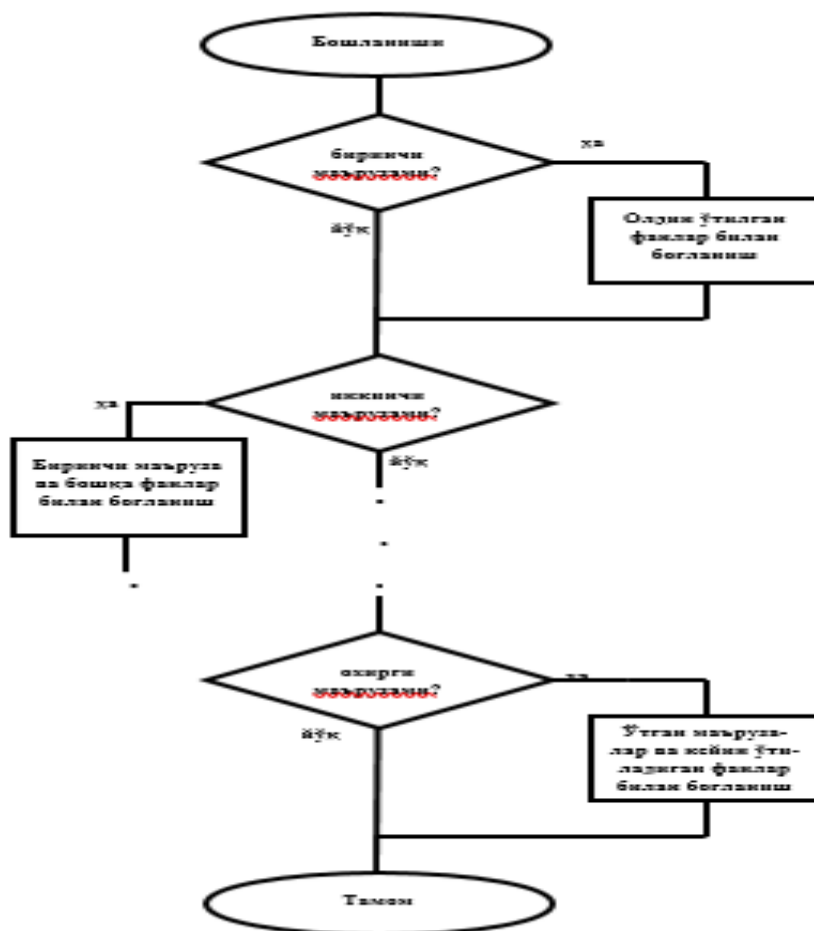
Маъруза машғулотларини ташкил этишда қуйидагиларга эътибор қаратишимиз лозим. 2-расм. Расмда кўрсатилганидек, маърузанинг ўтилиш кетма-кетлигига эътибор берсак, биринчи маърузани ўтишда фаннинг



Ўзидан аввал ўтилган бошқа фанлар билан боғлиқлик интеграциясига катта эътибор берилади. Иккинчи ва бошқа маърузаларда маърузалар аро боғланишга эътибор берилган. Охирги маъруза яқунланувчи маъруза ҳисобланиб, олинган билимларнинг кейинги босқич фанларидаги ўрни ва олий таълимни яқунлагач хизмат фаолиятларида керак бўладиган нуқталарга эътибор бериш назарда тутилган.

Маърузанинг қишлоқ хўжалиги йўналишидаги олий таълим жараёнида етакчи ўрнини қуйидгилардан англашимиз мумкин:

- мавзу бўйича тизимли таҳлиллар бериш талаб этилган ҳолларда кўпроқ мақсадга мувофиқ машғулот шакли бўлиб ҳисобланади;



2 - расм. Маъруза машғулотини ташкил этиш алгоритми

- талабаларни илмий иш жараёнига, илмий фаолият билан шуғулланишга йўналтирувчи машғулот шаклидир; янги мавзуга ёки мавзунинг янги бўлимига ўтишда талабалар диққатини фаоллаштиришнинг самарали услуби ҳисобланади;
- олинган билимлардан фойдаланиш эҳтиёжини шакллантиради;

- айниқса, кейинги гуруҳий машғулотларга тайёрланишда, курс ёки бўлим бошида қисқа кириш шаклида олиб борилса янада кўпроқ самара беради.

Хулоса ўрнида шуни айтиш мумкинки, ҳозирги кундаги мавжуд ахборотлар маконида маълумотларнинг жуда кўплиги сабабли айнан маъруза талабаларга тўғри йўл кўрсата олади, керакли ва зарур материалларни олишларига ёрдам беради, маърузаларнинг турли кўринишлардаги шакллари таълим жараёнида ўзига хос йўналиш касб этиб, талабада билишнинг анъанавий мантикий кетма-кетлигини (қабул қилиш, тушуниш, уқиш, фикрлаш, қайта ишлаш, мустаҳкамлаш) ҳосил бўлишига олиб келади. Шу сабабли, олий таълимда ўқиладиган маърузаларнинг сифати таълим сифатини белгиловчи асосий кўрсаткичлардан бири бўлиб қолаверади.

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## ЧИСЛЕННОЕ РЕШЕНИЕ ОБЫКНОВЕННЫХ ДИФФЕРЕНЦИАЛЬНЫХ УРАВНЕНИЙ 1-ГО ПОРЯДКА

*Аннотация. В этой статье приведен алгоритм численного решения обыкновенных дифференциальных уравнений 1-го порядка методом Рунге-Кутты и на основе этого алгоритма создана программа на языке Delphi-7. Ключевые слова. Алгоритм, Рунге-Кутта, схема, программа, Коши.*

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## NUMERICAL SOLUTION OF ORDINARY DIFFERENTIAL EQUATIONS OF THE 1st ORDER

*Abstract. In this article presents an algorithm for the numerical solution of 1st order ordinary differential equations using the Runge-Kutta method and a program in the Delphi-7 language is created based on this algorithm. Keywords. Algorithm, Runge-Kutta, scheme, program, Cauchy.*

### 1. Подстановка задачи.

$$\begin{cases} \frac{dy}{dx} = f(x, y) \\ y(x_0) = y_0 \end{cases} \quad (1)$$

Будем считать, что задача Коши (1) подставлена корректна, т.е. удовлетворяет все условия следующей теоремы.

**Теорема Коши.** (теорема о существовании и единственности решения дифференциального уравнения 1-го порядка)

*Если функция  $f(x, y)$  непрерывна в некоторой области  $D$  в плоскости  $ХОУ$  и имеет в этой области непрерывную частную производную  $y' = f(x, y)$ , то какова бы не была точка  $(x_0, y_0)$  в области  $D$ , существует единственное решение  $y = \varphi(x)$  уравнения  $y' = f(x, y)$ , определенное в некотором интервале, содержащем точку  $x_0$ , принимающее при  $x = x_0$  значение  $\varphi(x_0) = y_0$ , т.е. существует единственное решение дифференциального уравнения.*

### 2. Алгоритм решения.

Вводными данными являются следующее:

1. Начальные условия:  $x_0, y_0$ ;
2. Отрезок,  $[x_0; X]$  в котором находится решение задачи Коши (1)

3. Функция  $f(x, y)$ .

4.  $N$  число разбиений отрезка  $[x_0; X]$ .

В программу функция  $f(x, y)$  вводится с использованием элементарных функций, арифметических операций: + сложение, - вычитание, / деление, \* умножение, а также действительных чисел. Число  $\pi \approx 3,14$  вводится символом  $\pi$ . В следующей таблице даны элементарные функции и ввод их в программу.

№	Элементарные функции	Ввод элементарных функций в программу
1	$y= x $	mod (x)
2	$y=[x]$	butun (x)
3	$y=\{x\}$	kasr (x)
4	$y=x^n \ n \in \mathbb{N}$	dar (x:n)
5	$y=\sqrt[n]{x} \ n \in \mathbb{N}$	ildiz (x:n)
6	$y= \sin x$	sin (x)
7	$y= \cos x$	cos (x)
8	$y= \operatorname{tg} x$	tg (x)
9	$y= \operatorname{ctg} x$	ctg (x)
10	$y= \sec x$	sec (x)
11	$y= \operatorname{cosec} x$	cosec (x)
12	$y= \arcsin x$	arcsin (x)
13	$y= \arccos x$	arccos (x)
14	$y= \operatorname{arctg} x$	arctg (x)
15	$y= \operatorname{arcctg} x$	arcctg (x)
16	$y= a^x$	kurs (a:x)
17	$y= \ln x$	ln (x)
18	$y= \lg x$	lg (x)
19	$y= \log x$	log (x)
20	$y= \operatorname{sh} x$	sh (x)
21	$y= \operatorname{th} x$	th (x)
22	$y= \operatorname{sch} x$	sch (x)
23	$y= \operatorname{ch} x$	ch (x)
24	$y= \operatorname{cth} x$	cth (x)
25	$y= \operatorname{csch} x$	csch (x)
26	$y= \operatorname{arsh} x$	arsh (x)
27	$y= \operatorname{arch} x$	arch (x)
28	$y= \operatorname{arth} x$	arth (x)
29	$y= \operatorname{arcth} x$	arcth (x)
30	$y= \operatorname{arcsec} x$	arcsec (x)
31	$y= \operatorname{arccsc} x$	arccsc (x)
32	$y= e^x$	e (x)

Например функция  $f(x, y) = \sqrt[3]{x^2 + y^2} + e^{5x^2}$  вводится в программу в следующем виде `ildiz(dar(x:2)+dar(y:2):3)+e (5*dar(x:2))`.

Задачу Коши (1) решим методом Рунге-Кутта четвёртого порядка.

Разобьём отрезок  $[x_0; X]$  на  $N$  равные части точками

$$x_i = x_0 + ih; i = \overline{0, N}; h = \frac{X - x_0}{N}$$

которые называются узлами сетки. Значение приближенного решения в узлах обозначим символами  $y_i$ , т.е.

$$y(x_i) \approx y_i; i = \overline{0, N}.$$

В этом методе используется следующая схема

$$y_{i+1} = y_i + \frac{1}{6}(k_{1i} + 2k_{2i} + 2k_{3i} + k_{4i}), i = \overline{0, N-1}, (2)$$

где

$$\left. \begin{aligned} k_{1i} &= hf(x_i, y_i), & k_{2i} &= hf\left(x_i + \frac{1}{2}h, y_i + \frac{1}{2}k_{1i}\right), \\ k_{3i} &= hf\left(x_i + \frac{1}{2}h, y_i + \frac{1}{2}k_{2i}\right), & k_{4i} &= hf(x_i + h, y_i + k_{3i}). \end{aligned} \right\} (3)$$

На основе этого алгоритма создана программа на языке Delphi-7, решающая численно задачу (1) и рисующая график решения. Созданная программа проверена на основе вычислительных экспериментах.

### 3. Численные расчеты.

**Задача.** Найти решения задачи Коши

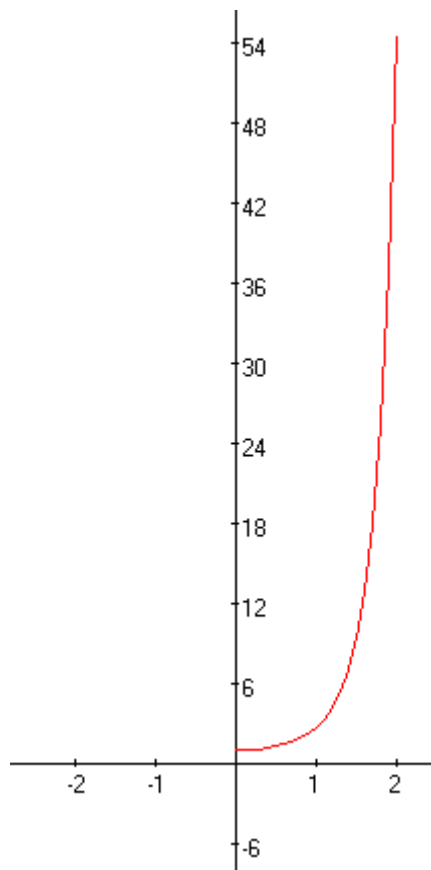
$$\begin{cases} \frac{dy}{dx} = 2xy \\ y(0) = 1 \end{cases}$$

на отрезке  $[0; 2]$ .

Точное решение этой задачи  $y(x) = e^{x^2}$ .

Ниже приведены численные значения приближенного решения в узлах и график ее при  $N = 20$ .

$$\begin{aligned} &y[0,0]=1,0000 \quad y[0,1]=1,0101 \quad y[0,2]=1,0408 \quad y[0,3]=1,0942 \quad y[0,4]=1,1735 \\ &y[0,5]=1,2840 \quad y[0,6]=1,4333 \quad y[0,7]=1,6323 \quad y[0,8]=1,8965 \quad y[0,9]=2,2479 \\ &y[1,0]=2,7183 \quad y[1,1]=3,3535 \quad y[1,2]=4,2206 \quad y[1,3]=5,4194 \quad y[1,4]=7,0991 \\ &y[1,5]=9,4873 \quad y[1,6]=12,9350 \quad y[1,7]=17,9918 \quad y[1,8]=25,5307 \quad y[1,9]=36,9601 \\ &y[2,0]=54,5863 \end{aligned}$$



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## **РАЗВИТИЕ МЕТОДИЧЕСКОЙ ПОДГОТОВКИ БУДУЩИХ УЧИТЕЛЕЙ В ПРЕПОДАВАНИИ ЕСТЕСТВЕННЫХ НАУК**

*Аннотация. В данной статье рассмотрены вопросы разработки и использования заданий, направляющих учащихся к компетентности на уроках «Наука», преподаваемых в начальных общеобразовательных школах, а также развития методической подготовки будущих учителей.*

*Ключевые слова: естествознание, компетентность, учебник, ТИМСС, интересные задания, креативность, интеграция, методы, методы, мышление.*

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## **DEVELOPMENT OF METHODOLOGICAL TRAINING OF FUTURE TEACHERS IN TEACHING NATURAL SCIENCES**

*Abstract. This article describes the issues of developing and using tasks that guide students to competence in "Science" classes taught in elementary schools of general education, as well as the development of methodological training of future teachers.*

*Keywords: natural science, competence, textbook, TIMSS, interesting assignments, creativity, integration, methods, methods, thinking.*

Необходимо срочно организовать образовательный процесс во всех общеобразовательных школах, действующих в нашей республике, исходя из требований времени, внедрить самые передовые инновационные технологии и тем самым добиться качества и эффективности образования. В этом месте особое значение приобретает вопрос разработки стратегий и инструментов, служащих стимулированию результатов творческого мышления и творческой деятельности, ориентированных на воспитание у школьников навыков самостоятельной работы, критического и творческого мышления.

Кардинально повысить качество образования в области естественных наук, внедрить совершенно новую систему преподавания этих предметов в общеобразовательных школах, обеспечить учебные заведения

современными лабораториями, учебниками и другим учебным оборудованием, подготовить квалифицированных студентов по этим направлениям. Важно установить тесную связь и сотрудничество между сферами образования, науки и производства в привлечении преподавателей-тренеров, подготовке кадров и использовании результатов науки. Студенты направления «Наука» должны приобрести следующие научные знания и практические компетенции, связанные с географией [1, 2]:

- ✓ имеет предварительную информацию о природной среде и месте проживания;

- ✓ знает основные понятия о природе пустынь, лесов, гор и водоемов, а также о флоре и фауне нашей планеты;

- ✓ знает, что вулканы, землетрясения и ветер изменяют поверхность Земли;

- ✓ водоемы; понимать, что поверхность Земли меняется под воздействием океана, моря, озер и рек;

- ✓ приобретает предварительное представление об использовании природных ресурсов;

- ✓ знает, как избежать нанесения вреда природным ресурсам и как их защитить;

- ✓ измеряет температуру помещения утром, в полдень и вечером воздушным термометром и дифференцирует изменения;

- ✓ знает возможность повторного использования отходов, рационального использования природных ресурсов;

- ✓ сравнивает результаты еженедельных наблюдений за погодой;

- ✓ различает природу и животных самых жарких и холодных мест;

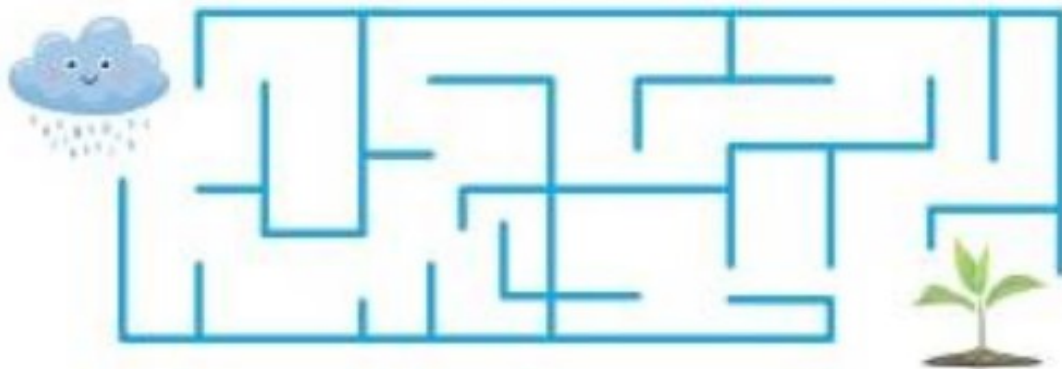
- ✓ описывает схожие и разные аспекты времен года;

- ✓ описывает смену дня и ночи, появление Луны [4, 67].

Формирование этих компетенций у студентов также важно при подготовке их к международным оценочным исследованиям. Международные стандарты оценки TIMSS в основном оценивают способность студента применять полученные знания на практике. Это, в свою очередь, зависит от того, насколько студент усвоил данные знания. Учителю уместно задавать вопросы, которые стимулируют творческое мышление учащихся и побуждают их думать во время урока. Потому что до этого времени вопросы, заставляющие учащихся думать, редко использовались в ходе урока. В настоящее время подобные вопросы и практические работы становятся основой учебного процесса [3, 26].

Мы можем видеть это на примере практических учебников «Наука» для первоклассников 1 и 2 классов и подготовленных для них рабочих тетрадей. Эти учебники и тетради содержат темы, связанные с содержанием географии, а также других естественных наук (биологии, физики, химии), интересные задания и небольшие исследования. Некоторые из них мы представляем ниже.

Задание 1. Вода необходима для роста растений. Ямгирвой хочет принести воды своему другу Нихалу. Укажи ему правильный путь [1,14].



Помимо выполнения вышеперечисленных задач, методической поддержкой для достижения хороших результатов будет также изучение и анализ некоторых материалов международной программы оценки TIMSS. Учебники естествознания большинства развитых зарубежных стран содержат много информации по работе с картами и умению их читать [2, 5]. Важно будет сформировать эти компетенции у студентов нашей страны. Это помогает студентам нашей страны показывать более высокие результаты в международных оценочных исследованиях [6,38]. Конечно, школьные уроки играют очень важную роль в широком осуществлении экологических исследований среди учащихся, в формировании у них интуиции к изучению внешней среды, в которой они живут. В частности, роль науки естествознания в этом отношении чрезвычайно несравненна.

В заключение отметим, что естествознание — очень интересный предмет в начальных классах, и преподавать его очень важно. Методы, используемые на уроках, представляют собой процесс, который зависит от мастерства учащихся и их умения использовать их на уроках. Качественная организация урока и умение учителя использовать педагогические и психологические технологии создают эффективное образование.

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## **МАДАНИЯТНИНГ ХУДУДИЙ ЖИҲАТЛАРИНИ ГЕОГРАФИК ТАДҚИҚ ЭТИШ ЙЎНАЛИШЛАРИ**

*Аннотация. Бугунги кунда инсоният олдида турган глобал муаммолар, жумладан, жаҳон миқёсида кузатилаётган экологик инқирозлар ва табиий ресурслардан фойдаланиш муаммоси иқтисодий ёки сиёсий соҳаларда эмас, балки айнан маданият соҳасида ҳал этилиши лозимлиги тобора аён бўлиб бормоқда. Ушбу мақолада маданиятнинг ҳудудий жиҳатлари ва уни географик ўрганишнинг асосий йўналишлари очиқ берилган.*

*Калит сўзлар: анъана, моддий маданият, маънавий маданият, урф-одат, қадрият, этнос, табиий мувозанат.*

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## **DIRECTIONS OF GEOGRAPHICAL RESEARCH OF TERRITORIAL ASPECTS OF CULTURE**

*Annotation. It is becoming more and more clear that the global problems facing humanity today, including the environmental crises observed on a global scale and the problem of the use of natural resources, should not be solved in the economic or political spheres, but in the sphere of culture. This article reveals the territorial aspects of culture and the main directions of its geographical study.*

*Keywords: tradition, material culture, spiritual culture, tradition, value, Ethnos, natural balance.*

Ҳар бир ҳудуднинг табиий, минтақавий ҳамда тарихий ўзига хослиги шу ерда яшовчи этнос учунгина хос бўлган маданиятнинг ривожланишига шароит яратади. Маданият эса ўз навбатида этнос ҳаётининг сақланиб қолиши ёки таназзулига сезиларли даражада таъсир кўрсатади. Маданиятдаги ўзига хослик этносларнинг яшаш муҳитига мос ҳолдаги турмуш тарзида ҳамда хўжалик фаолияти юритиш учун табиатдан фойдаланишида намоён бўлади. В.Г.Богараз-Тан таъкидлаганидек, муайян

худудда яшовчи «маҳаллий аҳоли маданиятига назар ташласак, ҳатто энг қолоқ халқлар ҳам ўзи яшаб турган атроф-муҳитга мукаммал даражада мослашган, такрорланмас маданий қадриятларга эга эканлигини кўриш мумкин...» [3, 38-б.]. Демак, этнос билан худуд ўртасида ўзаро узвий алоқа бўлиб, бир жойда узоқ вақт (бир неча авлод) яшаган этноснинг табиатдан фойдаланиш ҳамда хўжалик юритиш анъаналари муқим ҳолатга келади ва маданий қадрият даражасига кўтарилади.

Олимларнинг фикрича, инсоният олдида турган экологик инқирозларнинг вужудга келиши маънавий қашшоқлик ва маданий тараққиётдаги умумий таназзул билан боғлиқ. Ҳозирги глобал иқлим ўзгариши шароитида жаҳон миқёсида кузатилаётган чучук сув тақчиллиги ва трансчегаравий сув ресурсларидан фойдаланиш муаммоси ҳам иқтисодий ёки сиёсий соҳаларда эмас, балки, айнан маданият соҳасида ҳал этилиши лозимлиги тобора аён бўлиб бормоқда.

Маданият ҳодисасини ифодалаш учун Ғарбда «culture» (лотинча «ерга ишлов бериш», «ерни парваришlash», «деҳқончилик меҳнати») Шарқда, хусусан, туркий халқларда араб тилидаги «مَدِينَة» - «мадина» («шаҳарга хос», «шаҳарга оид») атамасидан фойдаланилади [1, 2]. Жамият тарихининг ўтган даври давомида тадқиқотчилар томонидан цивилизациялар, турли-туман маданиятлар тараққиётига оид жуда бой ва сермаҳсул маълумотлар йиғилганига қарамай, ҳозиргача фанда маданият атамасининг ягона, мукаммал таърифи йўқ. Ҳозирги кунда аксарият илмий нашрларда маданиятнинг 600дан ортиқ таърифлар борлиги таъкидланмоқда [1, 2, 11]. Маданиятни ўрганувчи фанлар ўз вазифа ва мақсадларидан, ҳар бир тадқиқотчи эса ўз дунёқараши ва ёндашувидан келиб чиққан ҳолда, маданиятнинг таърифини яратади.

Маданият ҳодисаси маданиятшунослик, этнология, фалсафа, тарих, социология, санъат, ахлоқ, эстетика, диншунослик, фольклоршунослик, археология ва бошқа кўплаб фанларнинг ўрганиш объекти ҳисобланади. Маданиятни тадқиқ этишда табиий ва ижтимоий фанлар чорраҳасида жойлашган география фани «фанлар орасида қулай «географик ўрин»га эга». Кейинги йилларда этнологияга доир нашрларда ҳам географик омил этноснинг пайдо бўлиши ва мавжудлигини таъминловчи зарурий шартлардан бири сифатида қаралмоқда. Географик омилнинг таъсирини этноснинг нафақат моддий, балки маънавий маданиятини шаклланишига, унинг руҳиятига ҳам таъсир қилишини, бу эса ўзига хос миллий хусусиятларда, урф-одат, расм-русум, анъана ва қадриятларда намоён бўлишини таъкидланмоқда [12].

XIX-XX аср бошларида олиб борилган тадқиқотлар, яратилган тамойил ва таълимотлар география, этнология, экология, маданиятшунослик, социология ва бошқа фанлар чорраҳасида маданият географияси, маданий экология, мерос географияси, экологик антропология, этногеография, этноэкология, этнометеорология,



этнопсихология, этнотопонимика каби бир қатор янги илмий йўналишларнинг ривожланишига асос бўлди. География фани доирасида маданиятга бир томондан реал ҳодиса сифатида қаралиб, унга «макондаги объект» (турли маданий объектларнинг ҳудудий ташкил этилиши, уларнинг ландшафтдаги ифодаси,...) нуқтаи назаридан ёндошиш мумкин. Бошқа томондан эса «маконни ўзлаштириш» (географик макон ғояси, турли ҳудудларнинг қиёфаси, маҳаллий жамоаларнинг маълум бир табиий ёки ижтимоий муҳитга муносабати) жиҳатидан ёндошилади [5]. Ҳозирги кунда Мустақил Давлатлар Ҳамдўстлиги мамлакатларида маданий география, этноэкология ҳамда мерос географияси йўналишлари жадал суръатлар билан тараккий этиб бормоқда.

Маданият географияси ёки маданий география ижтимоий-иқтисодий географиянинг тез ривожланиб бораётган илмий йўналишларидан биридир. «Маданий география» (Cultural geography) ибораси кўпроқ Европа ва Америка мамлакатларида, «маданият географияси» (география культуры) эса асосан Россия ва МДХ давлатларида қўлланилмоқда [6.10-б]. Ҳозирги кунда хорижий мамлакатларда маданий география ижтимоий географиянинг тўрт етакчи тармоғи (иқтисодий география, ижтимоий география ва сиёсий география)дан бири бўлиб, МДХда, жумладан, Россияда XX асрнинг 70-80 йилларидан ривожлана бошлади [6, 8].

Маданий географияга XX асрнинг 20-йилларида АҚШлик К.О.Зауэр (1889-1975) томонидан асос солинди. Ушбу йўналишнинг муҳим тушунчаси ҳисобланган «маданий ландшафт» ҳам шу олим томонидан фанга киритилган. К.О.Зауэрнинг фикрича, «маданият - ташқи фаол куч, табиий жараёнлар эса муҳитдир. Уларнинг ўзаро таъсири натижасида маданий ландшафт вужудга келади». [10. с.18]. Маданият географияси фанлараро хусусиятга эга бўлиб, Р.Ф.Туровский бу йўналиш «маданиятшунослик ва география фанлари чорраҳасида шаклланган»лигини таъкидлайди [11. с. 11]. А.Г.Дружинин ва В.Н.Стрелецкийнинг ёзишича, «маданият географиясининг шаклланиши, биринчи навбатда, илмий билимларнинг иккита асосий тармоғи – география ва маданий антропологиянинг ўзаро узвий таъсири жараёнида содир бўлган» [7. с. 5]. Маданият географияси ўрганадиган муаммолар доирасига қуйидагиларни киритиш мумкин: инсон жамоалари билан уларнинг яшаш муҳити ўртасидаги ўзаро алоқадорлик; этник гуруҳ томонидан ҳудуднинг моддий ва маънавий ўзлаштирилиши; маданий алоқаларнинг асл географик сабаблари; ҳаётни таъминлашнинг минтақавий ва маҳаллий тизимлари; ҳудудий аҳамиятга эга қадриятлар ва хулқ-атвор стратегиялари; аҳоли пунктлари ва демографик жараёнларнинг маданий-этник хусусиятлари; маданий географик районлаштириш ва бошқалар.

МДХда маданият географиясининг мукамал назарий асослари А.Г.Дружинин (1989; 1999) ва В.Н.Калуцков (2016) томонидан ишлаб чиқилган. А.Г.Дружинин маданиятга қуйидагича таъриф беради: «Ҳар

қандай сайёравий ҳодиса каби маданият ҳам ҳудудийдир, яъни, географик омилнинг кенг миқёсдаги таъсирини бошдан кечиради, макон жихатдан фарқланади ва ўзига хос кўринишларда ташкил этилади, имманент (ички) ҳудудий шаклларда ривожланади» [6. с.4]. У маданият географиясини «худудий ижтимоий тизимларнинг шаклланиши, ривожланиши ва фаолият жараёнида маданиятнинг худудий қонуниятларини ўрганадиган географик билимларнинг ўзига хос тармоғи» сифатида эътироф этади. В.Н.Калуцков томонидан олиб борилаётган изланишларда маданий ландшафт концепцияси, адабиёт географияси ҳамда топонимикага оид тадқиқотлар асосий ўринни эгаллайди. Унинг ёзишича, географиянинг долзарб назарий-методологик муаммоларидан бири тилнинг маданий ва лингвистик ресурсларидан тўлиқ фойдаланишга асосланган ландшафт назариясини ривожлантиришдир [8].

Ю.А.Ведениннинг илмий тадқиқотларида табиий ва маданий меросни ўрганиш, тавсифлаш, муҳофаза қилиш ва улардан фойдаланишда географиянинг муҳим ўрни борлиги кўрсатиб берилди. Географиянинг мерос соҳаси билан алоқаси уни ўрганиш ва сақлаш тамойиллари ҳамда усулларини сезиларли даражада кенгайтди. Ю.А.Веденин меросни ўрганиш ва сақлашнинг географик тамойиллари орасида қуйидагиларни ажратиб кўрсатади: маданий ва табиий хилма-хилликни сақлаш; худудий яхлитлик; маданий ландшафт; экологик тамойил ва бошқалар. У маданий меросни ўрганиш ва муҳофаза қилишда биринчи марта ландшафт концепциясини қўллади ва маданият экологиясининг ажралмас қисми сифатида мерос экологияси ғоясини киритди [4].

Кейинги йилларда Мустақил Давлатлар Ҳамдўстлиги, жумладан, Ўзбекистонда ривожланиб бораётган янги илмий йўналишлардан бири этноэкология (юнон тилида *ethnos* – халқ, *oikos* – уй, бошпана, *logos* – сўз, таълимот)дир. Бу атамани Филиппиндаги қадимги Хануно ёзувларини ўрганган америкалик антрополог Г.К.Конклин ўзининг «Связь культуры Хануно с растительным миром» (1954) номли тадқиқот ишида илмий ёндашув сифатида фанга киритди. Унинг тушунтиришича, этноэкологиянинг вазифаси табиат ҳақидаги халқ билимларини жамлаш ва уларни атроф муҳит билан бўладиган алоқада қўллаш усулларини ишлаб чиқаришдан иборат, деб кўрсатилади.

Этноэкологик тадқиқотларнинг ривожланишида тарихчи ва этнограф олимлар - В.И.Козлов, С.А.Арутюнов, И.И.Крупник, Ф.Р.Итс, С.С.Губаева, А.Н.Ямсков, географ олимлардан С.М.Мягков, К.Б.Клоков, И.Ю.Гладкий, М.В.Рагулина ва бошқаларнинг хизматлари катта. Ҳозирги кунда этноэкологиянинг асосий тушунчалари - маданий мослашув, тирикликни таъминлаш маданияти (Арутюнов, 1983), этноэкологизимлар (Крупник, 1989) табиатдан фойдаланиш ва уни муҳофаза қилиш (Ямсков, 2009) кабилар этнолог, географ, эколог, файласуф ва бошқа соҳа вакиллари томонидан тадқиқ этилмоқда. Этноэкология атамасини Россияда биринчи бўлиб

қўллаган тарихчи олим В.И.Козлов (1983) қайд этганидек, МДХда «этник экологиянинг шаклланиши бир қатор сабаблар, биринчи навбатда, XIX асрнинг охири XX аср бошларида табиий фанларни ижтимоий фанлардан ажратилиши туфайли кечиктирилди. Хусусан, илгари ягона халқшунослик фанига бирлаштирилган география – табиий фанларга, этнография эса ижтимоий фанлар қаторига киритилди. Бунинг оқибатида табиий ва ҳатто иқтисодий географияда «инсон», этнографияда эса «табиий муҳит» йўқола бошлади» [9. с.6].

Шундай қилиб, географик тадқиқ этишда маданиятга экологик-географик йўналишдаги тадқиқот объекти сифатида ёндошилади, асосий эътибор этносларнинг атроф-табиий муҳит билан онгли фаолияти воситачилигида бўладиган алоқаларини ўрганишга қаратилади. Чунки фақат география фани Ер шарини ландшафтларнинг барча хилма-хиллиги, иқлим, тупроқ, сув, табиий яшаш шароитларидаги фарқлар билан қамраб ўрганади, бу омиллар эса ўз навбатида хилма-хил маданият турларининг, шу жумладан анъанавий сувдан фойдаланиш маданиятининг пайдо бўлишига сабаб бўлади.

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## **НАЛОГОВАЯ ПОЛИТИКА И ЕЕ РОЛЬ В РАЗВИТИИ ЭКОНОМИКИ**

*Аннотация. В статье рассмотрены вопросы налоговой политики его влияние на социально-экономическое состояние страны. Проведена анализ теоретических взглядов на сущность налоговой политики. Отражены вопросы эффективного осуществления налогового администрирования и основные направления налоговой системы для целенаправленного введения налоговой политики в повышении макроэкономических показателей.*

*Ключевые слова: макроэкономика, внутренней валовой продукт процесс, стабильность, устойчивость, экономический рост, государственный бюджет, налог, налоговая система, налоговое администрирование, налогоплательщик, направления.*

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## **TAX POLICY AND ITS ROLE IN ECONOMIC DEVELOPMENT**

*Annotation. The article discusses issues of tax policy and its impact on the socio-economic state of the country. An analysis of theoretical views on the essence of tax policy is carried out. Issues of effective implementation of tax administration and the main directions of the tax system are reflected for the targeted introduction of tax policy in increasing macroeconomic indicators.*

*Key words: macroeconomics, gross domestic product process, stability, sustainability, economic growth, state budget, tax, tax system, tax administration, taxpayer, directions.*

Налоговая политика государства должен быть направлен на социально-экономическое страны (регионов, предприятий, организаций в целом хозяйствующих субъектов, а также физических лиц) для создания благоприятного экономического потенциала которая является основой повышения налогооблагаемой базы хозяйствующих субъектов.

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благополучия населения путем устойчивого экономического роста» отмечено

«Обеспечение фискальной стабильности и эффективное управление государственными обязательствами. В частности, «Обеспечение сохранения консолидированного дефицита бюджета в объеме ниже 4 процентов в 2024 году относительно ВВП и 3 процентов - в последующие годы. Переход к практике «бюджетирования, направленного на результат». Использование возможности дополнительного расширения налоговой базы путем сокращения «теневой экономики». Дальнейшее повышение эффективности системы налогового администрирования путем повышения эффективности и расширения системы маркировки и цифровизации. Классификация проектов, реализуемых на основе государственно-частного партнерства, с учетом их доходности и нагрузки на Государственный бюджет, а также внедрение системы управления по направлениям проекта.» [1, с.15]

При этом следует рассмотреть экономическую сущность налоговой политики.

По мнению В.Г. Панскова — «Налоговая политика представляет собой совокупность экономических, финансовых и правовых мер государства по формированию налоговой системы страны в целях обеспечения финансовых потребностей государства, отдельных социальных групп общества, а также развития экономики страны за счёт перераспределения финансовых ресурсов» [2, с. 49].

Очень убедительной выглядит логика последовательного рассмотрения философского, лингвистического и экономического смысла категорий, предложенная А.Э. Сердюковым, Е.С. Вылковой и А.Л. Тарасевичем, авторами учебника —Налоги и налогообложение [3, с. 14-44]. После проведенного исследования эти авторы пришли к следующему мнению что под формулировкой государственной налоговой политики понимается «деятельность органов государственной власти и государственного управления, осуществляемая в рамках общей экономической стратегии государства по комплексному решению вопросов налогообложения с учётом интересов и целей конкретного государства на соответствующем этапе его исторического развития» [3, с. 38]

По мнению М.В. Карп – «налоговая политика является составной частью общей финансовой политики государства на среднесрочную и долгосрочную перспективу и включает в себя такие понятия, как концепция государственной деятельности в области налогообложения, налоговый механизм, а также управление налоговой системой» [4, с. 39].

Но налоговый механизм подразумевает управление налоговой системой, а концепция государственной деятельности не является основным элементом налоговой политики государства. По мнению учёных С.В. Барулина, А.В. Макрушина, В.А. Тимошенко «налоговая политика



—представляет собой комплекс стратегических и тактических мероприятий в области управления налоговым процессом, проводимых государством в составе общей экономической политики и направленных на максимально возможную реализацию фискальной, регулирующей и контрольной функции налогов в целях достижения определенного, на данном этапе, экономически и социально значимого результата (эффекта) [5, с. 24-25]. По поводу этого определения можно сказать, что, во первых, оно является избыточным (в части функций налогов), и, во-вторых, к налоговой политике относятся не только различные мероприятия, но и идеи, принципы, теории.

Как отмечают авторы статьи «Сущность и элементы налоговой политики» В.Н. Едронов и Н.Н. Мамыкин подходят к определению понятия -налоговая политика следующим образом: —совокупность правовых, экономических и организационных мер субъекта налоговой политики по регулированию налоговых отношений. [6, с. 38]

Совокупность налогов, методов, форм и принципов их формирования составляют основу налоговой системы. Налогообложение является одним из важных экономических рычагов, при помощи которых государство воздействует на рыночную экономику. В целом налоговая система базируется на ряде принципов теории налогообложения в отношениях между государством и хозяйствующими субъектами в частности с физическими лицами. В границах существующей системы налогообложения формируются взаимоотношения налогоплательщиков страны с бюджетами всех уровней, при этом не только с бюджетом, а также с вышестоящими организациями, банками и другими субъектами налоговых правоотношений. Взаимосвязь общегосударственных интересов с коммерческими интересами предпринимателей, организаций различных форм собственности и организационно-правовой формы организации, достигается посредством применения налогов как одного из экономических методов управления.

При этом система налогообложения способна в какой-то определенной степени само регулироваться, то есть автоматически увеличивать налоговые поступления при сокращении государственных расходов в период подъема и их уменьшение при увеличении расходов в период спада, за счет существующих взаимосвязей [7, с.86].

По мнению кандидата экономических наук Базаров К.Т. «Налоговая политика в регионе представляет собой совокупность экономических и правовых мер на уровне региона по совершенствованию налоговой системы в целях обеспечения финансовых потребностей региона и государства в целом, реализации запланированных политических, социальных и экономических стратегических программ путем перераспределения финансовых ресурсов и изменения направления финансовых потоков.» [8, с.422-423].

Налоговая политика – это совокупность мер и регуляций, которые государство принимает в сфере налогообложения для достижения определенных экономических целей. Она играет важную роль в развитии экономики по нескольким причинам:

1. Финансирование государственных расходов: налоги являются основным источником доходов государства. Они используются для финансирования различных государственных программ и проектов, таких как социальное обеспечение, образование, здравоохранение, инфраструктура и т.д. Эффективная налоговая политика позволяет правительству получать достаточные средства для реализации своих задач и обеспечить стабильность экономики.

2. Регулирование социального и экономического неравенства: налоговая политика может использоваться для снижения социального и экономического неравенства в обществе. Прогрессивные налоговые ставки, т.е. увеличение ставки налога с ростом доходов, позволяют редистрибутировать доходы в пользу менее обеспеченных слоев населения.

3. Стимулирование экономического роста и инвестиций: налоговая политика может создавать стимулы для экономического роста и инвестиций. Снижение налоговых ставок для предприятий и индивидуальных предпринимателей, освобождение от налогов на инвестиции или научно-исследовательскую деятельность могут привлечь больше инвестиций и способствовать развитию новых технологий и инноваций.

4. Регулирование спроса и потребления: налоговая политика может использоваться для регулирования уровня потребления и спроса на определенные товары и услуги. Например, повышение ставки налога на товары, которые считаются вредными для здоровья (табак, алкоголь), может снизить их потребление и способствовать здоровому образу жизни.

5. Привлечение и удержание квалифицированных кадров: налоговая политика также может играть роль в привлечении и удержании квалифицированных кадров. Система налогообложения может быть одним из факторов, влияющих на решение людей о переезде или остаться в стране для работы.

В целом, налоговая политика имеет огромное значение для развития экономики. Ее эффективное использование может способствовать устойчивому экономическому росту, справедливому распределению доходов и стимулированию инвестиций. Однако, неэффективное использование налоговых инструментов или чрезмерная налоговая нагрузка может препятствовать развитию экономики и инвестиций.

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## **ПРОБЛЕМЫ РАЗВИТИЯ ГОСТИНИЧНОЙ ИНФРАСТРУКТУРЫ В КАШКАДАРЬИНСКОЙ ОБЛАСТИ**

*Аннотация. В данной статье представлено развитие инфраструктуры сети гостиниц Кашкадарьинской области и проблемы, возникающие в них. Также в статье приведены определения туристской инфраструктуры, количества гостиниц, гостевых домов, хостелы, санаториев-курортов в регионе по районам, их потенциал, группировка и анализ, проблемы, возникающие при развитии гостиниц и предложения по решению проблем.*

*Ключевые слова: инфраструктура, инфраструктура туризма, турист, средство размещения, гостиница, гостевой дом, хостел, курорт, потенциал, сезонность.*

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## **PROBLEMS OF DEVELOPMENT OF HOTEL INFRASTRUCTURE IN KASHKADARYA REGION**

*Annotation. This article presents the development of the infrastructure of the hotel chain in the Kashkadarya region and the problems arising in them. The article also provides definitions of tourism infrastructure, the number of hotels, guest houses, hostels, sanatoriums-resorts in the region by district, their potential, grouping and analysis, problems arising during the development of hotels and proposals for solving problems.*

*Keywords: Infrastructure, tourism infrastructure, tourist, accommodation facility, hotel, guest house, hostel, resort, potential, seasonality.*

Прежде всего, под инфраструктурой понимают совокупность всех условий, которые служат для обеспечения нормального функционирования процесса материального производства или оказания услуг.

Инфраструктура туризма - это совокупная сущность общих условий производства туристского продукта. Инфраструктура туризма - отрасли,

участвующие в формировании (производстве) туристского продукта (транспорт, связь, носители информации, сети связи, энергетика, водоснабжение, бытовые услуги, коммунальное хозяйство, образование, здравоохранение, средства размещения, торговые услуги, предприятия общественного питания, объекты культуры и спорта, финансовые организации, правоохранительные органы и т.д.), а также комплекс, управляющий туристической сферой [2; 6-7 б.].

Уникальной особенностью туристской инфраструктуры является то, что она предназначена для обслуживания туристов и в то же время обеспечивает удовлетворение потребностей местного населения, а ее развитие служит повышению туристического потенциала территории, увеличению числа туристов, туристской инфраструктуры, и повысить социально-экономическое благосостояние жителей этой территории.

Наличие развитой туристской инфраструктуры имеет важное значение в повышении туристско-рекреационного потенциала регионов и в развитии туризма.

В более широком смысле под туристической инфраструктурой понимают систему зданий, инженерных и коммуникационных сетей, в том числе дорог, различных обслуживающих предприятий туризма, обеспечивающих беспрепятственное использование туристами существующих туристских ресурсов, их использование и предоставление по мере необходимости [4; 179 б.].

В Кашкадарьинской области принимают туристов 17 крупных туристических объектов. Они принимают более 700 000 туристов в год, и соответственно необходимы инфраструктурные объекты

Сегодняшнего дня в Кашкадарьинской области туристические услуги оказывают 48 гостиниц, 194 гостевых дома и 16 хостелов. Регион имеет высокий потенциал для привлечения туристов во все четыре сезона года и ограничивается лишь городом Шахрисабз и горными районами области. За 9 месяцев 2023 года в области приехали 180 тысяч иностранных туристов, а соседние Самаркандскую и Бухарскую области посетили 3,5 миллиона туристов. Видно, что поток туристов, приезжающих в регион, очень низкий. Это свидетельствует о том, что существуют проблемы со своевременным обслуживанием территорий.

Одной из основных проблем является то, что в Кашкадарьинской области услуги, предоставляемые туристам из-за границы, находятся на очень низком уровне, а в Шахрисабзском, Яккабогском, Камашинском и Касбийском районах туристические услуги вообще не предоставляются.

В 2017 году было создано 749 туристских организаций и турагентов, а сейчас их число достигло 2404. В 2022 году турорганизациями, осуществляющими туристическую деятельность в Кашкадарьинской области, обслужено 21 873 посетителя. Из них граждане Узбекистана - 67,1

процента, иностранные гости - 30,7 процента, гости из стран СНГ - 2,2 процента.

Гостиницы являются важным структурным элементом туристической инфраструктуры. Если номерной фонд в гостиницах нашей республики велик, лидирует город Ташкент с 33,6%, в этом отношении Кашкадарьинская область - 4,9%, что значительно ниже среднего показателя по республике.

Количество гостиничных номеров в нашей республике выросло в 3,4 раза с 37 тысяч в 2017 году до 128 тысяч в 2023 году. Количество инструментов размещения увеличилось с 767 в 2017 году до 5500 к 2023 году.

Гостиничная отрасль является одним из наиболее привлекательных секторов экономики для инвестиций в связи с небольшими начальными вложениями капитала, постоянно растущим спросом общества на гостиничные услуги, высоким уровнем рентабельности и средним сроком окупаемости проектов [1, с.17-19]. Увеличение потока туристов и увеличение спроса на отели среди жителей приведет к строительству новых отелей и развитию этой сети.

Поднятие туристической инфраструктуры, расположенной в регионе, до уровня современных требований, повышение уровня сервиса является одним из важных факторов развития туризма. Для этого необходима организация на высоком уровне составляющих туристской инфраструктуры: отелей, транспортных услуг, питания, отдыха, лечения, развлечений и других услуг.

С увеличением потока иностранных туристов и внутренних туристов, посещающих нашу республику, увеличивается спрос на гостиницы. В Кашкадарьинском районе в настоящее время строится множество гостиниц, особенно увеличивается количество частных туристических гостиниц, в том числе за 9 месяцев 2023 года в регионе построено 48 гостиниц (в 2021 году - 45). Города Карши (20) и Шахрисабз (10) относятся к регионам с высоким потенциалом по количеству гостиниц, тогда как в остальных районах области построено 1-2 гостиницы, а потенциал находится на значительном уровне. нижний уровень (табл. 1). Это, в свою очередь, негативно влияет на поток туристов. На территориях с низким и ниже среднего потенциалом желательно строить современные гостиницы и улучшать туристические услуги за счет привлечения субъектов предпринимательства на основе государственно-частного партнерства.

“гостевой дом -...частное жилое помещение для совместного проживания с членами семьи принимающего лица, вмещающее одновременно до 10 посетителей,... из расчета 3 м<sup>2</sup> на одного жителя.” [5; с.10.]. Основная цель создания гостевых домов - увеличение количества туристов и создание новых рабочих мест за счет создания благоприятных условий для местных и иностранных туристов.



В Кашкадарьинской области количество гостевых домов за 9 месяцев 2023 года увеличилось до 243, а в 2020 году этот показатель установился на уровне 47, и их количество быстро увеличивается. В Шахрисабзском районе (204) большое количество гостевых домов, в то время как в других регионах, в том числе в Китабском районе 30, в Чиракчинском районе 14, в городе Карши 11, в городе Шахрисабзе 6, и наоборот, ни одного гостевого дома не создано. в остальном регионе.

Таблица 1.

**Потенциал гостиниц и других средств размещения Кашкадарьинской области, 2023 год.**

№	Города и районы	Гостиницы	гостевые дома	Хостелы	Санаторий и курорты	Базы отдыха	Всего	*Группы
		КОЛ-ВО	КОЛ-ВО	КОЛ-ВО	КОЛ-ВО	КОЛ-ВО		
1	Шахрисабз	2	182	5	3	12	204	<b>Высокий потенциал (300)</b>
2	г.Карши	20	11	19	2	-	52	
3	Китаб	2	30	2	2	8	44	
4	Чиракчи	1	14	1	-	4	20	<b>Средний потенциал (56)</b>
5	г.Шахрисабз	10	6	1	1	-	18	
6	Яккабаг	2	-	-	1	15	18	<b>От среднего низкий потенциал (16)</b>
7	Мубарек	2	-	2	1	-	5	
8	Касан	2	-	1	1	-	4	
9	Карши	1	-	2	-	1	4	
10	Нишан	1	-	2	-	-	3	
11	Гузар	2	-	-	-	-	2	<b>Низкий потенциал (9)</b>
12	Дехканабад	1	-	1	-	-	2	
13	Камашини	2	-	-	-	-	2	
14	Касби	-	-	2	-	-	2	
15	Кокдала	-	-	1	-	-	1	
16	Миришкар	-	-	-	-	-	-	
	<b>Всего</b>	<b>48</b>	<b>243</b>	<b>39</b>	<b>11</b>	<b>40</b>	<b>381</b>	

Таблица составлена автором на основе информации управления туризма Кашкадарьинской области.

\* Количество гостиниц и аналогичных средств размещения.

За 9 месяцев 2023 года количество хостелы в регионе достигло 39, в 2020 году этот показатель составил 3 хостель. В городе Карши создано 19 хостелы, в городе Шахрисабзе - 5, в Яккабагском, Миришкарском, Гузарском, Камашинском и Миришкорском районах, напротив, ни одного хостель не создано. Общее количество санаториев - 3 в Шахрисабзском районе, по 2 в городе Карши и Китабском районе, по 1 в городе Шахрисабзе и Яккабагском, Мубарекском и Касанском районах. Туристско-рекреационные зоны расположены в основном в Китабском, Шахрисабзском, Яккабагском, Камашинском, Дехканабадском,

Чиракчинском и Каршинском районах. Строительство санаториев-курортов в Дехканабадском, Яккабагском, Камашинском, Чиракчинском, Мубаракском и Касанском районах, богатых рекреационными ресурсами региона, образом улучшить их деятельность, улучшить их материально-техническую базу, довести их до уровня соответствующий мировым стандартам, является основным требованием отрасли.

Согласно данным, по обеспеченности гостиницами и аналогичными средствами размещения целесообразно разделить районы области на следующие 4 группы (табл. 2).

Таблица 2.

**Группировка гостиниц и аналогичных средств размещения в  
Кашкадарьинской области**

Группы *	Количество и доля городов, районов		Города и районы	Гостиницы и аналогичные средства размещения	
	кол-о	%		кол-во	%
I - Высокий потенциал (56-300)	3	18,7	Шахрисабзский район, город Карши, Китабский район	300	78,7
II - Средний потенциал (20-55)	3	18,7	Чиракчинский район, город Шахрисабз, Яккабагский район	56	14,7
III - От среднего низкий потенциал (10-19)	4	25,0	Мубарак, Касан, Карши, Нишан	16	4,2
IV- Низкий потенциал (менее 10)	6	37,5	Гузар, Дехканабад, Камашинский, Касбинский, Кокдалинский, Миришкарский	9	2,3
<b>По областям</b>	<b>16</b>	<b>100,0</b>		<b>381</b>	<b>100,0</b>

Таблица составлена автором.

\* Количество гостиниц и аналогичных средств размещения.

Из данных таблицы 2 выше известно, что среди регионов области с высоким потенциалом по количеству гостиниц и аналогичных средств размещения находятся Шахрисабзский район (204), город Карши (52), Китабский район (44), Чиракчинский район (20), Шахрисабзский (18) и Яккабагский (18) районы, которые воплощают в себе 78,7% потенциала региона в этом отношении. Напротив, Гузарский (2), Дехканабадский (2), Камашинский, Касбинский, Кокдалинский и Миришкарский районы относятся к районам с низким потенциалом в этом отношении, которые составляют лишь 2,3% потенциала региона. Остальные районы характеризуются районами со средним и ниже среднего потенциалом, что составляет 14,7 и 4,2%. Географически они характеризуются

расположением в горных и равнинных районах края, а экономика некоторых районов развита слабо. Размещать гостиницы и другие средства размещения целесообразно чаще всего в турбазах, туристских зонах и небольших населенных пунктах (сельской местности), поскольку в эти районы стекаются туристы и проводят в них несколько дней.

Со стороны предпринимателей в сфере гостиничного бизнеса также необходимо активное участие в решении вопросов повышения качества услуг, квалификации работающего персонала, прозрачности осуществляемой деятельности. Важным является привлечение молодых специалистов к работе, повышение мотивации сотрудников [3, с. 175]. Решение потребности в молодых кадрах в гостиницах - одна из главных проблем.

Одной из основных проблем гостиничного девелопмента является сезонность. В летние месяцы, когда туристы активны, он часто пользуется большим спросом, но в остальное время года спрос на отели практически отсутствует. В решении этой проблемы существует немало сложностей, поскольку большинству туристических городов и объектов региона уже нечем привлечь туристов в межсезонье. Из-за этого отели до конца года остаются закрытыми без посетителей, и владелец отеля снова теряет деньги. Прежде всего, очень важно учитывать эти аспекты при поиске отелей.

Еще одной из основных проблем гостиничного хозяйства на современном этапе развития является недостаток квалифицированных кадров, нехватка гостиничных фондов среднего класса (2-3 звезды), несовершенство законодательства по регулированию рынка гостиничных услуг. Для решения этих проблем необходимо упростить процедуру регистрации гостиничных объектов, поддерживать инвестиционные проекты, обеспечить взаимное сотрудничество государства и бизнеса на принципах легальной, прозрачной деятельности.

В результате анализа потенциала гостиниц и средств размещения Кашкадарьинской области они были разделены на территории с высоким, средним, ниже среднего и низким потенциалом. Необходимо учитывать сезонность при строительстве и размещении объектов гостиничной инфраструктуры в равнинных, высокогорных и горных районах региона, движение туристических потоков, прием туристов в течение года, наличие туристско-рекреационных ресурсов. и их потенциальная кадровая проблема.

К сожалению, на сегодняшний день не решены вопросы, связанные с деятельностью санаторно-курортных комплексов и гостиничных предприятий. Организация и управление гостиничным бизнесом, привлечение новых клиентов, повышение качества услуг – сложная задача, требующая отдельного обсуждения.

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**НАУЧНАЯ ШКОЛА «ФИЗИЧЕСКАЯ ГЕОГРАФИЯ-  
ЛАНДШАФТОВЕДЕНИЕ», СОЗДАННАЯ В НУУЗ**

*Аннотация. Данная статья посвящена научным школам, созданным в Национальном университете Узбекистана имени Мирзо Улугбека, и основное внимание уделено исследованиям, проводимым основателями научной школы «Физическая география-ландшафтоведение» и их продолжателями.*

*Ключевые слова: Физическая география, ландшафтоведение, геоморфология, агрометеорология, физико-географическое районирование, ландшафт, научная школа.*

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**SCIENTIFIC SCHOOL “PHYSICAL GEOGRAPHY-LANDSCAPE  
STUDIES” CREATED AT NUUZ**

*Abstract. This article is devoted to the scientific schools created at the National University of Uzbekistan named after Mirzo Ulugbek, and the main attention is paid to the research conducted by the founders of the scientific school “Physical Geography-Landscape Science” and their successors.*

*Key words: Physical geography, landscape science, geomorphology, agrometeorology, physical-geographical zoning, landscape, scientific school.*

Зарождение и развитие научных школ связано с историей, направлениями развития и перспективами науки. Создание научных школ основано на потребности общества в новом научном направлении. Его создают смелые, трудолюбивые и целеустремленные ученые, обладающие огромным научным потенциалом, имеющие множество учеников и последователей, которые вдохновляют их на исследования, поиски и открытия, а также применение результатов науки на практике.

Способность привлечь молодежь на путь самостоятельного творчества, создать среду для научных исследований, помочь ей освоить новые методы исследования играет важную роль в формировании научных школ. В области географии учеными, способными привлечь молодежь на путь самостоятельного творчества, создать среду для научных исследований, оказать им помощь, проведен ряд всемирно известных научных исследований с уникальными исследовательскими принципами и методами. осваивали новые методы исследования, создавались школы. М.В.Ломоносов, К.И.Арсеньев, П.П.Семенов-Тянь-Шанский, Д.Н.Анучин, В.В.Докучаев, Л.С.Берг, А.А.Борзов, Н.Н.Баранский, Н.Н.Колосовский, Н.И.Вавилов, Г.Ф.Морозов, Б.Б.Полинов, В.Г.Глушков, С.Д.Муравейский, Ю.М.Шокальский, Н.Н.Зубов, В.Н.Сукачев, В.Б.Сочава, Н.Н.Баранский, Д.Н.Кашкаров и Е.П.Коровин, М.П.Петров и А.Г.Бабаев, Т.З.Захидов, Л.Н.Бабушкин и Н.А.Когай и другие ученые. Географические, физико-географические, общее ландшафтоведение, географо-генетические, экономико-географические, географо-геоморфологические, географо-лесные, ландшафтно-геохимические, географо-гидрологические, океанографические, биогеографические, биогеоценологические, эколого-географические, пустынные, биогеоценологические научные школы, такие как [5].

В Узбекистане созданы более 44 научных школ, принадлежащих к различным областям науки, в том числе Национальный университет Узбекистана имени Мирзо Улугбека (ранее САГУ, ТашГУ). Среди них 3 важных для развития науки географии в республике (Научная школа физической географии-ландшафтоведения - основатели Бабушкин-Когай, научная школа экономической и социальной географии Узбекистана - основатели Акрамов-Салиев и Ташкентская научная школа Гидрология горных регионов - основатели Шульц-Шеглова) на географическом факультете были созданы и действуют до сих пор [4].

Формирование научной школы физической географии-ландшафтоведения было основано доктором географических наук (1950 г.), профессором (1952 г.) Леонидом Николаевичем Бабушкиным (1902-1976) и



доктором географических наук (1972 г.), профессором (1974 г.) Николаем Андреевичем Когай (1926 – год смерти не ясен) связано с именем.

Л. Н. Бабушкин, один из основоположников научной школы естественной географии и ландшафтоведения, стал для научной общественности крупным агрометеорологом благодаря своим работам «Агроклиматическое районирование хлопковой зоны Средней Азии» (1960), «Агроклиматическое описание Средней Азии» (1964), «Агроклиматическое районирование Средней Азии» (1964) и учёный-агроклиматолог, он был признан и привлечён вниманием как основоположник этих полей в Средней Азии. Имя и научные труды Л. Н. Бабушкина известны и известны не только в Узбекистане, но и среди географов и агрометеорологов других стран (Рис.1).

Вторым ученым был исследователь Н.А.Когай, добившийся определенных результатов в изучении геоморфологии и четвертичных отложений. Он является автором таких работ, как «Четвертичные отложения» (1959), «Туранская физико-географическая провинция» (1969), «Физико-географическое районирование Туранской части Средней Азии» (1969), «Физическая география Средней Азии» (1979).



**Рис.1. Л. Н. Бабушкин**



**Рис. 2. Н.А.Когай**

Л. Н. Бабушкин и Н. А. Когай совместно провели исследования по вопросам естественно-географического районирования Средней Азии и Узбекистана. Анализ ландшафтно-типологической карты принят в качестве основного метода при осуществлении естественно-географического районирования. За время их совместной деятельности было создано более 100 больших и малых научных статей, монографических трудов, учебных пособий, диссертаций, множество оригинальных карт. Например, «Физико-географическое районирование Узбекистана» (1964), «Физико-географическое районирование Средней Азии (Таджикистан)» (1967), «Физико-географическое районирование Туркменистана» (1971), «Природные территориальные комплексы Юго-запада Средней Азии». (1975), «Физическая география Средней Азии» (1978) и другие.

В первые годы становления этой научной школы (1960-1963) в ее состав входили доц. Н.Д.Долимов, доц. Ч.В.Галков, доц. Участвовала О.Ю.Пославская, а позднее к ним присоединились такие ученые, как Ш.Зокиров, И. Хасанов, А.Зайнутдинов, А.Соатов и их ученики, и они продолжают свою научно-исследовательскую работу в этом направлении.

Один из продолжателей научной школы физической географии-ландшафтоведении Шухрат Солихович Зокиров, кандидат географических наук, доцент. Ш.С.Зокиров под руководством профессора Н.А.Когая провел комплексные исследования природных условий горных долин Ташкентской области и вопросов рационального использования этих территорий в сельском хозяйстве. В результате научных исследований в 1972 году «Природные условия бассейна р. Ахангаран и опыт их оценки для целей сельскохозяйственного производства» успешно защитил кандидатскую диссертацию (Рис. 3).

К 1990-м годам Асомутдин Зайнутдинов проводил свои исследования по направлениям этой научной школы (Рис.4). Под руководством профессора Н.А.Когая и научного руководителя, доктора биологических наук Р.Худойбердиева успешно защитил кандидатскую диссертацию на тему «Роль новейших тектонических движений в формировании природных условий Приташкентского района».



**Рис.3. Ш.С.Зокиров и Р.А.Ибрагимова**



**Рис.4. Асомутдин Зайнутдинов**



**Рис. 5. А.Сагатов**

В 1993 году Сагатов Абдурасул (Рис.5) успешно защитил кандидатскую диссертацию на тему «Анализ физико-географических условий Узбекистана для целей градостроительства» под научным руководством профессора Н.А. Когая, известного географа, доктора географических наук [3].

Научными продолжателями Закирова Шухрата Солиховича являются Ибрагимова Рано Алимбаевна, доцент кафедры «Физическая география». До сегодняшнего дня он проводил научные исследования по физико-географическому районированию в Средней Азии и впервые разделил Аральский физико-географический округ. Она подробно описала физико-географическое описание Аральская физико-географического округа [1,2].

В настоящее время десятки специалистов (Ш.Шарипов, Р.Ибрагимова, М.Гудалов и др.) проводят исследования по направлению научной школы «физической географии-ландшафтоведению».

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## **ПРОГРАММА НАСТАВНИЧЕСТВА МОЛОДЫХ СПЕЦИАЛИСТОВ НА ПРЕДПРИЯТИИ**

*Аннотация. Для успешного развития персонала и эффективного функционирования предприятия особое значение приобретает система наставничества, понимаемая в широком смысле как отношения, где специалист с опытом помогает менее опытному усвоить профессиональные компетенции. Наставничество представляет собой распространенный и эффективный метод обучения, являющийся формой адаптации и развития не только молодых специалистов в современных организациях, но и уже занятого персонала.*

*Ключевые слова: наставничество, наставник, молодой специалист.*

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## **MENTORING PROGRAM FOR YOUNG SPECIALISTS AT THE ENTERPRISE**

*Annotation. For the successful development of personnel and the effective functioning of an enterprise, a mentoring system, understood in a broad sense as a relationship where an experienced specialist helps a less experienced one acquire professional competencies, is of particular importance. Mentoring is a common and effective method of training, which is a form of adaptation and development not only of young professionals in modern organizations, but also of already employed personnel.*

*Key words: mentoring, mentor, young specialist.*

Цель настоящего исследования – экспериментальная апробация программы наставничества как средства сопровождения профессионально-личностного становления молодого специалиста предприятия. Исследование проходило с мая 2022 года по октябрь 2023 года.

Для исследования сформированы 2 группы человек, в каждой из которых 10 человек. 1 группа – молодые специалисты предприятия

(работающие менее 1 месяца на предприятии) и 2 группа – наставники, имеющие опыт работы на предприятии более 10 лет.

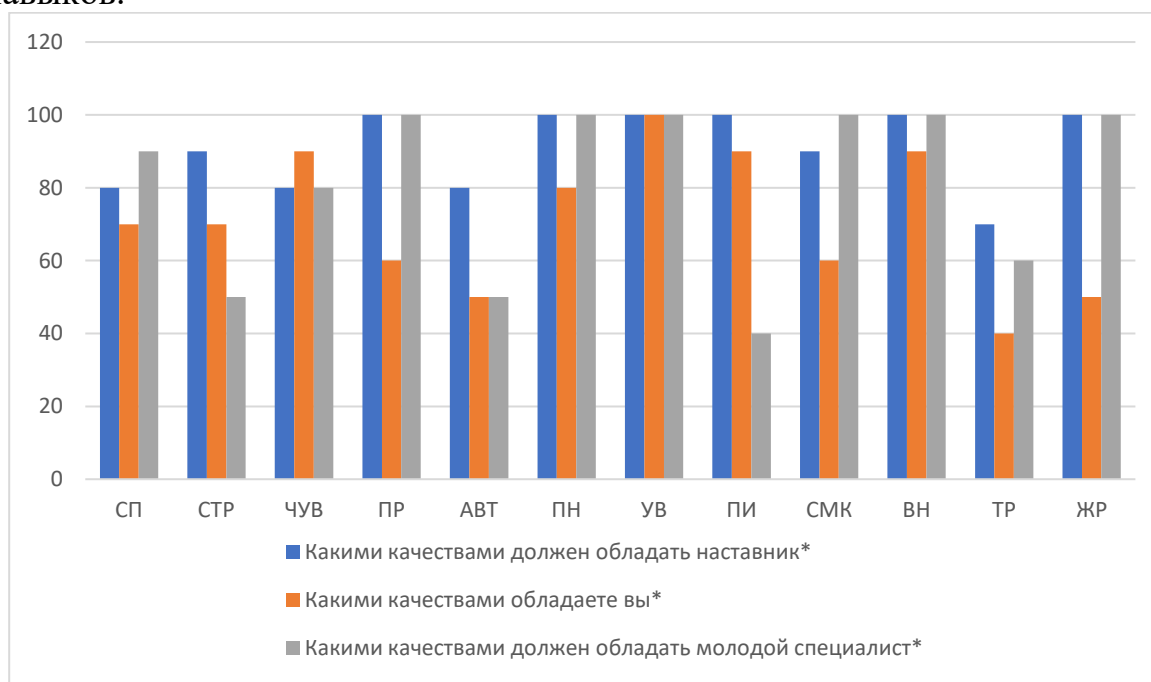
Для проведения исследования были подобраны следующие диагностические материалы:

- анкета выявления компетенций наставника, разработанная автором;
- изучение мотивации профессиональной деятельности, авторы методики: Замфир К., модификация Реана А.

### Констатирующий этап исследования

Для выявления начальных компетенций наставника, была применена анкета выявления компетенций наставника, полученные результаты исследования представлены на рисунках 1-3.

какими качествами должен обладать наставник; респондент; молодой специалист (рис. 1). На все вопросы предоставлены одинаковые варианты ответов совсемс целью неразрозности оценки качеств и навыков.



Примечание\* СП сопереживание, СТР строгость, ЧУВ чувствительность, ПР пронциательность, АВТ авторитетность, ПН пунктуальность, УВ уважение к личности, ПИ поощрение инициативы, СМК самокритичность, ВН внимательность, ТР требовательность, ЖР желание развиваться.

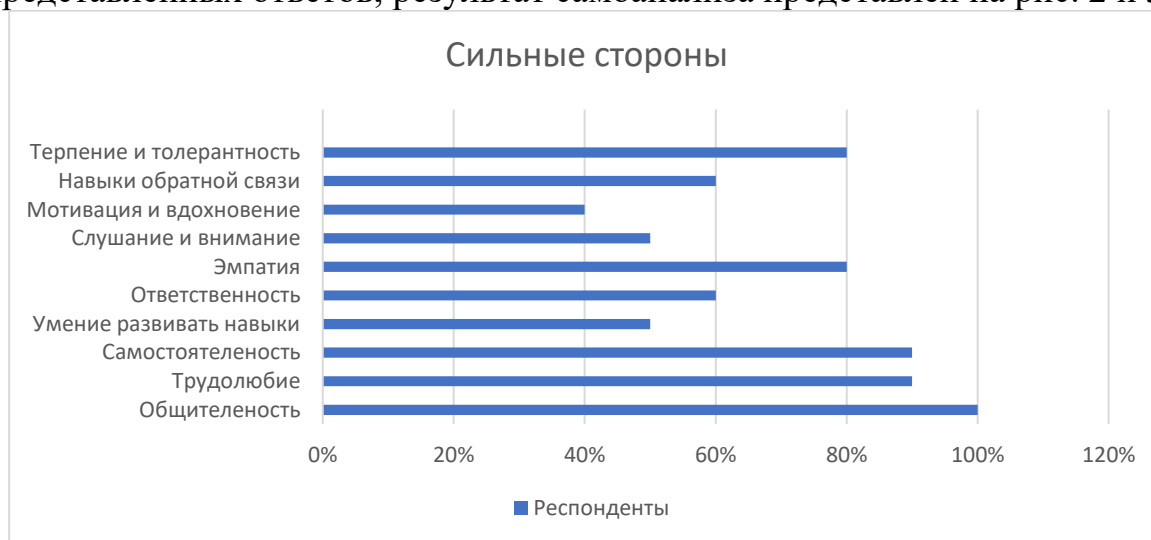
Рис. 1. Оценка качеств и навыков наставников, респондентов, молодых специалистов.

Исходя из ответов, представленных с на рисунке 1 можно сделать вывод, что респонденты предъявляют более высокие требования к наставникам и к молодым специалистам чем лично к себе. Для примера можно рассмотреть критерий «Требовательность»: в 70% - наставник

должен обладать этим качеством, в 60% - молодой специалист и к себе отнесли только 40%.

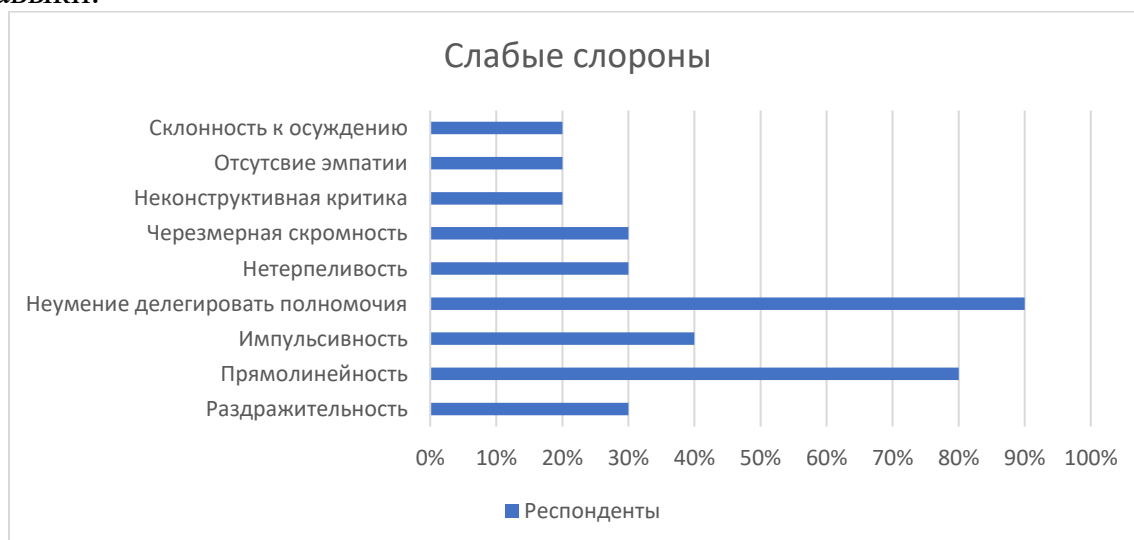
Еще один вопрос, который необходимо рассмотреть – это какое количество времени готовы уделять наставничеству в неделю, результаты представлены в таблице 3.

Также в анкете был применен блок самоанализа сильных и слабых сторон, где респондентам нужно было выбрать разные варианты представленных ответов, результат самоанализа представлен на рис. 2 и 3.



**Рис. 2. Самоанализ сильных сторон**

Проанализировав данные видно, что большая часть респондентов оценивают себя положительно, но также имеются показатели на низком уровне: мотивация и вдохновение, слушание и внимание, умение развивать навыки.



**Рис. 3. Самоанализ слабых сторон**

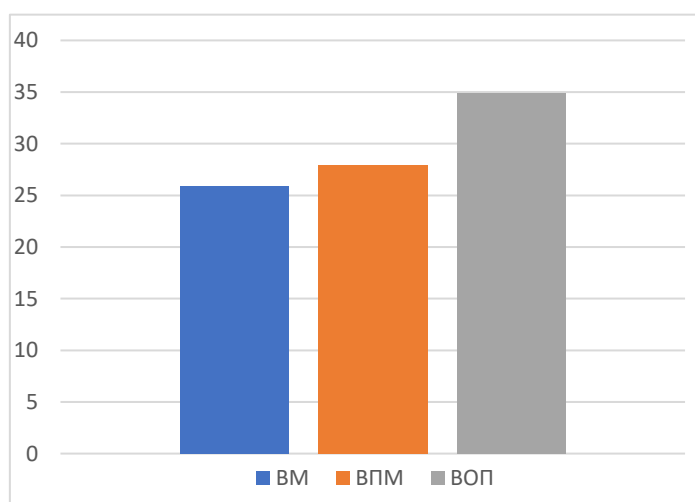


Анализ слабых сторон четко указывает на следующие критерии: умение делегировать полномочия (90%), прямолинейность (80%), стоит обратить внимание на критерий импульсивность (40%).

Исходя из выше представленных результатов анкетирования была выстроена программа наставничества как средства сопровождения профессионально-личностного становления молодого специалиста предприятия. В программу были включены выявленные показатели, для развития компетенций юристы наставников.

Для изучения мотивации профессиональной деятельности молодых специалистов была проведена диагностика (Замфир К., модификация Реана А.), обобщенные результаты можно увидеть на рис. 4.

Примечание\*: ВМ – внутренняя мотивация, ВПМ – внешняя положительная мотивация ВОП – внешняя отрицательная мотивация



**Рис. 4. Мотивации профессиональной деятельности**

У молодых специалистов предприятия выявлен наихудший комплекс мотивации (ВОП>ВПМ>ВМ), в котором мотивы избегания, порицания, желания «не попасть впросак» преобладают над внешними положительными мотивами, связанными с ценностью самой деятельности, а также над внутренней мотивацией, иными словами, у испытуемых высокий уровень эмоциональной нестабильности.

Это указывает на то, что молодые специалисты хуже справляются с непредсказуемыми ситуациями и менее эффективно управляют своими эмоциями.

Разработанная программа наставничества молодого специалиста предприятия, позволит наставнику развить у себя недостающие компетенции, сопровождать профессионально-личностное становление молодого специалиста, а также изменит мотивационный настрой молодых специалистов, что в последующем улучшит результативность труда работников.

## Эффективность внедрения программы наставничества

Реализация программы делится на семь основных этапов, этапы, изложенные в дорожной карте программы наставничества:

**Этап 1.** Подготовка условий для запуска программы наставничества (май – июнь 2022 г.).

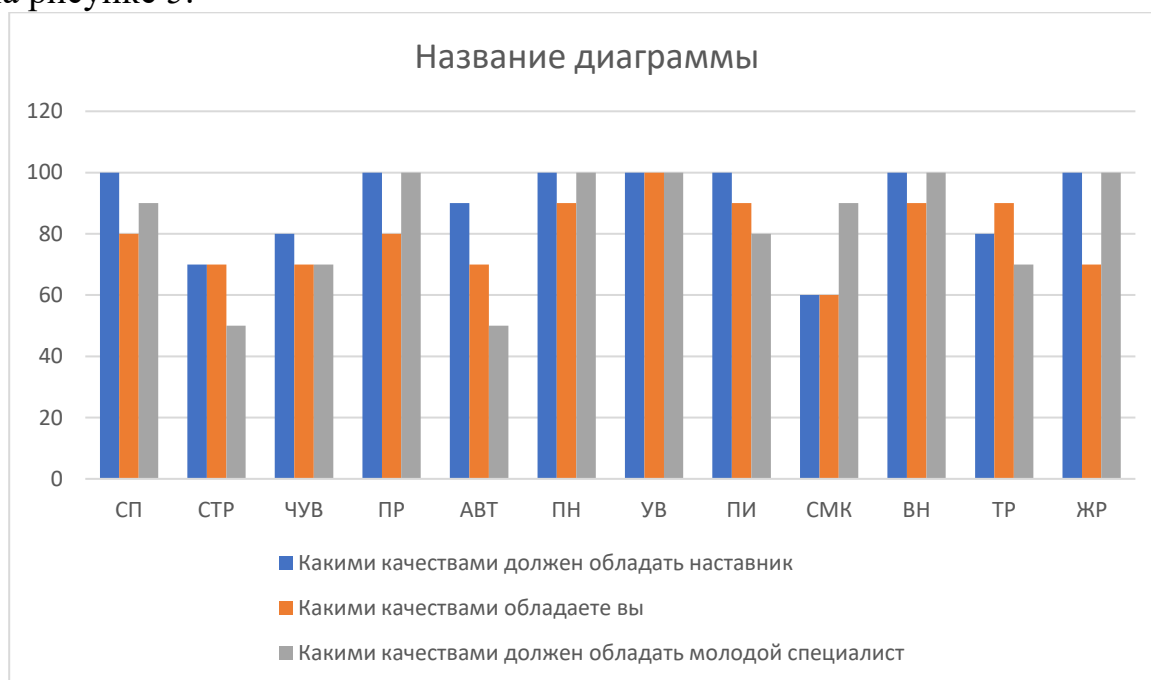
**Этап 2.** Формирование базы наставников (июль - август 2022 г.).

**Этап 3.** Обучение наставников (сентябрь – октябрь 2022 г.).

**Этап 4.** Формирование пар «наставник – наставляемый» (ноябрь 2022 г.).

**Этап 5.** Организация хода реализации программы наставничества (ноябрь 2022 г. – январь 2023 г.).

**Этап 6.** Завершение программы наставничества (февраль 2023 г.). Проведена диагностика результатов с использованием ранее использованных анкет. Результаты диагностики наставников представлены на рисунке 5.



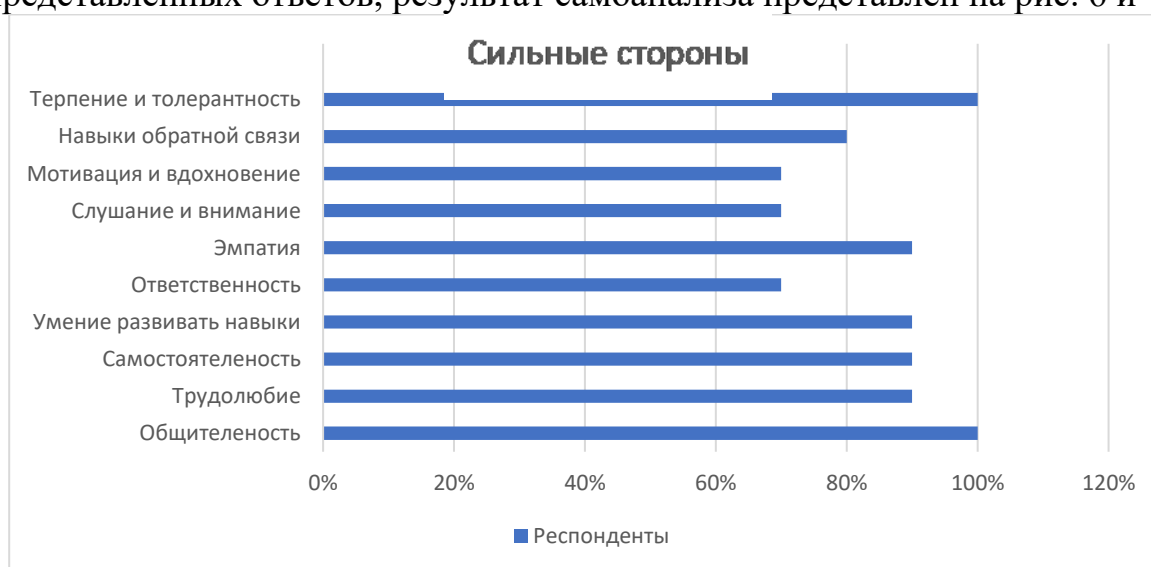
Примечание\* СП сопереживание, СТР строгость, ЧУВ чувствительность, ПР пронизательность, АВТ авторитетность, ПН пунктуальность, УВ уважение к личности, ПИ поощрение инициативы, СМК самокритичность, ВН внимательность, ТР требовательность, ЖР желание развиваться.

Рис. 5. Оценка качеств и навыков наставников, респондентов, молодых специалистов.

Исходя из ответов, представленных на рис. 5 и сравнив их с показателями первичной диагностики (рис.1) можно сделать вывод, что респонденты по пересмотрели многие критерии относительно себя,

наставников и молодых специалистов. Для примера рассмотрим критерий «Требовательность»: если ранее респондентов считали, что в 70% наставник должен обладать этим качеством, в 60 % - молодой специалист и к себе отнесли только 40 %, то после реализации программы наставничества процент ответов возрос: 80% - наставник, в 70% - молодой специалист, к себе отнесли 90%. Но несмотря на это, остались завышенные требования к наставникам и к молодым специалистам. Можно предположить, что у респондентов присутствуют признаки заниженной самооценки – данное исследование можно включить в дальнейшую реализацию программы наставничества.

Также видны изменения в блоке самоанализа сильных и слабых сторон, где респондентам нужно было выбрать разные варианты представленных ответов, результат самоанализа представлен на рис. 6 и 7.



**Рис. 6. Самоанализ сильных сторон**

Проанализировав данные видно, что респонденты оценили себя более положительно, также имеются рост показателей, которые прежде находились на низком уровне: мотивация и вдохновение (было – 40%, стало – 70%); слушание и внимание (было – 50%, стало – 70%); умение развивать навыки (было – 50%, стало – 90%).

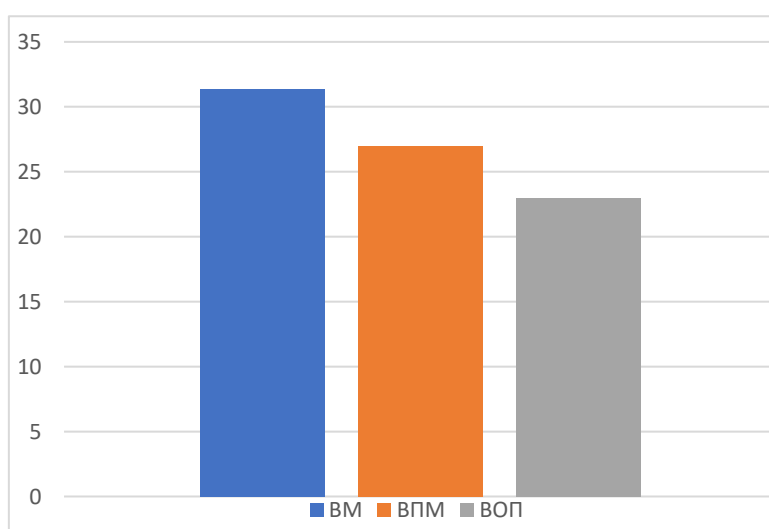


**Рис. 7. Самоанализ слабых сторон**

Анализ слабых сторон показывает резкое снижение следующих критериев: раздражительность (было 30%, стало 20%), прямолинейность (было 80%, стало 50%), импульсивность (было 40%, стало 20%), неумение делегировать полномочия (было 90%, стало 50%), чрезмерная скромность (было 30%, стало 0%).

Представленные данные говорят о том, что программа наставничества благоприятно повлияла на самих наставников. Что в свою очередь подтверждает результативность реализации программы.

Результаты итоговой диагностики молодых специалистов представлены на рисунке 8.



Примечание\*: ВМ – внутренняя мотивация, ВПМ – внешняя положительная мотивация ВОП – внешняя отрицательная мотивация

**Рис. 4. Мотивации профессиональной деятельности**

В результате реализации программы наставничества в АО «КРП» у молодых специалистов предприятия выявлен наилучший комплекс мотивации (ВМ>ВПМ>ВОП), чем более активность мотивирована самим содержанием деятельности, стремлением достичь в ней определенных позитивных результатов, тем ниже эмоциональная нестабильность.

Это говорит о том, что молодые специалисты способны справляться с эмоциональными вызовами, которые возникают в рабочей обстановке, без значительных изменений в их внутреннем состоянии. Они умеют распознавать и понимать свои эмоции, а также управлять ими таким образом, чтобы они не приводили к неадекватным или деструктивным реакциям.

Что в свою очередь подтверждают результативность реализации программы наставничества.

**Использованные источники:**

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## **ВЛИЯНИЯ ЭКЗОГЕНИИ НА КЛИНИЧЕСКИЙ ПРОГНОЗ И ТЕЧЕНИЕ ЭПИЗОДИЧЕСКОЙ ШИЗОФРЕНИИ**

*Аннотация. Статья посвящена изучению влияния экзогений на клинический прогноз и течение эпизодической шизофрении. Было проведено клинико-эпидемиологическое и клинико-психопатологическое обследование 322 больных эпизодической шизофренией (ЭШ), с длительностью заболевания свыше 25 лет, (154 больных эпизодической ремитирующей шизофренией - и 168 больных эпизодической шизофренией с нарастающим дефектом) находившихся на диспансерном учёте в Андижанском областном психоневрологическом диспансере. В результате проведенных исследований выявлены, что среди экзогенных факторов ведущая роль принадлежит психогениям. В случаях, когда возникновению заболевания предшествовали экзогенные вредности, достоверно чаще наблюдалось большее число приступов. Это указывает на необходимость более широкого использования комплекса мероприятий не только первичной, но и вторичной психопрофилактики, а также психогигиены на всех этапах реабилитации больных данной категории.*

*Ключевые слова: эпизодическая шизофрения, экзогении, психогигиена, первичная и вторичная психопрофилактика.*

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## **THE EFFECT OF EXOGENY ON THE KLINIK PROGNOZ AND COURSE OF EPISODIC SCHISOPHRENIA ANNOTATION**

*Annotation. The article is devoted to the study of the influence of exogenies on the course of recurrent schizophrenia. A clinical-epidemiological and clinical-psychopathological examination of 188 patients with recurrent schizophrenia (RSch) with a disease duration of more than 15 years who were treated in the Andijan Regional Neuropsychiatric Dispensary was conducted. As a control group, examined 40 patients with paroxysmal-progressive schizophrenia (PPSch).*



*As a result of the studies, it was revealed that among exogenous factors, the leading role belongs to psychogenies. In cases where the onset of the disease was preceded by exogenous harmfulness a significantly higher number of seizures was significantly more often. This indicates the need for wider use of the complex of measures not only primary, but also secondary psychoprophylaxis, as well as mental hygiene at all stages of rehabilitation of patients in this category.*

*Key words: recurrent form, schizophrenia, exogeny, mental hygiene, primary and secondary psychoprophylaxis.*

**Актуальность исследований.** Шизофрения — это одно из самых тяжелых психических расстройств, причем поражает оно преимущественно молодых людей. Патологические изменения затрагивают все сферы восприятия, эмоций, поведения, когнитивных функций.

Шизофрения является мультифакториальным расстройством, которое зависит от сложного взаимодействия генетических и окружающих факторов. Наследственная отягощенность играет существенную роль в развитии этого расстройства, и современные исследования подтверждают, что шизофрения относится к группе заболеваний с явно выраженным генетическим фоном. [1,5].

Но, не в каждом случае наличие предрасположенности к шизофрении приводит к развитию болезни. Это указывает на значимое влияние окружающих средовых факторов, которые способны выявить и изменить фенотипические проявления этого психического расстройства. [1].

Изучение этих факторов, их провоцирующей роли и патогенетического влияния на начало, характер развития и дальнейший клинический ход шизофрении, включая развитие рецидивов, имеет огромное значение для понимания взаимосвязи внутренних и внешних факторов. Это также является важным в целях разработки подходов к диагностике, лечению и профилактических план мероприятий пациентов с эпизодической шизофренией.

Не во всех случаях генетический фактор, как наследственное предрасположение, реализуется в болезнь. Следовательно, должны существовать дополнительные средовые факторы, способные выявить и модифицировать фенотипические проявления заболевания [1,3]. Изучение этих факторов, их провоцирующей роли и влияния на характер и клинику начала шизофрении, на особенности дальнейшего течения болезни, в том числе и развитие рецидивов, их значения для социально-трудовой адаптации больных является важным вкладом в решение проблемы взаимосвязи внутренних и внешних факторов [4,5,6,10]. Однако их соотношение, влияющее на проявления процесса, в частности на характер развития дебюта, первого цикла заболевания последующих приступов, на особенности клинического течения до настоящего времени изучены явно недостаточно. Вместе с тем предсказание вероятности возникновения

повторных приступов с использованием обоснованных и статистически подтвержденных критериев прогноза представляется достаточно важной научно-практической проблемой.

Поэтому изучение влияния экзогений в характере дебюта заболевания, в риске развития приступов шизофрении, разработка прогностических критериев возникновения последующих приступов в динамике заболевания является актуальной проблемой современной психиатрии.

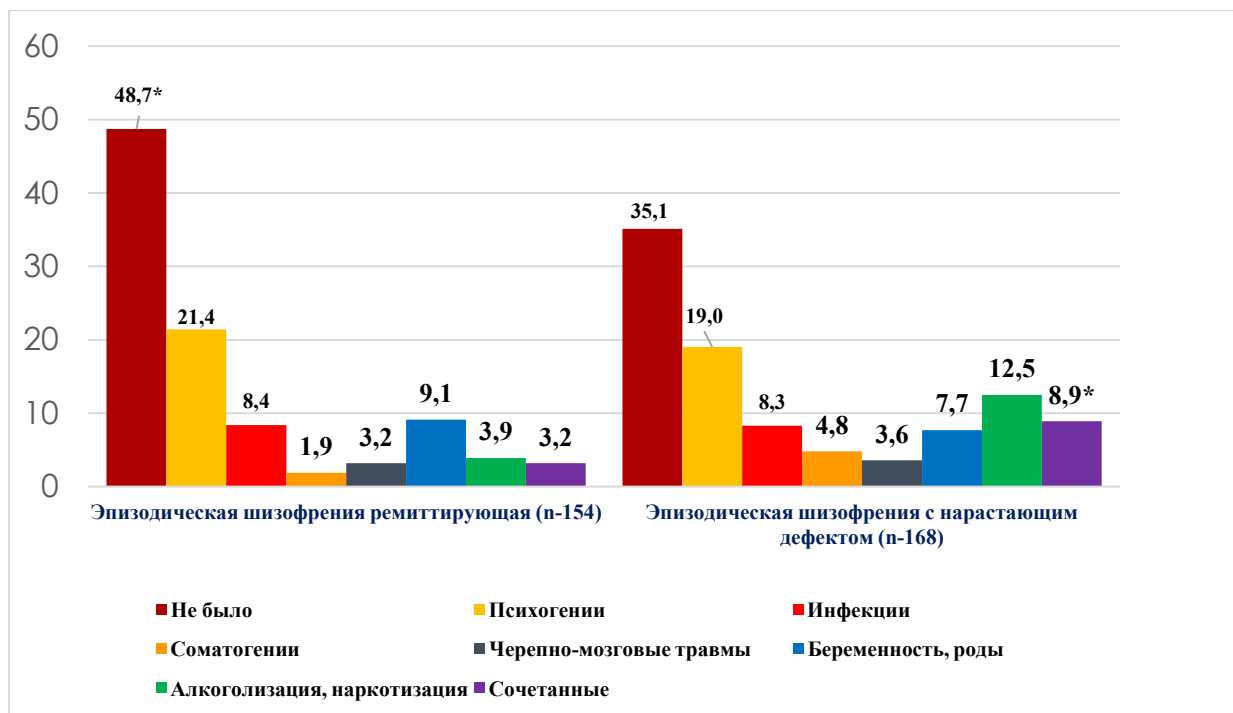
**Цель исследования:** Изучить влияния экзогенных факторов на течение эпизодической шизофрении.

**Материалы и методы исследования:** Было проведено клинко-эпидемиологическое и клинко-психопатологическое обследование больных рекуррентной шизофренией (РШ) с длительностью заболевания свыше 15 лет. Были изучены 322 больных: муж – 162 (50,3%), жен – 160 (49,7%), возрасте от 28 до 80 лет с диагнозом эпизодической шизофрении, находившихся на лечении в Андижанском областном психоневрологическом диспансере.

**Результаты и обсуждение:** Анализ экзогенных вредностей, предшествовавших заболеванию, позволил обнаружить экзогенно спровоцированное начало процесса у 110 больных (57,9%) ЭШР и у 80 (42,1%) - ЭШНД.

В качестве экзогений нами были изучены: психогении, инфекции, соматогении, черепно-мозговые травмы, беременность и роды, алкоголизация и наркотизация и сочетанные.

Определенный интерес представляет сравнительный анализ экзогенных факторов, который представлен в диаграмме:



Наиболее часто началу заболевания предшествовали психогении (при ЭШР – 21,4%, при ЭШНД – 19,0 %, беременность и роды (9,1% и 7,7%), сочетанные (3,2% и 8,9%).

Среди экзогенных факторов необходимо обратить внимание на психогении, которые достоверно чаще коррелировали с большим числом приступов при рекуррентной (5,6% и 33,6%) и приступообразно-прогредиентной (12,4% и 36,3%,  $P < 0,05$ ) формах заболевания, а также на беременность и роды при рекуррентной шизофрении (2,8% и 19,0%,  $P < 0,01$ ).

Наибольший удельный вес среди экзогенных вредностей при повторных приступах по-прежнему приходился на психогении при обеих формах заболевания (19,4% и 13,2%). На отдаленных этапах заболевания влияние экзогенных факторов на количество приступов становится менее выраженным. В то же время отмечена четкая тенденция к более частому возникновению экзогенно спровоцированных приступов у тех больных, у которых экзогенно спровоцирована и манифестация болезни.

ЭШ относится к числу эндогенных заболеваний, однако роль внешних влияний, провоцирующих их рецидивирование, изучена, пожалуй, несколько лучше, чем внутренние факторы. Причем, в литературе отмечается, что по мере возникновения последующих приступов шизофрении удельный вес экзогений меняется [2,7,11].

Таким образом, выявлены некоторые общие закономерности, касающиеся роли экзогенных факторов на различных этапах эпизодической шизофрении. При ЭШР отмечается обратная зависимость – в дебюте заболевания основное значение в механизме развития приступов

принадлежит эндогенным факторам, а на отдаленных этапах заболевания все большее значение приобретают экзогенные факторы и после нескольких приступов болезни становятся ведущими в риске их развития, причем вне зависимости от эндогенных факторов, то есть эндогенные механизмы играют здесь уже значительно меньшую роль.

**Выводы.** Установлено, что провоцирующее влияние и роль экзогенных факторов в дебюте и на отдаленных этапах ЭШР и ЭШНД неоднозначны. В дебюте заболевания экзогенные факторы играют большую роль в развитии приступов ЭШНД, особенно в сочетании с наследственной отягощенностью шизофренией, с шизоидным типом преморбиды и с ранним возрастом манифестации, то есть экзогенные факторы в буквальном смысле выступают

в роли провоцирующих, пусковых механизмов для реализации «патоса». Наибольшее влияние экзогенные вредности оказывают на первоначальном этапе манифестации заболевания, выступая как дополнительный патогенетический фактор в качестве «пускового механизма» приступов. А последующее течение уже в значительно большей мере определяется внутренними (эндогенными) механизмами развития. Среди экзогенных факторов ведущая роль принадлежит психогениям. В случаях, когда возникновению заболевания предшествовали экзогенные вредности, достоверно чаще наблюдалось большее число приступов. Это указывает на необходимость более широкого использования комплекса мероприятий не только первичной, но и вторичной психопрофилактики, а также психогигиены на всех этапах реабилитации больных данной категории. А также необходимо учитывать в комплексе дифференцированных психотерапевтических мероприятий в рамках семейной психиатрии. Установление избирательного влияния на шизофренический процесс экзогенных вредностей содействует не только выявлению патогенетических моментов, но и уточнению дифференциальной диагностики, дифференцированной терапии и мер профилактики рецидивов заболевания.

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## **ОСОБЕННОСТИ ОСУЩЕСТВЛЕНИЯ КОНТРОЛЬНО- НАДЗОРНОЙ ДЕЯТЕЛЬНОСТИ ОРГАНАМИ ГОСУДАРСТВЕННОЙ ВЛАСТИ В СОЦИАЛЬНОЙ СФЕРЕ**

*Аннотация. Данная статья рассматривает общие характеристики осуществления контрольно-надзорной деятельности, а также представляет информацию об особенностях контрольно-надзорной деятельности органами государственной власти на примере Министерства семьи, труда и социальной защиты населения Республики Башкортостан (далее – Министерство).*

*Автор предоставляет информацию об основных проблемах в контрольно-надзорной деятельности министерства, предлагает пути решения данных проблем для успешной и качественной реализации контрольно-надзорных функций в Министерстве.*

*Актуальность темы состоит в том, что в конъюнктуре нашего времени остро стоит вопрос о реформе контрольно-надзорной деятельности всех органов государственной власти Российской Федерации.*

*Ключевые слова: контрольно-надзорная деятельность, проблемы контрольно-надзорной деятельности, социальная сфера, законодательная база.*

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## **FEATURES OF THE IMPLEMENTATION OF CONTROL AND SUPERVISORY ACTIVITIES BY STATE AUTHORITIES IN THE SOCIAL SPHERE**

*Abstract. This article examines the general characteristics of the implementation of control and supervisory activities, and also provides*



*information on the features of control and supervisory activities by public authorities on the example of the Ministry of Family, Labor and Social Protection of the Population of the Republic of Bashkortostan (hereinafter - the Ministry).*

*The author provides information about the main problems in the control and supervisory activities of the Ministry, suggests ways to solve these problems for the successful and high-quality implementation of control and supervisory functions in the Ministry.*

*The relevance of the topic lies in the fact that in the context of our time, the issue of reforming the control and supervisory activities of all state authorities of the Russian Federation is acute.*

*Keywords: control and supervisory activities, problems of control and supervisory activities, social sphere, legislative framework.*

Контрольно-надзорная деятельность в настоящее время является одной из важнейших функций органов государственной власти. Она направлена на обеспечение соблюдения законности, прав и свобод граждан, а также на защиту общественных интересов. В социальной же сфере контрольно-надзорная деятельность играет особую роль, поскольку направлена на защиту наиболее уязвимых слоёв населения.

Контрольно-надзорная деятельность в Российской Федерации в последние десятилетия прошла серьёзный путь комплексного реформирования, обусловленного развитием идей, принципов и подходов, лежащих в её основе и отражающих приоритеты во взаимоотношениях государства, общества, бизнеса и отдельных граждан.

Контрольно-надзорная деятельность - это выполнение функций государства посредством действия всех разновидностей государственного надзора и контроля за исполнением обязательных требований законодательства.

Осуществление контрольно-надзорной деятельности в органах государственной власти в социальной сфере является важным аспектом обеспечения соблюдения законодательства и защиты прав граждан.

Министерство является органом исполнительной власти, осуществляющим функции по выработке и реализации государственной политики в сфере семьи, труда, социальной защиты населения, занятости населения, опеки и попечительства, защиты прав детей, а также по оказанию государственных услуг в этих сферах.

В соответствии с возложенными на него полномочиями Министерство осуществляет контрольно-надзорную деятельность в следующих сферах:

- занятость населения;
- социальное обеспечение;
- социальная защита семьи и детей;
- опека и попечительство;

– защита прав детей.

В Министерстве контрольно-надзорную деятельность осуществляет сектор контрольно-надзорной деятельности.

Основные особенности осуществления контрольно-надзорной деятельности в Министерстве включают в себя следующее.

Законодательная база: деятельность в сфере труда и социальной защиты населения регулируется федеральными законами и законами Республики Башкортостан, а также иными нормативно правовыми актами. Министерство выполняет контроль и надзор в соответствии с данной законодательной базой.

Контрольно-надзорная деятельность в Министерстве является одним из важных инструментов обеспечения соблюдения прав и интересов граждан в области социальной защиты.

Также одной из основных особенностей осуществления контрольно-надзорной деятельности в министерстве является то, что оно имеет свои подведомственные организации, и само же проводит контрольно-надзорные мероприятия данных учреждений, туда же входят различные государственные казённые учреждения Республики, государственные автономные учреждения социального обслуживания населения Республики и другие учреждения.

Важно отметить, что в связи с особенностями организации и проведения контрольно-надзорных мероприятий в 2022-2023 гг. фактически наложен мораторий на проведение контрольно-надзорных мероприятий, что, с одной стороны, облегчило осуществление организациями своей деятельности, а с другой, существенно нарушает права и законные интересы простых граждан.

Из предоставленной информации в Докладе об итогах работы Министерства за 2022 год можно выделить следующие основные проблемы контрольно-надзорной деятельности Министерства.

Проблемы, связанные с недостатками процедур проведения проверок и применения мер в отношении фактов выявленных нарушений:

– высокая степень «усмотрения» должностных лиц при проведении контрольно-надзорных мероприятий (субъективизм должностных лиц при проведении контрольно-надзорных мероприятий);

– недостаточная квалификация кадров. В настоящее время в системе Министерства наблюдается нехватка квалифицированных кадров, обладающих необходимыми знаниями и навыками для осуществления контрольно-надзорной деятельности. Это приводит к снижению качества контрольно-надзорных мероприятий в Министерстве.

Для решения вышеуказанных проблем контрольно-надзорной деятельности Министерства необходимо принять следующие меры:

– разработать пошаговый алгоритм действий для исключения возможности «усмотрения» должностными лицами при проведении контрольно-надзорных мероприятий.

– повышение квалификации кадров. Необходимо организовать повышение качественной квалификации кадров, осуществляющих контрольно-надзорную деятельность в социальной сфере. Это позволит повысить качество контрольно-надзорных мероприятий и его престиж.

Внедрение предложенных рекомендаций будет способствовать реальному повышению эффективности и качества контрольно-надзорных мероприятий Министерства.

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## **ЭФФЕКТИВНОСТЬ ПРИМЕНЕНИЯ ХИМИЧЕСКИХ ПРЕПАРАТОВ ПРИ ВЫРАЩИВАНИИ ТУТОВЫХ РАССАДНИКОВ**

*Аннотация. Представлен анализ опытов, проведенных по испытанию химических препаратов Бинсегард, Альфамилин и Римон Стар в борьбе с опаснейшим вредителем тутовых рассадников – малой тутовой огневкой. Показано, что двухкратная обработка данных инсектицидов в летний период с интервалом 30-35 дней позволяет в течение 15 дней уничтожать вредителей до 100% и до конца обработанного сезона признаки повреждения листьев тутовых рассадников не наблюдаются.*

*Ключевые слова: химические препараты, тутовые рассадники, тутовая огневка.*

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## **EFFICIENCY OF USING CHEMICALS IN GROWING MULBERRY NURSERIES**

*Annotation. An analysis of experiments carried out to test the chemical preparations Binsegard, Alfamilin and Rimon Star in the fight against the most dangerous pest of mulberry nurseries - the small mulberry moth - is presented. It has been shown that double treatment of these insecticides in the summer with an interval of 30-35 days allows for the destruction of pests up to 100% within 15 days and no signs of damage to the leaves of mulberry nurseries are observed until the end of the treated season.*

*Key words: chemicals, mulberry nurseries, mulberry moth.*

**Введение.** В связи с развитием концепции интегрированного управления вредителями в 70 гг. прошлого столетия возникло требование [1] безопасности для полезных компонентов агробиоценозов. Усилилось внимание к проблемам окружающей среды в целом. В результате этого в ассортименте 80–90 гг. появились препараты из химических классов пиретроидов, бензоилмочевин, фенилпиразолов и неоникотиноидов, умеренно опасные для теплокровных и энтомофагов, применяемые в низких

нормах и разлагающиеся в объектах среды за один сезон. Большое внимание уделялось поиску экологически малоопасных форм этих препаратов.

В работе [2] была предложена тактика применения химических и биологических препаратов для борьбы с хлопковой совкой на сое, выращиваемой в Ставропольском крае, в котором было предложено использовать бактериальные биопрепараты, такие как Бикол, Битоксибациллин и их аналоги.

Специалистами из соседнего Таджикистана в борьбе с табачным трипсом на посевах дынь был протестирован [3] новый инсектицид Датрин, 200 эк., который оказался наиболее токсичным, чем эталонный препарат Данитол, 100 эк. (эталон): биологическая эффективность препарата Датрин при одинаковых концентрациях составила на 3-день – 98,4 % на 7-день – 96,8 % и на 14-день – 92,9 %; тогда как с эталонным Данитолом эти результаты оказались равными 89,5%, 84,2% и 81,7 %, соответственно. Результаты испытания инсектоакарицидов показали, что специфический акарицид Омайт, 570 эк. в борьбе с паутиным клещом оказался наиболее эффективным, для которого биологическая эффективность составила на 3-й день – 99,2%, на 7-й день – 99,6% и на 14-й день – 94,3%, соответственно.

В работе [8] для изучения видового состава и динамики численности вредителей яблони были использованы стандартные феромонные ловушки Атракон и Атракон А, при разработке методов синхронного регулирования в ловушку одновременно помещали диспенсеры с феромонами изучаемых видов яблонной (*Cydia pomonella* L.), сливовой (*Grapholitha funebrana* Tr.) и восточной (*Grapholitha molesta* Tr.) плодовых жорков, а также гранатовой огневки (*Euzophera bigella* Zell.). Феромон сливовой плодовой жорки стимулировал отловы восточной плодовой жорки, что, по-видимому, объясняется близкими по строению молекулами феромонов. Это позволяет совместно использовать феромоны в разработке синхронных методов защиты.

Лысенко А.А. [9] был использован препарат Карповирусин, имеющий в своем составе вирус гранулёза яблонной плодовой жорки  $1 \times 10^{13}$  гранул/л. Механизм действия препарата состоит в вертикальной передаче вируса при поглощении гранул новорожденными личинками. Далее препарат гидролизуется в ЖКТ и вирионы проникают во внутреннюю среду личинки, что приводит к прекращению питания и смерти личинки от септицемии в результате превращения их в жидкость. При обработке препаратом с нормой расхода в 0,1 л/га шестью обработками по поколениям плодовой жорки вредоносность восточной плодовой жорки снизилась в среднем на 88-90 %.

**Материалы и методы.** Опыты проводили в фермерских хозяйствах Пахтаабадского района Андижанской области в период сезонов 2021-2023 гг. Для опытов были отобраны последовательно расположенные поля в пяти вариантах с размерами 10×200 м по трем повторениям в каждом из



вариантов. Опыты проводили в нескольких этапах. Первый этап исследований проводили в первой половине апреля 2021 г. повешиванием феромонных ловушек для сбора вредных организмов тутовых рассадников. Целью проведения данного этапа исследований являлось выявление разновидностей вредных организмов тутовых рассадников. При этом первичные бабочки в ловушках появились в мае месяце. Как показал анализ выявленных организмов в мае 2021 г., в отобранных площадках тутовых рассадников повреждали, в основном, тутовая огневка и обыкновенный паутинный клещ (*Tetranychus urticae*). Средняя заселенность вредителей оказались равными: тутовая огневка – 37 личинок/рассадник и обыкновенный паутинный клещ – 4.2 особей/лист.

Далее, статистика попавшихся бабочек тутовой огневки велась до начала июня месяца 2022 г. К этому времени степень поврежденности листьев тутовых рассадников достигала, в среднем, 21.4 %.

Затем, в июне месяце в трех вариантах отобранных площадок проводили обработку перечисленными выше препаратами. Даты обработок выбирали на пике количества личинок тутовой огневки согласно полученных данных феромонными ловушками и полевыми контролями.

В целях сопоставления полученных данных по эффективности применения препаратов в четвертом варианте опытов использовали в качестве эталонного также препарат **Каратэ 5% эм.к.**, производимый фирмой «Сингента Кроп Протекш АГ», Швейцария с нормой расходов 0.5 л/га. Последний – пятый вариант оставили в качестве контроля, т.е. никакую обработку рассадников в нем не проводили.

**Результаты и обсуждение.** Как видно из таблицы, по истечении 4 дней после обработок если в первой обработке вымерли примерно 50 % личинок, то во второй – данный показатель равнялся около 70 %. После 9 дней же вымерли около 70 % и 80 % в первой и второй обработок, соответственно. По истечении 15 дней после первой и второй обработок биологическая эффективность достигла значений 97 % и 100 %, соответственно. Это означает, что использованные препараты, наравне с эталонным препаратом, являются эффективными средствами в борьбе с опаснейшим вредителем тутовых рассадников – тутовой огневкой.

**Выводы.** Итак, на основании анализа опытов, проведенных в 2021-2023 гг. в Андижанской области по тестированию химических препаратов, таких как Бинсегард, Альфамилин, и Римон Стар в борьбе с опаснейшим вредителем тутовых рассадников – тутовой огневкой, можно сделать следующие выводы:

во-первых, все эти средства являются хорошими средствами в борьбе с тутовой огневкой даже в случае очага вредителя;

во-вторых, в отличие шелковиц, тутовых рассадников рекомендуется обрабатывать два раза за сезон с интервалом 30-35 дней (а не 5-7 дней как в работе [11]), в котором достигнута наибольшая биологическая



эффективность и до конца сезона никаких признаков повреждения рассадников от огневки не наблюдались.

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## **ПРОБЛЕМЫ ЭФФЕКТИВНОГО ИСПОЛЬЗОВАНИЯ ВОЗОБНОВЛЯЕМЫХ ИСТОЧНИКОВ ЭНЕРГИИ В ЭКОТУРИЗМЕ**

*Резюме. В статье особое внимание уделено экотуризму, считающемуся самой молодой отраслью туризма, и использованию и расширению альтернативных источников энергии на его небольших площадях, сохранению углеводородных топливно-энергетических ресурсов, энергосбережению на основе определения энергоэффективности природные ресурсы, оценка запасов источников энергии и их рациональное использование.*

*Ключевые слова: природа, экотуризм, альтернативные источники энергии, вода, ветер, солнечная энергия, биогаз.*

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## **PROBLEMS OF THE EFFECTIVE USE OF RENEWABLE ENERGY SOURCES IN ECOTOURISM**

*Abstract. The article pays special attention to ecotourism, which is considered the youngest tourism industry, and the use and expansion of alternative energy sources in its small areas, the conservation of hydrocarbon fuel and energy resources, energy saving based on the determination of the energy efficiency of natural resources, the assessment of reserves of energy sources and their rational use.*

*Key words: nature, ecotourism, alternative energy sources, water, wind, solar energy, biogas.*

**Введение:** Развитие экотуризма в Узбекистане, в том числе в Ферганской долине, должно иметь конкретную цель, должно быть направлено на обеспечение экологической безопасности и устойчивого развития для нынешнего и будущих поколений путем целеустремленного и добросовестного природопользования.

До сих пор эффективное использование альтернативных источников энергии не в полной мере применялось в экотуризме, который считается самой молодой отраслью туризма. Сегодня это стало одним из самых важных терминов. Этот экотуризм является основным фактором не только для туристов, но и для регионов с развитым туризмом. Мы знаем, что

источники энергии, являющиеся одной из актуальных проблем современности, актуальны и для экотуризма.

В нашей республике реализован ряд реформ по дальнейшему развитию широкого использования возобновляемых источников энергии и достигнуты определенные результаты. В частности, Указом Президента Республики Узбекистан определены задачи «Непрерывного обеспечения электроэнергией экономики и активного внедрения технологий «Зеленой экономики» во все отрасли, повышения энергоэффективности экономики на 20%» [1,6-с.].

При реализации этих задач, в частности, важно проводить географические исследования, ориентированные на территориальные аспекты опережающего развития на основе альтернативных источников энергии, в первую очередь, для обеспечения приоритета современных, экологически чистых производств с очень малой негативное воздействие на окружающую среду, а также обеспечить ее рациональную организацию и интеграцию в стране.

**Методология исследования:** Экотуризм - это стратегическая практика использования возобновляемых источников энергии в развитых и развивающихся регионах и развития как объекта обслуживания туризма. После того, как запасы энергетического сырья, такого как нефть, уголь, природный газ и ядерное топливо, будут исчерпаны, они не будут производиться заново [2,320-с.].

В результате, когда они заканчиваются, энергия тоже. Чтобы этого не допустить, необходимо найти и внедрить новые технологии и виды производства энергии. В настоящее время существует множество видов таких альтернативных источников энергии, и их значение в производстве энергии возрастает. Ниже представлены виды таких возобновляемых источников энергии.

**Анализ литературы:** Научно-теоретическим вопросам экотуризма посвящены исследования географов и экономистов Узбекистана и зарубежных стран. Источники по экологическому туризму впервые были рассмотрены в работах зарубежных ученых Р.Давыдова, А.В.Дроздова, В.В. Храбовченко, Т.В. Бочкаревой, Л. И. Егоренкова и А. Таксанова в конце XX - начале XXI веков.

О.Х.Гамидов, Н.Тухлиев, Т.Абдуллаева и М.Р.Усманов провели исследования по маркетингу, управлению и экономическим вопросам туризма в Узбекистане. Научно-теоретические основы экологического туризма изучали А.Н. Нигматов, Н. Т. Шамуратова и М.Хошимов.

**Анализ и результаты:** *Энергия воды.* В этом случае, помимо энергии воды, поступающей от плотин, построенных на естественных реках, должны быть приняты и установлены автономные источники энергии малой мощности, т.е.там, где есть водотоки с достаточным стоком, с учетом возможных энергетических устройств. Если в горах и холмах есть поток

воды, на холмах, куда не доходит электричество, его поток используется для поворота трубы водогенератора и становится возможным получение энергии. Таким же образом в Самаркандской области реализовано энергогенерирующее устройство.

**Энергия ветра.** Для использования энергии ветра электрическую энергию получают путем поворота оси ротора за счет вращения лопастей, которые поворачиваются в направлении, откуда дует ветер. Следовательно, скорость ветра должна иметь достаточную энергию для вращения ротора. Хотя ветер, который их крутит, есть в Кызылкумском, Аралбойском и Бекобадском районах Узбекистана, силы ветра не всегда хватает, чтобы повернуть ветер на остальной территории. У сильного ветра, возникающего в некоторые дни, будет достаточно энергии, но поскольку он непостоянен, вы не можете получить постоянную энергию. В таких случаях было бы целесообразно использовать энергию ветра после хранения. Следует отметить, что энергию ветра часто комбинируют с другими видами источников энергии, чтобы гарантировать, что она может работать даже при отсутствии ветра. Например, когда устройства солнечной энергии сочетаются с устройствами энергии ветра, погода солнечная, когда есть нет ветра, и наоборот, в ветреные дни не всходит солнце, в результате и то, и другое дополняют друг друга [3,4-с.].

**Солнечная энергия.** Электростанции, использующие солнечную энергию, в настоящее время являются наиболее экологичными и быстродействующими устройствами, не требующими дополнительных генераторов и вращающихся элементов. Для использования солнечной энергии используется устройство, получающее энергию за счет процесса, происходящего при падении света на поверхность твердого тела, называемого солнечными элементами. Если это устройство выполнено на основе технологии, отвечающей определенным требованиям, путем приведения в контакт нескольких полупроводников, солнечная энергия, попадающая на поверхность такого полупроводника, может быть непосредственно преобразована в электричество. В результате большое количество энергии получается за счет расширения поверхности, на которую падает такой свет. Чтобы понять механизм этого, необходимо понять природу p-n-перехода и явлений фотоэффекта.



**Геотермальная энергия** - температура увеличивается по мере приближения к центру земли. По оценкам специалистов, температура в центре земли составляет 5000-6000 градусов, которая постоянно поддерживается за счет ядерных реакций. В этой жаре расплавленные

жидкие лавы всегда находятся в движении. Из-за того, что распространение лавы вдали от центра земли не является сферически симметричным, некоторые куски могут располагаться ближе к поверхности земли, а некоторые - дальше. Те, что находятся близко к земной поверхности, выделяют подземную тепловую энергию на земную поверхность в виде различных вулканов и горячих источников. Если подземелье является местом со сбалансированным выделением тепловой энергии, то его можно использовать для получения тепловой энергии. Таких источников горячей воды в Узбекистане много[4,177-с.].

**Энергия биогаза.** Для получения энергии из биогаза необходимо химически и биологически перерабатывать различные виды биомассы. Дело в том, что в зависимости от влажности биомасс их переработка происходит по-разному. Если влажность не менее 85 процентов, то биомасса разделяется на органические части ферментирующими бактериями в анаэробной, т.е. бескислородной, среде. При низком содержании влаги их используют для создания разных видов топлива, начиная с термического сжигания и химическими методами с помощью катализаторов. В обоих методах газы, выделяющиеся в результате отделения органических соединений от биомассы, собираются и осенью используются для получения энергии их сжигания. Следует сказать, что технология производства биогаза очень дешевая и простая по сравнению с технологией солнечной энергетики. Тот факт, что только в Китайской Народной Республике работает более 35 миллионов малых биогазовых автономных источников энергии, свидетельствует о том, что он считается удобным, дешевым и надежным источником энергии для домашних хозяйств.

**Заключение:** В заключение можно сказать, что использование альтернативных источников энергии признано важным и рекомендовано к использованию в качестве уникального ресурса для окружающей среды, здоровья и полноценного отдыха туристов вовремя экотуристических поездок.

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Олий мактаби мустақил изланувчиси*

## **ПАРЛАМЕНТ НАЗОРАТИ ИНСТИТУТИ ҲУҚУҚИЙ АСОСЛАРИНИНГ РИВОЖЛАНИШ БОСҚИЧЛАРИ**

*Ўзбекистон Республикасида парламент назорати институтининг ҳуқуқий асосларини миллий қонунчиликдаги ривожланиш даври ёритилади. Давлат қурилиши ва бошқаруви соҳасидаги ислоҳотларда асосий ўрин тутган парламентаризмни ривожлантиришига қаратилган ислоҳотларни босқичларга бўлган ҳолда таҳлил этилади.*

*Калит сўзлар: ҳуқуқий давлат, қонун устиворлиги, парламент, парламент назорати, жамоатчилик назорати, ислоҳот, сиёсий тизим, сайлов тизими, ижтимоий барқарорлик, ҳуқуқий ва конституциявий нормалар.*

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## **STAGES OF DEVELOPMENT OF THE LEGAL BASIS OF THE INSTITUTE OF PARLIAMENTARY CONTROL**

*The period of development of the legal basis of the institution of parliamentary control in the Republic of Uzbekistan in the national legislation is covered. The reforms aimed at the development of parliamentarism, which played a key role in the reforms in the field of state construction and management, are analyzed in stages.*

*Key words: rule of law, rule of law, parliament, parliamentary control, public control, reform, political system, electoral system, social stability, legal and constitutional norms.*

Ўзбекистон мустақилликка эришган кундан буён ўтган давр мобайнида демократик ҳуқуқий давлат, фуқаролик жамияти қуриш мақсадида мамлакат сиёсий тизимида кенг кўламли ислоҳотлар амалга оширилди. Давлат ва жамият бошқаруви тизимидаги туб ўзгаришлар аввало жамиятнинг ҳуқуқий асосларини таъминловчи, қонун чиқарувчи орган миллий парламентнинг шаклланишини тақозо этади.



Парламент қонунчилик органи сифатида давлат ҳокимияти органлари тизимида алоҳида ўрин тутади. Парламентнинг давлат ҳокимияти органлари тизимидаги бошқа бўғинларга нисбатан ўзига хос хусусияти шундаки, парламент (халқ вакиллиги орқали) мамлакатнинг барча ижтимоий гуруҳлари ва аҳоли қатламлари манфаатлари ифодаланадиган; давлатда энг кўп талаб қилинадиган ғояларни амалга ошириш учун шароитлар яратилган (сиёсий партиялар орқали); мамлакатнинг ҳуқуқий базаси шаклланадиган (парламентнинг қонун чиқарувчи функцияси орқали); ижро ҳокимиятини чеклаш ва назорат қилишнинг тегишли механизмлари (парламентнинг назорат функцияси орқали) мавжуд ягона коллегиял орган ҳисобланади [1.Б.7].

Ўзбекистонда давлат қурилиш ва бошқаруви соҳасидаги ислохотларда асосий ўрин тутган парламентаризмни ривожлантиришга қаратилган ислохотларни босқичларга бўлганда мамлакатимиз мустақилликка эришган 1991 йилдан 2004 йилгача бўлган бир палатали парламентнинг шаклланиши, ривожланиши, фаолиятининг ҳуқуқий асослари яратилишини ўз ичига олган даврни шартли равишда биринчи босқич деб олишимиз мумкин. Иккинчи босқич мамлакатимизда икки палатали парламент шаклланиши ҳамда давлат ва жамият бошқарувида демократик тамойиллар изчил жорий қилинган 2005–2016 йилларни қамраб олади. Учинчи босқич 2016 йилдан бошланиб, демократик ислохотларни чуқурлаштириш ва мамлакатни модернизация қилишда парламентнинг ва сиёсий партияларнинг ролини янада кучайтириш, жамоатчилик назорати механизмларини амалда татбиқ этиш вазифаларини амалга оширишни назарда тутди.

Биринчи босқич ислохотларнинг (1991–2004) вазифалари:

- давлат бошқарув тизимини шакллантириб олиш;
- ҳокимиятни тармоқларга ажратиш асосида миллий давлатчилик пойдеворини барпо этиш;
- давлат қурилиши ва бошқаруви бўйича ислохотларнинг ҳуқуқий негизини яратиш;
- демократик сайлов тизимини шакллантириш;
- кўппартиявийликни шакллантириш;
- демократик сайлов тизими асосида парламентни шакллантиришдан иборат бўлди.

Конституция қабул қилингунига қадар Ўзбекистон ҳуқуқ тизимида рўй берган ўзгаришларга асос солувчи, тизим ҳосил қилувчи қонунлар яратилди. 12-чақириқ Олий Кенгаш ўз фаолияти мобайнида 182 та қонун, 4 та кодекс, 509 та қарор қабул қилган [2.Б.65]. Ўзбекистон мустақиллигининг ҳуқуқий асослари яратилганлиги, Ўзбекистон Республикаси Конституцияси, қонун чиқарувчи, ижро этувчи ва суд ҳокимияти тармоқларининг ваколатларини белгиловчи қонунлар қабул қилинди. Жумладан, Ўзбекистон Республикасида жамоат бирлашмалари тўғрисида,

Ўзбекистон Республикаси Олий Мажлисига сайлов тўғрисида, Халқ депутатлари вилоят, туман ва шаҳар Кенгашларига сайлов тўғрисида, Фуқаролар сайлов ҳуқуқларининг кафолатлари тўғрисида, Фуқароларнинг муурожаатлари тўғрисида, Ўзбекистон Республикасининг Олий Мажлиси тўғрисида, Ўзбекистон Республикасида депутатларнинг мақоми тўғрисидаги Ўзбекистон Республикаси қонунлари биринчи босқич ислохотларнинг дастлабки даври (1991–1995 йиллар) учун белгиланган вазифаларни амалга оширилишида ҳуқуқий асос бўлиб хизмат қилди.

Мамлакатимизнинг мустақиллик Конституцияси (8.12.1992) давлат ва жамият тараққиётининг демократик тамойилларини ҳуқуқий мустаҳкамлаб, ҳокимиятлар бўлиниш принципи нормаларини амалга киритди (11-модда) [3].

Конституцияда Ўзбекистон Республикасининг Олий Мажлиси қонун чиқарувчи ҳокимиятни амалга оширувчи олий давлат вакиллик органи эканлиги, ваколатлари аниқ белгилаб қўйилди.

Парламент назорати – бу мустақил ва қонуний, тизимли вакиллик органи фаолияти бўлиб, унинг палаталари, қўмита ва комиссиялари, палата аъзоларининг ижро ҳокимияти ва бошқа давлат органлари ва хўжалик бошқарув органларининг инсон ва фуқароларнинг ҳуқуқлари ва эркинликларини, қолаверса, Ўзбекистон Республикаси Конституциясига риоя қилинишини таъминлаш ҳамда конституциявий ва жорий қонунларнинг ижросини назорат қилиш фаолияти ҳисобланади. Парламент назорати ҳуқуматнинг бюджет ижроси тўғрисидаги ҳисоботларида, жорий масалалар бўйича ахборотида, парламент муҳокамаларида, депутатлар сўровлари ва бошқа шу кабиларда ифодаланади.

Ўзбекистон Республикаси Олий Мажлисининг назорат функцияси моҳиятини 1992 йил конституциясининг 78-моддасида мустаҳкамланган. Парламент назорат ваколатларининг конституциявий асослари Давлат бюджетини тасдиқлашда, унинг ижроси устидан назорат қилишда, тайинладиган ва сайладиган мансабдор шахсларнинг ахборотларини эшитиб боришда, ижро этувчи ҳокимият органларига ва уларнинг мансабдор шахсларига сўров бериш ҳуқуқида мужассамлашган. Олий Мажлиснинг Ўзбекистон Республикаси Президенти фармонларини тасдиқлашга, тайинлашларга, сайлашларга, конституцияда назарда тутилган масалалар юзасидан тайинлашлар учун розилик бериш ваколатларини ҳам парламент назоратининг шаклларида бири сифатида кўриш мумкин.

Олий Мажлиснинг назорат ваколатлари Ўзбекистон Республикасининг Олий Мажлиси тўғрисида”ги Қонунда, “Ўзбекистон Республикасида депутатларнинг мақоми тўғрисида” ги Қонунда, Олий Мажлиснинг қўмиталари ва комиссиялари тўғрисидаги Низомда ҳам мустаҳкамлаб қўйилди. Парламент ҳамда қўмита ва комиссияларнинг

назоратни амалга ошириши билан боғлиқ тартиб-таомиллар Олий Мажлиснинг регламентида тартибга солинди.

“Ўзбекистон Республикасининг Олий Мажлиси тўғрисида”ги Қонуннинг (№2011-ХП-сонли қонун, кучга кириш санаси 16.10.1994, ҳужжат кучини йўқотган сана 14.01.2005) 11-моддасида “Ўзбекистон Республикаси Олий Мажлиси қонунларнинг ва Ўзбекистон Республикаси Олий Мажлиси бошқа ҳужжатларининг ижросини назорат қилади” деб белгиланди. Қонунда қўмиталар ва комиссиялар қонун лойиҳаларини тайёрлаш ишларини олиб бориши, Олий Мажлис муҳокамасига киритиладиган масалаларни дастлабки тарзда кўриб чиқиши ва тайёрлаши, қонунларнинг ва Олий Мажлис бошқа ҳужжатларининг ижросини назорат қилишлиги (18-, 23-моддалар) белгиланган [4]. Қўмиталарнинг вазирликлар, давлат қўмиталари ва идоралар раҳбарларининг, Қорақалпоғистон Республикаси Вазирлар Кенгаши, вилоятлар ва Тошкент шаҳар ҳокимликлари, корхоналар муассасалар, ташкилотлар раҳбарларининг қонунлар, Олий Мажлиснинг бошқа ҳужжатлари, қўмиталар тавсиялари бажарилиши юзасидан ахборотларини эшитиш амалиёти жорий қилинди. Қўмиталар қараб чиқилган масалалар юзасидан тавсия йўсинидаги қарор қабул қилишлари, ушбу қарорлар йўлланилган давлат органлари томонидан кўриб чиқилиши шартлиги ва узоғи билан бир ойлик муддатда хабар бериш амалиёти йўлга қўйилди.

Ўзбекистон Республикасида депутатларнинг мақоми тўғрисидаги Қонунга (№66-І-сонли қонун, кучга кириш санаси 01.06.1995, ҳужжат кучини йўқотган сана 05.09.2019) асосан, депутатлар қонунлар ва давлат ҳокимияти юқори органлари қарорларининг жойларда ижро этилишини назорат қиладилар. Депутатнинг сессияда Ўзбекистон Республикаси қонунларининг ижро этилишини, тегишли ҳокимият вакиллик органи қарорларининг бажарилишини текшириш ҳақида кўриб чиқиш учун масалалар таклиф этиш ҳуқуқи мустаҳкамланган. Парламент назоратининг анъанавий шакли бўлган Депутат сўрови [5] тушунчасига – сессияда давлат органлари ёхуд мансабдор шахсларга ижтимоий аҳамиятга молик масалалар юзасидан расмий тушунтириш бериш ёки ўз нуқтаи назарини баён қилиб бериш ҳақида қўйилган талабдир деб, изоҳ берилди. Олий Мажлис, Жўқорғи Кенгес депутати қонун ҳужжатларига мувофиқ давлат ҳокимиятига ва бошқаруви маҳаллий органларига, шунингдек корхоналар, муассасалар ва ташкилотларнинг раҳбарларига сўров киритиш, Вилоят, туман, шаҳар Кенгаши депутати ҳокимга, ҳоким ўринбосарларига, ҳокимлик бўлимлари ва бошқармаларнинг раҳбарларига, шунингдек Кенгаш ҳудудида жойлашган корхоналар, муассасалар ва ташкилотларнинг раҳбарларига сўров билан мурожаат қилиш ҳуқуқи қонун билан мустаҳкамланди.

Ўзбекистон Республикаси Олий Мажлиснинг регламентида (№49-І-сон, кучга кириш санаси 15.07.1995, ҳужжат кучини йўқотган сана

27.01.2005) XII- бобида Олий Мажлиснинг назорат қилиш соҳасидаги ваколатларини амалга ошириш тартиб-таомиллари очиб берилди. Жумладан, Олий Мажлис давлат органлари, фуқаролар ўзини ўзи бошқариш органлари, жамоат бирлашмалари, корхоналар, муассасалар ва ташкилотлар томонидан Ўзбекистон Республикаси Конституцияси, қонунлари ва Олий Мажлис қарорлари ижро этилиши устидан назоратни амалга ошириши, Олий Мажлис мансабдор шахсларнинг ҳисоботини ёки ахборотини тинглаши мумкинлиги, Олий Мажлиснинг битта ёки бир гуруҳ депутати, қўмитаси, комиссияси, фракцияси ёки блоки мансабдор шахсларга, шунингдек хўжалик юритувчи субъектларнинг раҳбарларига республиканинг давлат, хўжалик ва ижтимоий-маданий қурилиши учун муҳим аҳамиятга эга бўлган масалалар юзасидан расмий тушунтиришлар бериш ёки ўз муносабатини баён этишни талаб қилиб сўров билан мурожаат этиш ҳуқуқи белгиланди. Лекин қонун ҳужжатларида сўровларни тайёрлаш, бериш ва сўровлар бўйича иш олиб бориш билан боғлиқ барча тартиб-таомиллар норматив жиҳатдан етарлича тартибга солинмади.

Парламент назоратининг муҳим бўғини бўлган Олий Мажлиснинг Инсон ҳуқуқлари бўйича вакили институти жорий қилинди. Анъанавий равишда омбудсман вакиллик органига таяниб, мансабдор шахслари ўз ҳаракатлари ёки ҳаракатсизлиги туфайли фуқароларнинг ҳуқуқлари ва қонуний манфаатларини бузадиган ижро этувчи органлар устидан назоратни амалга оширади. 1997 йил 27 апрелда қабул қилинган “Олий мажлиснинг инсон ҳуқуқлари бўйича вакили (омбудсман) тўғрисида”ги Қонун билан Вакил фаолияти унинг ҳуқуқий мақомига асосан ижтимоий муносабатларнинг давлат ва фуқаро, жамият ва шахсга тааллуқли муҳим соҳаларини қамраб олади. Омбудсман “инсон ҳуқуқлари соҳасида: а) давлат органлари; б) фуқароларнинг ўзини ўзи бошқариш органлари; в) корхоналар, муассасалар, ташкилотлар; г) жамоат бирлашмалари; д) мансабдор шахслар томонидан қонун ҳужжатларига риоя этилиши устидан парламент назоратини амалга оширади” [6.Б.23].

Иккинчи босқич мамлакатимизда икки палатали парламент шаклланиши ҳамда давлат ва жамият бошқарувиغا демократик тамойиллар изчил жорий қилинган **2005- 2016** йилларни қамраб олади. 2005 йилда Олий Мажлис икки палатали тизим асосида шакллантирилди. Профессional парламентни барпо этишдан мақсад:

биринчи – парламент ўз ваколатларини самарали амалга ошириши, ҳар томонлама асосли ва пухта қарорлар қабул қилиши учун зарур бўлган ўзаро мувозанат ва чекловлар тизимини яратиш;

иккинчи – Қонунчилик палатаси ўз фаолиятини доимий профессионал тарзда олиб боришини назарда тутган ҳолда, парламентнинг қонун ижодкорлиги борасидаги ишининг сифатини ошириш;

учинчи – Сенат асосан маҳаллий кенгашлар, ҳудудларнинг вакиллари билан иборат бўлиши ҳамда вакиллик вазифасини бажаришини

инобатга олиб, умумдавлат ва ҳудудий манфаатларнинг мутаносиблигига эришиш;

тўртинчи – аҳолининг мамлакат ижтимоий ва сиёсий ҳаётидаги иштироки кўламини янада кенгайтиришдан иборатдир [7.Б.13].

Доимий асосда ишловчи парламент ҳуқуқий давлат амал қилишининг асосий шарти ҳисобланади. 2003 йилдаги умумхалқ референдумида киритилган Конституцияга киритилган ўзгаришлар билан икки палатали парламентнинг ҳукуматни шакллантириш ва назорат қилиш борасидаги ваколатлари кенгайди. Конституцияда Вазирлар Маҳкамасининг Олий Мажлис олдидаги жавобгарлигини мустаҳкамловчи норма парламент назоратини таъминлашда муҳим омил бўлди. Олий Мажлис палаталари биргаликда Президент тақдимотига кўра Бош вазир номзодини кўриб чиқиш ва тасдиқлаш ваколатига эга бўлди. Давлат органлари раҳбарларини, суд тизими ва махсус хизматлар раҳбарларини, чет мамлакатлардаги ва халқаро ташкилотлардаги дипломатик вакилларни тайинлаш ва тасдиқлаш ва ишдан озод этиш каби Президент ваколатларининг бир қисми Сенатга ўтказилди. Сенатнинг мутлақ ваколатларига Бош прокурорни, Табиатни муҳофаза қилиш қўмитаси раисини ва Марказий банк раисини эшитиш ҳамда амнистия актларини қабул қилиш киритилди [8].

Парламент назоратининг муҳим шакли сифатида Ҳисоб палатасининг ҳисоботини кўриб чиқиш амалиёти жорий қилинди. Олий Мажлис Қонунчилик палатаси ўз ишини профессионал асосда олиб бориши қонунчилик фаолияти сифатини оширди. Қонунчилик палатаси ва Сенатнинг ҳамкорликдаги фаолияти умумдавлат ва ҳудудий манфаатларни мувофиқлаштириш имконини берди. Парламент фаолиятининг ҳамда давлат ҳокимияти органлари мувозанатини таъминлаш тизимининг такомиллаштирилиши жамият сиёсий ҳаётининг фаоллашувига олиб келди.

Парламент назоратининг сифати ва самарадорлигини оширмай туриб қонун чиқарувчи ҳокимиятнинг таъсирини кучайтириб бўлмайди. Шу сабаб, парламент назоратини такомиллаштириш мақсадида Конституциянинг 86- ва 87-моддалари билан Қонунчилик палатаси Спикерининг ва Сенат раисининг Ўзбекистон Республикаси қонунлари ижросини назорат қилишни ташкил этиш бўйича ваколатлари мустаҳкамланди. 87-моддага асосан Олий мажлис қўмиталари муҳокамага киритиладиган масалаларни нафақат кўриб чиқиш ва тайёрлаш мақсадида балки қонун ва қарорлар ижросини назорат қилиш учун ҳам тузилиши белгиланди.

2010 йилда қабул қилинган “Мамлакатимизда демократик ислохотларни янада чуқурлаштириш ва фуқаролик жамиятини ривожлантириш концепцияси” [9] парламент назоратини ривожлантириш бўйича ислохотларнинг мантиқий давоми бўлди.

Концепцияга мувофиқ Ўзбекистон республикаси Конституциясига ва бошқа қонунчилик ҳужжатларига бир қатор тузатишлар киритилди. Давлат



қурилиши соҳасини қамраб олган бу тузатишлар парламент назоратини конституциявий-ҳуқуқий асосларини ҳамда қонунчилик, ижро ва суд ҳокимиятлари ўртасидаги тийиб туриш ва мувозанатни сақлаш тизимини янада ривожланишига хизмат қилди. Мазкур тузатишларга асосан Ўзбекистон Республикаси Бош вазири номзоди Ўзбекистон Республикаси Олий Мажлисининг Қонунчилик палатасига сайловда энг кўп депутатлик ўринларини олган сиёсий партия ёки тенг миқдордаги энг кўп депутатлик ўринларини қўлга киритган бир неча сиёсий партия томонидан таклиф этилиши, Бош вазирга нисбатан ишончсизлик вотуми билдириш институти амалиётга киритилди. Парламентга мамлакат ижтимоий-иқтисодий ривожланишининг долзарб масалалари юзасидан Бош вазирнинг ҳисоботларини эшитиш ва муҳокама қилиш, Вазирлар Маҳкамасининг мамлакат ижтимоий-иқтисодий ҳаётига оид йиллик маърузасини кўриб чиқиш каби қўшимча назорат ваколатлари берилди [10]. Шунингдек, ҳокимият вакиллик органларининг назорат функцияларини кучайтириш мақсадида, маҳаллий ҳокимиятлар халқ депутатлари Кенгашига ижтимоий-иқтисодий ривожланишнинг энг муҳим ва долзарб масалалари юзасидан ҳисоботлар тақдим этиш, улар бўйича халқ депутатлари Кенгаши томонидан тегишли қарорлар қабул қилиниши белгиланди [11].

Учинчи босқич 2016 йилдан бошланиб, демократик ислоҳотларни чуқурлаштириш ва мамлакатни модернизация қилишда парламентнинг ва сиёсий партияларнинг ролини янада кучайтириш, жамоатчилик назорати механизмларини амалда татбиқ этиш вазифаларини амалга оширишни назарда тутди. Ўзбекистон Республикаси Олий Мажлиси парламент назорати фаолиятининг ҳуқуқий асослари “Ўзбекистон Республикаси Олий Мажлисининг Қонунчилик палатаси тўғрисида”, “Ўзбекистон Республикаси Олий Мажлисининг Сенати тўғрисида”, “Ўзбекистон Республикаси Олий Мажлиси Қонунчилик палатасининг Регламенти тўғрисида”, “Ўзбекистон Республикаси Олий Мажлиси Сенатининг Регламенти тўғрисида”, “Ўзбекистон Республикаси Олий Мажлиси Қонунчилик палатасининг депутати ва Сенат аъзосининг мақоми тўғрисида”, “Парламент назорати тўғрисида”ги ва бошқа қонун ҳужжатларида мустаҳкамланган.

2016 йилда қабул қилинган “Парламент назорати тўғрисида”ги Қонун [12] парламент назоратини ташкил этиш ва амалга ошириш соҳасидаги муносабатларни тартибга солишдан иборат бўлиб, парламент назорати субъектлари, объекти, парламент назорати шакллари аниқ белгилаб берилган.

Қонунга мувофиқ Парламент назорати субъектлари қуйидагилардан иборат:

Ўзбекистон Республикаси Олий Мажлисининг Қонунчилик палатаси;  
Ўзбекистон Республикаси Олий Мажлисининг Сенати;

Қонунчилик палатасининг, Сенатнинг қўмиталари, комиссиялари;



Қонунчилик палатасидаги сиёсий партиялар фракциялари;  
Қонунчилик палатаси депутатлари;  
Сенат аъзолари;  
Ўзбекистон Республикаси Олий Мажлисининг Инсон ҳуқуқлари бўйича вакили (омбудсман).

Қонуннинг 4-моддасига кўра, давлат ҳокимияти ва бошқаруви органларининг ҳамда улар мансабдор шахсларининг Ўзбекистон Республикаси Конституцияси ва қонунларини, Ўзбекистон Республикаси Олий Мажлиси палаталарининг ва улар органларининг қарорларини, давлат дастурларини ижро этиш, шунингдек ўз зиммаларига юклатилган вазифалар ҳамда функцияларни амалга ошириш бўйича фаолияти парламент назорати объектидир.

Парламент назорати шакллари куйидагилардан иборат:

Давлат бюджети ижросининг боришини кўриб чиқиш;

Ўзбекистон Республикаси Вазирлар Маҳкамасининг мамлакат ижтимоий-иқтисодий ҳаётининг энг муҳим масалалари юзасидан ҳар йилги маърузасини кўриб чиқиш;

Вазирлар Маҳкамасининг Ўзбекистон Республикаси Президентининг Ўзбекистон Республикаси Олий Мажлисига Мурожаатномасидан келиб чиқадиган, тегишли йилга мўлжалланган давлат дастури бажарилишининг бориши тўғрисидаги ҳисоботини кўриб чиқиш;

Ўзбекистон Республикаси Коррупцияга қарши курашиш агентлигининг Ўзбекистон Республикасида коррупцияга қарши курашиш тўғрисидаги миллий маърузасини кўриб чиқиш;

Ўзбекистон Республикаси Бош вазирининг (бундан буён матнда Бош вазир деб юритилади) мамлакат ижтимоий-иқтисодий ривожланишининг айрим долзарб масалалари юзасидан ҳисоботини эшитиш;

Қонунчилик палатаси, Сенат мажлисларида ҳукумат аъзоларининг, давлат органлари, хўжалик бошқаруви органлари раҳбарларининг ўз фаолиятига доир масалалар юзасидан ахборотини эшитиш;

Қонунчилик палатаси мажлисларида ҳукумат аъзоларининг Қонунчилик палатаси депутатлари саволларига жавобларини эшитиш;

Сенат мажлисларида вилоятлар, туманлар, шаҳарлар ҳокимларининг тегишли ҳудудни ривожлантириш масалалари юзасидан ҳисоботларини эшитиш;

Ўзбекистон Республикасининг чет давлатлардаги дипломатик ваколатхоналари раҳбарларининг ўз фаолияти масалаларига доир ҳисоботларини эшитиш;

Ўзбекистон Республикаси Ҳисоб палатасининг ҳисоботини эшитиш;

Ўзбекистон Республикаси Бош прокурорининг ҳисоботини эшитиш;

Ўзбекистон Республикаси Марказий банки бошқаруви раисининг ҳисоботини эшитиш;

Қонунчилик палатаси депутатининг, Сенат аъзосининг сўрови;

Қонунчилик палатаси, Сенат қўмиталари томонидан давлат органлари, хўжалик бошқаруви органлари раҳбарларининг ахборотини эшитиш;

қонун ҳужжатларининг ижроси ҳолатини, ҳуқуқни қўллаш амалиётини Қонунчилик палатасининг, Сенатнинг қўмиталари томонидан ўрганиш ва қонуности ҳужжатларининг қабул қилиниши юзасидан улар томонидан мониторингни амалга ошириш;

парламент текшируви. Парламент назорати қонунга мувофиқ бошқа шаклларда ҳам амалга оширилиши мумкин.

2017-2021 йилларда Ўзбекистон Республикасини ривожлантиришнинг бешта устувор йўналиши бўйича Ҳаракатлар стратегияси ишлаб чиқилиши жараёнида асосий эътибор давлат ва жамият қурилишини тубдан ислоҳ қилишга қаратилди. Мазкур демократик ислоҳотлар даврида парламент назоратини жамият ҳаётидаги ўрни ва таъсирини кучайтиришда Ўзбекистон Республикаси Президенти Ш.М.Мирзиёевнинг ташаббуслари алоҳида аҳамият касб этади. Олий Мажлис депутатлари, сиёсий партиялар ва Ўзбекистон Экологик ҳаракати вакиллари билан 2017 йил 12 июлда ўтказилган видеоселектор йиғилишида Ўзбекистон Республикаси Президенти Ш.М.Мирзиёев парламент назорати объектларини кенгайтириш, “Ҳукумат соати” институтини жорий қилиш зарурлиги тўғрисидаги ғояларни илгари сурган эди [13]. Ҳаракатлар стратегияси мақсадларидан келиб чиқиб “Парламент назорати тўғрисида”ги Қонуни 2017-2021 йиллар давомида парламент назоратининг амалий аҳамиятини кучайтирувчи нормалар билан тўлдирилди [14].

“Ҳукуматни шакллантириш тартиби демократлаштирилиши ва унинг масъулияти кучайтирилиши муносабати билан Ўзбекистон Республикасининг айрим қонун ҳужжатларига ўзгартиш ва қўшимчалар киритиш тўғрисида”ги Қонун билан Ўзбекистон Республикаси Конституциясининг 79, 93, 98-моддаларига, Ўзбекистон Республикаси Вазирлар Маҳкамаси тўғрисида”ги, “Ўзбекистон Республикаси Олий Мажлисининг Қонунчилик палатаси тўғрисида”, “Ўзбекистон Республикаси Олий Мажлисининг Сенати тўғрисида”, “Ўзбекистон Республикаси Олий Мажлиси Қонунчилик палатасининг Регламенти тўғрисида”ги Қонунларга ўзгартириш ва қўшимчалар киритилди [15].

Мамлакат давлат бошқарувини такомиллаштиришда асосий эътибор ҳукуматнинг парламент олдидаги ҳисобдорлигини ошириш, ҳокимиятларнинг бўлиниш ва ўзаро тийиб туриш принциплари асосида қонун чиқарувчи органнинг ваколатларини кенгайтириш, унинг мамлакат сиёсий ҳаётидаги ролини оширишга қаратилди.

Бош вазир ўринбосарлари, вазирлар ва давлат қўмиталари раислари номзодини Бош вазир тақдимига биноан Қонунчилик палатаси томонидан маъқуллаш ва Президент томонидан тасдиқлаш тартиби белгиланди.

Хукумат аъзолигига кўрсатилган номзоднинг соҳани ривожлантириш бўйича яқин ва ўрта истиқболга мўлжалланган ҳаракат дастурини депутатларга тақдим этиш тартиби жорий этилди.

Ўзбекистон Республикаси Олий Мажлиси Қонунчилик палатасида давлат бошқарув органлари мутассадиларининг ҳисоботларини эшитиш бўйича “Хукумат соати” ташкил этилди.

Олий Мажлисни мамлакатнинг ички ва ташқи сиёсатига оид муҳим вазифаларни амалга ошириш устидан парламент назоратини таъминлаш ваколатлари янада кенгайтирилди. Сенатда Ўзбекистоннинг хорижий давлатлардаги элчилари ҳисоботини эшитиш амалиёти йўлга қўйилди.

Жойлардаги реал ҳолатни ўрганиш ва мавжуд муаммоларни ҳал қилиш учун керакли чораларни кўриш, шунингдек мурожаатларни амалда кўриб чиқиш мақсадида парламентарийларнинг ўзи сайланган ҳудудга ҳар ойда ташриф буюриш амалиёти йўлга қўйилди.

Доимий асосда ишловчи сенаторлар ҳудудлардаги маҳаллий кенгашларга бириктирилиб, ҳар ойда жойларга чиқиши ҳамда маҳаллий Кенгашлар сессияларида иштирок этиши амалиёти жорий этилди.

Маҳаллий ижро органлари фаолияти устидан депутатлик назорати кучайтирилди, Халқ депутатлари маҳаллий Кенгашларининг доимий асосда ишлайдиган котибияти ташкил этилди. Вилоят, туман ва шаҳар миқёсидаги давлат бошқаруви органлари раҳбарлигига номзодлар тегишли халқ депутатлари Кенгашлари томонидан тасдиқланадиган бўлди.

Олий Мажлис Қонунчилик палатасида давлат бюджети устидан самарали парламент назоратини таъминлашда депутат ва сенаторларга профессионал, мустақил ва ҳолис ахборот-таҳлилий, экспертлик хизмати кўрсатиш мақсадида Давлат бюджети бошқармаси ташкил этилди.

Ўзбекистонда қонун чиқарувчи ҳокимиятни тизимли ўзгартиришлар ислохотларнинг ҳар бир босқичида сиёсий тизим ва унинг асосий элементларининг тегишли даражада ривожланишига эга бўлган реал тарихий шароит билан боғлиқликда амалга оширилди. Ислохотларнинг ҳар бир босқичи Ўзбекистонда демократик институтларнинг фаолияти самарадорлигини оширишга ва ривожланган фуқаролик жамиятини шаклланишини таъминлашга қаратилган мувозанатли давлат аппарати тизимини яратилаётганлигини кўрсатиб берди. Ўз навбатида мамлакатдаги демократик ўзгаришлар, давлат ва жамият ҳаётининг барча соҳаларини ислох этишда парламентнинг ўрни, унинг назорат функциясининг самарали амалга оширилиши имкониятларини кенгайтди.

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## **ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ОЗНАКОМЛЕНИЯ ДОШКОЛЬНИКОВ С ПРИРОДОЙ**

*Аннотация. В данной статье рассмотрены некоторые вопросы теории и методики ознакомления детей дошкольного возраста с природой как наука и учебная дисциплина, которая формирует систему знаний, умений и навыков, которая определяет уровень профессиональных компетенций в образовательной области ознакомления с природой учебной программы «Илк кадам» дошкольного образования.*

*Ключевые слова: природа, методика, объект, предмет, теоретические основы, диалектический подход, методические основы.*

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## **THEORETICAL FOUNDATIONS FOR INTRODUCING PRESCHOOLERS TO NATURE**

*Abstract. This article discusses some issues of the theory and methodology of introducing preschool children to nature as a science and academic discipline, which forms a system of knowledge, skills and abilities that determines the level of professional competencies in the educational field of familiarization with the nature of the “Ilk Kadam” preschool curriculum education.*

*Key words: nature, methodology, object, subject, theoretical foundations, dialectical approach, methodological foundations.*

Исторический анализ трудов и профессиональной деятельности педагогов-мыслителей показал, что теория и методика ознакомления дошкольников с природой как самостоятельное научное направление в дошкольной педагогике стала интенсивно развиваться в 80-х годах XX века.

Методика (греч. *metodes*) – обозначающая в широком смысле путь, способ исследования и познания. Статус современной методики можно определить следующим образом: с одной стороны – это частная дидактика, с другой – самостоятельная теоретическая дисциплина.

Теория и методика ознакомления дошкольников с природой – наука, изучающая особенности и закономерности организации педагогической работы с детьми дошкольного возраста, ориентированная на формирование



экологической культуры и навыков рационального взаимодействия с природным окружением.

Основным объектом данного научного направления является процесс ознакомления с окружающим миром и его научным отражением, а также воспитание и развитие детей в процесс обучения.

Предметом рассмотрения теории и методики ознакомления дошкольного возраста с природой является содержание, формы, методы, средства преподавания и изучения окружающей природы в дошкольном учреждении.

Основные задачи методики ознакомления дошкольников с природой:

1. Определение цели обучения (зачем учить?);  
2. Уточнение содержания образования (чему учить?). Как оно определяется?

а) анализируются базисные науки: ботаника, физика, химия и т.д., для отбора понятий, которые будут формироваться у дошкольников;

б) определяется система знаний, умений, навыков, которые предполагается сформировать у детей;

с) оформляется основное содержание в виде программ, к которым создаются учебные пособия.

3. Разработка форм, методов и приёмов обучения (как учить детей?);

4. Создание материально-технической базы (где, чем обучать?).

Теоретической основой методики являются базовые положения общей, дошкольной педагогики и детской психологии о закономерностях и средствах развития детей дошкольного возраста.

Современная теория и методика ознакомления дошкольников с природой базируется на трёх источниках:

1. Теоретическое наследие классиков педагогики и частных методик;

2. Психолого-педагогические исследования по педагогике, частной методике и детской психологии;

3. Практический опыт работников дошкольных учреждений. Методологические основы или подходы, которые способствуют развитию данной методики:

1) всеобщий диалектический подход, позволяет вычлнить основные закономерности педагогического процесса в отношении данной образовательной области: неразрывная связь обучения, воспитания и развития личности ребенка, внутренние противоречия между количеством и качеством применяемых методов, методических приемов, разнообразных форм и средств общения, переход количественных изменений в качественные (накопление знаний, их преобразование в нормы собственного поведения и др.).

2) системно-структурный – каждый объект или явление рассматривается как целостная система, в единстве взаимосвязанных

элементов («система учебного материала», «система методов/форм обучения» и т.д.).

3) синергетический – процесс обучения рассматривается как сложно организованная система открытого типа, которая характеризуется постоянной изменчивостью; самоорганизацией, саморазвитием, что стимулирует развитие личности ребенка, его индивидуальности, удовлетворяющее изменяющимся требованиям социального заказа.

4) комплексный – обеспечивает рассмотрение всех методических категорий: цели, содержания, методов обучения в рамках триады (образовательные, развивающие и воспитательные функции обучения).

5) дидактический – определяет теоретическую основу методики ознакомления дошкольников с природой.

6) гуманистический – предполагает создание условий для психологического единства субъектов образовательного процесса на почве творчества.

7) культурологический – связанный с пониманием природы и человека как величайших ценностей.

В заключении можно сделать выводы, что эти подходы помогают определить основные тенденции в развитии теории и методики ознакомления дошкольников с природой на современном этапе, категории, историю возникновения и развития. Как теория, так и методика ознакомления дошкольников с природой взаимосвязаны и не могут существовать и развиваться изолированно. Теория ознакомления дошкольников с природой представляет систему географических, биологических и экологических закономерностей в окружающей нас природе. Методика создает базу для теоретических обобщений и реализует систему теоретических закономерностей в систему педагогических рекомендаций.

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## **ТЕХНОЛОГИИ ОРГАНИЗАЦИИ ЭКОЛОГИЧЕСКОГО ВОСПИТАНИЯ В ДОШКОЛЬНОМ ВОЗРАСТЕ**

*Аннотация. В экологическом образовании дошкольников важна уверенность воспитателя в себе, способность стать примером в вопросах охраны природного мира, т.е. экологическая компетентность педагога. В данной статье рассмотрены некоторые вопросы технологии организации экологического воспитания в дошкольном возрасте.*

*Ключевые слова: природа, методика, объект, предмет, теоретические основы, диалектический подход, методические основы.*

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## **TECHNOLOGIES FOR ORGANIZING ENVIRONMENTAL EDUCATION IN PRESCHOOL AGE**

*Abstract. In the environmental education of preschoolers, it is important for the teacher to have self-confidence and the ability to become an example in matters of protecting the natural world, i.e. environmental competence of the teacher. This article discusses some issues of technology for organizing environmental education in preschool age.*

*Key words: nature, methodology, object, subject, theoretical foundations, dialectical approach, methodological foundations.*

Успешность экологического образования обусловлена положительным примером поведения взрослых, прежде всего, родителей, в ситуациях взаимодействия с природой. Именно родители призваны объяснить ребенку ценность окружающего мира, важность сохранения природы как для человечества, так и для обитателей природного мира; убедить в том, что нужно беречь и охранять природу; научить, как это можно делать. Стоит добавить, что семья обладает неоценимыми возможностями для экологического образования детей. Так, вместе с родителями дети могут выезжать на природу (лес, рыбалка, пляж, путешествие) и приобретать реальный опыт природоохранного поведения, принимать посильное участие в выращивании овощей на дачном участке, ухаживать за домашними питомцами, комнатными растениями, др. Результативность воспитания часто зависит от того, насколько ценным

является окружение ребенка, как его воспринимают старшие поколения. С.Н. Николаева доказала, что умение правильно и интересно организовывать занятия с дошкольниками способствует повышению интереса детей к познанию мира природы, формированию внимательного, гуманного отношения к окружающему, поэтому в образовательной работе нужно использовать комплекс методов и технологий приобщения детей к миру природы, выбор которых обуславливается возрастными возможностями и индивидуальными особенностями детей, содержанием решаемых задач, возможностями ближайшего природного окружения.

В экологическом образовании дошкольников важна уверенность воспитателя в себе, способность стать примером в вопросах охраны природного мира, т.е. экологическая компетентность педагога.

Г.А. Рысбаева предлагает ряд педагогических условий, необходимых для эффективного формирования основ экологической культуры детей [9]:

- 1) оборудование в группе экологического центра/природного уголка;
- 2) создание на территории дошкольной организации, в зависимости от особенностей ландшафта и конкретных климатических и географических условий, различных экологических пространств, где дети могли бы применять знания на практике, эмоционально взаимодействовать с природными объектами (цветник, экологическая тропа, фитоогород, метеостанция, др.);
- 3) установление партнерских взаимоотношений с родителями воспитанников для совместной работы по формированию основ экологической культуры;
- 4) высокий уровень педагогической и экологической культуры педагога, развитая компетентность в вопросах содержания и технологии ознакомления детей с миром природы;
- 5) интеграция видов деятельности, имеющих отношение к миру природы (игра, труд, экспериментирование, чтение художественной литературы и т.д.).

Как уже было отмечено выше, для решения задач экологического воспитания важно грамотное оборудование природного уголка в группах, ухоженная территория дошкольной организации, что позволит ребенку активно взаимодействовать с живой и неживой природой. Такой контакт с окружающим миром служить важным стимулом приобщения ребенка к труду, поэтому на территории детского сада необходимо создать такие экологические пространства, где каждый воспитанник сможет применять свои знания в практической деятельности, тем самым, приобщиться к бережному сохранению природы.

Итак, общение с природой, позитивный пример родителей и педагогов, непосредственное природное окружение детей, комплексное использование разнообразных методов и технологий образовательной работы, эколого-педагогическая компетентность педагогов

рассматриваются нами как важные условия результативности экологического воспитания.

К числу современных образовательных технологий, которые широко используются в экологическом воспитании дошкольников, Т.Б. Казарцева и Е.В. Дудова относят игровые технологии, технологию исследовательской деятельности, технологию проектной деятельности, здоровьесберегающие технологии и информационно-коммуникационные технологии (ИКТ).

Игровые технологии наиболее эффективны в экологическом воспитании дошкольников, поскольку игра - ведущий вид деятельности в дошкольном возрасте, органично объединяет в себе игровое и познавательное начало, стимулирует у детей интерес и позитивную мотивацию. Дидактические, подвижные, театрализованные, сюжетно-ролевые и другие игры экологической направленности используются для того, чтобы уточнить, закрепить, обобщить и систематизировать имеющиеся представления о мире живой и неживой природы, сезонных явлениях, экологических закономерностях и взаимосвязях, деятельности человека в природе. Детям особенно нравятся игры на открытом воздухе, связанные с отображением повадок и образа жизни животных («Кот и мыши», «Зоопарк», «Наседка и цыплята»), некоторых явлений неживой природы («Солнышко и дождик», «День - ночь»); это так называемые подвижные игры, развивающие физические качества.

Игра превращает обучение в творческую лабораторию, активизирует самовоспитание и саморазвитие, помогая детям освоить знания в доступной занимательной форме, способствует выработке правильного поведения в определенных ситуациях, оказания посильной помощи в решении экологических проблем.

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## **ТЕХНОЛОГИИ ИНДУСТРИИ 4.0., В ПРОИЗВОДСТВЕННЫХ ПРОЦЕССАХ**

*Аннотация. В данной статье заключается исследование и анализ имплементации технологий Индустрии 4.0 в производственных процессах, а также их влияния на оптимизацию и прогнозирование этих процессов. Рассматриваются анализ способов применения технологий Индустрии 4.0 в текстильной промышленности, преимущества и вызовы, с которыми сталкиваются компании при внедрении этих технологий.*

*Ключевые слова: Индустрия 4.0, "умные" фабрики, цифровые технологии, (AI), (Big Data), виртуальное моделирование, анализ данных.*

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## **INDUSTRY 4.0 TECHNOLOGIES IN PRODUCTION PROCESSES**

*Abstract. This article consists of a study and analysis of the implementation of Industry 4.0 technologies in production processes, as well as their impact on the optimization and forecasting of these processes. An analysis of the ways of using Industry 4.0 technologies in the textile industry, the advantages and challenges that companies face when implementing these technologies are considered.*

*Keywords: Industry 4.0, smart factories, digital technologies, (AI), (Big Data), virtual modeling, data analysis.*

Современная технологическая революция в 2017 году вошла в важнейшую фазу, когда около половины населения Земли стало пользователем интернета, что свидетельствует о цифровой революции. Согласно исследованию, в ближайшие 20 лет до 50% всех рабочих операций по всему миру возможно будут автоматизированы. Эта концепция стремится создать "умные" фабрики и производственные системы, которые

полностью автоматизированы и связаны между собой через сеть. Внедрение цифровой технологии существенно способствовало экономическому развитию множества стран, превращая их в мировых экономических лидеров. Узбекистан имеет прекрасную возможность использовать промышленную революцию для своего развития и вступления в число мировых лидеров [1].

Индустрия 4.0, также известная как Четвертая промышленная революция - это концепция, основанная на использовании современных информационных и коммуникационных технологий для улучшения производственных процессов. Она отличается от предыдущих промышленных революций тем, что основной акцент делается на автоматизации, обработке данных и взаимосвязи между различными системами. Системы и устройства, такие как Интернет вещей (IoT), искусственный интеллект (AI) и большие данные (Big Data), позволяют собирать, анализировать и использовать огромные объемы информации о производственных операциях [2].

Одним из ключевых аспектов Индустрии 4.0 является анализ данных, собранных со всех уровней производства - от оборудования и машин до сотрудников и клиентов. Используя специализированные алгоритмы и аналитические инструменты, компании, могут получить ценную информацию о производственных процессах, выявить потенциальные проблемы и идентифицировать области для оптимизации.

Оптимизация производственных процессов является еще одним важным аспектом внедрения технологий Индустрии 4.0. Автоматизация и цифровизация позволяют создавать гибкие и адаптивные системы производства, которые могут быстро реагировать на изменения в спросе и условиях рынка. Например, с помощью алгоритмов машинного обучения можно оптимизировать расписание производства, учитывая различные факторы, такие как доступность сырья, пропускная способность оборудования и требования клиентов.

Прогнозирование - еще одно преимущество Индустрии 4.0. Собирая и анализируя большие объемы данных, компании могут предсказывать спрос на продукцию, оптимизировать запасы и планировать производственные ресурсы. Это позволяет снизить затраты и минимизировать риски, связанные с перепроизводством или недостаточным количеством товаров на складе.

Имплементация технологий Индустрии 4.0 в производственных процессах имеет огромный потенциал для улучшения эффективности, снижения затрат и повышения конкурентоспособности компаний. Однако, для успешной реализации этих технологий необходимо провести анализ существующих процессов, определить потенциальные области для оптимизации и разработать стратегию внедрения. Только тогда компании

смогут полностью воспользоваться преимуществами Индустрии 4.0 и достичь нового уровня производственной эффективности.

Индустрия 4.0 – это концепция, которая связывает технологии цифровой трансформации с производственными процессами для создания "умных" фабрик и предприятий. Она имеет широкое применение в различных производственных отраслях и может значительно улучшить эффективность и конкурентоспособность предприятий. Рассмотрим несколько способов применения технологий Индустрии 4.0 для текстильной промышленности.

1. Автоматизация процессов производства: Внедрение автоматизированных систем и роботизированных решений позволяет снизить затраты на рабочую силу, увеличить производительность и повысить качество продукции. Например, использование автоматических машин для вышивки или сшивания тканей, а также автоматических систем контроля качества.

2. Интернет вещей (IoT): Подключение оборудования и машин к сети Интернет позволяет собирать и анализировать большие объемы данных, что помогает оптимизировать производственные процессы. Например, установка сенсоров на оборудование, чтобы мониторить его состояние и предотвращать возможные сбои.

3. Аналитика данных и искусственный интеллект: Сбор и анализ больших объемов данных позволяет выявить паттерны и тенденции в производстве, что помогает прогнозировать спрос и улучшать планирование производства. Использование искусственного интеллекта также позволяет распознавать дефекты на тканях или в механизмах производственного оборудования.

4. Цифровое производство и 3D-печать: Применение 3D-печати позволяет создавать сложные трехмерные текстуры и узоры на тканях, а также производить индивидуальные изделия по запросу клиента. Также возможно использование цифрового производства для оптимизации процесса создания и тестирования новых моделей и дизайнов.

5. Умные материалы и носимая электроника: Применение умных материалов, таких как ткани с датчиками или микрочипами, позволяет создавать функциональную одежду и аксессуары, способные мониторить физическое состояние пользователя, контролировать температуру или реагировать на окружающую среду.

Внедрение Индустрии 4.0 в профессиональную сферу работников привело к изменению бизнес-моделей компаний. Новые технологии производственного процесса начинают использоваться как в IT-индустрии, так и в тяжелой промышленности. Использование автоматизированных систем и роботов позволяет ускорить производственные процессы, снизить количество ошибок и улучшить качество продукции.

Применение технологий Индустрии 4.0 позволяет оптимизировать процессы поставки и управления запасами, что ведет к снижению затрат и повышению эффективности. Анализ данных о качестве продукции позволяет выявлять проблемы и предпринимать меры для их устранения, что приводит к снижению количества дефектных изделий и повышению качества.

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## **СТРАТЕГИЯ И НАПРАВЛЕНИЯ РАЗВИТИЯ ЦИФРОВИЗАЦИИ СЕЛЬСКОГО ХОЗЯЙСТВА**

*Аннотация. В данной статье критически рассматривается, как цифровые технологии внедряются в сельское хозяйство. В статье описано появление новых технологий и стратегий цифровизации сельского хозяйства.*

*Ключевые слова: сельское хозяйство, математическое моделирование, эконометрический анализ и моделирование, цифровое сельское хозяйство, «умное» сельское хозяйство.*

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## **STRATEGY AND DIRECTIONS FOR DEVELOPMENT OF DIGITALIZATION OF AGRICULTURE**

*Abstract. This article critically examines how digital technologies are being implemented in agriculture. The article describes the emergence of new technologies and digitization strategies for agriculture.*

*Key words: agriculture, mathematical modeling, econometric analysis and modeling, digital agriculture, "smart" agriculture.*

### **ВВЕДЕНИЕ**

обеспечение населения качественными продуктами питания становится все более сложной проблемой. «В условиях углубляющейся глобализации развитие сельского хозяйства рассматривается как наиболее мощный инструмент реализации проекта ликвидации бедности, повышения общего благосостояния и обеспечения питанием 9,7 миллиардов человек к 2050 году» [1]. С этой точки зрения сегодня особое значение придается развитию процессов сельскохозяйственного производства, переработки, реализации и обслуживания.

Обеспечение населения продуктами питания в мире, развитие сельского хозяйства, обеспечение его устойчивости на основе поддержки промышленности различными рычагами, комплексный план удовлетворения потребности населения в продуктах питания по количеству и качеству большое внимание уделяется научным исследованиям. исследовать. Сегодня развитие процессов сельскохозяйственного



производства и внедрение инновационных методов производства продуктов питания на основе повышения конкурентоспособности и эффективности, совершенствование научно-исследовательских и опытно-конструкторских работ на основе математического моделирования для определения приоритетов сохранения природно-ресурсной базы. Научно-исследовательские работы выполняются на приоритетном уровне.

### **АНАЛИЗ ЛИТЕРАТУРЫ ПО ТЕМАТИКЕ**

ученые и исследователи изучали процессы производства в сфере сельского хозяйства в зарубежных странах, деятельность субъектов, участвующих в нем, и факторы, влияющие на него. В том числе Сиджуан Ван, Джилиан Ху, САО Угвумба, С. Мерфи, М. Винтер, М. Лобли, Йоан Батрансеа, Иоан-Дан Морар, Эма Маска, Сабау Каталин, Ливиу Бечис, Эмиль Ставрев, Георгий Комбуров, Хосе Альберто Молина, Ана Изабель Гил, Джон С. Бегин, Джин Кристофер Бюро, София Дроуг, Рамалингем Б. и другие исследовали эти вопросы.

Б. Рамалингем указывает, что «модели обычно служат для детального описания природы биофизических процессов, но тот факт, что они требуют большого количества данных, глубокого обсуждения перед использованием и выбора точной модели, затрудняет их широкое использование. Также сложность этих моделей ограничивает их полезность, но эти методы значимы тем, что упрощают структурные и динамические взаимосвязи, важные в сельскохозяйственном планировании» [2].

От ученых СНГ Кравченко Р.Г., Каштаева С.В., Цвиль М.М., Шумилина В.Е., Синельников В.М., Корсун Н.Ф., Марков А.С., Подашевская Е.И., Ерешко Ф.И., Меденников В.И., Кульба В.В., Носонов А.М., Иванова И.А., Савкин В.И., Нам М.А., Байдаков А.А., Муратова Л.Г., Сальников С.Г., Горбачев МИВС Важенина, Е.А.Пахомова, Д.А.Писарева раскрывают такие вопросы, как математическое моделирование экономических процессов в сельском хозяйстве, эконометрический анализ и моделирование, прогнозирование экономических рисков и пути их решения..

С.В. Каштаева отметила, что **«использование экономико-математических методов и моделей позволяет существенно повысить качество планирования и добиться дополнительной эффективности без привлечения дополнительных ресурсов в производство» [3].**

В. С. Важенина: «Наиболее распространенные методы гармонического анализа и редкие спектральные методы анализа позволяют сделать вывод об устойчивом развитии сельского хозяйства на основе наблюдения за определенным периодическим повторением реальности, происходящей в поле. Гармонический и спектральный анализ является одним из методов исследования технологических процессов и применяется для определения качества системного импульсного сигнала и определения

периодических или непериодических сигналов сложной динамической системы» [4].

Среди экономистов нашей страны Гулямов С.С., Шодиев Т.Ш., Абдуллаев Ю.А., Махмудов Н.М., Беркинов Б.Б., Бегалов Б.А., Дошанов Т.Д.,

Рузметов Б.Р., Салаев С.К., Абдуллаев И.С., Нигмаджанов У., Мухитдинова У.С., Джумаев И.К., Худжакулов Х.Д., Ходжаев А.С. и другие в своих научных исследованиях по эконометрическому моделированию, моделированию производственно-экономических процессов в сельском хозяйстве, прогнозированию сезонных колебаний, Теоретические - исследованы методические и научно-практические проблемы эконометрического прогнозирования тенденций и перспектив развития страны.

Б. Беркинов: «Фермеры и специалисты сельского хозяйства обязаны иметь научно обоснованную информацию и знания о результатах использования земельных, водных и других производственных ресурсов в почвенно-климатических условиях своих регионов. Информация, относящаяся к этой категории, отражается в различных нормативных актах и отчетах системы управления сельским хозяйством. Прийти к правильному выводу об эффективности производства можно только на основе объективной информации », - утверждает он [5].

### **МЕТОДОЛОГИЯ ИССЛЕДОВАНИЯ**

В ходе исследования использовались монографическое исследование, абстрактное мышление, экономико-статистический анализ, научное наблюдение, обобщение опыта, методы эконометрического моделирования.

### **АНАЛИЗ И РЕЗУЛЬТАТЫ**

Основной задачей сельского хозяйства является обеспечение потребностей населения в сырье и продуктах питания предприятий по переработке сельскохозяйственной продукции на территории республики. При этом желательно, чтобы сеть участвовала в удовлетворении спроса внешнего рынка [8].

Здесь следует отметить, что в связи со спецификой сельского хозяйства определенная часть продукции, выращиваемой в сети, например, семена, корма, корма и т. д., используется для удовлетворения внутреннего спроса. В противном случае развитие процесса воспроизводства в сети не будет обеспечено.



### 1. Продукция, выращенная в сельскохозяйственных предприятиях каналы распространения и продаж

В целях обеспечения развития производства сельскохозяйственных предприятий на основе расширенного воспроизводства часть продукции, выращенной для удовлетворения требований в этой связи, выдается рабочим-обслуживающим работникам в натуральной форме вместо заработной платы, выделяемой на их питание.. В настоящее время продукция, выращенная на сельскохозяйственных предприятиях, распространяется и реализуется по определенным каналам (рис. 1) [8].

Основной задачей на современном этапе аграрной реформы является устойчивое развитие производства продуктов питания на основе роста потребления на внутреннем рынке и конъюнктуры внешнего рынка. Это обеспечить комплексное и сбалансированное развитие агропродовольственного комплекса со всеми отраслями экономики, поднять уровень жизни на селе и улучшить ее качество, обеспечить население продовольствием и фермерские хозяйства на основе разработанной стратегии. устойчивого развития сельского хозяйства,

требующего, чтобы всесторонняя поддержка развития была взаимосвязана с макроэкономической стабильностью [9].

Основные показатели сельского хозяйства Сурхандарьинской области приведены в таблице 1, из которой видно, что в 2010 году посевная площадь сельскохозяйственных культур составляла 272 303 га, а к 2016 году этот показатель увеличился до 12 697 га и достиг 285 000 га. В 2021 году по сравнению с 2010 годом она уменьшилась на 13 105 га и составила 259 198 га. Причиной этого является то, что с 2017 года Президент нашей Республики Ш.Мирзиёев в целях обеспечения улучшения продовольственной безопасности страны, материального и духовного благополучия страны выделил низкопроизводительные пашни населению (табл. 1).).

Таблица 1

## Основные показатели сельского хозяйства Сурхандарьинской области

Индикаторы	2010 год	2011 год	2012 год	2013	2014 год	2015 год	2016 год	2017 год	2018 год	2019 год	2020 год	2021 год
Посевная площадь сельскохозяйственных культур, га	272303	280077	280362	282979	283195	284271	285000	267354	259780	253132	252967	259198
Сельскохозяйственная продукция, млрд. руб. сум	2286,8	4099,6	4825,7	5411,0	6761,9	8218,0	8737,2	11608.1	15046.2	17844.1	19424.0	23415.5
включая:												
сельское хозяйство	1310,8	2588,1	2910,0	3095,9	3762,8	4892,9	4707,3	6810,8	8173,7	9718,3	9696,2	12171.2
животноводство	976,0	1511,5	1915,7	2315.1	2999,1	3325.1	4029,9	4797,3	6872,5	8125,8	9727,8	11244.3
Темп роста сельскохозяйственного производства, в процентах, по сравнению с предыдущим годом	105,2	108,8	108,0	106,9	106,6	106,3	104,7	104,5	97,2	103,5	105,3	104,2
включая:												
сельское хозяйство	103,3	109,2	108,0	106,8	107,4	106,3	103,2	104,6	92,4	104,9	107,1	104,6
животноводство	108,2	108,2	107,9	107,0	105,6	106,3	106,9	104,5	103,9	101,8	103,1	103,8

Анализ уровня производства плодоовощной продукции в Сурхандарьинской области за 2017-2022 годы показывает, что в 2022 году по сравнению с 2017 годом производство картофеля увеличится в 10 раз, овощей – в 6,5 раза, овощной продукции – в 6,8 раза, фрукты - в 10 раз, виноград - в 4 раза.

Также в хозяйствах: производство картофеля увеличилось в 3,5 раза, овощей - в 4,2 раза, молочной продукции - в 2,6 раза, фруктов - в 10,9 раза, винограда - в 4,6 раза.

В остальных хозяйствах: производство картофеля увеличилось в 11,6 раза, овощей - в 52,5 раза, продукции из сахарного тростника - в 9,8 раза, фруктов - в 19,4 раза, винограда - в 33,9 раза (табл. 2).

К лимитирующим факторам развития рынка продовольственных товаров (ООМБ) можно отнести следующие:

1) несмотря на наблюдаемый в последние годы устойчивый рост денежных доходов населения, покупательная способность населения остается низкой;

2) недостаточное развитие сельской производственной инфраструктуры. Фермы в разных сегментах рынка, подходящая инфраструктурная сеть.

из-за отсутствия продукции возникают проблемы со сбытом произведенной продукции. Существующие проблемы со сбытом, хранением и транспортировкой продукции ограничивают географию поставок продукции, в том числе производства на экспорт. Это обусловлено и основными ограничениями, такими как недостаточное использование экспортного потенциала сельскохозяйственной продукции, отсутствие парка рефрижераторных вагонов.

3) отсутствие развития альтернативных каналов сбыта продукции и повышение активности монопольных продуктовых предприятий. К хозяйствам предъявляются большие требования по опыту работы на рынке, срокам поставки и ценам крупных сетевых компаний. Многие торговые сети закупают свою продукцию на условиях отсрочки платежа при поставке в фермерские хозяйства, что приводит к сокращению оборотных средств фермерских хозяйств.

Таблица 2

**Уровень производства фруктов и овощей в Сурхандарьинской области**

Т/р	Продукты и фермы	ТОННЫ						
		2017 год	2018 год	2019 год	2020 год	2021 год	2022 год	2022/2017
1	<b>Картофель</b>							
	В фермах	8615	7185	12943	75480	75755	86357	10.02



	В домашних хозяйствах	235558	258226	279406	767568	778165	833996	3.54
	В других фермах	653	564	473	8223	7209	7600	11.63
	Во домохозяйствах всех	244826	265975	292822	851271	861130	927953	3,79
<b>2</b>	<b>Овощной</b>							
	В фермах	200874	141138	90918	764254	849856	1309703	6.52
	В домашних хозяйствах	759181	837676	773199	2681163	2804150	3244872	4.27
	В других фермах	6749	5139	33946	282824	229272	354986	52,59
	Во домохозяйствах всех	966804	983953	898063	3728241	3883278	4909561	5,0 7
<b>3</b>	<b>Политические продукты</b>							
	В фермах	48818	31385	40154	267291	285090	335000	6,86
	В домашних хозяйствах	157113	159170	200264	502774	508615	421162	2,68
	В других фермах	1992 год	1504	1463	18431	18649	19657	9,86
	Во домохозяйствах всех	207923	192059	241881	788496	812353	775819	3,73
<b>4</b>	<b>Фрукты</b>							
	В фермах	62478	56103	47103	545728	572358	651535	10.42
	В домашних хозяйствах	89785	90762	101782	934591	967801	984929	10.96
	В других фермах	2194	1086	1077	35209	37455	42624	19.42
	Во домохозяйствах всех	154457	147951	149962	1515528	1577614	1679088	10.87
<b>5</b>	<b>Виноград</b>							
	В фермах	78451	76446	40046	375933	389486	314544	4.00
	В домашних хозяйствах	56365	49962	59989	343186	350138	262555	4,65
	В других фермах	702	682	2368	30814	27269	23866	33,99
	Во домохозяйствах всех	135518	127090	102403	749932	766892	600964	4.43

4) недостаточная развитость нормативно-правовой базы регулирования рынка со стороны государства. При этом вопросы регулирования рынка согласовываются с различными законами и нормативными актами, а также действующими стандартами, положениями и другими техническими документами. Однако в законодательстве республики нет единой, устойчивой системы, не определены приоритеты развития и четкие направления реализации;

5) низкий уровень государственной поддержки. Это важный фактор, который душит конкурентную среду на всех рынках. Для решения проблемы неэквивалентности товарообмена с другими отраслями, выражающейся в диспаритете цен, которая до сих пор не находит своего решения в сельском хозяйстве, отрасли необходимы большие финансовые ресурсы;

б) недостаточная защищенность внутреннего рынка, что препятствует обеспечению равных условий для отдельных групп товаров в условиях конкуренции с импортной продукцией для хозяйств нашей республики. [9].

В настоящее время цифровизация является важнейшим фактором эффективной работы и устойчивого развития сельского хозяйства. Цифровое сельское хозяйство характеризуется использованием точных технологий, основанных на данных, для поддержки принятия решений в режиме реального времени и с учетом особенностей конкретного участка [9].

Решением проблем в этом плане станут основные элементы цифровизации сельского хозяйства ( рис. 2 ) [ 10 ].

#### **Raqamli baza**

Agrosanoat majmuasida qarorlarni qo'llab-quvvatlashtirish tizimlarining raqamli bazasi

#### **Analitika va Big Data**

Analitik dasturiy platformalar agrosanoat kompleksining vertikalari (hosilni bashorat qilish, mahsulotlarni iqlimiy xatarlar va boshqalar)



#### **Ishlab chiqarishni raqamlashtirish**

Aqli texnologiyalar va robotlashtirish (Sun'iy yo'ldosh va dronlar)

#### **Sotishni**

raqamlashtirish Qishloq xo'jaligi barcha mahsulotlarini elektron sotish uchun birjalar asosida kuzatilish

**Фигура 2. Основные элементы цифровизации сельского хозяйства.**

Чтобы противостоять нынешним и будущим угрозам биологической и продовольственной безопасности в сельском хозяйстве, обществу необходима новая аграрная экономика, основанная на использовании

современных информационных технологий, соответствующая принципам устойчивого развития и модели безотходной экономики. Модернизация сельского хозяйства основана на переходе к «умному» сельскому хозяйству. «Умное» сельское хозяйство — это сельское хозяйство, основанное на использовании комплексной автоматизации и роботизации производства, автоматизированных систем принятия решений, современных технологий моделирования и проектирования экосистем. Интеллектуализация сельского хозяйства, с одной стороны, снижает чрезмерное использование внешних ресурсов (агрохимикатов, неорганических удобрений, топлива и т. д.), с другой стороны, местных факторов производства (органические удобрения, биотопливо, возобновляемые источники энергии и т. д.) позволяет максимальное использование современных технологий «интеллектуализации» сельского хозяйства позволяет: Например, сохранять и восстанавливать полезные свойства подземных вод и почвы; обеспечение экологически чистой и эффективной борьбы с вредителями, дистанционный контроль соблюдения требований сертификации органического сельского хозяйства. В результате расширяются возможности сельского хозяйства, в том числе производственные, повышается эффективность использования сельскохозяйственных ресурсов. В ближайшие годы планируется реализовать программу «Цифровизация сельского хозяйства» [2].

В частности, планируется создать систему учета земель, используемых в сельском хозяйстве, и учета всей продукции, производимой в сельском хозяйстве. Эксперты утверждают, что внедрение цифровых технологий повысит эффективность сельского хозяйства и привлечет молодежь в агробизнес. Одной из целей программы цифровизации сельского хозяйства является создание единой информационной системы учета земель, используемых в сельском хозяйстве. Это дает возможность отследить, какие площади сельскохозяйственных культур фактически возделываются, а какие гектары являются незначительными. Облегчить ситуацию в этом плане позволит разработка мер поддержки фермеров в части покрытия затрат на приобретение программного обеспечения и компьютерной техники [7].

### **ВЫВОДЫ И ПРЕДЛОЖЕНИЯ**

Основной целью данной стратегии является реализация следующих мер по внедрению высоких технологий в производство сельскохозяйственной продукции с упором на повышение продуктивности сельскохозяйственных культур и продуктивности животноводства. Включая:

- повышение эффективности управления;
- использование ресурсосберегающих технологий, в частности сеялок точного высева, сельскохозяйственной техники, оснащенной GPS-оборудованием;

применение водосберегающих, автоматизированных технологий орошения, обеспечивающих эффективное использование водных ресурсов, минеральных удобрений;

внедрение автоматизированных технологий ухода за скотом и доения;

привлечение в сельское хозяйство работников, обладающих современными профессиональными знаниями;

повысить эффективность взаимодействия участников и государства за счет перехода на цифровой обмен данными, сокращения видов отчетности;

создание базы знаний и технологий, направленной на общее пользование для подотраслей и регионов аграрного сектора;

повысить адаптивность и устойчивость сельскохозяйственных культур к изменению климата;

формирование конкурентоспособного сельского хозяйства, ориентированного на внутренний рынок и экспорт;

укрепление продовольственной безопасности и защиты окружающей среды;

повысить эффективность государственных расходов на условиях государственно-частного партнерства;

внедрение технологий «Умного сельского хозяйства», соответствующих зарубежным аналогам, на плановой основе;

повышение эффективности логистической инфраструктуры сельхозпроизводителей за счет внедрения инновационных решений [8].

Развитие системы внедрения технологий «умного сельского хозяйства» осуществляется исходя из следующих приоритетов:

а) Внедрение цифровых технологий в эффективное использование сельскохозяйственных земель и воды:

б) интенсивная организация сада, внедрение технологий автоматического управления садом:

в) внедрение автоматизированных и компьютеризированных интеллектуальных технологий в теплицах:

г) широкое использование роботизированных, автоматизированных и компьютеризированных технологий в животноводстве и птицеводстве:

д) внедрение современных технологий в процессы хранения и переработки сельскохозяйственной продукции, организацию логистических и торговых центров, оснащенных современными информационными коммуникациями:

ж) подготовка квалифицированных кадров для всех сфер сельского хозяйства и повышение профессиональных знаний кадров, совершенствование нормативной базы по внедрению технологий «Умного сельского хозяйства»:

1. В целях удовлетворения спроса и потребности населения в фруктах и овощах районов района (или города), а также поддержания стабильности цен на фермерских рынках целесообразно провести следующие мероприятия:

- на управление фермерскими рынками должна быть возложена задача поддержания стабильных цен на всю сельскохозяйственную продукцию на уровне цен, соответствующих доходам населения;

- администрации фермерских рынков следует полностью изучить потребности населения района в сельскохозяйственной продукции и заключить фьючерсные контракты на необходимую продукцию с фермерами и фермерскими хозяйствами;

- организация складов хранения фруктов и овощей под управлением фермерских рынков.

2. Необходимо сформировать базу данных по уровням продуктивности (баллам) каждого земельного участка. Такие исследования позволяют более точно определить, сколько удобрений на каких участках земли следует вносить. Это снижает затраты сельхозпроизводителей и повышает производительность.

3. Налаживание реализации продукции на экспорт через агропромышленные биржи. Организация торговых площадок Узбекской агропромышленной биржи в зарубежных странах, где имеется большой спрос на сельскохозяйственную продукцию, выращенную в Узбекистане.

4. Разрешить жителям, фермерам и фермерским хозяйствам частично экспортировать свою мясную продукцию при условии обмена ее на породистый скот и корма.

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## **ИНТЕГРАЦИОННЫЙ ПОДХОД К ПРЕПОДАВАНИЮ ГЕОГРАФИИ И ХИМИИ**

*Аннотация. В статье приведены данные по интегрированному уроку химия-география разработанного с позиции оберегания здоровья учащихся и построенного таким образом, чтобы чередование видов учебной деятельности происходило не реже, чем через 10 - 12 минут. Для поддержания интереса у учащихся к уроку включены видеоматериалы, игровые приемы, а также задания, способствующие активизации творческой активности учащихся. Для снятия эмоционального напряжения предусмотрена релаксационная пауза, в ходе которой происходит полная смена деятельности учащихся, переход от умственного труда к ручному. В качестве рефлексии использован метод «Корзина знаний», благодаря которому учащиеся, анализируя свою деятельность, чувствуют свою успешность. Урок ориентирован на взаимодействие всех участников образовательного процесса.*

*Ключевые слова: интегрированный урок, химия, география, учебная деятельность, творческая активность, учащиеся, урок, образовательный процесс, оберегание здоровья учащихся.*

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## **INTEGRATION APPROACH TO TEACHING GEOGRAPHY AND CHEMISTRY**

*Annotation. The article contains data on the integrated chemistry-geography lesson designed from the perspective of the student's health savings and built in such a way that the alternation of types of educational activities occurs at least in 10-12 minutes. To maintain the interest of the student, the content of the lesson includes video materials, game techniques, as well as tasks that contribute to the activation of the student's creative activity. To relieve emotional tension, a relaxation pause is provided, during which there is a complete change in the student's activity, the transition from mental to manual labor. As a reflection, the "Basket of Knowledge" method was used, thanks to which students, analyzing their activities, feel their success. The lesson is focused on the interaction of all participants in the educational process.*

*Keywords: integrated lesson, chemistry, geography, educational activity, creative activity, student, lesson, educational process, student's health savings.*

Каждому человеку необходимы целостное мировоззрение и система ценностей, которыми он руководствуется в своей жизни. Ведь современный человек живет в многомерном пространстве культуры, и его бытие определяется тем, какими языками культуры он владеет. Здесь каждый выбирает свой путь. И задача образования заключается в том, чтобы предоставить каждому учащемуся широкие возможности для такого выбора, научить его ориентироваться в мире идей, образов, развивать его мышление и эмоциональное восприятие действительности, помочь ему выработать целостный взгляд на мир [1].

Интегрированный урок позволяет решать целый ряд задач, которые трудно реализовать в рамках традиционных подходов.

Вот некоторые из таких задач [2]:

- повышение мотивации учебной деятельности за счет нестандартной формы урока (это необычно, значит интересно);
- рассмотрение понятий, которые используются в разных предметных областях;
- организация целенаправленной работы с мыслительными операциями: сравнение, обобщение, классификация, анализ, синтез и т.д.;
- показ межпредметных связей и их применение при решении разнообразных задач.

На интегрированных уроках учащиеся работают легко и с интересом усваивают обширный по объему материал. Важно и то, что приобретаемые знания и навыки не только применяются школьниками в их практической деятельности в стандартных учебных ситуациях, но и дают выход для проявления творчества, для проявления интеллектуальных способностей [3,4,5].

Урок посвящен одному из самых интересных элементов. Этот элемент и его соединения известны с глубокой древности. Уже в средние века он считался обязательной составной частью всех веществ. Жизнь на нашей планете построена на его основе. Не будь его, жизнь на Земле в привычной нам форме не возникла бы. Атом этого элемента может образовывать химические связи с 4 другими атомами, так образуются тысячи разных углеродсодержащих соединений и урок сегодня посвящен Углероду и его содержанию в полезных ископаемых. Попробуем составить сегодня родословную углерода: «Нефть», «Газ», «Уголь», «Графит и алмаз».

Карта для креативного подхода лаборатории «Нефть» [6,7]

1. Ознакомьтесь с текстом, чтобы потом рассказать всем.

Нефть часто называют «черное золото». В глубокой древности славяне называли ее ропанкой, греки – петролеумом. Но смысл перевода один – горное масло.

Нефть – это маслянистая темно-коричневая жидкость, иногда черная, красная, синяя и даже прозрачная и белая (месторождения в Азербайджане) с характерным резким запахом. Различают легкую и тяжелую нефть. Легкую извлекают из недр насосами или фонтанным способом. Из такой нефти, в основном, делают бензин и керосин. Тяжелые сорта иногда добывают даже шахтным способом. Готовят из нее битум, мазут, различные масла. В состав нефти входят: смесь углеводородов – углерод 80-87%, водород -10-14%, сера – до 5%, кислород до 3%, азот до 2 %. Нефть уникальное топливо, так 10т нефти дают столько же тепла, сколько 13т угля и 31 т дров. Нефть меряют баррелями. Один баррель – около 136 кг. Баррель (англ. Barrel, основное значение — бочка), мера вместимости и объёма, применяемая в США, Англии и ряде стран, использующих английскую систему мер. В США различают Б. сухой, равный 115,628  $дм^3$ , и Б. нефтяной, равный 158,988  $дм^3$ . Английский Б. (мера вместимости для сыпучих веществ) равен 163,65  $дм^3$ . Уникальные месторождения есть в Кувейте, Саудовской Аравии, Иране, Казахстане, России – одни из крупнейших месторождений: Самотлорское, Усть-Балыкское, Федоровское, Мамонтовское в нашем округе.

2. Рассмотрите коллекцию «Нефть», отметьте характерные признаки нефти.

3. Пользуясь картами атласа, определите крупные месторождения нефти в мире и у нас в РУз.

4. Сопоставьте их с мировой картой на доске, определите, куда вы будете прикреплять условные знаки нефти на этой карте.

Карта для креативного подхода лаборатории «Газ» [8,9]

1. Ознакомьтесь с текстом, чтобы потом рассказать всем.

Газ делят на природный и попутный. Газ состоит из углеводородов с примесью азота, углекислого газа, сероводорода, гелия. Газ – наиболее экономичный вид топлива, поэтому его больше всего применяют в качестве топлива в промышленности и в быту. Также из него производят синтетические волокна, каучук, пластмассы, спирты, медикаменты. Нефть и газ встречаются вместе и имеют одно происхождение. Но открыты были в разное время. Залежи газа расположены, как правило на глубинах, превышающих 3 км, где первичное органическое вещество в условиях высоких температур и высокого давления преобразуется в углеводороды. Мировые запасы газа сосредоточены в Иране, США, Алжире, Канаде, Мексике, Норвегии и конечно же в России (Ямало-Ненецкий округ на 1 месте в мире).

2. Пользуясь картами атласа, определите крупные месторождения газа в мире и у нас в РУз.

3. Сопоставьте их с мировой картой на доске, определите, куда вы будете прикреплять условные знаки газа на этой карте.

4. Запишите уравнения реакции горения бытового газа пропана ( $C_3H_8$ ), из горелки плиты на кухне при варке борща, а также горение бензина ( $C_6H_{14}$ )

Карта для креативного подхода лаборатории «Уголь» [10,11,12].

1. Ископаемые угли – это твердые продукты изменения древних растительных остатков. В состав углей входит влага, углерод – 60-98%, водород – 1-12%, кислород -2-20%, азот -1-3%, сера и др. элементы. Как же из мертвых деревьев рождается уголь? Все начинается с торфа, который постепенно под давлением и при отсутствии кислорода превращается в бурый уголь, который переходит в каменный, а затем – в антрацит., далее он может превращаться в графит и шунгит. Бурый уголь имеет низкую теплотворную способность. Это низкокачественный уголь. Каменный уголь –переходная форма от бурого угля к антрациту. Он обладает большой теплотворной способностью. Путем его переработки можно получить более 400 различных продуктов, стоимость которых в десятки раз выше стоимости самого угля. крупнейшие месторождения в РК: Антрацит- в нем больше всего углерода до 97%.он горит бездымным пламенем, так как в нем мало водорода и летучих веществ.. он обладает наиболее высокой теплотворной способностью. Используют его в качестве высококачественного бездымного топлива в металлургии.

2. Пользуясь картами атласа, определите крупные месторождения угля в мире и у нас в РУз.

3. Сопоставьте их с мировой картой на доске, определите, куда вы будете прикреплять условные знаки угля на этой карте.

4. Рассмотрите коллекцию «Уголь» и определите, какую продукцию производят из угля.

Карта для креативного подхода лаборатории «Графит и алмаз» [13,14,15].

1. Ознакомьтесь с текстом, чтобы потом рассказать всем. В природе много углеродных соединений, но есть и чистый углерод в виде двух модификаций: алмаз и графит. Одна из наиболее известных форм графита – чешуйчатый, кристаллы которого имеют вид мелких табличек, или чешуек. Карандашная линия на бумаге – это огромное количество мелких чешуек, остающихся на бумаге. Графит издревле применялся человеком в качестве красящего вещества для изготовления огнеупорных сосудов, а с 16 века в качестве грифелей для карандашей. С 19 века графит добывали в России в Саянах и вывозили на карандашные фабрики Франции. Сейчас его применяют в литейном деле, в электромеханике, в ядерной технике, в ракетостроении. Месторождения графита есть в Китае, Корее, Чехии. До 18 века Индия была известна как единственный источник алмазов. Алмаз – самый твердый минерал на земле, по-арабски слово «алмаз» означает твердый. Это свойство сочетается с высокой сопротивляемостью к испарению, механической прочности, кислоты и щелочи на алмаз не

действуют. Все это связано с тем, что у алмаза особо прочная кристаллическая структура.

Измеряют алмазы в каратах. Это единица массы в торговле драгоценными камнями и равен 0,2г месторождения алмазов немногочисленны. Алмазы в сотни каратов – уникальны. Поэтому им присваивают собственные имена. Первый алмаз в России был найден в 1829 г. на Урале 14-летним мальчиком Павлом Поповым. Самые крупные алмазы «Звезда Якутии», «Орлов», «Шах» и самый крупный в мире алмаз «Куллинан» найден в 1905 году в Южной Африке. Цены на бриллианты на мировом рынке устанавливает Всемирный Алмазный Синдикат.

2. Пользуясь картами атласа, определите крупные месторождения графита и алмазов в мире.

3. Сопоставьте их с мировой картой на доске, определите, куда вы будете прикреплять условные знаки графита и алмазов на этой карте.

*Учащиеся, выполнив задания, рассказывают всему классу о результатах своей работы.*

-Теперь давайте заполним родословную, кто из данных веществ является родными братьями, кто двоюродными (Учащиеся прикрепляют листы с названиями полезных ископаемых на доске). Родные братья – графит и алмаз, двоюродные, нефть, газ, уголь, так как содержат другие элементы.

-Кроме близких родственников углерод имеет и дальних, к ним относятся горные породы, в состав которых входят соли угольной кислоты, т.е. карбонаты.

И сейчас проведем генетическую экспертизу, на установление родственных связей.

Задание 1: Проведите опыт, подтверждающий качественный состав карбонатов, докажите, что в их состав входит углерод.

- определить в какой пробирке находится карбонат кальция.
- собрать углекислый газ и доказать его присутствие.
- получить карбонаты пропустив выдыхаемый воздух через известковую воду
- определить какая из горных пород содержит карбонаты.

Учащиеся объясняют проведенный опыт и дополняют родословную углерода. Д. Хевеши говорил: «Мыслящий ум не чувствует себя счастливым, пока ему не удастся связать воедино разрозненные факты, им наблюдаемые». Вот и я не могу успокоиться, пока не свяжу воедино то, что изображено на слайде «Сталактиты и сталагмиты», с темой урока, с углеродом. Итак, обсудите и объясните, какая связь между углеродом и сталактитами, и где такое в домашних условиях вы наблюдаете. Гидрокарбонат кальция существует только в водном растворе и в условиях, когда вода может испаряться, карбонат кальция выпадает в осадок.





Выполнение теста группами на компьютерах: 1. Основную часть нефти составляет элемент? 2. Какой вес имеет один баррель. 3. При сгорании газа образуются вещества? 4. Более калорийным является уголь? 5. В качестве красящего вещества в древние времена использовался? 6. Чему равен метрический карат? 7. Что в переводе означает слово алмаз?

А в завершение поделитесь своими впечатлениями об уроке. Для этого допишите предложения: *сегодня я узнал..... Я удивился..... Я хотел бы.....*

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## **ПРЕИМУЩЕСТВА ПРИМЕНЕНИЯ ГЕМИЭПИФИЗИОДЕЗА ПРИ ОСЕВЫХ ДЕФОРМАЦИЯХ НИЖНИХ КОНЕЧНОСТЕЙ**

*Аннотация. В данной статье рассматривается применение методов временной блокировки зоны роста кости для коррекции вальгусных деформаций оси стопы у детей. Материалы и методы исследования включали 68 детей, которые проходили лечение в двух клиниках. Результаты показали, что использование перфораций в кости и гемиепифизиодеза приводит к коррекции деформации после определенного времени, в среднем 1,5-2 года. Пациенты, прошедшие лечение, достигли хороших клинических и рентгенологических результатов, их функциональность была восстановлена. Эти методы характеризуются низкой инвазивностью и позволяют детям быстро восстановиться после процедуры.*

*Ключевые слова: гемиепифизиодез, вальгус, варус, голен.*

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## **ADVANTAGES OF HEMIEPIPHYSIODESIS FOR AXIAL DEFORMATIONS OF THE LOWER LIMB**

*Annotation. This article discusses the use of methods of temporary blocking of the bone growth zone for the correction of valgus deformities of the axis of the foot in children. Materials and methods of the study included 68 children who were treated in two clinics. The results showed that the use of bone perforations and hemiepiphyodesis leads to correction of the deformity after a certain time, on average 1.5-2 years. Patients who underwent treatment achieved good clinical and radiological results and their functionality was restored. These methods are*

*characterized by low invasiveness and allow children to recover quickly after the procedure.*

*Key words: hemiepiphysiodesis, valgus, varus, femur.*

**Введение.** Вальгусные деформации оси стопы у детей-одна из самых распространенных патологий опорно-двигательного аппарата. На сегодняшний день представлено множество вариантов хирургического лечения деформаций оси стопы. В последнее время наблюдается тенденция к применению техники временной блокировки зоны роста кости, с помощью которой достигается коррекция костного сегмента. Временная блокировка зоны роста костного сегмента осуществляется с помощью множества металлических приспособлений: например, скоб, пластин и др. Коррекция деформации происходит через некоторое время и занимает в среднем 1,5-2 года.

**Материалы и методы.** Обследовано 68 детей от 3 до 14 лет с деформацией нижних конечностей, которые в период с 2020 по 2023 год проходили лечение в клинике ФМИОЗ и клинике РСТОНПМЦ. Основную часть больных составили 36 больных от 3 до 14 лет, находившихся на лечении в травматологическом отделении клиники ФМИОЗ, из них у 32 была вальгусная деформация голеностопного сустава, у 4 больных - варусная деформация.

Вид деформации	Возраст	
	3-6 лет	8-14 лет
Вальгусная деформация	36	28
Варусная деформация	-	4

#### Классификация пациентов по возрасту и деформации

Все они раньше несколько раз лечились консервативно, но безуспешно или наблюдался рецидив. Больным 3-6 лет, пролеченным в этом отделении, одновременно осматривая область деформации, сделали несколько перфораций в кости через одно отверстие в коже; вправили кость и нашили корректирующая гипсовая повязка. Гипсовую повязку назначают на срок от 45 до 55 дней в зависимости от возраста ребенка. Таких больных было 22. Остальных 14 пациентов с деформациями нижних конечностей лечили путем временного гемиепифизиодеза. Для этого пациенты должны были быть старше 8 лет, а степень деформации не менее 20 градусов. У большинства больных, которым применилась гемиепифизиодез (12 человек), имелись вальгусные деформации или деформации нижних конечностей.



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Им применили гемиепифизеодез с дистально-внутренней поверхности бедра обеих голеней традиционным способом. Гемиепифизеодез выполняли специально приготовленной скобой из аппарата Илизарова (см. рисунок). На следующее утро после операции больных постепенно лечили лечебной гимнастикой. Имobilизирующие устройства и повязки не применяются. Продолжительность эндопротезирования зависит от возраста пациента и степени деформации, и в нашем наблюдении минимальное время составило от 8 мес до максимального 2 лет.

В детском ортопедическом отделении РСТОНПМЦ находятся 32 пациента, у которых выявлены как вальгусные, так и варусные деформации. Возраст таких больных был от 3 до 14 лет. Полиперфоративная остеотомия выполнена 14 пациентам в возрасте 3-6 лет, лечившимся в отделении детской ортопедии РСТОНПМЦ. С целью коррекции после оперативного вмешательства применялся аппарат Илизарова. Гипсовые повязки больным не накладывались. Срок пребывания аппарата Илизарова составил от 45 до 90 дней. Всем остальным 18 больным (старше 8 лет), с учетом возраста, выполнен временный гемиепифизеодез. Временный гемиепифизеодез выполняют в зависимости от формы деформации: при вальгусной деформации традиционно выполняют с дистально-внутренней поверхности бедра, а при варусной – с верхней-наружной поверхности голени. Для временного гемиепифизеодеза использовали специальную восьмиобразную пластину. Срок пластины зависит от возраста пациента и степени искривления, и минимальная продолжительность составляет от 6 месяцев до 3 лет.

### **Результаты и обсуждение**

Анализируя результаты лечения пациентов с полиперфоративной остеотомией в клинике ФМИОЗ, в первые и вторые сутки после операции наблюдались сильные боли, а гипсовая повязка вызывала дискомфорт.

Симптомы боли и дискомфорта были устранены после симптоматического лечения и текущей коррекции гипсовой повязки. После снятия гипсовой повязки у больных наблюдались контрактуры, незначительная мышечная гипотрофия и гипотонус. А реабилитационный период – восстановление способности ходить составило 2-4 месяца. Основное преимущество метода заключается в том, что в то же время устраняется и деформация. Если оценить функциональные особенности нижних конечностей, в ходе лечения достигнуты хорошие клинические и рентгенологические результаты.

Анализ пациентов с деформацией конечностей, пролеченных методом гемиепифизедеза в клинике ФМИОЗ и отделении детской ортопедии РСТОНПМЦ, показывает, что данная хирургическая процедура малоинвазивна и позволяет больным самостоятельно ходить через 1-2 дня после процедуры, а боль кратковременна, и интенсивность снижается. На 3-4-й день после операции полностью восстанавливаются движения в коленном суставе, и больной постепенно начинает ходить самостоятельно. Состояние, возникающие после применения гипсовой повязки (мышечная гипотрофия, дискомфорт, контрактуры), не выявляются.

Следует отметить, что после применения метода гемиепифизедеза миграция скобы наблюдалась у 1 пациента (7,1%) среди пациентов, пролеченных в клинике ФМИОЗ в связи с несоблюдением ортопедической методики. Установлено, что 8-симоидная пластина, имплантированная в отделении детской ортопедии РСТОНПМЦ, была сломана в 1 случае (5,5%). Кратчайший срок лечения гемиепифизедезом при деформациях нижних конечностей составляет 8 мес. Период получения результатов занимает в среднем 1-2 года, а первые признаки коррекции наблюдаются через 6 месяцев. С другой стороны, для пациента считается очень удобным не ограничиваться физически и не пропускать занятия. Метод временного гемиепифизедеза отличается высокой эффективностью результатов лечения и минимальным количеством осложнений от хирургической практики.

#### **Выводы:**

1. Таким образом, несмотря на то, что используется множество терапевтических процедур, можно сказать, что хирургическая практика временной блокировки или контроля роста растущих ветвей костей соответствует требованиям времени.
2. Консервативное лечение целесообразно для пациентов с диагностированными деформациями нижних конечностей в раннем возрасте.
3. Применение временного гемиепифизедеза в лечении детей школьного возраста с деформациями нижних конечностей целесообразно.

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## СТАНДАРТЫ ПОДГОТОВКИ БИЗНЕС – ПЛАНА

*Аннотация. В статье рассмотрены основные характеристики и подготовка методологии бизнес-плана Юнидо. Особенности бизнес-планирования по стандарту Юнидо. Содержание стандартного бизнес-плана Юнидо. Приведены примеры структур бизнес-планов в разных методологиях.*

*Ключевые слова: бизнес-план, компания, управление, методология, стандарты.*

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## STANDARDS FOR PREPARATION OF A BUSINESS PLAN

*Annotation. The article discusses the main characteristics and preparation of the Unido business plan methodology. Features of business planning according to the Unido standard. Contents of Unido's standard business plan. Examples of business plan structures in different methodologies are given.*

*Keywords: business plan, company, management, methodology, standards.*

Руководство UNIDO является основой для большинства рекомендаций, требований и рекомендаций по бизнес-планированию и оценке инвестиционных проектов. Подготовка бизнес-плана по стандартам UNIDO является приоритетом по сравнению с другим бизнес-планом. Кроме того, иногда это не простой, но правильный путь, чтобы завоевать доверие иностранных банков, фондов, инвесторов [1].

Ключевое значение имеет системный подход к обоснованию экономического потенциала проектов. В соответствии с методологией ЮНИДО:

Ход проекта рассматривается как цикл, состоящий из трех самостоятельных этапов: инвестиционного, инвестиционного и операционного. Создание бизнес-плана состоит из нескольких основных этапов: оценка рынка сбыта фактического объема и потенциального объема; маркетинговое планирование; организационное планирование реализации

Проекта; финансовое планирование и анализ; оценка экономической эффективности; Оценка рисков проекта, оценка чувствительности; подготовка презентационной части проекта.

Стандартный бизнес-план UNIDO включает общие разделы, связанные с идеей проекта, маркетингом, производством, управлением, финансированием, эффективностью, рисками. Каждый из них глубоко проработан, начиная с идеи и заканчивая всеми нюансами реализации проекта.

В бизнес-плане также должны быть обоснованы: обоснование выбора района и района строительства, оценка состояния инфраструктуры с учетом социально-экономической политики и воздействия на окружающую среду, профессиональный подход к производственно-технологическому проектированию. Рекомендации UNIDO содержат не только перечень исследований, необходимых для бизнес-планирования, но и методологию, позволяющую получить максимально достоверные и достоверные результаты.

Хорошо подготовленный бизнес-план должен не только формально соответствовать стандартам Юнидо, но и содержать интересное для инвестора содержание. Основные требования: краткое, простое, понятное изложение с выделением главного, достоверности информации, обоснованности финансовых расчетов, реальной оценки рисков и вариантов их минимизации. Когда требуется бизнес-план Юнидо?

В России методология UNIDO относится к общепринятым международным стандартам подготовки бизнес-проектов, которые используются в банковской сфере, а также в инвестиционной сфере и для частного инвестора. Рекомендация бизнес-плана ЮНИДО может быть использована, если инвестор требуется непосредственно банку или если необходим типовой бизнес-план - без конкретных требований к инвестору.

Структура бизнес-плана в соответствии со стандартом UNIDO выглядит следующим образом:

Резюме - краткое описание каждого параграфа. История и история проекта Спонсоры, история, исследования. Аналитическая концепция рынка и маркетинга: основные идеи, цели проекта, стратегия проекта, оценка рыночных и отраслевых показателей, роль народного хозяйства, импорт, показатели спроса, маркетинг, продажи, бюджет, производственная программа. Материальные ресурсы: потребности в сырье, коммунальных услугах, электрических и других источниках энергии, поставщики и поставщики, плановые затраты. Местоположение и строительные площадки: обоснование выбора площадки, цена площадки, воздействие проекта на окружающую среду. Проектирование: изготовление помещений, технология, оборудование, гражданское строительство, плановые затраты. Организационно-управленческий план, отделы, расходы. Персонал: потребности в персонале, заработная плата, план и затраты на обучение.

График проекта, включая разбивку затрат по периодам. План финансовых вложений: потребности в основных, оборотных средствах; структура и стоимость финансирования; производственные затраты; показатели окупаемости и рентабельности финансирования, точки невозврата, IRR анализ.

Сущность и риски; влияние на экономику, создание дополнительной стоимости, рабочих мест, диверсификация производства и т.д. Области применения: Контракты с поставщиками; разрешения; письма от властей в поддержку проектов и так далее.

Бизнес-план в соответствии с международными стандартами KPMG: Швейцарская Ассоциация KPMG International Cooperative (KPMG International) основана в 1987 году и является международной сетью компаний, предоставляющих консультационную, аудиторскую и прочую услугу. По сути, ассоциация не официально ассоциируется с банками-инвестиционными компаниями России, поэтому стандарты ее бизнес-плана должны восприниматься исключительно как рекомендации. KPMG - крупнейшая компания в своей отрасли, стоит рядом с такими «монстрами» как Ernst Young, Price Waterhouse Coopers, Deloitte Touch Tomhatsu. Таким образом, он имеет авторитет, которому доверять мы можем этим советам.

Название Ассоциации KPMG - это аббревиатура, составленная из названий компаний, входящих в него: Клинвелд Крайенхоф и William Barclay Pet Co., Марвик, Митчэлл Со., Трейхэйнд-Гесэльсхафт.

Проект «ТАСИС»

Аббревиатура называется Технической помощью для общего блага независимых государств - Технической помощью Содружеству независимых государств. Эта программа – плод усилий ЕС в начале 90-х.

Формы поддержки - консультация, консультации по созданию тестовых бизнес-проектов и оптимизация корпоративной структуры. Также реализовали проекты, которые не касались частного сектора.

БФМ Групп является инвестиционной и проектной компанией, которая специализируется на предоставлении полного спектра услуг в области подготовки инвестиционного проекта для инвесторов.

БФМ Групп реализовала проекты инвестиций для предприятий России, Украины, Беларуси, Узбекистана, Казахстана, Польши, других стран.

Бизнес-план БФМ Группы характеризует бизнес по всему своему аспекту.

Бизнес-план компании BFM Group состоит из следующей структуры:

Конфиденциальность и конфиденциальность

Аннотация.

Подробное содержание

Характеристика компании (в разделе представлена общая информация по проекту, краткая информация о продукте или услуге, инновационная составляющая проекта).

Анализ деловой среды для предпринимательства. Анализировался политический, экономический, социальный, технологический фактор окружающей бизнес-среды. Определены концепции и стратегии развития бизнес-процессов.

Изучена позиция проекта в отношении конкурентов в анализе SWOT по отрасли.

Особенности продукта (в разделе представлен анализ действия компании в целях создания конкурентного преимущества, анализ спроса на продукцию в зависимости от ее позиции на рынок и рост выпуска с использованием матрицы BCG).

Характеристика сбытовых рынков

Определяются возможные объемы и тенденции развития рынков, прогнозируются объемы рынков, которые планирует охватить компания.

Анализ конкурентоспособности и характеристики конкурентного преимущества

Даны сравнения аналогичных товаров с конкурентами и фирмами. Анализируется рыночная конкуренция. В компании проводится анализ SWOT.

Внешнеэкономические отношения компании

Характеризуется организация и обеспечение экономического обеспечения внешних экономических отношений.

Стратегическое маркетинговое агентство

Описана маркетинговая стратегия, ценовая политика, методы продвижения товаров на рынок, тактика продаж и обслуживания послепродажного периода.

План продаж. (в разделе рассматриваются факторы продажи и рассчитаны точки безубыточного показателя).

План производства.

Организационные структуры и управления

Определены структуры организационной структуры, руководство компании, инвестиционные инвесторы, советники. Охарактеризуется система найма работников и награждения.

План инвестиций. Определены ключевые задачи инвестиций и финансовые источники.

Финансовые планы. Определить необходимые финансовые ресурсы, срок оплаты кредита, проценты на кредит. Готовы отчеты: прибыли и потери, движения денег, cashflow, баланс компании, доходы структурных подразделения компании и отдельных членов.

Расчет финансового показателя за месяц до завершения проекта

Показатели текущей ликвидности, срочной ликвидности, ликвидности запасов, задолженности по дебиторской задолженности, основных средств, ликвидности по активам, процентного покрытия, маржа валового дохода, операционной прибыли, чистой прибыли. Рентабельности: оборотный и необоротный актив, инвестиции и собственный капитал, а также оборотный и необоротный актив. Использовать прибыль.

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## **СОСТОЯНИЕ КЛИНИКО-БИОХИМИЧЕСКОЙ НЕЗРЕЛОСТИ У НЕДОНОШЕННЫХ НОВОРОЖДЕННЫХ ПРИ ПНЕВМОНИИ**

*Аннотация. Преждевременные роды являются глобальной проблемой здравоохранения, поскольку все большее число младенцев рождается до наступления полного срока беременности. Эти младенцы сталкиваются с множеством проблем, поскольку их недостаточно развитые системы органов делают их особенно уязвимыми к различным заболеваниям. Среди этих состояний пневмония является ведущей причиной заболеваемости и смертности недоношенных новорожденных. В статье представлено определение состояния клиничко-биохимической незрелости у недоношенных новорожденных при пневмонии.*

*Ключевые слова: сурфактант, неонатальная, пневмопатии, протеолиз, гиповентиляция, бронхограмма, бронхолегочная дисплазия.*

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## **STATE OF CLINICAL AND BIOCHEMICAL IMMATURITY IN PREMATURE NEWBORNS WITH PNEUMONIA**

*Annotation. Preterm birth is a global health problem as an increasing number of infants are born before full gestation. These babies face many challenges as their underdeveloped organ systems make them especially vulnerable to various diseases. Among these conditions, pneumonia is the leading cause of morbidity and mortality in preterm infants. The article presents a definition of the state of clinical and biochemical immaturity in premature newborns with pneumonia.*

*Keywords: surfactant, neonatal, pneumopathy, proteolysis, hypoventilation, bronchogram, bronchial dysplasia.*

**Актуальность.** Важнейшей характеристикой состояния новорожденного является функциональная зрелость его органов и систем с



момента рождения и в раннем неонатальном периоде. Только достаточная зрелость жизненно важных органов плода обеспечивает полноценную физиологическую адаптацию после рождения и выживание новорожденного. При нарушении процессов внутриутробного созревания плода при рождении нередко происходят срывы функциональной адаптации к внеутробному дыханию. Сюда относятся анатомическая, биохимическая и функциональная незрелость.

**Цель исследования.** Определить состояние клинико-биохимической незрелости у недошенных новорожденных при пневмонии.

При анатомической незрелости лёгких важным патогенетическим элементом может быть качественная и количественная недостаточность дыхательных поверхностей, не достигших хроноспецифической степени развития, что характеризуется гипоплазией сосудов, задержкой трансформации и регрессии соединительной ткани, особенно в межальвеолярных выстилающих клеток. В свою очередь, биохимическая незрелость сопровождается дефицитом сурфактанта, малой активностью фибринолиза, недостаточной активностью антипротеаз, что указывает на ограничение защитных функций составной лёгочной в образовании протеолитических, липолитических и гликолитических ферментов (2,4).

**Материалы и методы.** С учётом упомянутых особенностей было проведено клинико-биохимическое обследование 50 недоношенных новорожденных с 1,2 степенью недоношенности, болеющих пневмонией, на фоне пневмопатии. В зависимости от периода развития пневмонии у 23 новорожденных была пневмония внутриутробная, у 27 – неонатальная.

Для сравнения обследовано 12 детей в возрасте от 3 до 9 месяцев, больных пневмонией, а также родившихся недоношенными.

Использованные методы исследования: клинические, рентгенологические, биохимические:

1. Определение уровня  $\alpha_1$ -АТ по методу Рейдермана, 1980 г.
2. Определение  $\alpha$ -ФП (ИФА, завод «Нихол», г.Ташкент, 2000 г.).
3. Определение БАЭЭ-эстеразной активности по методу С.Пасхиной, 1970.

Результаты и обсуждение.

В таблице 1 дефицит  $\alpha_1$ -АТ в сочетании с высоким показателем  $\alpha$ -ФП степени незрелости способствует ареактивности организма недоношенного, что проявляется слабой активностью протеолитических систем, в данном случае это БАЭЭ-эстеразная активность. Это указывает на взаимосвязь уровня антипротеаз с особенностями созревания легочной ткани у недоношенных детей и морфофункциональной зрелости организма.

Таблица 1

**Показатели протеолиза у детей при пневмонии в возрасте от 3 до 9 месяцев**

Тесты	$\alpha_1$ -АТ(мЕ/мл)	БАЭЭ(мЭЕ/мл)
1-3 й день	2,25±0,14	348,54±2,16
К выписке	2,75±0,2	284,08±1,82
Здоровые	2,75±0,18	310,12±20,4

Рентгенологические проявления имели свои особенности. Так, расправление лёгких задерживалось до 2-3 недель, а иногда месяцев, что на снимках отражалось в виде рассеянного ателектаза на фоне общего понижения воздушности легочных полей. В результате гиповентиляции лёгкие приобретали вид матового стекла. Помимо этого, такой признак воспалительного процесса, как кровенаполнение (причиной которого является незрелость артериальной системы), на рентгенограммах отсутствовал. Более характерным проявлением легочного рисунка являлся сетчато-петлистый тип деформации, сочетаемый в некоторых случаях с вздутыми легочными дольками, называемыми буллами. Бронхиальные разветвления, невидимые у здоровых детей, приобретали вид двухконтурных образований, что обусловлено отеком стенки бронхов. Этот симптом известен под названием «воздушной бронхограммы».

Таблица 2.

**Показатели биохимической зрелости у недоношенных детей**

Тест	$\alpha_1$ (мЕ/мл)	АТ	БАЭЭ(мЭЕ/мл)	$\alpha$ -ФП
1-3 й день	1,28±0,22		124,6±8,14	94,5±10,3
8-10 й день	1,5±0,28		132,2±5,16	
К выписке	2,21±0,7		136,8±7,3	
здоровые	2,25±0,21		278,14±2,2	23,8±0,22

У 16-20% детей, выписанных из отделения недоношенных, сохраняются патологические изменения со стороны лёгких и в старшем возрасте, на 1-4м годах жизни, а у 4 % больных в дальнейшем бронхолёгочная дисплазия ведёт к инвалидности (2).

В таблице 1 сравнительно умеренное снижение уровня антипротеаз сопровождается умеренным повышением протеолиза, что говорит о постепенном становлении защитных сил организма.

Такие изменения в лёгких при острой пневмонии у детей до 1 года, родившихся недоношенными, подтверждают мнение, что диагноз недоношенности должен сохраняться до тех пор, пока психомоторное и физическое развитие не достигнет примерного уровня доношенных сверстников. При этом, естественно, исключаются те случаи, когда задержка развития обусловлена патологией ЦНС, тяжёлыми пороками или частыми соматическими заболеваниями.

### **Выводы.**

1. Показатели  $\alpha_1$ -АТ и  $\alpha$ -ФП отражают функциональную незрелость ребёнка после рождения.

2. Особенности клинико-биохимической динамики при острой пневмонии у недоношенных в возрасте до 1 года сопоставимы со своеобразием развития легочной ткани и биохимической незрелости.

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## **ИСПОЛНЕНИЕ ФЕДЕРАЛЬНОГО БЮДЖЕТА РОССИЙСКОЙ ФЕДЕРАЦИИ ЗА 3 ГОДА**

*Аннотация. Федеральный бюджет Российской Федерации является одним из основных инструментов экономического развития страны. Его исполнение - это сложный и многосторонний процесс, охватывающий широкий спектр финансовых операций.*

*В данной статье мы рассмотрим основные результаты исполнения федерального бюджета Российской Федерации за период последних трех лет, а также выявим ключевые тенденции и проблемы в этой сфере. Будут рассмотрены такие аспекты, как доходы и расходы бюджета, уровень исполнения плановых показателей.*

*Ключевые слова: федеральный бюджет, доход, расход, эффективное использование.*

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## **EXECUTION OF THE FEDERAL BUDGET OF THE RUSSIAN FEDERATION FOR 3 YEARS**

*Abstract. The Federal budget of the Russian Federation is one of the main instruments for the economic development of the country. Its execution is a complex and multifaceted process covering a wide range of financial transactions.*

*In this article we will consider the main results of the execution of the federal budget of the Russian Federation over the past three years, and also identify key trends and problems in this area. Aspects such as budget revenues*

*and expenses and the level of implementation of planned indicators will be considered.*

*Keywords: Federal budget, income, expenditure, effective use.*

## **Введение**

Анализировать исполнение федерального бюджета имеет большое значение для определения эффективности государственной политики и планирования бюджетных ресурсов. Это позволяет оценить степень соответствия фактического исполнения бюджета заданным целям и обнаружить возможные нарушения и неэффективное использование средств. Такой анализ является основой для принятия корректировок в финансовой политике и разработки мер по повышению эффективности исполнения бюджета.

Статья будет основана на данных, предоставленных Министерством финансов Российской Федерации и другими государственными органами, а также результатами проведенного нами собственного анализа. Кроме того, будут рассмотрены мнения ведущих экспертов в области финансов и экономики. Надеемся, что данная статья поможет читателям получить более полное представление о состоянии исполнения федерального бюджета Российской Федерации за последние три года и выделить ключевые направления для дальнейшего улучшения этого процесса.

### **Обзор основных показателей исполнения федерального бюджета Российской Федерации за 3 года**

За последние три года исполнение федерального бюджета Российской Федерации прошло сразу через несколько этапов. В первом году был отмечен значительный рост доходной части бюджета, благодаря увеличению поступлений от налогов и сборов. Второй год характеризовался стабильностью в исполнении расходной части, что позволило оптимизировать использование бюджетных средств и приоритизировать наиболее важные направления развития экономики и социальной сферы. Однако третий год принес некоторые вызовы, связанные с изменениями в мировой экономике и возникающей необходимостью пересмотра некоторых программ и проектов. Общим результатом исполнения федерального бюджета за 3 года является достижение стабильности и устойчивости в области финансовых ресурсов, а также повышение эффективности расходной политики государства.

### **Анализ доходной части федерального бюджета и его изменений в течение 3 лет**

За последние три года доходная часть федерального бюджета Российской Федерации претерпела значительные изменения. В 20XX году доходы составили XXX миллиардов рублей, что на XX% больше, чем в предыдущем году. Основными источниками доходов являются налоги, акцизы, сборы и пошлины.

Существенный рост доходной части бюджета был обусловлен увеличением ставок налогов и акцизов, а также расширением базы налогообложения. Кроме того, благоприятные экономические условия способствуют увеличению объема производства и потребления товаров и услуг, что в свою очередь повышает доходность бюджетной системы.

Однако следует отметить некоторые негативные тенденции в изменении доходной части бюджета. Например, сокращение доли нефтегазовых доходов вследствие падения цен на энергоресурсы на мировом рынке. Это требует разработки новых механизмов для компенсации убытков и диверсификации экономики страны.

Также важным аспектом является эффективное использование полученных доходов. Необходимо обеспечить прозрачность и контроль расходов бюджета, чтобы избежать коррупционных схем и нецелевого использования средств

### **Заключение**

За последние 3 года исполнение федерального бюджета Российской Федерации было предметом тщательной оценки. Основное внимание уделялось расходной части бюджета и основным направлениям его использования.

Расходы федерального бюджета за данный период были представлены различными статьями, такими как социальные программы, оборона, здравоохранение и образование. Проводилась аналитика по каждой статье расходов с целью определения эффективности использования выделенных средств.

Важным аспектом оценки было определение соответствия распределения средств на основные направления использования бюджетных средств стратегическим задачам развития страны. Большое внимание уделялось поддержке экономического роста, инвестициям в инфраструктуру и новые технологии.

Кроме того, проводилась проверка эффективности реализуемых проектов и программ. Это позволяло выявить успешные и неэффективные инвестиции для дальнейшего корректирования расходов.

В результате оценки расходной части федерального бюджета за последние 3 года были выявлены положительные тенденции в использовании средств на основные направления развития страны. Однако, были также обнаружены некоторые проблемные моменты, которые требуют дополнительных корректировок и улучшений

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## **УПРАВЛЕНИЕ ФИНАНСАМИ МАЛОГО ПРЕДПРИЯТИЯ**

*Аннотация. Статья посвящена вопросам финансового управления на малых предприятиях. Описывается процесс организации финансового менеджмента в малом бизнесе. Проанализированы актуальные проблемы и преимущества малых предприятий. Рассматривается эффективность управления финансами во взаимосвязи с показателями рентабельности и финансовой устойчивости на примере конкретной организации.*

*Ключевые слова. Финансы, финансовое состояние, финансовый менеджмент, малый бизнес, эффективность управления финансами, финансовый анализ, рентабельность.*

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## **SMALL ENTERPRISE FINANCE MANAGEMENT**

*Annotation. The article is devoted to issues of financial management in small enterprises. The process of organizing financial management in small businesses is described. Current problems and advantages of small enterprises are analyzed. The effectiveness of financial management in relation to indicators of profitability and financial stability is considered using the example of a specific organization.*

*Keywords: finance, financial condition, financial management, small business, financial management efficiency, financial analysis, profitability.*

## **Введение**

Финансовый менеджер помогает управлять компанией, отвечая за финансовые вопросы. Специалист анализирует движение, целевое использование денег организации. Работает с финансовыми документами, бизнес-планами, фондами. Оценивает экономический смысл инвестиционных проектов. Главная должностная обязанность – составление рекомендаций по сокращению расходов, росту прибыли фирмы.

### **Формирование финансовой стратегии для малого предприятия**

Формирование финансовой стратегии является важным этапом управления финансами малого предприятия. Она позволяет определить цели и приоритеты в области финансов, а также выбрать наиболее эффективные инструменты для достижения этих целей.

Первым шагом в формировании финансовой стратегии является анализ текущего состояния предприятия. Это включает оценку его финансовых показателей, таких как выручка, затраты, прибыль и долгосрочные обязательства. На основе этого анализа можно определить сильные и слабые стороны компании, а также возможности для роста и развития.

Следующим шагом является определение целей и задач, которые должна решать финансовая стратегия. Это могут быть такие задачи, как обеспечение стабильного потока денежных средств, минимизация затрат, повышение рентабельности и привлечение инвестиций. Цели должны быть конкретными, измеримыми, достижимыми, релевантными и ограниченными по времени (SMART-подход).

### **Управление операционными финансами на малом предприятии**

Управление операционными финансами является одной из ключевых задач при управлении малым предприятием. Он включает в себя планирование и контроль всех финансовых операций, связанных с текущей деятельностью предприятия.

Одной из основных задач управления операционными финансами на малом предприятии является обеспечение достаточного уровня ликвидности. Для этого необходимо аккуратно планировать поступления и расходы денежных средств, а также эффективно управлять запасами товаров и материалов. Контроль над текущими активами и обязательствами поможет минимизировать риски нехватки денег и проблемы с платежеспособностью.

Еще одним важным аспектом управления операционными финансами на малом предприятии является оптимизация затрат. Это означает поиск способов снижения издержек производства, оптимизации закупок и использования ресурсов, а также контроль над расходами на транспортировку и хранение товаров. Результатом правильного управления затратами будет увеличение прибыли предприятия.

### **Финансовое планирование и прогнозирование на малом предприятии**

Финансовое планирование и прогнозирование играют важную роль в управлении финансами малого предприятия. Это процесс, который помогает определить будущие доходы и расходы, а также способствует разработке стратегии для достижения финансовых целей компании.

Одной из основных задач финансового планирования является определение бюджета предприятия на определенный период времени. В процессе составления бюджета учитываются все факторы, которые могут повлиять на финансовое положение компании, такие как продуктивность труда, инфляция, конкурентная ситуация на рынке. Бюджет помогает оценить потребности в капитале и выделить необходимые ресурсы.

Прогнозирование финансовых результатов также является неотъемлемой частью управления финансами малого предприятия. Оно осуществляется на основе анализа текущих данных и трендов развития рынка. Прогноз позволяет предугадать возможные изменения в доходах и расходах компании и принять соответствующие финансовые решения заранее.

### **Заключение**

Оценка и управление рисками являются важными аспектами финансовой деятельности малого предприятия. Риски могут возникать из различных источников, таких как изменение рыночной конъюнктуры, нестабильность экономической ситуации или непредвиденные события.

Для эффективного управления рисками необходимо провести их оценку. Это позволит определить потенциальные угрозы и вероятность их возникновения, а также выработать стратегии для минимизации негативных последствий.

Одной из основных методик оценки рисков является анализ финансовых показателей предприятия. Он включает в себя изучение доходности, ликвидности, платежеспособности и других ключевых факторов. По результатам анализа можно определить слабые места в финансовом состоянии предприятия и принять соответствующие меры по улучшению.

После оценки рисков необходимо разработать стратегию их управления. В зависимости от конкретной ситуации это может быть создание резервных фондов, заключение страховых договоров или привлечение финансирования от инвесторов. Важно учитывать потенциальные риски при принятии финансовых решений и постоянно мониторить их состояние.

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## **БЮДЖЕТНОЕ УСТРОЙСТВО РФ**

*Аннотация. В статье рассматривается бюджетное устройство РФ и его роль в экономическом развитии страны. Авторы анализируют основные принципы формирования и исполнения бюджета, а также механизмы контроля за его исполнением. В статье также рассматриваются особенности бюджетного устройства в различных регионах РФ и в муниципальных образованиях. Результаты и выводы статьи могут быть полезными для специалистов в области экономики, бюджетного управления и государственного устройства, а также для руководителей и политиков, занимающихся вопросами государственного управления и финансовой политики.*

*Ключевые слова. Бюджет, элементы бюджета, бюджетное устройство РФ.*

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## **BUDGETARY SYSTEM OF THE RUSSIAN FEDERATION**

*Annotation. The article examines the budget system of the Russian Federation and its role in the country's economic development. The authors analyze the main principles of budget formation and execution, as well as mechanisms for monitoring its implementation. The article also considers the peculiarities of the budget system in various regions of the Russian Federation and in municipal entities. The authors emphasize the need for effective use of budget resources and propose a number of measures to increase the transparency and efficiency of budget management. The results and conclusions of the article*



*may be useful for specialists in the field of economics, budget management and state administration, as well as for managers and policymakers dealing with issues of state management and financial policy.*

*Key words. Budget, budget elements, budget system of the Russian Federation.*

### **Роль государственного бюджета в экономике России**

Государственный бюджет является основным инструментом финансовой политики государства и играет важную роль в экономике России. Он определяет объемы доходов и расходов государства на определенный период времени. Главная цель бюджетной политики - обеспечить стабильность экономического развития страны, сбалансированный рост и социальную справедливость.

Государственный бюджет РФ имеет несколько ключевых функций. Во-первых, он финансирует основные обязательства государства перед своими гражданами, такие как здравоохранение, образование, социальная защита и др. Это позволяет поддерживать уровень жизни населения и обеспечивать его базовые потребности.

Во-вторых, бюджет выполняет инвестиционные функции. Государственные расходы направляются на развитие инфраструктуры, поддержку отраслей экономики, создание новых рабочих мест и другие проекты, способствующие устойчивому экономическому росту.

Кроме того, государственный бюджет является инструментом макроэкономической стабилизации

### **Основные структурные элементы бюджетной системы РФ**

Бюджетное устройство РФ представляет собой сложную систему, состоящую из нескольких основных структурных элементов. Один из таких элементов - это федеральный бюджет, который формируется и утверждается на уровне центрального правительства. Федеральный бюджет включает в себя доходную и расходную части, которые определяются на основе прогноза экономического развития страны.

Другим важным элементом бюджетной системы являются региональные бюджеты. Они формируются на уровне субъектов РФ и отражают доходы и расходы соответствующих регионов. Региональные бюджеты имеют свои особенности и зависят от местного экономического развития, инфраструктуры и потребностей населения.

Также в состав бюджетной системы входят местные (муниципальные) бюджеты. Они формируются органами местного самоуправления и направлены на решение конкретных задач городских или сельских территорий. Местные бюджеты финансируют различные социальные программы, обеспечивают функционирование коммунальных служб и развитие инфраструктуры.

Кроме того, в бюджетной системе РФ существуют такие элементы, как государственный внутренний долг и государственное казначейство

### **Процесс формирования и исполнения федерального бюджета РФ**

Процесс формирования и исполнения федерального бюджета РФ является сложной и многоэтапной процедурой, основанной на законодательных нормах и принципах финансовой дисциплины. Этот процесс начинается с разработки проекта федерального бюджета, который составляется Министерством финансов Российской Федерации.

На этапе разработки проекта бюджета проводится анализ экономической ситуации в стране и определяются приоритетные направления расходования государственных средств. Затем составляется план доходов и расходов, включая все поступления в бюджет от налоговых и неналоговых источников.

После утверждения проекта федерального бюджета правительством он направляется на рассмотрение Государственной Думы, где проводятся обширные дебаты по его содержанию. По результатам обсуждений принимается закон о федеральном бюджете, который после утверждения Советом Федерации подписывается Президентом РФ.

Исполнение федерального бюджета осуществляется Министерством финансов. Каждый год составляется план расходования средств, который детально определяет цели и направления использования бюджетных средств

### **Заключение**

В современных условиях Российской Федерации наблюдаются определенные тенденции и перспективы развития бюджетного устройства. Одной из таких тенденций является укрепление роли государственного бюджета как инструмента социально-экономического развития страны.

Существует все большая потребность в эффективном использовании государственных финансовых ресурсов для решения насущных проблем общества. В этой связи, акцент ставится на повышение прозрачности и открытости процесса формирования и исполнения бюджета, а также на активном использовании информационных технологий.

Другой важной тенденцией является углубление децентрализации бюджетного процесса. Государство все больше делегирует полномочия по распределению и использованию бюджетных средств на местный уровень. Это позволяет максимально учитывать особенности и потребности конкретных регионов, обеспечивая более эффективное использование государственных средств.

Перспективы развития бюджетного устройства РФ связаны с постоянным совершенствованием системы планирования, формирования и исполнения бюджета.

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## **РОЛЬ КООПЕРАЦИИ В ФОРМИРОВАНИИ АГРАРНОЙ СОБСТВЕННОСТИ**

*Аннотация. В данной статье проанализированы факторы, влияющие на формирование и развитие собственности агропредпринимательской деятельности, разработаны научно обоснованные предложения рекомендации по повышению роли в конкурентной среде.*

*Ключевые слова: предпринимательство, творчество, бизнес, частно-индивидуальное предпринимательство, частно-корпоративное предпринимательство, партнерство, агропромышленный комплекс, малый бизнес, кластер, кооперация, домохозяйства.*

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## **THE ROLE OF COOPERATION IN THE FORMATION OF AGRICULTURAL OWNERSHIP**

*Annotation. This article analyzes the factors influencing the formation and development of ownership of agro-entrepreneurial activities, developed scientifically based proposals for recommendations on increasing the role in the competitive environment.*

*Key words: entrepreneurship, creativity, business, private-individual entrepreneurship, private-corporate entrepreneurship, partnership, agro-industrial complex, small business, cluster, cooperation, households.*

Одна из основных задач экономических реформ в странах-повышение благосостояния населения, а материальной основой экономического роста является производство, обеспечивающее эффективную организацию малого

бизнеса и частного предпринимательства. Для этого необходимо улучшить организационные, экономические и частные отношения, а также правильно решить существующие проблемы. Это требует глубокого понимания социально-экономической сущности предпринимательства.

Имеет особое место подход современных экономистов к проблеме предпринимательства. На основе их исследований, анализ сущности предпринимательства можно разделить на следующие области: Первое направление - предпринимательство - это самостоятельная экономическая деятельность, направленная на получение прибыли.

Второе направление - достижение высокой эффективности производства на основе отношений при реализации новых комбинаций ресурсов, не отрицая цели получения прибыли предпринимательской деятельности.

Третье направление состоит в том, что необходимо творчески подходить для управления движением ресурсов предпринимательской деятельности. К ним относятся Д. В. Бусыгин [2], В. Д. Камаев [3], И. Н. Герчикова [4], Ф. М. Русинов [5] и другие. В исследованиях этих ученых предпринимательство отражается не как простая трудовая деятельность, а как творческая деятельность. Таким образом, эти авторы разделили предпринимательство на три неотъемлемых взаимосвязанных компонента.

Основываясь на приведенных предложениях и рекомендациях, можно сказать, что предпринимательство - это производственная, сервисная деятельность, которая включает в себя процесс объединения и мобилизации ресурсов, управления, основанного на инновациях и риске для получения прибыли.

Предпринимательство - это деятельность, при которой в связи с производством товаров и услуг осуществляется фактическое использование собственных или других материальных и денежных ресурсов, то есть капитала. По этому, предпринимательство связано с функцией капитала.

Малый бизнес и частное предпринимательство - важная составная часть рыночной экономики. Это массовая основа и элемент механизма рыночной конкуренции. Развитие рыночной экономики без предпринимательства, в том числе малого бизнеса, невозможно даже действовать.

На наш взгляд, бизнес и предпринимательство - это экономические категории, которые представляют собой экономические отношения между субъектами хозяйствования. Бизнес является первобытной экономической категорией по отношению к предпринимательству и имеет ряд характеристик. К ним относятся: участники бизнеса стремящийся получить прибыль или полезность; с этой целью они стремятся эффективно использовать капитальную собственность и функцию капитала; почувствовать экономический риск, опасность; они будут бизнесменами,

мастерами своего дела, инициативными, новаторскими, обладающими культурой экономических взаимоотношений, навыками;

бизнес-участники получают выгоду от совместного взаимодействия.

Таким образом, бизнес как экономическая категория представляет собой совокупность отношений между людьми при ведении экономической деятельности с целью получения прибыли. Этот комплекс отношений включает в себя собственность, прямое производство, обмен и отношения с потребителями.

Поскольку предпринимательство является одним из ключевых аспектов бизнеса, на наш взгляд, оно представляет собой второстепенные продуктивные отношения по сравнению с деловыми отношениями. Эти отношения связаны с производственной и сервисной деятельностью людей с целью получения прибыли.

Предпринимательство, как и другие формы бизнеса, требует следующих условий:

-экономическая независимость и самостоятельность. Предприниматель может полностью использовать свой экономический потенциал только в том случае, если он имеет возможность действовать свободно;

- Стремление к инновациям, творчеству, предпринимательству. Только тогда станет предпринимателем, когда улучшает свой бизнес, приспособив к меняющимся требованиям рынка, может только если у него есть идея обновления, а также воплощает ее в жизнь;

- склонность к риску, чувство имущественной ответственности и др.

Также, в отличие от бизнеса, предпринимательство требует глубоких знаний в сфере производства товаров и услуг, профессиональных навыков.

Предпринимательство проявляется в государственной, негосударственной, в том числе частной, смешанной формах собственности. Негосударственные формы включают частно-индивидуальное и частно-корпоративное предпринимательство. В свою очередь, субъект частного предпринимательства будет основан на собственном и наемном труде. Частно-корпоративное предпринимательство проявляется как партнерство, смешанное, арендуемые предприятия. Индивидуальное предпринимательство включает себя частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. Коллективная форма предпринимательства включает государственный, сельскохозяйственные кооперативные предприятия, партнерство и самоуправляющиеся фирмы, акционерное общество, предприятия трудового коллектива, и т. Д.

В зависимости от уровня организации различают индивидуальные и коллективные формы предпринимательства.



Индивидуальное предпринимательство включает частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. К коллективной форме предпринимательства относятся государственные, ширкатные хозяйства, корпорации, партнетство и самоуправляющиеся фирмы, предприятия трудового коллектива, акционерные общества и др. Согласно сфере деятельности, предпринимательство имеет формы производства, оказания услуг, коммерческой деятельности и коммерческого посредничества. Форма предпринимательства в виде малого, среднего и крупного бизнеса в зависимости от количества сотрудников, занятых на предприятии.

Таким образом, формы предпринимательства взаимосвязаны, и любая из них может иметь несколько форм одновременно. Например, форма частного предпринимательства проявляется в разных формах в зависимости от уровня организации, сферы деятельности и количества занятых.

В зависимости от уровня организации бизнеса его проявление в той или иной форме зависит от ряда факторов. Организационная, организационная форма предпринимательской деятельности, прежде всего личная заинтересованность предпринимателя, желание заявить о себе; во-вторых, сфера деятельности; в-третьих, количество наличных денег; в-четвертых, это зависит от склонности к риску [7].

У каждой формы предпринимательства есть свои достоинства и недостатки. Например, индивидуальное предпринимательство - его простейшая форма, вся организационная и управленческая работа выполняется одним человеком. Например, индивидуальное предпринимательство - его простейшая форма, вся организационная и управленческая работа выполняется одним человеком. Например, индивидуальное предпринимательство - его простейшая форма, вся организационная и управленческая работа выполняется одним человеком, то есть простота организации. Он принимает на себя всю ответственность и сильный экономический стимул, то есть получение всей прибыли одним лицом. В этом случае предприниматель ведет производственную и коммерческую деятельность только по своему усмотрению, то есть не связанная с необходимостью согласования в принятии решений. Но предприниматель берет на себя все ответственные риски, связанные с его бизнесом. Следовательно определяется у предпринимателя банкротство, велик риск потери имущества. Этот тип предпринимательства широко распространен в сферах экономической деятельности, которые не требуют больших финансовых и материальных ресурсов для открытия бизнеса и не являются технологически сложными. Индивидуальные предприниматели - это люди, склонные к риску и способные взять на себя все опасности.

Предпринимательство на основе партнерства более распространено в областях, требующих немного большего финансовых и материальных

ресурсов и имеющих более сложную технологическую основу, чем индивидуальное предпринимательство. Эта форма предпринимательства-организованная рядом лиц, совместно владеющих и управляющих предприятием. Основные права здесь принадлежат всем партнерам. Они осуществляют эффективный контроль за деятельностью друг друга.

Одна из современных форм предпринимательства - это корпоративная форма. Она действует в основном в форме акционерного общества. Доля каждого из его участников определяется количеством принадлежащих ему акций [8]. Самым важным преимуществом этой формы бизнеса является очень ограниченная ответственность акционеров, разделение функции капитала, то есть отделение капитала от собственности, возможность привлечения дополнительных средств путем выпуска акций. Такие общества в основном преобладают в сферах экономической деятельности, требующих большего финансовых и материальных ресурсов, технологически крупных масштабов и сложной материально-технической базы.

В процессе работы в условиях свободной рыночной экономики малый бизнес меняет форму и типы организации, а под влиянием своих возможностей и внешней среды может переходить из одной формы в другую.

В развитых и развивающихся странах малый бизнес и частное предпринимательство выполняют несколько ключевых функций. Создавая новые рабочие места, он уравнивает социальные издержки необходимых структурных изменений в экономике. В процессе внедрения принципов рыночной экономики в Узбекистане также необходимо развивать малый бизнес и частное предпринимательство, и последовательно изучать опыт зарубежных стран в этом направлении.

#### **Формы собственности субъектов хозяйствования агропромышленного комплекса.**

<b>Формы Предпринимательство</b>	<b>Сферы деятельности</b>	<b>Хозяйствующие субъекты</b>	<b>хозяйствующие субъекты</b>
Частно-индивидуальный	Сельскохозяйственное производство	Фермерское хозяйства Дехканское хозяйства	Частная собственность
	Сервис	Малые предприятия культурно-бытового обслуживания. • Торговые предприятия • Пункты платных услуг	Частная собственность
	Переработка	Предприятия по переработке овощей и фруктов.	Частная собственность

		<ul style="list-style-type: none"> <li>• Малые индивидуальные зерноперерабатывающие предприятия</li> </ul>	
Частно-корпоративный	Сельскохозяйственное производство	Корпоративные хозяйства. <ul style="list-style-type: none"> <li>• Агрофирмы</li> <li>• Агрокластеры</li> <li>• Кооперативы</li> </ul>	Кооперативная собственность
	Сервис	Компании-поставщики ГСМ. <ul style="list-style-type: none"> <li>• Машинно-тракторные парки (МТР),</li> <li>Альтернативные машинно-тракторные парки (ММТР)</li> <li>• Семеноводческие компании</li> <li>• Компании по производству удобрений</li> <li>• Ассоциация водопользователей</li> </ul>	Кооперативная собственность
	Переработка	Предприятия по переработке зерна <ul style="list-style-type: none"> <li>• хлопкоочистительные машины</li> <li>• Предприятия по переработке овощей и фруктов.</li> <li>• Агрофирмы</li> <li>•</li> </ul>	Кооперативная собственность

Исходя из вышеизложенного, можно сказать, что проводимая государством экономическая политика, направленная на построение демократического общества, полноценно функционирующей рыночной экономики, основанной на приоритете частной собственности, в сегодняшнюю стратегию экономического развития должна включать развитие малого бизнеса и частного предпринимательства.

В результате экономических реформ в агропромышленном комплексе сформированы хозяйствующие субъекты на основе различных форм собственности и некоторые объекты собственности были приватизированы и преобразованы в частно-индивидуальную, частно-корпоративную формы предпринимательства. В сфере сельскохозяйственного производства агропромышленного комплекса созданы, прежде всего, корпоративные хозяйства, в том числе фермерские, деханские хозяйства.

Культурные, бытовые и торговые объекты в сфере услуг были приватизированы и эксплуатировались как частные предприятия, объекты производственной инфраструктуры были преобразованы в акционерные общества МТЗ, ММТП, поставка удобрений, поставка семян, поставка ГСМ.

Предприятия по переработке сельскохозяйственной продукции были преобразованы в акционерные общества в связи с их большими производственными мощностями и технологиями. В этой сфере сформированы только малые предприятия по переработке овощей и фруктов.

Взаимозависимость деятельности хозяйствующих субъектов на основе разной формы собственности в сфере агропромышленного комплекса создает аграрные отношения.

Аграрные отношения - это отношения между различными субъектами, занимающимися производством, переработкой, продажей и производством сельскохозяйственной продукции.

Деятельность всех хозяйствующих субъектов в аграрном секторе приводит к формированию агробизнеса, поскольку агробизнес отличается от предпринимательского движения в других секторах. Потому что на основе этой отрасли является производство сельскохозяйственной продукции в связи с земельными отношениями. Это означает, что в агропромышленном комплексе есть особенности организации частного предпринимательства.

Эффективная организация текущей и будущей деятельности малых предприятий и частных предпринимателей, работающих в агропромышленном секторе сегодня. соотношение должно быть обеспечено.

Эффективность текущей и будущей деятельности малых предприятий и частных предпринимателей, действующие в агропромышленном секторе зависит от соотношения прибыл и затрат.

На наш взгляд, в связи с взаимозависимостью агропромышленного комплекса целесообразно наладить кооперацию, объединяющую отрасли, и это сотрудничество базируется на материальной базе крупных фермерских хозяйств и малых перерабатывающих предприятий в сторону предприятий инфраструктуры. Это сотрудничество организовано на основе финансовых слияний предприятий агропромышленного комплекса и является основой для развития сельхозпроизводителей и перерабатывающих предприятий.

Члены кооператива - малые предприятия агропромышленного комплекса, объединенные по функциональным направлениям производства. Осуществляется исполнительным органом на основании решения созданного совета кооператива. Например, в сельском хозяйстве используется около 2500 сельскохозяйственных машин, и не все из них можно приобрести одному малому предприятию. ММТП не имеют возможности приобретать сельхозтехнику.

У государства также нет возможности поставить сложную сельскохозяйственную технику в каждый регион. Потому что развитие сельского хозяйства само по себе не обеспечивает стабильности в стране. Другие отрасли также нуждаются в развитии. Его может поощрять

государство только через организационные, правовые, экономические и финансовые стимулы.

В такой ситуации можно объединить возможности малых предприятий и стать самодостаточными на кооперативной основе. Члены совместного кооператива в области техники и технологий добровольно объединят свои финансовые ресурсы для закупки сельхозтехники, приобретения перерабатывающей техники, закупки необходимого оборудования для предприятий инфраструктуры.

Использование техники и технологий, полученных за счет накопленных финансовых средств, полностью используется собственниками имущества по решению совета кооператива, членам кооператива предоставляются льготы в их услугах. С малых предприятий, не являющихся членами кооператива, взимается полная плата за обслуживание. Прибыль от этого вычитается из затрат на организацию и деятельность кооператива и распределяется между собственниками в соответствии с их вкладом. Этот порядок взаимодействия целесообразно применить и в других функциональных сочетаниях.

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## **ТВОРЧЕСКИЙ ПОДХОД НА ИНТЕГРИРОВАННЫХ УРОКАХ ХИМИИ И ГЕОГРАФИИ**

*Аннотация. В статье говорится о преимуществах творческого запоминания для развития интеллектуальных способностей учащегося на интегрированных уроках химии и географии. Такая деятельность часто приводит к расширению круга мышления учащихся и укреплению его интеллектуальности.*

*Ключевые слова: химия, география, интеграция, интеллектуальность, развитие.*

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## **CREATIVE APPROACH IN INTEGRATED LESSONS CHEMISTRY AND GEOGRAPHY**

*Annotation. The article talked about the advantages of creative memorization for the development of intellectual abilities of a student in integrated chemistry and geography lessons. Such activity often leads to an expansion of the circle of students' thinking and strengthening of their intellectuality.*

*Keywords: chemistry, geography, integration, intelligence, development.*

Обновляемый Узбекистан день за днём играет важную роль в международном педагогическом сообществе, что сказывается не только на быстром развитии экономики, но и на образовании. Адаптация под мировые стандарты должна начинаться со школьной скамьи [1]. Для обновляемого педагогического направления требуются новые методы и приемы обучения. Практика показывает, что наиболее эффективна техника, учитывающая личность, способности, склонности и интересы ученика. Один из таких методов - интегрированный урок. Это отличная возможность не только добиться целей новых мировых стандартов, но и разнообразить обычные занятия [2].

Исходя из содержания географического образования и построения курса обучения, в преподавании географии в школе возникают



противоречия. Можно сделать вывод: школьный курс географии «опережает» некоторые учебные дисциплины, в частности, химию. Многие понятия у учащихся превращаются в абстракцию, что ведет к худшему усвоению материала, снижению познавательного интереса. О строении веществ, простые и сложные вещества, состав и строение воздуха, учащиеся по географии узнают начальных классах, а уроки химии на эту тему пройдут у учащихся позже. При изучении металлов на уроках химии выясняется: роль и значение цветных и черных металлов, где используются различные виды металлов, где, в каких странах они добываются и как производятся, а об этом на занятиях по географии учащиеся узнают раньше [3]. Из опыта педагогической практики, можно отметить, что именно методика интегрированного обучения является одним из решающих факторов формирования всесторонних знаний у обучающихся [4]. Интегрированное обучения географии создает новые условия деятельности учителей и учащихся и представляет собой действенную модель активации мыслительной деятельности и развивающих приемов обучения. Оно требует и разнообразие форм преподавания, успешно влияющих на интеллект и эффективность креативности учащихся. Многие понятия в предмете география осознать и усвоить трудно без элементарных знаний математики, физики, биологии, химии и других предметов [5]. На данном этапе обучения приходится решать одну немаловажную задачу: изучить уровень подготовленности учащихся, оценить их особенности и познавательные интересы. Необходимо также отметить, что интегрированные уроки требуют большой подготовки учителя. Более того, не каждый учитель географии захочет отказаться от времени на уроке в пользу химических дисциплин. Но использованное время обязательно вернется учителю в будущем с плюсом [6]. При изучении темы «Состав атмосферы. Воздуха. Аномальные свойства воды» можно продемонстрировать учащимся несколько опытов по химии. А при изучении темы «Распределение атмосферного давления на Земле. Циркуляция атмосферы» у учащихся не возникнет проблем. Они легко будут объяснять образование муссонов, пассатов и т.д [7]. Однако, несмотря на все трудности, которые приходится преодолевать в процессе подготовки и проведения урока, радует конечный результат интегрированного обучения. Интегрированное образование способствует расширению содержания естественнонаучного образования. Интеграция химии и географии обеспечивает целостность и неразрывность содержания учебного материала, взаимосвязь между предметами географии и химических дисциплин [8]. Вместе с учителем географии были разработаны интегрированные уроки (химии + география), в основу которых положены разные педагогические технологии:

- «Горные породы»;
- «Химическое производство Узбекистана»;

- «Пищевая промышленность Узбекистана»;
- «Машиностроительный комплекс Узбекистана»;
- «Роль топливно-энергетической отрасли в народном хозяйстве»;
- "Влияние автомобильного транспорта на окружающую среду»;
- «Металлургический комплекс Узбекистана» и др. [9].

Уроки-закрепления знаний по химии (тема «Разделение однородных и неоднородных смесей») и по географии (тема «Минеральные ресурсы Узбекистана»). На уроке учащиеся закрепляют знания по классификации минеральных ресурсов, вырабатывают элементы экологического воспитания и закрепляют знания и умения практического разделения смесей. Урок предназначен для обучающихся, представлен в инновационной форме [10,11,12].

Для проверки усвоения пройденного материала создали ряд проверочных теоретических, практических работ [13]. Строго оценивания содержательный план своего предмета, каждый учитель может увидеть, что изолированное по каждому предмету не даёт эффективность преподавания, а креативный подход решает все проблемы обоих предметов на интегрированных занятиях [14]. Можно отчетливо понять, что все в мире, взаимосвязано и что нельзя затронуть ни одного важного вопроса, не коснувшись при этом множества других [15]. Это и есть «заявка» на объединение и интеграцию программ, хотя бы по отдельным темам. Но все же более глубока основа объединения, когда выявляешь в преподавании своих предметов такие поля взаимодействия, которые сближают перспективные цели обучения. На интегрированном уроке учащиеся имеют возможность получения глубоких и разносторонних знаний, используя информацию из различных предметов, совершенно по-новому осмысливая события, явления. На интегрированном уроке имеется возможность для синтеза знаний, формируется умение переносить знания из одной отрасли в другую. Благодаря этому достигается целостное восприятие действительности. Именно на этих уроках, в большей мере, происходит формирование личности творческой, самостоятельной, ответственной, толерантной.

Данный креативный подход считаю инновационным образовательным подходом. По уровню применения данный креативный подход является общепедагогической, по концепции усвоения относится к развивающим и направлена на развитие личностного потенциала ученика и учителя. По структуре и содержанию её можно отнести к общеобразовательным, гуманистическим, воспитательным технологиям. Может применяться при любых формах организации деятельности: урочной и внеурочной, индивидуальной, групповой и коллективной и др.

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## **БОГАТЫЕ СКОПЛЕНИЯ ГАЛАКТИК: ФИЗИЧЕСКИЕ СВОЙСТВА И СТАТИСТИЧЕСКИЙ АНАЛИЗ**

*Аннотация. Приведены вычисленные нами значения параметра концентрации для 31 богатый скоплений галактики на основе данных наблюдений видимой поверхностной плотности. Изучены корреляции параметра концентрации с другими характеристиками богатых скоплений галактик.*

*Ключевые слова: галактика, скопления, параметра концентрация, плотность*

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## **RICH CLUSTERS OF GALAXIES: PHYSICAL PROPERTIES AND STATISTICAL ANALYSIS**

*Abstract. The values of the concentration parameter calculated by us for 31 large galaxy clusters based on observational data of the apparent surface density are presented. Correlations of the concentration parameter with other characteristics of rich galaxy clusters have been studied.*

*Keywords: galaxy, clusters, parameter concentration, density.*

В середине XX века, когда огромные просторы Вселенной стали изучать с помощью больших телескопов, была отмечена неоднородность распределения галактик на небесной сфере. В первом каталоге, составленном Шепли, было перечислено 25 скоплений галактик. Даже в 1940-е годы было известно всего несколько десятков банд. Но в течение следующих 10 лет изображения, сделанные на широтах «Лиска» и «Паломара», выявили большое количество скоплений галактик. Сейчас наибольшую концентрацию Вселенной составляют скопления галактик. На основании наблюдений пространственное распределение галактик разделено на группы галактик с небольшим составом.

К 1958 году Эйбель составил обширный каталог богатых скоплений галактик, состоящий из 2712 объектов [2], и классифицировал их по классам

в зависимости от количества членов в скоплениях. В 1989 г. был опубликован «Каталог богатых скоплений» Эйбеля и Олвина, содержащий 4076 скоплений из северного и южного полушарий [1]. В 1968 году был опубликован каталог Свикки, содержащий 9134 банды [6]. Свики, как и Эйбель, делил банды на классы в зависимости от количества членов.

В статье М. Галли и А. Каппилара 1993 г. были представлены данные о лучевых скоростях и красных смещениях членов южного Эбелийского скопления.

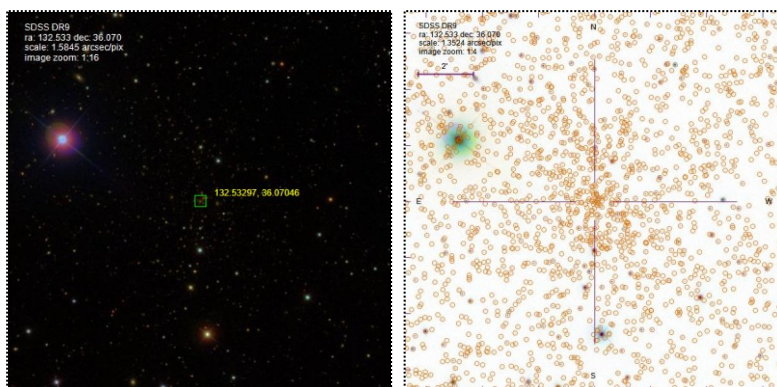
Эту работу продолжили другие авторы, и сейчас составлено более 600 каталогов скоплений галактик, а также ведется крупномасштабное картирование Вселенной на основе программы SDSS (Sloan Digital Sky Survey). На основе этой программы было идентифицировано более 132000 скоплений галактик и составлено несколько специальных каталогов.

Сегодня изучены богатые скопления галактик и установлено, что они имеют сильную концентрацию по отношению к своему центру, а число их членов колеблется от нескольких десятков до нескольких десятков тысяч. Богатые скопления галактик – это объекты, составляющие крупномасштабную структуру Вселенной, распределение скоплений галактик во Вселенной, их статистический анализ по физическим параметрам и их классификация на классы по этим параметрам, распределение галактик в скоплениях по камертону Хаббла и распределению галактик поля вне скоплений, эволюция этих объектов, т. е. родилось ли сверхскопление до его разделения на скопления галактик или наоборот, являются актуальными вопросами.

Если рассматривать Вселенную в большом масштабе, то в качестве ее основного элемента принимаются скопления галактик. Среди этих групп важнейшее место занимают богатые группы галактик. Гравитационные системы с высокой концентрацией галактик в центре и числом членов от нескольких сотен до нескольких тысяч называются богатыми скоплениями галактик.

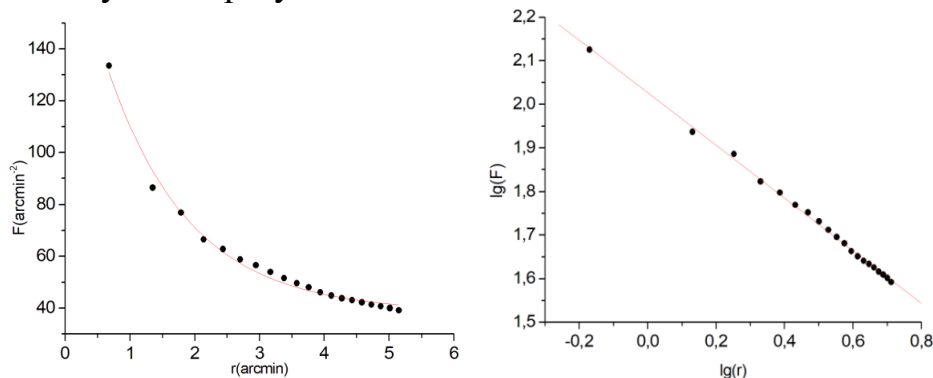
Вэнь З.Л., Хань Дж.Л., Лю Ф.С. Согласно каталогу «Новые богатые скопления галактик, идентифицированные в SDSS-DR12», опубликованному в 2015 году, был выбран «Каталог из 132684 скоплений галактик, идентифицированных в рамках Sloan Digital Sky Survey III». Из базы данных SDSS были получены изображения избранных богатых скоплений галактик и изучено их распределение галактик.





**Рисунок 1.** SDSS J085007.9+360414 в каталоге «Новые богатые скопления галактик, идентифицированные в SDSS-DR12»

В центре скопления, изображенного на рис. 1, видна сильная концентрация галактик, что указывает на то, что это богатое скопление. Мы проанализировали данные наблюдений скопления J085007.9+360414 из базы данных SDSS и обнаружили, что в видимом угловом радиусе до 5,14 угловых минут находится 1037 галактик. Это еще раз доказывает, что банда — богатая банда. По данным каталога «Новые богатые скопления галактик, идентифицированные в SDSS-DR12», богатство скопления равно 117 ( $R(L^*)=L_{200L}$  – средняя плотность рассматриваемой части скопления в 200 раз больше чем критическая плотность Вселенной, мы видим, что отношение яркости к яркости скопления) равно [4, 5]. Эти данные были подтверждены результатами нашего анализа. По результатам анализа мы изучили видимую поверхностную плотность галактик в скоплении. Мы добились следующих результатов.



**Рисунок 2.** Распределение кажущейся поверхностной плотности кластера J085007.9+360414

На рисунке 2 выше показана связь между видимым угловым радиусом скопления и видимой поверхностной плотностью. При этом, как только мы достигаем края скопления, мы видим, что число галактик резко уменьшается и значения видимой поверхностной плотности приближаются друг к другу. Полученные графики были проверены с помощью функции

распределения поверхностной плотности (1) и найдены параметры, характеризующие концентрацию галактик в скоплении.

$$F(r) = F_0 \cdot [1 + (r/r_0)^2]^{-\gamma} \quad (1)$$

Здесь  $F_0$  — центральная поверхностная плотность,  $r_0$  — радиус ядра, а  $\gamma$  — параметр концентрации. На основе анализа наблюдательных данных мы определили значения параметра концентрации, радиуса ядра скопления, поверхностной плотности в центре скопления и радиуса скопления 31 богатого скопления галактик [3]. Результаты представлены в таблице 1.

**Таблица 1**

№	WHL	$F_0$	$r_0$	$\gamma$	$r$
		arcmin <sup>2</sup>	arcmin		Mpc
1	J001051.4+290940	155,6814	0,1931	0,2462	64,83133
2	J002016.1+000446	78,4472	0,8172	0,3175	39,93664
3	J002712.5-193045	85,6719	0,574	0,2415	51,92664
4	J002800.9+244744	241,8503	0,231	0,3669	95,70856
5	J004118.5+252609	72,5782	0,2149	0,1508	33,12912
6	J004511.7+084111	40,9774	2,4684	0,3908	60,67221
7	J023127.6+065856	82,7679	0,5312	0,2619	39,62996
8	J023952.7-013419	386,835	0,1613	0,3569	69,69077
9	J083057.3+655031	117,9669	0,4227	0,2607	35,25415
10	J085007.9+360414	112,2458	1,1409	0,3528	72,88801
11	J090912.7+105829	203,5664	0,1259	0,2804	32,82574
12	J091609.0-002226	77,5699	1,4599	0,3187	63,51274
13	J091753.4+514338	386,4694	0,1315	0,3351	41,65644
14	J092048.3+302818	132,4687	0,1242	0,1712	55,7065
15	J094951.8+170711	133,7621	0,514	0,2986	80,53145
16	J100226.8+203102	109,7053	0,6505	0,251	65,07734
17	J105417.5+143904	160,7753	0,2526	0,2664	53,27194
18	J111450.3-121351	171,6555	0,1563	0,244	38,57717
19	J112358.8+212850	83,036	0,5638	0,2263	36,28152
20	J131129.5-012028	121,2828	1,0006	0,3661	35,42344
21	J131505.2+514903	149,471	0,516	0,3095	56,13162
22	J133238.4+503336	215,0104	0,1807	0,2719	54,18884
23	J133520.1+410004	173,7122	0,1898	0,2133	46,14839
24	J140102.1+025242	94,3957	1,1394	0,3554	46,47049
25	J144431.8+311336	236,0683	0,0694	0,2307	44,51954
26	J153940.5+342527	162,4453	0,248	0,238	45,1469
27	J155820.0+271400	221,4657	0,1008	0,2334	17,27088
28	J160319.0+031645	104,5931	0,5564	0,23	44,73952
29	J164019.8+464242	371,6218	0,0326	0,2324	45,74162
30	J164325.4+132236	132,0536	0,2691	0,2209	38,5243
31	J212823.4+013536	99,4691	1,4662	0,3122	77,25449

Рассмотрены коэффициенты корреляции связи определяемых параметров концентрации с другими физическими величинами. Это

привело к корреляции 0,5 с красным смещением скопления, 0,6 с радиусом ядра, 0,45 с радиусом скопления и 0,46 с расстоянием между скоплениями.

Согласно полученным результатам, показатель концентрации групп находился в пределах  $0,15 < \gamma < 0,39$ .

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## **РАЗРАБОТКА СТРАТЕГИИ УПРАВЛЕНИЯ ПЕРСОНАЛОМ НА ОСНОВЕ СИСТЕМЫ СБАЛАНСИРОВАННЫХ ПОКАЗАТЕЛЕЙ**

*Аннотация. В статье автор раскрывает сущность и индикаторы системы сбалансированных показателей, за счет которых обеспечивается оптимальное развитие организации. Помимо этого, автором раскрыты такие категории как «стратегия управления персоналом», выделены особенности разработки стратегии управления персоналом на основе системы сбалансированных показателей. Для повышения эффективности управления персоналом автором предлагается проводить оценку деятельности организации в сфере управления персоналом с учетом системы сбалансированных показателей.*

*Ключевые слова: персонал, управление персоналом, стратегия управления персоналом, система сбалансированных показателей, эффективность управления персоналом.*

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## **DEVELOPMENT OF A HUMAN RESOURCE MANAGEMENT STRATEGY BASED ON A BALANCED SCORECARD SYSTEM**

*Annotation. In the article, the author reveals the essence and indicators of the balanced scorecard system, which ensures the optimal development of the organization. In addition, the author reveals such categories as “personnel management strategy” and highlights the features of developing a personnel management strategy based on a balanced scorecard system. To improve the efficiency of personnel management, the author proposes to evaluate the organization’s activities in the field of personnel management taking into account the balanced scorecard system.*

*Key words: personnel, personnel management, personnel management strategy, balanced scorecard, personnel management efficiency.*

В настоящее время концепция управления при помощи сбалансированной системы показателей (ССП) является одной из самых популярных в мире. Ее формулировка в начале девяностых годов прошлого века пролила свет на то, как стратегическое управление может реализовываться в жизни, и подстегнула множество дискуссий по поводу эффективности ее применения.

Впервые положения концепции сбалансированной системы показателей (Balanced Scorecard — BSC или рус. СПП) были изложены в статье Р. Каплана и Д. Нортон «The Balanced Scorecard — Measures that Drive Performance» в журнале «Harvard Business Review» в 1992 г.

Целью создания СПП было нахождение такого набора показателей, который бы позволил высшему руководству организаций оценивать деятельность всего предприятия по отношению к достижению его целей. Следует отметить, что уже с 70-х гг. XX века в управленческой науке господствовала модель, представляющая организацию в виде сложной иерархической структуры, в которой основным направлением деятельности менеджеров становится стратегическое управление [1] (Borsch, 2016). В дальнейшем большой вклад в развитие концепции СПП внесли Л. Брейди, Р. Мамбу, Н. Чамберз, Р. Стата, Д. Фишман, А. Шнейдерман [2].

Сбалансированная система показателей (ССП) является одной из самых известных концепций управления предприятием. В данной статье мы проследим эволюцию системы с течением времени.

Сбалансированная система показателей (ССП) появилась в конце 1980-х – начале 1990-х гг. как инструмент стратегического управления динамично развивающимися компаниями.

В эти годы профессора Роберт Каплан и Дейвид Нортон (Гарвардская школа бизнеса) проводили исследования американских компаний с целью создания новой системы измерения эффективности деятельности компаний и выяснили, что почти все компании сильно ориентируются на финансовые показатели. При этом, в целях улучшения краткосрочных финансовых показателей производилось снижение расходов на обучение и мотивацию персонала, маркетинг, обслуживание клиентов, что затем пагубно сказывалось на общем финансовом состоянии компании.

Каплан и Нортон пришли к выводу, что базирование методики оценки эффективности предприятия исключительно на финансовых показателях не обеспечивает роста будущей экономической ценности организации (рис. 1).



Рис. 1. Система сбалансированных показателей\*

\*Источник: [3]

Установлено, что сотрудники часто не понимают своей роли в процессе реализации стратегии и не имеют мотивации повышать эффективность внедрения в жизнь долгосрочных корпоративных планов. Только четвертая часть топ-менеджеров получают вознаграждение, напрямую связанное со стратегией, а 60% организаций не связывают бюджет со стратегией.

В качестве способа решения выявленных проблем Нортоном и Капланом была разработана концепция сбалансированной системы показателей. Ее апробировали в ряде американских компаний, и в конце 1990 г. был подведен итог проделанной работы. Манифестом новой теории и нового управленческого подхода стала публикация статьи «Показатели, ведущие к эффективности» в журнале «Harvard Business Review».

Вскоре после того, как концепция ССП получила распространение в различных компаниях, обнаружилась ее пригодность не только для измерения достижений, но и для стратегического управления.

На волне успешной публикации своих материалов профессоры продолжили развитие концепции сбалансированной системы показателей и в 1996 г. выпустили книгу «Сбалансированная система показателей. От стратегии к действию». Затем в 2000 г. была выпущена вторая книга «Организация, ориентированная на стратегию», а в 2004 г. — третья книга «Стратегические карты» [4].

Затем консалтинговая компания Balanced Scorecard Collaborative, которую возглавляют Р. Каплан и Д. Нортон, разработала функциональные стандарты — минимальный набор требований, которому должно соответствовать программное обеспечение, поддерживающее корпоративную систему ССП. Дизайн системы ССП должен включать шесть обязательных элементов: перспективы, стратегические цели, показатели, целевые значения, причинно-следственные связи, стратегические инициативы.



В настоящее время сбалансированная система показателей — это динамично развивающаяся во всем мире эффективная методика стратегического управления.

Большая часть исследователей склоняется к тому, что необходимо проводить регулярный мониторинг бизнес-процессов в целях выявления факторов, которые негативно отражаются на развитии компании, а также для выработки стратегии развития. Система сбалансированных показателей (ССП) является одним из инструментов, который сказывается на формировании стратегии организации. Стоит обратить внимание на то, что существуют различные подходы к пониманию понятия «сбалансированная система показателей». Ее основной отличительный признак сводится к тому, что оценка производится на основе как финансовых, так и нефинансовых показателей.

Задачи, решаемые с помощью сбалансированной системы показателей предприятия:

- уточнение или обновление стратегии бизнеса;
- увязка повседневных рабочих процессов с долгосрочной концепцией развития;
- определение приоритетов для реализуемых и разрабатываемых проектов;
- соотношение бюджетных планов со стратегическими целями;
- отслеживание элементов бизнес-стратегии;
- измерение прогресса в достижении поставленных целей;
- распределение ресурсов, исходя из стратегических задач;
- обеспечение организационных изменений;
- сравнение эффективности различных бизнес-единиц;
- повышение понимания корпоративного видения и стратегии.

Цели	Задачи
Измерение результатов	Установление стратегических целей и KPI, сроков
Сравнение текущих показателей с запланированными	Распределение ответственности между должностными лицами
Корректировка задач и показателей в случае разрыва	Определение инструментов для достижения целей

Рис. 2. Цели и задачи ССП

\*Источник: [3]

ССП отличается от традиционных финансовых показателей тем, что она нацелена на получение представления о развитии компании в стратегическом разрезе и потому используется в рамках управления стратегией развития.

Сбалансированные системы ключевых показателей появились относительно недавно, но они быстро приобрели популярность и сейчас активно применяются различными организациями — коммерческими компаниями, некоммерческими и правительственными структурами [5].



Рис. 3. Сбалансированная система показателей

\*Источник: [3]

На сегодняшний день более половины крупных корпораций по всему миру опираются на BSC в стратегическом менеджменте, и в России эта система тоже нашла поддержку среди представителей бизнес-сообщества.

Одна из приоритетных целей стратегического развития предприятия сводится к тому, чтобы максимально заинтересовать персонал в достижении поставленной цели всей организации в целом. Все это отражается на устойчивости экономического развития. Помимо этого, представляется возможным определить уровень эффективного использования ресурсов, платежеспособности и т. д. Данный фактор необходимо рассматривать в качестве фундаментального, поскольку финансовые возможности организации оказывают свое воздействие на процесс достижения стратегических бизнес-целей.

Преимущество предприятия в отрасли, а также за ее пределами обеспечивается размером индикаторов, соответствующих оптимальным значениям. В области обеспечения финансовой состоятельности требуется независимость от внешних источников финансирования и достаточный уровень платежеспособности. Это достигается путем роста прибыли и, соответственно, рентабельности продукции. Увеличение положительных финансовых результатов обеспечивается путем роста выручки от продаж. Основными индикаторами роста продаж являются увеличение количества покупателей продукции и расширение рынков сбыта.

Увеличение объема продаж возможно достигнуть за счет проводимой работы с клиентами (при этом необходимо принимать во внимание маркетинговые исследования с учетом сегментации рынка). Помимо этого,

необходимо стремиться к сохранению и уже существующих клиентов, удовлетворению потребностей потребителей и т. д. В общем виде стоит отметить тот факт, что есть необходимость совершенствовать внутренние бизнес-процессы [4]:

- своевременность поставки продукции;
- стабильность сбытовой деятельности;
- повышение качества продукции;
- эффективность использования ресурсов.

Повышение рентабельности деятельности — одна из главных задач обеспечения эффективности системы управления персоналом, т. к. характеризует рост прибыли, которая является источником увеличения собственного капитала, расширения и модернизации производства, формирования бюджетных и внебюджетных ресурсов. Решение данной задачи достигается за счет таких стратегических направлений, как эффективность использования ресурсов и оптимизация запасов. Индикаторами данных направлений являются: фондоотдача, производительность труда, коэффициенты интенсивного и экстенсивного использования оборудования, размер оптимальной партии заказов, затраты на производство и исправление брака, наличие неликвидных активов [6].

Разработка ССП для компании состоит из трех этапов: провести стратегический анализ, определить стратегические цели и разработать, и ввести BSC-карту.

1. Стратегический анализ начинается с комплексного анализа организации. Рекомендуется проводить его с помощью двух методик: STEP-анализ и SWOT-анализ [7, с. 69–75].

STEP-анализ позволяет установить факторы влияния на бизнес компании и определить степень их вклада в реализацию стратегии. SWOT-анализ помогает оценить сильные и слабые стороны внутренней среды и возможности технологического и социально-экономического развития для приспособления бизнеса компании.

2. Формирование и группировка стратегических целей. С учетом результатов анализа необходимо поставить стратегические цели. Они лягут в основу корпоративной стратегии, на основе которой руководители смогут создать стратегическую карту. Для этого необходимо сформулировать не менее 10–12 стратегических целей, чтобы на их основе можно было построить BSC-модель. Затем необходимо объединить стратегические цели в группы по 4 ключевым направлениям.

- финансовые показатели. Цель ставится на основе того, какого результата нужно добиться, чтобы удовлетворить запросы инвесторов и потребителей;

- лояльность клиентов. Данная группа должна отвечать на вопрос: Какие ассоциации вызывает компания у заказчиков?

- бизнес-процессы. Что нужно улучшить в работе компании?
- обучение и развитие. Что нужно развивать, чтобы показатели бизнеса увеличивались.

3. Разработка стратегической карты. Для этого нужно выявить причинно-следственную связь между стратегическими целями. Предпринимателю необходимо построить цепочку целей по принципу «если... — то...». В результате совокупность связей образует стратегическую карту.

Внедрение ССП на предприятии позволяет:

1. Объединить сбалансированные показатели в единую концепцию.
2. Распределить систему по всей иерархической структуре организации.
3. Разработать систему контроля и оценки результатов [2].

Чтобы внедрить систему показателей в компанию, сначала интегрируют и контролируют внедрение отдельных мероприятий. Параллельно показатели BSC анализируют по текущей системе отчетности. Если ее нет или она не подходит под концепцию с новыми целями — запускают новую систему отчетности. В результате ССП встраивают в систему HR и управления кадрами.

ССП не должна существовать отдельно от предприятия. Она должна дополнять другие инструменты стратегического планирования: систему финансирования, которая предоставит денежные показатели для грамотного распределения ресурсов и финансового планирования и систему мотивации сотрудников. Выполнение KPI по ССП дает право на получение бонусов организации. Зная о стратегических целях и действиях, направленных на их выполнение, менеджер получает инструменты самоконтроля.

Каскадная интегрированная система стратегических целей направлена сверху вниз от высшего руководства на периферию. Целевые параметры транслируют конкретику, адаптируются под отдельные структурные единицы компании. Каждый отдел, подразделение и департамент компании получают свою систему сбалансированных показателей. Иногда под стратегическую карту подгоняют даже индивидуальные планы каждого отдельного сотрудника — для большей эффективности [3].

Вертикальное распределение показателей помогает повысить качество и усилить вес стратегического управления.

Внедрение инструментов контроля и оценки. Для оперативного контроля разрабатывают и внедряют интерактивные таблицы, но они недостаточно раскрывают нужные показатели. Чтобы сравнить текущие результаты с планами и выяснить причины отклонений, есть смысл использовать программные инструменты автоматизации.

Примером такого инструмента является CRM-система, которая позволяет установить основные показатели, выявить причины отклонения и быстро принять меры по их устранению. Если в результате компания получает отклонение от KPI, то цели или их значение нужно корректировать. Цели, которые стоят ниже в иерархии, пересматривают в контексте соответствия целям верхнего уровня.

Проект не заканчивается созданием ССП. Чтобы превратить разработанную систему в действующий механизм, необходима реализация. Внедрение сбалансированной системы показателей означает получение информации, необходимой для расчета показателей ССП, и введение положений, обеспечивающих их выполнение.

Внедрение показателей ССП в регулярную управленческую отчетность отражают в цифрах в соответствующих документах, которые менеджеры компании получают в конце каждого месяца, квартала и года. Внедрение показателей ССП в систему планирования и финансирования позволяет включить эти показатели в планы и бюджеты, которые регулярно разрабатываются, утверждаются и принимаются.

В результате проект по внедрению ССП в организации не сильно отличается от других проектов, направленных на проведение значительных изменений в компании. Интегрированное планирование, внедрение управленческого учета или оптимизация определенных процессов также приводят к улучшению показателей компании. Работа по разработке и внедрению ССП требует высокого уровня мотивации участников, вовлеченности и воли руководства компании, отличного уровня организации проекта и доступа к необходимым человеческим и материальным ресурсам. Эти компоненты являются предпосылками успешного внедрения системы BSC на предприятии [5].

Повышение качества продукции, эффективности использования ресурсов, рост производительности труда непосредственно связаны с уровнем квалификации персонала. Стратегия управления персоналом должна быть нацелена на повышение конкурентоспособности работников [8]. Индикаторами данного стратегического направления являются доля квалифицированных сотрудников в общей численности и затраты на обучение персонала.

Таким образом, можно сказать о том, что развитие предприятия находится в зависимости от системы управления персоналом. Есть необходимость постоянно проводить мониторинг ключевых индикаторов системы сбалансированных показателей для того, чтобы обеспечить последующее развитие организации и ее персонала.

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## **ТЕМА ВОЙНЫ В ПРОИЗВЕДЕНИЯХ С ФАНТАСТИЧЕСКИМ ДОПУЩЕНИЕМ: НА МАТЕРИАЛЕ РОМАНОВ Г. УЭЛЛСА**

*Аннотация. Данная статья посвящена изучению и анализу темы войны в произведениях великого английского писателя-фантаста Г. Уэллса. В статье раскрывается образ войны в мире фантастики, который тесно переплетается с реальностью и представляется описание войны с точки зрения Г. Уэллса.*

*Ключевые слова: война, военные действия, ядерная война, конфликт, развитие технологий, фантастика, фантастическое допущение, инопланетное вторжение, пришельцы, разрушение, уничтожение.*

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## **THE THEME OF WAR IN WORKS WITH A FANTASTIC ASSUMPTION: BASED ON THE NOVELS OF H. WELLS**

*Annotation. This article is devoted to the study and analysis of the theme of war in the works of the great English science fiction writer H. Wells. The article reveals the image of war in world of fantasy, which is closely intertwined with reality and presents a description of the war from the point of view of H. Wells.*

*Key words: the war, hostilities, nuclear war, nuclear weapons, conflict, technology development, science fiction, fantasy assumption, alien invasion, aliens, destruction.*

Война – это сложное социально-политическое явление, которое совершало и совершает человечество на протяжении всей истории.

Психологи Э. Дурбан и Дж. Боулби и в том числе З. Фрейд утверждают, что война – это форма человеческой агрессии и ненависти и полностью изжить войну невозможно, доколе продолжают существовать эти инстинкты в человеке [12].

По суждениям же некоторых милитаристов, как Франц Александер, так называемые мирные времена или периоды на самом деле являются

периодами приготовления к предстоящей войне, которая случится в будущем [1].

Существуют множество мнений и предположений о причине возникновения военных движений, которые чаще всего направлены на политиков, на социальные факторы, как увеличение населения, нехватка сырья и т.д. Однако важность в том, что изобретение новейших современных технологий и оружий, носящие в себе разрушительный характер колоссального объема и размера, приводит к тому, что военное искусство на сегодняшний день достигла пика своего развития, которая способна стереть всё человечество с лица земли. Таким образом, мы можем сказать, что тема войны продолжает оставаться актуальным среди людей во всех сферах и во всех отношениях и до сих пор волнует многих литераторов разного направления, жанра, течения, в том числе и фантастов.

Упоминая о фантастике прежде всего стоит отметить, что она представляет собой понятие довольно непростое и обширное. Во-первых, фантастика многообразна и выделение фантастики как отдельно взятого жанра или направления в литературе весьма сложно и мнения специалистов по этому поводу расходятся, поскольку элементы фантастического встречаются и в рамках романтизма, реализма, модернизма, поэтому называть фантастику особым методом тоже неуместно.

К примеру, русский писатель-фантаст Борис Стругацкий отметил, что фантастику делает фантастикой применение «специфического приёма» - введение в произведение элемента необычайного [5]. В данном случае, фантастика рассматривается как приём в литературе, иными словами, литература, которая дополнена фантастическим допущением, что является весьма уместным.

Популярность фантастики позволяет ей выделить из себя отдельные жанры и поджанры, как: научная фантастика, космическая фантастика и её виды, как планетарный роман, космическая опера и космическая одиссея, боевая фантастика, социальная фантастика, фэнтези, мистика и ужасы, а также киберпанк, апокалиптика, постакалиптика и многие другие.

Тема войны в каждом жанре и поджанре фантастики выступает весьма разнообразной, так как каждый писатель воспринимает ее по-своему. Места же, где происходят военные события выходят за рамки воображения. Ими могут быть воздух, земля, подземелье, космос, другие планеты или другие вымышленные миры, море, дно моря и т.д. Участниками же военных действий могут быть не только люди, но и инопланетяне, монстры, разумные животные, неизвестные существа или роботы.

Великий английский писатель научной фантастики Г. Уэллс, описывая военные конфликты в своих произведениях касался и социально-нравственных, политико-философских проблем общества.

Стоит отметить, что писатель первый среди фантастов упоминает об инопланетной атаке, о марсианах, что подчеркивает непревзойденность его творения.

Идея у Уэллса появилась с ознакомлением астрономических взглядов о красной планете и о возможных там обитателях. Однако у Уэллса возникла мысль о том, а что если эти неизвестные нам создания окажутся вовсе недружелюбными, что и речи не может быть о переговорах или соглашениях, а что, если они намерены захватить Землю, и человечество это для них просто сладкая еда.

Таким образом Г. Уэллс придумывает сюжет с инопланетным вторжением, которые будучи намного продвинутыми в плане научного и технического развития, сумели захватить Землю в течение трех недель.

Вторжение было вовсе неожиданным для человечества, как и любые военные начала в истории, что говорит о неготовности людей к катастрофам.

Массовое истребление людей со стороны пришельцев осуществлялась с помощью лазера, еще неизвестного для времени Уэллса, так что это является еще одной новизной автора и неким предсказанием или идеей для создания данного устройства.

А победителем в таком хаосе окажется сама природа, сама Земля, вопреки всем придуманным оружием и технологиям человечества, которые были бесполезными при сражении с пришельцами.

Вздыхнув наш воздух, пробовав нашу воду, жадно испив человеческую кровь, марсиане уже с первого же дня приезда в нашу планету, где царит своя биологическая атмосфера, были обречены на смерть.

Г. Уэллс, как доктор биологических наук, прекрасно описывает иммунную систему, которая присуща всем живым существам, также необладательность организма марсиан вынести земные бактерии и микробы, включая вещества в составе человеческой крови, что способствовало необычной кончине пришельцев.

Однако не победа является главной идеей автора, а показать не сплоченность людей, изобразить отсутствие взаимопомощи, дружного союза между людьми в момент трудной ситуации.

Кроме этого, автор утверждает, что люди тоже ничем не отличаются от марсианских завоевателей в плане захвата и разрушения, тем самым вспоминает об аборигенах. *«...прежде чем судить их слишком строго, мы должны припомнить, как беспощадно уничтожали сами люди не только животных... но и себе подобных представителей низших рас. Жители Тасмании были уничтожены до последнего за пятьдесят лет истребительной войны, затеянной иммигрантами из Европы. Разве мы сами уж такие апостолы милосердия, что можем возмущаться марсианами, действовавшими в том же духе?»* [8].

Следующее произведение Г. Уэллса «Война в воздухе», написанное в 1907 году поражает своим предсказанием первой и второй мировой войны. *«Я вас предупредил. Проклятые вы дураки»* - именно эту эпитафию Г. Уэллс позже желает, чтобы написали в следующих изданиях его книг [10].

В произведении говорится о развитых технологиях передвижения, о воздушных сражениях, о бомбардировке городов, монорельсах и мы даже имеем конкретное представление о враге, который и в действительности оказалась фашистская Германия.

Романы Уэллса были строго запрещены в Германии в 1933 годы и даже имя Г. Уэллса было включено в популярную книгу фашистов – «Черная книга» [9].

В «Войне в воздухе» также немаловажна идея о том, что с появлением летательных аппаратов, мы теряем значимость понятий фронта, тыла, когда можно массово уничтожить всё живое и неживое прямо с высоты. Роман «Освобожденный мир», то ли благодаря интуиции Уэллса, то ли по конкретным ему известным сведениям, тоже в свою очередь считается предсказывающим.

Исследователь творчества Г. Уэллса, историк научной фантастики, доктор филологических наук и профессор Ю. Кагарлицкий говорил: *«вряд ли для самого Уэллса «Освобожденный мир» был фантастикой. Это была книга конкретных предсказаний»* [4].

В этом произведении автор предсказывает изобретение ядерного оружия, возможность начала ядерной войны, которая несет уже более серьезные последствия, как излучение.

В романе атомная бомба, которую сбрасывали с самолета и перевозили в ящиках, похожих на гроб, имеется у всех государств мира, что говорит насколько непредсказуемым и ужасным могут быть войны с их применением, в особенности в руках безнравственных и жестоких людей.

Взрыв атомной бомбы в произведении Уэллса предотвращается, после чего человечество строит лучший мир, объединив все страны мира в единое государство. Для Уэллса настоящего мира можно добиться, построив всемирное единое государство и эту свою точку зрения он неоднократно просвечивает во многих своих произведениях. Однако все мы прекрасно понимаем, что не всегда удастся предотвратить атомную угрозу, как и в «Освобожденном мире» и замечательно помним, что творилось в Хиросиме и Нагасаки.

Таким образом, не смотря на главную мысль автора и какой бы бессмысленной не считалась война и насколько бы большим и сильным не было желание её предотвратить, мы понимаем, что в существующем на данный момент мире избежать трагедий всё ещё не удаётся и построить так называемого идеального единого мира в реальности фактически невозможно.

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## **УЛЬТРАЗВУКОВОЕ ИССЛЕДОВАНИЕ ТУННЕЛЬНОГО СИНДРОМА**

*Введение. Ультразвуковое исследование туннельного синдрома – это диагностический метод, который позволяет оценить состояние срединного нерва и окружающих его структур в области запястья. Это исследование помогает выявить нарушения в проведении нервных импульсов, связанные с сдавлением нерва в карпальном канале. Ультразвуковое исследование туннельного синдрома проводится с помощью специального датчика, который подается по поверхности кожи вдоль нерва. Во время исследования врач может просить пациента сделать некоторые движения кистью или пальцами, чтобы оценить функцию нерва. Ультразвуковое исследование туннельного синдрома является безболезненным, безопасным и доступным методом диагностики, который может помочь определить степень тяжести заболевания и выбрать оптимальный способ лечения.*

*Ключевые слова: туннельный синдром, УЗИ, сдавление нерва, диагностика.*

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## **ULTRASOUND EXAMINATION OF TUNNEL SYNDROME**

*Introduction. Ultrasound examination of tunnel syndrome is a diagnostic method that allows you to assess the condition of the median nerve and its surrounding structures in the wrist area. This study helps to identify disorders in the conduction of nerve impulses associated with nerve compression in the carpal canal. Ultrasound examination of tunnel syndrome is carried out using a special sensor that is fed along the skin surface along the nerve. During the examination, the doctor may ask the patient to make some movements with the brush or fingers to assess the function of the nerve. Ultrasound examination of tunnel syndrome is*



*a painless, safe and affordable diagnostic method that can help determine the severity of the disease and choose the optimal treatment method.*

*Keywords: tunnel syndrome, ultrasound, nerve compression, diagnostics.*

Туннельный синдром запястья вызывается сдавлением срединного нерва запястья, когда нерв проходит через узкий костно-фиброзный канал вместе с сухожилиями сгибателей девяти пальцев. Существует много потенциальных причин ТСЗ, таких как неправильное сращение после перелома дистального отдела лучевой кости, ревматический синовит, амилоидоз, диабет, беременность или опухоль мягких тканей. Но в большинстве случаев ТСЗ является идиопатическим. Традиционно диагноз синдрома запястного канала устанавливается на основании анамнеза, клинических симптомов и физического осмотра. Клинические данные включают онемение и нарушение чувствительности области иннервации срединного нерва, парестетическую брахиалгию ночную, атрофию мышц тенара, иногда отек ладонной стороны запястья, а также результаты провокационных тестов, таких как маневр Фалена или симптом Тинеля. Электрофизиологические (ЭП) тесты полезны, когда диагноз неясен, имеются сопутствующие неврологические расстройства, такие как радикулопатия или полинейропатия, или для количественной оценки тяжести заболевания. Однако инвазивность и частота ложноотрицательных результатов тестов на ВП привели к поиску других, менее инвазивных и более удобных вариантов диагностики.

**Динамическое УЗИ для оценки СКЗ**

В запястном канале субсиновиальная соединительная ткань (ССТ) соединяет сухожилия с сухожилиями и сухожилия со срединным нервом. ССТ играет важную роль в уменьшении сопротивления скольжению между сухожилиями и поддержании притока крови к движущимся сухожилиям. Сообщалось, что ССТ у пациентов с идиопатическим СКЗ показывает пролиферацию тканей, такую как дегенерация пучков коллагена, фиброз и отек, а также утолщение гладких мышц сосудов и образование тромбов, но без каких-либо воспалительных клеток. Кроме того, было показано, что ССТ пациентов с СКЗ имеет пониженную вязкоэластичность по сравнению со здоровыми субъектами. Эти изменения могут повлиять на динамику и морфологию срединного нерва во время движений сухожилий сгибателей. В последние годы напряжение срединного нерва, обусловленное движением пальцев и запястья, привлекает внимание как фактор риска развития синдрома запястного канала.

С целью уточнения морфологических изменений и смещений срединного нерва при скольжении сухожилия сгибателя у больных СКЗ был введен поперечный динамический анализ. В этом методе датчик размещается параллельно складке запястья в проксимальной части

запястного канала. Испытуемому предлагается имитировать хватательное движение от разгибания пальца до его сгибания (до тех пор, пока кончик пальца не коснется ладони) при записи ультразвукового динамического изображения сухожилий, срединного нерва и ССТ. Конечное положение каждого положения разгибания и сгибания является целью оценки изображения, а также отслеживаются морфология и смещения срединного нерва. Оцениваются площадь срединного нерва, окружность, соотношение сторон и округлость. Округлость — это признак, который измеряет сложность формы на основе площади и периметра и определяется как  $(\text{квадрат окружности срединного нерва}) / (\text{площадь срединного нерва} \times 4\pi)$ . Поэтому в случае идеального круга степень округлости становится равной единице. Каждый параметр сравнивался между здоровыми субъектами и пациентами с СЗК, а также между разгибанием и сгибанием пальцев. Как для положения разгибания, так и для сгибания пальцев наблюдались значительные различия между здоровыми субъектами и пациентами с СЗК в области срединного нерва, окружности и округлости. Что касается характера деформации у здоровых испытуемых, то при сгибании пальца соотношение сторон уменьшалось, а округлость увеличивалась. С другой стороны, соотношение сторон увеличивалось, а округлость уменьшалась у пациентов с СЗК во время сгибания пальцев. Было обнаружено, что у здоровых людей наблюдаются морфологические изменения: нервы уплощаются при сгибании пальцев, а у пациентов с СЗК становятся более похожими на круг.

Эти факты показывают, что у здорового человека срединный нерв может быть морфологически деформирован за счет движения сухожилия, сопровождающего движение пальца. Изменение площади поперечного сечения также принято считать перемещением срединного нерва в продольном направлении. С другой стороны, у пациентов с ССТ видно, что морфологические изменения срединного нерва, связанные с движением пальцев, невелики. Динамическое УЗИ позволяет обнаружить эти изменения подвижности и гибкости срединного нерва при патологических состояниях.

**Вывод.** Было рассмотрено последние достижения в ультразвуковой оценке СЗК. Ультразвуковая визуализация, особенно динамическая визуализация, позволила изучить патофизиологию СЗК. То есть характер морфологических изменений срединного нерва вследствие движения пальцев у пациентов с ССТ отличается от такового у здоровых людей. Кроме того, у пациентов с СЗК снижается модуль упругости срединного нерва, а у пациентов с СЗК увеличивается напряжение сдвига ССТ относительно соседних сухожилий. В настоящее время этот анализ требует работы после получения изображения, но ожидается, что в будущем каждый параметр можно будет измерять более автоматически с использованием программного обеспечения на ультразвуковом

оборудовании. Ожидается, что на основе этих критериев оценки будут выяснены различные причины СКЗ и что в будущем ультразвуковые измерения будут применяться для выбора лечения и оценки результатов у пациентов с СКЗ.

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**РАЗРАБОТКА МОДЕЛЕЙ И АЛГОРИТМОВ ПРИНЯТИЯ  
РЕШЕНИЙ В ЗАДАЧАХ ТЕХНИЧЕСКОГО ОБСЛУЖИВАНИЯ И  
РЕМОНТА ВС НА ОСНОВЕ ИСПОЛЬЗОВАНИЯ  
ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ**

*Аннотация. В данной статье представлена подробная информация по вопросам технического обслуживания и ремонта воздушных судов с использованием информационных технологий. Кроме того, особое внимание уделяется разработке моделей и алгоритмов решения этих задач.*

*Ключевые слова: технология, воздушного судна, авиадвигатель, техническое обслуживание, ремонт, модель, алгоритм, самолет, мастерская, управление.*

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**DEVELOPMENT OF MODELS AND ALGORITHMS FOR  
DECISION-MAKING IN AIRCRAFT MAINTENANCE AND REPAIR  
TASKS BASED ON THE USE OF INFORMATION TECHNOLOGIES**

*Abstract. This article provides detailed information on aircraft maintenance and repair using information technology. In addition, special attention is paid to the development of models and algorithms for solving these problems.*

*Keywords: technology, aircraft, aircraft engine, maintenance, repair, model, algorithm, aircraft, workshop, management.*

## **ВВЕДЕНИЕ**

В настоящее время на большинстве авиационных производственных предприятий пользуется отечественным методом организации при технической обслуживании и ремонта воздушных судов и авиадвигателей. Это – трата времени на собрания, совещания, разборы и обсуждения при принятии какое-либо решения в задачах технического обслуживания и ремонта воздушных судов. Естественно, это трата от 20% до 40% полезного времени, вследствие чего увеличивается длительность цикла технического обслуживания или ремонта и приводит к постоянному росту расходов себестоимость услуги по ТОиР. Отечественная и международная практика работ многих авиационных предприятия свидетельствует о том, что идёт интенсивная борьба за снижение расходов на ТОиР для повышения эффективности эксплуатации воздушных судов.

Основной целью диссертационное исследование представляет собой деятельность соискателя, направленную на развитие и совершенствование своих способностей, повышение эффективности использования воздушных судов и обеспечения безопасности полётов, существенно связанных с состоянием функциональных систем воздушных судов, повышение требований к безопасности и регулярности полётов, увеличивают затраты на их техническое обслуживание и ремонт, что требует поиска и внедрения новых эффективных методов технологических процессов технического обслуживания авиационной техники.

В связи с этим тема диссертационной работы является актуальной для эксплуатации гражданской авиации и имеет практическую значимость повышения конкурентоспособности отечественных предприятий.

## **ЛИТЕРАТУРНЫЙ АНАЛИЗ И МЕТОДОЛОГИЯ**

Комплекс мероприятий по техническому обслуживанию, определяемых системой технического обслуживания и ремонта воздушных судов, условно делится на две группы:

- 1) плановые профилактические работы, связанные с предупреждением отказов и неисправностей;
- 2) дополнительные работы, направленные на восстановление работоспособного состояния ВС в случае обнаружения отказа или неисправности.

Основным требованием, предъявляемым к процессу ТО в целом, является обеспечение готовности ВС к выполнению его основных функций с наименьшими затратами.

Использование современных информационных технологии позволяют добиться повышения эффективности технического обслуживания и ремонт на предприятиях. Обладая этой информацией руководство предприятия имеет возможность целенаправленно работать по увеличению производительности, уменьшению производственных потерь и

строго контролировать эффективность использования вложенных в повышение эффективности производства финансовых средств.

Сегодня все больше компаний включается в борьбу за повышение своей операционной эффективности, и они имеют в этой области колоссальный потенциал роста.

Каждая авиакомпания имеет производственные цеха и отделы или подразделения, обслуживающие самолеты западного или восточного производства.

Республика Узбекистан обладает уникальным потенциалом по использованию и ремонту современной авиатехники. Авиация играет важную роль в интеграции Узбекистана, расположенного вдали от морских путей, в мировое сообщество, поэтому проводимые в отрасли реформы очень важны. Законы большинства штатов разрешают операции воздушного транспорта только в том случае, если вся авиационная продукция соответствует требованиям Международная организация гражданской авиации (ИКАО от англ. ICAO - International Civil Aviation Organization).

Например, ООО «Uzbekistan Airways Technics» является структурным подразделением АО «Uzbekistan Airways» и имеет более чем 98-летний опыт работы в сфере технического обслуживания и ремонта (ТОиР) воздушных судов, двигателей и комплектующих. Современный комплекс ООО «UAT» выполняет ТОиР воздушных судов и их компонентов, таких как Boeing 737/747/757/767/787, Airbus 300/310/318/319/320/321.

С приобретением АО «Uzbekistan airways» техники западного производства, возникла необходимость освоения их технического обслуживания и в 1997 году на базе завода был создан центр по техническому обслуживанию самолетов западного производства. Уже в 1998 году был выполнен первый в Центральной Азии C-check на одном из самолетов Airbus 310. С 1999 года выполняется техническое обслуживание в объеме C-check воздушных судов (ВС) Boeing 767 и ВАе146/AVRO146-RJ, а с 2000 года – ВС Boeing 757.

В настоящее время в состав центра технического обслуживания (ЦТО) самолетов западного производства (СЗП) входят следующие цеха и отделы:

- **Цех подготовки производства (ЦПП)** – предназначен для выполнения работ по обеспечению производственных подразделений ЦТО СЗП, занятых базового обслуживания (БО) и линейного обслуживания (ЛО) СЗП и КЗП, необходимыми производственными условиями, наличием и поддержанием в исправном состоянии всего необходимого инструмента, наземного и специального оборудования, проведения учета их получения, хранения и обслуживания, выполнения ТО УВЗ, развития производственных площадей и поддержания их в пригодном для использования состояний.



• **Отдел планирования и контроля производства (PPCD)** – предназначен для планирования объемов и сроков выполнения всех видов ТО на самолетах и компонентах западного производства. Также предназначен для планирования модификаций, доработок, устранения отложенных дефектов, замены агрегатов с ограниченным ресурсом, отслеживания материальных ресурсов для данных видов работ, в соответствии с программами ТО Заказчика, требованиями Производителей авиационной техники (АТ) и Авиационных Администраций с учетом расписания полетов, загрузки производственных мощностей и персонала, наличия оборудования и инструмента, трудоемкости работ, условиями подписанных контрактов. Выполняет ежедневный контроль полноты и соответствия ТО, внесение в компьютерные программы данных по самолетам и компонентам ЗП всей необходимой информации, связанной с их ТО. Хранит записи в компьютерной системе и других носителях информации (твердых копиях), а также производит сбор, обработку, архивацию и хранение статистических данных о трудоемкости выполненных работ по ТО (сроки планового начала, завершения, длительности, последовательности). Вносит необходимые изменения в самолетные и двигательные формуляры, подготовку материалов для продления сертификатов лётной годности самолётов. Совместно с Заказчиком ведет необходимый контроль полноты и сроков выполняемых работ на ВС и компонентах.

• **Отдел комплектации (ОК)** – предназначен для подготовки производства по вопросам заказов, отслеживания поставок от Заказчиков и Поставщиков, получения со складов, выдачи в производство, учета и анализа расходования, временного хранения в расходных кладовых: запасных частей, расходных материалов и компонентов, согласно потребностям, для бесперебойного технического обслуживания СЗП и компонентов, ТО которых осуществляет ЦТО СЗП.

• **Цех линейного обслуживания (ЛО)** – предназначен для выполнения оперативных форм ТО на стоянках в международном аэропорту «Ташкент» и других линейных станциях самолетов Airbus, Boeing АО «Uzbekistan airways», транзитного обслуживания СЗП других авиакомпаний, устранения неисправностей АТ (при возможности их устранения во внеангарных условиях), обеспечения готовности воздушных судов к вылету в соответствии с расписанием полетов.

• **Handling** – предназначен для выполнения круглосуточного оказания бытового сервисного обслуживания ВС АО «Uzbekistan Airways», в соответствии с требованиями эксплуатационной документации, а так же с договорами, подписанными между UAT и авиакомпаниями, выполняющими транзитные и чартерные рейсы через ООО «Islom Karimov nomidagi Toshkent Xalqaro Aeroporti». Выполняет сервисное обслуживание

(внутренняя уборка/мойка) транзитных самолетов, внутреннюю и наружную мойку ВС, химическую чистку ковровых покрытий ВС, первоначальную подготовку расходных материалов и мягкого бытового имущества.

• **Цех базового обслуживания (БО)** – предназначен для выполнения периодических базовых форм ТО СЗП, а также выполнения трудоемких работ по доработкам и модификациям, устранению значительных/трудоемких дефектов в системах.

• **Цех ТО и ремонта планера (ТОиРП)** – предназначен для технического обслуживания СЗП согласно одобренному перечню, проведения работ по ремонту планера и его элементов, изготовлению деталей, диагностики методами неразрушающего контроля. Также цех предназначен для организации и координации работ, выполняемых в специализированных цехах с использованием специальных технологических процессов.

• **Цех технического обслуживания и ремонта компонентов западного производства (ТОиР КЗП)** - выполняет техническое обслуживание и ремонт самолётных компонентов западного производства в объемах одобренной сферы деятельности. Обеспечивает оперативное и качественное устранение дефектов, выявляемых в эксплуатации и при выполнении ТОиР компонентов СЗП.

• **Цех покраски** предназначен для обеспечения локального ремонта и восстановления лакокрасочного покрытия ВС и его съемных деталей, включая смывку лакокрасочного покрытия и полную перекраску ВС в ангарных условиях.

Задачи ЦТО СЗП выполнение всех видов ТО ВС в соответствии с одобренной сферой деятельности ООО «УАТ». Выполнение восстановления ЛКП, покраски ВС и его компонентов, ТО и ремонта компонентов, перечень которых входит в одобренную сферу деятельности УАТ.

Функции ЦТО СЗП выполнять техническое обслуживание СЗП, техническое обслуживание и ремонта компонентов СЗП в объемах одобренной сферы деятельности. Обеспечивать оперативное и качественное устранение дефектов, выявленных при выполнении ТО СЗП и ремонта КЗП. Поддерживать в рабочем состоянии систему качества, как средство, обеспечивающее соответствие выполняемых функций в процессе ремонта и технического обслуживания авиационной техники, требованиям, установленным «Руководством по качеству».

Разработка моделей и алгоритмов принятия решений в задачах технического обслуживания и ремонта ВС на основе использования информационных технологий является одним из начальных этапов оптимизации технического обслуживания и ремонта ВС. Необходимым

условием для организации на авиационных производственных предприятиях использования информационных технологий является создание единого информационного пространства (комплекса), с помощью которого все автоматизированные системы управления авиационным предприятием, а также отделы, цеха и подразделения могут оперативно и своевременно обмениваться информацией.

Одним из самых главных условий реализации автоматизированные системы управления по организации работ по ТОиР ВС (цифрового производства) с использованием информационных технологий (модель и алгоритм при принятии решений) является функционал, который позволит автоматически собирать данные о выполняемой работе всех производственных объектов (воздушного судна, наземного оборудования, инструменты, рабочие места работников предприятия, снабжение (обеспечения запасными частями и расходными материалами) вспомогательные сервисные службы, отделы, лаборатории и т.п.) в единое информационное пространство (комплексная база), в целях оперативного управления производством при техническом обслуживании и ремонта воздушных судов в авиационном предприятии.

Пример такого функционала является умная система мониторинга работ по ТОиР, которая позволяет контролировать работу производственного персонала в режиме реального времени, выполнять классификацию и анализ его работы, проводить оперативную диспетчеризацию цеховых и сервисных служб, передавать информацию на информационное пространство (комплексную базу), выпускать отчетную информацию, взаимодействовать с системами планирования и управления производством. Главным объектом для автоматизированные системы управления авиационным предприятием является воздушное судно. Это должно являться отправной точкой во внедрении новой программы планирования и управления производством. В первую очередь в этом направлении должна осуществляться соответствующая автоматизация процессов.

Существует множество факторов, влияющих на выбор оптимальной вариант стратегии при техническом обслуживании воздушных судов, а именно отказы или же дефекты, которые обнаружены в процессе дефектации, является способность выполнять свой функциональный потенциал в надлежащем качестве и объеме. Цель стратегии данной системы заключается в том, чтобы не дать значительные потери времени на другие работы и минимизировать расходы, снизить себестоимости обслуживаемого ВС, а также обеспечить надежность и качественно выполнять работы по ТОиР ВС. Для этого нужна будет учесть охватывать все обслуживающие службы, отделы, цеха и вспомогательные службы, а также весь рабочий процесс связанные с техническим обслуживанием ВС.

Для интегрированного управления техническими обслуживаниями, ремонтными работами, затратами, контроля запасов и закупок ЗИП созданы, разработаны более распространённые нижеперечисленные программные продукты:

1. AMOS Maintenance and Procurement (рус. АМОС Техническое обслуживание и Закупки) от компании СпеТес предназначен для планирования и контроля технического обслуживания, учёта запасных частей, инструментов и принадлежностей, управления освидетельствованиями оборудования, и заказа ЗИП из удалённых площадок в центральных офисах. Программная система AMOS M&P была разработана специально для компаний и организаций с географически распределёнными производственными площадками и офисами. Другими словами, там, где техническое обслуживание, контроль запасов и реквизиция осуществляются на одном или нескольких местных предприятиях, а планирование закупок и перевозок осуществляется в центральном офисе (штабе).

Программа AMOS M&P является частью бизнес-решения AMOS Business Suite (рус. АМОС Бизнес Сьют). AMOS Business Suite - это комплексное программное решение на базе ОС Windows, способное реализовывать большинство ежедневных функций управления предприятием (ERP), возникающих в средних и крупных организациях.

Модуль AMOS Maintenance and Procurement (M&P) предоставляет подключенный, стандартизированный и глобальный обзор ключевых операций на флоте судов:

Повышенная безопасность

Стандартизация

Снижение стоимости

Безопасность судов, передовые методы технического обслуживания, оптимизированные закупки, доступность информации в режиме реального времени, беспрепятственная передача данных и экономия за счет масштаба являются основными движущими силами этого инновационного решения с добавленной стоимостью:

Сквозной процесс закупок

Управление логистикой

Бюджетный контроль

Управление техническим обслуживанием

Техническое обслуживание по состоянию

Составление отчетов

Управление запасами

Рабочие процессы

Аудит и измерения.

2. Программный продукт HubEx (рус. ХабЕкс) от компании Смарт-Сервис является FSM-платформой и предназначена для управления

мобильными сотрудниками, автоматизации сервисных процессов, и в целом выполнения полного цикла обслуживания удалённых активов, от принятия оборудования в обслуживание до управления клиентскими сервисными заявками.

Основные функциональные возможности продукта HubEx:

- Управление заявками,
- Автоматизация диспетчерской,
- Управление сервисом оборудования,
- GPS-контроль мобильного персонала,
- Электронный паспорт оборудования,
- Help Desk, CRM и BPM в единой системе.

Таким образом интернет-сервис HubEx даёт бизнесу возможность контролировать качество и надёжность предоставляемых услуг, осуществлять учёт нормативов соглашений об уровне сервиса и сервисных контрактов (SLA), контролировать заданное время реакции и выполнения работ.

Применение облачного программного обеспечения HubEx позволяет достичь следующих положительных эффектов для бизнеса:

- Повышение эффективности использования рабочего времени и качества принятия решений,
- Оптимизация бизнес-процессов эксплуатации и сервисного обслуживания физических активов,
- Сокращение временных издержек на коммуникации внутри компании,
- Перевод бумажных сервисных документов (сервисный акт, заказ-наряд) в электронный вид,
- Сокращение времени простоя оборудования и издержек на сервисное обслуживание,
- Снижение расходов на диспетчеризацию заявок,
- Стандартизация процессов инвентаризации имущества и оборудования.

3. Seascope - это российская система для управления эксплуатацией сложной техники, автоматизирующая планирование технического обслуживания и оптимизацию управления материально-техническим обеспечением.

Программный продукт Seascope (рус. Сискейп) от Sea Project сочетает управление оборудованием (EAM) с управлением техническим обслуживанием и ремонтами (ТОиР). Из единой системы компании могут контролировать и управлять полным жизненным циклом своих активов предприятия, включая здания, сооружения, инфраструктуру, транспорт, производственные средства и многое другое. Такая функциональность программы Seascope обеспечивает пользователям видимость и контроль

состояния активов и процессов при одновременном повышении производительности и снижении времени простоя.

Программное решение Seascope предоставляет информацию о номенклатуре запасных частей, необходимых для проведения регламентных и сервисных работ, информацию об их стоимости, поставщиках и производителях. Использование СУ ТОиР Seascope позволяет оценивать текущую техническую готовность объекта и прогнозировать её изменение, а также управлять затратами на поддержание технической готовности.

Основные функции программного обеспечения Seascope:

- Управление электронной структурой объекта
- Планирование ТОиР и ППР
- Управление МТО
- Контроль технической готовности.
- Получение данных от ТС.
- Подготовка отчетов.
- Управление персоналом.

4. Fiix – это программный продукт для управления техническим обслуживанием и ремонтом оборудования в различных отраслях промышленности с ориентацией на простоту использования.

Программный продукт Fiix (рус. Фиикс) система управления оборудованием (CMMS/EAM), которая предназначена для управления технической документацией, ремонтом и обслуживанием оборудования в производственных и промышленных предприятиях. Система получила популярность среди многих промышленных компаний и организаций.

Сервис Fiix предназначен для различных групп пользователей, включая:

- Руководители, которые отвечающие за обслуживание оборудование и инфраструктуры, а также за управление активами,
- Механики, инженеры и техники, которые занимаются техническим обслуживанием оборудования,
- Аналитики данных, которые обрабатывают и анализируют информацию по оборудованию и процессам обслуживания,
- Пользователи, которые взаимодействуют с оборудованием и подают запросы на его обслуживание.

Основные функциональные возможности приложения Fiix включают:

- Создание и управление оборудованием и инфраструктурой с помощью интуитивного интерфейса и конфигурации на основе низкоуровневых компонентов.
- Управление ЗИПами, включая создание заказов на запчасти и интеграцию с внешними поставщиками.



- Планирование профилактических работ и техобслуживания с автоматическим назначением задач на основе расписания и условий использования оборудования.

- Отслеживание и управление задачами и потоками работ для обеспечения участия каждого члена команды и оптимизации производительности.

- Продуктивное использование мобильных устройств для ввода данных на месте, быстрого доступа к информации, оповещений о задачах и работе в автономном режиме.

- Анализ статистики и отчётности с целью поиска путей повышения производительности и дальнейшего развития бизнеса.

- Интеграция с другими системами и платформами, такими как ERP, BI, CRM, SCADA, MES и другими, а также обмен данными между различными источниками данных.

- Настраиваемые права доступа пользователей, чтобы обеспечить безопасность и конфиденциальность данных.

В целом Fiix предоставляет разнообразные возможности для управления инфраструктурой и оборудованием, автоматизации процессов обслуживания и технического обслуживания, улучшения исполнительской дисциплины и донесения командной работы до достоверной аналитики. Используя данную платформу, организации могут значительно уменьшить время выявления и устранения проблем с оборудованием.

5. RealMaint – это система управления ремонтами и надёжностью оборудования, обеспечивающая стабильную работу оборудования путём планирования и выполнения работ по техническому обслуживанию. Алгоритмы RM основываются на основе контроля срока службы, времени работы, технического состояния оборудования.

А также имеются другие аналоги как: openMAINT, Planny24, SAP Predictive Maintenance and Service и другие, которые отличаются со своими параметрами, выполняемыми задачами и т.д.

Поэтому авиационным предприятиям необходимо создание малозатратных продукт, что требует все более быстрой разработки и внедрения различного рода методов, устройств и систем, при этом большое значение имеет интеллектуальный уровень программного обеспечения. При этом одним из основных требований к программному обеспечению является возможность быстро и в режиме реального времени оценивать выходные данные и получать аналитические результаты. На основе анализа мы осуществляем автоматизированный сбор данных о значениях физических параметров в заданных точках исследуемого объекта, а также первичную обработку данных, сбор и передачу данных и их взаимодействие. Предложена разработать модель и алгоритм при техническом обслуживании воздушных судов и использованием информационных технологии.

## **ЗАКЛЮЧЕНИЕ**

В заключение выгоды, преимущества и польза от применения программного обеспечения (продукт) для планирование и управление всеми процессами работ при технического обслуживания или ремонта воздушного судна западного производства. Применение такого программного обеспечения при техническом обслуживании ВС может иметь несколько полезных эффектов:

**Увеличение эффективности.** Это помогает быстро определить, какие виды работ будут выполняться, какие инструменты требуются, какое оборудование нуждается в техническом обслуживании или ремонта, что обеспечивает более быстрое и качественное выполнение этих работ. Это позволяет сократить время простоя и увеличить производительность.

**Оптимизация процесса.** Это помогает оптимизировать процесс технического обслуживания или ремонта, что позволяет сократить расходы на эти работы и увеличить эффективность процесса.

**Улучшение безопасности.** Это помогает следить за состоянием оборудования и быстро реагировать на любые возможные проблемы. Это позволяет увеличить безопасность работы на разных оборудованных, на разных высотах и снизить риск несчастных случаев.

**Уменьшение нагрузки на персонал.** Программное обеспечение может сделать работу по техническому обслуживанию или ремонту более эффективной, что позволяет сократить количество необходимого персонала и снизить затраты на его содержание.

**Улучшение качества обслуживания.** Программное обеспечение помогает быстро определить, какие виды работ должны выполняться и на основании каких документации и поможет определить и найти возможные проблемы с оборудованием, и инструментам и принимать меры для их устранения. Это позволяет улучшить качество обслуживания и повысить удовлетворенность заказчиков.

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## **ПЕРЕВОДЫ ПРОИЗВЕДЕНИЙ МАХТУМКУЛИ НА УЗБЕКСКИЙ ЯЗЫК**

*Аннотация. В данной статье рассматриваются смысл и значение произведений туркменского поэта-классика Махтумкули, переведенных на узбекский язык в разные годы, достижения переводчиков произведений поэта, а также значение произведений поэта.*

*Ключевые слова: содержание, значение, перевод, публикации.*

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## **TRANSLATIONS OF MAKHTUMKULI'S PUBLICATIONS INTO UZBEK LANGUAGE**

*Abstract. This article illustrates the meaning and importance of the Turkmen classical poet Makhtumquli's publications, translated into Uzbek in different years and the achievements of translators of the poet's works as well as the significance of the poet's publications.*

*Key words: Content, meaning, translation, publications.*

Махтумкули Фироги был великим поэтом просветительской поэзии XVIII века и стал любимым поэтом, просветителем, ученым, духовным любителем весь тюркской поэзии, который оказал чрезвычайно эффективное воздействие на истину туркменского народа, который спел справедливости и гуманизма, охранная порода, создавший неиссякаемого источника эстетического наслаждения и мудрости.

Прославление в его произведениях смирение и благородство, патриотизм и дружба, осуждение зависть, угнетение и несправедливость, удовольствие, лицемерие это и есть доказательство того, что он создал, живя с болью своего народа.

Махтумкули поднял туркменскую литературу на вершину мировой литературы. Его произведения очаровывали всех своей универсальностью и актуальностью на все времена. произведения универсальность и актуальность на все времена, она также стала духовным достоянием всех тюркских народов, в том числе и узбекского народа. Как первый Президент Республки Узбекистан Ислам Каримов отметил, в наши дни, когда Узбекистан и Туркменистан находятся на пути независимого развития, бессмертное наследие Махтумкули, как и всех наших великих предков, приобретает для нас еще более важное значение и смысл.

Он наш соотечественник и добавляет со своими произведениями силы, энтузиазма к нашей энергии в возвышении нашей национальной гордости, в развитии национальной идеологии. Его стихи были переведены на на различные языки мира, их читают и изучают с любовью. Его произведения с гордостью поют туркмены, постоянно издают в Сирии, Иране, Турции и Афганистане и даже далекой Аравии. По информации, предоставленной Хамидуллы Хасановым, «Махтумкули Фирогии известен на Востоке своими сильными, впечатляющими, популярными стихами, которые понимают и туркмены, и узбеки как на родном языке. Я слышал, что в Афганистане есть старый туркмен-бакши, который называет себя «Махтумчи», потому что он известен тем, что виртуозно исполняет стихи Махтумкули.

По сведениям, предоставленным Хамидом Абдуллаевым, распространение произведений Махтумкули среди узбекского народа началось в 60-70-х годах 18 века, то есть когда он преподавал в медресе Шергозихана в Хиве. Так как стихи пекинского поэта в простом стиле и простом языке были понятны узбекам, не было необходимости их переводить, даже во второй книге четвертого тома комплекса «Узбекская литература», вышедшей в 1960 году, отмечалось, что стихи Махтумкули произносились на туркменском языке. Если привести хотя бы один пример, то талантливое дитя Хорезма, наш бульбульнафас Комилжон Отаниёзов - есть во всей Средней Азии. Газели Махтумкулизаслужил стать славным во всей Центральной Азии хафиза. 29 стихотворений Махтумкули исполнил Камилджон Отаниезов. Некоторые из них были записаны на грампластинки, магнитные ленты и телекассеты. Например, «Бўйларинга», «Намасан», «Юргин келади», «Айлар», «Айрилдим», «Бўлмас», «Тўхтамас», «Кдрамас», «Этмасин», «Кўзим тушди», «Ошиқ бўлмишам», «Устозингдан айрилма», "Айрилма", "Кўринг" в исполнении любимых артистов нашего народа. После него исполняли и исполняют эти песни Бобомурод Хамдамов, Ортик Отажонов, Ахмаджон Шукуров, Каримбой Рахманов, Агабек



Собиров. Каждый узбек, любитель музыки, песни обязательно слушает эти песни.

Махтумкули – один из поэтов широко и регулярно читаемый в Узбекистане. Большой вклад в изучение творчества Махтумкули внесли большой вклад В. Абдуллаев, Н. Маллаев, К. Курамбоев, Х. Абдуллаев и другие литературоведы. Великий переводчик Джуманёз Шарипов проделал большую работу по исследованию этого уникального творчества, переводу их на узбекский язык и популяризации. Народный поэт Узбекистана Джуманиёз Джаббаров показал образцы тонкого перевода произведений поэта на узбекский язык. В последние годы появились представители нового поколения, изучающие, исследующие и переводящие творчество Махтумкули. Известный поэт Мирза Кенжабек, знаток и переводчик поэзии Эргаш Ачил, поэт Музаффар Ахмад, успешно переводящий на узбекский язык поэзию казахской, туркменской и каракалпакской и другой поэзии, новые публикации, статьи и переводы творчества Махтумкули, открыли новых пластов творчества Махтумкули. За годы независимости расширились ряды переводчиков Махтумкули, появились новые переводы его стихов. Талантливый поэт и переводчик Музаффар Ахмад перевел 67 стихотворений великого туркменского поэта и издал в 1995 году тиражом 5000 экземпляров под названием «Избранное» в издательстве «Ёзувчи».

Переводчик говорил так: «во-первых, наша любовь к этим стихам сильна, а во-вторых, в некоторых из этих стихотворений сокращены некоторые пункты, не вписывающиеся в рамки авторитарной системы, а некоторые слова и фразы изменены. В данном случае мы их предъявляем", — подчеркнул он. За этот новый перевод стал ответственным редактором Сайфиддин Сайфулла, редактором Умрзок Хожи Закиров, рецензентом был кандидат филологических наук Зухриддин Исомиддинов. В эту подборку включено 169 стихотворений, но ещё включены только заглавие - названия 97 стихотворений. Брошюра состоит из 254 страниц, но в оглавлении указано 153 страницы. Это издание, без сомнения, помогает людям понять природу мира и загробного мира, дает духовную пищу, силу души, ободрение к вере. Мирза Кенджа, известный поэт и переводчик, впервые перевел на узбекский язык 170 его преимущественно религиозно-мистических стихотворений, и они включены в «Избранное». Хотя в обоих сборниках есть несколько переводов повторно, они примечательны, которые еще не известны узбекским читателям. Содержание стихов, включенных в эту книгу, соответствует мелодии. В своих шедеврах великий мудрый поэт записал идеи самых дорогих и уважаемых в человеческом сердце чувств - веры, чистоты, честности, доброты, патриотизма, дружбы, отваги, человеколюбия. Первый Президент нашей Республики Ислам Каримов дал поэту достойную и справедливую оценку и сказал: «Махтумкули – великий поэт и мыслитель, поэтому он пользуется большим уважением у просвещенного человечества». Величие мыслителя, поэта,



философа и путешественника Махтумкули жил в веках и смогло привлечь внимание и любовь простых людей, целых народов мира культурным и просветительским богатством. Махтумкули, наряду с выводом туркменской литературы на мировой уровень, вывел на мировой уровень и туркменский народ. Поэзия поэта по праву считается одним из классических произведений литературы народов мира.

В 2015 году «Пословицы» был издан издательством «Узбекистан» в переводе с туркменского на узбекский язык Э.Очилова тиражом 3000 экз. на латинице.

В 2017 году «Избранное» – сборник стихов в переводе с туркменского на узбекский язык был издан издательством «Укитувчи» тиражом 2000 экз. в переводе М.Пирриева. Сборник под названием «Стихотворения» подготовил к изданию любитель поэзии Махтумкули, поэт, писатель и ученый Мирза Кенжабек, общественным фондом «Ижод».

Накануне визита Президента Узбекистана 2017 года 18 мая в Туркменистан в Ташкенте на ул. Махтумкули был открыт барельеф классика туркменской литературы, на улице, ранее названной именем классика туркменской литературы. 18 мая в Туркменистане отмечался День возрождения, единства и поэзии Махтумкули. В этот день в 1992 году была принята Конституция Туркменистана. Автор проекта скульптор Джасвант Анназаров, который выиграл также конкурс на памятник Эркину Вахидову, бронзовый барельеф создавался в течение месяца. Вечная поэзия Махтумкули Фироги, его гуманистические идеалы и заветы служат образцовой школой мудрости, высокой духовности и нравственности. Стихотворения великого поэта-мыслителя призывали к единению, сплоченности, гуманизму, а его бессмертные высказывания стали неотъемлемой частью общечеловеческих ценностей, в том числе и народа Узбекистана.

Пусть дело Махтумкули Фироги живет в веках, радует наши сердца, приглашает к дружбе и солирности.

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## **ЗАИМСТВОВАНИЕ – ЗАКОНОМЕРНЫЙ ПУТЬ ОБОГАЩЕНИЯ ЯЗЫКА**

*Аннотация. Данная статья рассматривает влияние языков, в частности, латинского и греческого языка, на развитие лексикологии в процессе исторического развития*

*Ключевые слова. Грамматика, лексикология, заимствования, сокровищница, исследование, структура, прародитель, античная эпоха, разнообразность*

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## **BORROWING - A NATURAL WAY TO ENRICH A LANGUAGE**

*Annotation. This article examines the influence of languages, in particular Latin and Greek, on the development of lexicology in the process of historical development*

*Keywords. Grammar, lexicology, borrowing, treasury, research, structure, progenitor, antique epoch, variety.*

В течение почти 20 веков латинский язык служил народам Европы средством общения, с его помощью знакомились и воспринимали римскую и греческую культуру. Он оказал огромное влияние на языки европейских народов, как в области грамматики, так и особенно в области лексики.

С развитием медицинской науки возникла потребность в новых обозначениях, новых понятиях; источником этого словотворчества в медицине явилась та же богатая сокровищница античного мира - латинский и греческий языки.

В процессе своего исторического развития человеческие языки постоянно вступали и продолжают вступать в определённые контакты друг с другом. Языковым контактом называется взаимодействие двух или более языков, оказывающее какое – либо влияние на структуру и словарь одного или многих из них. Самым простым случаем языкового контакта является заимствование слова из одного языка в другой. Как правило, заимствование

слова связано с заимствованием предмета или понятия, обозначаемого этим словом.

Язык, как и люди, может быть пластичным или консервативным, или даже «мертвым» как древний греческий и латинские языки. «Язык имеет своего предка, давшего ему жизнь, при благоприятных условиях он может оказаться далеко от своего прародителя, порождая подобно латинскому языку, принесённому римлянами, целую семью благородных отпрысков» (В. Стивенсон).

Основной поток заимствований иноязычных слов идет через разговорную речь профессионалов. Среди заимствований выделяется группа так называемых интернационализмов, т.е. слов греко-латинского происхождения, получивших распространение во многих языках мира. Сюда относятся такие слова, как **филиал, гонор, каникулы, финиш, литература, апелляция, юстиция, юриспруденция, авиация, бис, вокал, клептомания, пестицид, желатин**. Помимо готовых латинских и греческих слов, в международной научной терминологии широко используются отдельные греко-латинские морфемы: корни, приставки, суффиксы (многие греческие морфемы были заимствованы латинским языком еще в античную эпоху). К строительным элементам греческого происхождения относятся, например: **био-, гео-, гидро-, антропо-, пиро-, хроно-, психо-, микро-, демо-, тео-, палео-, нео-, макро-, поли, моно-, пара-, алло-, -логия, -графи-, супер-, интер-, экстра-, ре-, ор-, -изация** и др. При построении терминов интернациональные греческие и латинские элементы могут комбинироваться между собой (например: телеграмма, иммунология), а также с морфемами, заимствованными из новых европейских языков, например спидометр (от англ. Speed «Скорость»).

Слова греческого происхождения в русском языке бывают двух типов – в соответствии с эпохой и способом их заимствования. Наиболее многочисленную группу составляют те греческие слова, которые пришли в русский язык через латынь и новые европейские языки – сюда относятся вся международная научная терминология, а также множество общезначимых слов, таких как **тема, сцена, алфавит, варвар, кафедра, Афины, финик**. Наконец, в русском языке имеются единичные слова, заимствованные из древнегреческого в его классическом варианте, - например, философский термин ойкумена (букв. «население»), восходящий к тому же слову «дом», которое входит в слова экономика или экология.

Латинское **gerundium** означало существующее в латинском языке грамматическое понятие (разновидность существительного, образованного от глагола). В русских семинариях учащиеся наряду с другими предметами изучали и латынь.

Слово «хризантема» заимствовано в конце XIX века из языка ученой латыни, где *chrysanthemum* происходит от греч. *chrysanthemon*, сложения

chrysos «золото» и anthemion «цветок». Хризантема буквально - «золотой цветок».

Столкнувшись со словом, называющим непонятное им явление, студенты по-своему восприняли его. Первоначально это слово имело вид герунда, а значило то же, что и сегодня - «бессмыслица», «нечто непонятное». Затем первая буква отпала - и получилось современное слово ерунда.

Слово «фужер» заимствовано в конце XIX века из французского языка, где fougère было образовано от Fougères - названия города Фужер в провинции Бретань, где производилось фужерное стекло.

Слово гардероб заимствовано из французского garde-robe, которое образовано сложением двух существительных: garde - «хранение», «охрана» и robe - «платье», что в сумме дает «место для хранения платья».

Русское слово роба - «рабочая одежда» - также является однокоренным слову «гардероб».

Для того чтобы стать заимствованием, пришедшее из чужого языка слово должно закрепиться в новом для себя языке, прочно войти в его словарный состав – как вошло в русский язык множество иностранных слов, таких как **резерв, метаморфозы, пальто, бонус, мульти, интим, альт, амаретто, оптимист, пессимист, пепсин, паралич, прогноз, превью, автомат, плантация, соль, интервью, станция, и др.** многие из которых оказались настолько освоены русским языком, что только лингвисты знают об их иноязычном происхождении.

**Неологизмы.** Среди неологизмов последних лет наблюдаем лексику латинского происхождения, пришедшую в русский язык через посредство английского языка. Это латинизмы в англизированном виде. Слово **офис** (англ. Office, лат. Officium – служба, обязанность), **спонсор** (англ. Sponsor лат. Spondare - торжественно обещать, меценат, частное лицо или какая - либо организация, финансирующая что –либо, кого – либо).

Латинский язык для нас – это, прежде всего, язык науки, культуры, религии, медицины. В результате проведенного исследования лексических латинизмов и грецизмов были сделаны следующие выводы:

1. Многие слова являются терминами различных областей науки, поэтому среди них выделяется лексика медицинская, юридическая, лексика просвещения и образования, общеупотребительная. Все латинизмы и грецизмы функционируют в современном русском языке.

2. Классифицируя лексические латинизмы и грецизмы по способу заимствования, мы определили, что большая часть изученных слов являются опосредованными заимствованиями (60%). Языками посредниками являются: в 20 % случаев - французский язык, в равной степени по 15 % - немецкий и польский языки, в 10% - английский язык. Отдельную группу составили 13 % грецизмов, заимствованных в русский

язык через латинский. Прямые заимствования из латинского языка составили 40% изученных лексических единиц.

3. Основная масса латинизмов и грецизмов была заимствована из французского и немецкого языков, это может быть объяснено тем, что именно с культурой Франции и Германии связана русская культура.

4. В результате заимствований русский язык пополнен интернациональными терминами. Интернациональными называются слова, встречающиеся во многих языках (**артерия, аорта, демократия, проблема, революция, принцип, прогресс, анализ**).

5. Национальная самобытность русского языка ничуть не пострадала от проникновения в него слов иноязычных, так как заимствование вполне закономерный путь обогащения любого языка. Русский язык сохранил свою полную самобытность и лишь обогатился за счет заимствованных латинизмов и грецизмов.

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## **ТЕРМИНОЛОГИЯ ЭПОХИ COVID – 19**

*Аннотация. Данная статья рассматривает влияние пандемии на словарный состав языка и появление неологизмов в этот период, изменение значения существующих слов, интеграцию языков.*

*Ключевые слова. Инфекция, приложение, самоизоляция. фонетика, игровые слова, сленг, интеграция, дезинфекция, антисептика.*

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## **TERMINOLOGY IN THE COVID-19 ERA**

*Annotation. This article examines the impact of the pandemic on the vocabulary of the language and the emergence of neologisms during this period, changes in the meaning of existing words, and the integration of languages.*

*Keywords. Infection, application, self-isolation. phonetics, play words, slang, integration, disinfection, antiseptics.*

Пандемия оказала и продолжает оказывать своё действенное влияние на все сферы жизни общества во всех странах мира. Она вызвала изменения в словарном составе языка за этот короткий срок.

Первая половина 2020 года была отмечена не только новациями в обычной лексике - новые слова стали повседневным даже на официальном уровне.

Пандемия коронавируса породила множество новых слов и выражений, и изменила значения уже давно существующих слов.

Многие толковые словари английского языка – словарь Вебстера, Оксфордский – уже включили слова, связанные с этой инфекцией.

Изучением ковидного сленга вплотную занялся доцент кафедры русского языка и литературы ЮУрГУ Денис Пелихов. Филолог условно разделил язык пандемии на 4 группы. Первая - это те слова, которые уже есть в словарях, но их редко использовали. Например — санитайзер, самоизоляция или термин — коронавирус. Он, кстати, появился ещё в 60-ых годах. И уже тогда использовался медиками. Вторая группа — это когда английское слово переделывают на русский лад. Так появился — ковидник



или зумиться. То есть, общаться через приложение зум. Третья группа, пожалуй, самая интересная — игровые слова, которые народ выдумывает, соединяя два фонетически похожих определения. Тем самым показывая своё отношение к ситуации.

По такому же принципу появилось слово — ковидиот. Это как раз те, кто не верит в опасность вируса и не соблюдает социальную дистанцию. Коронойа — наоборот, излишняя тревожность из-за болезни. Погулянтцы — те, кто во время самоизоляции имеет право на прогулку. Корониалы — дети, родившиеся во время пандемии. Ковидофобы — заостряющие внимание на своём здоровье. Думскролинг — неудержимое желание читать плохие новости. Филологи уверены, языковой «креатив» снимает напряжение и помогает отнестись к изменениям спокойно и даже с юмором.

Ещё одна группа ковидного сленга, это слова, которые в пандемию обрели новый смысл. Например, — **намордник**, теперь люди используют не только в отношении собак. Ну и выражение маски-шоу, сейчас звучит очень иронично.

Слова останутся, но не все и ненадолго.

По мнению филологов, появление новых слов в лексиконе общества при новых реалиях жизни — нормальное явление. Но не все появившиеся неологизмы останутся в нашем языке надолго.

«Все так называемые коронослова можно разделить на несколько групп», — считает Мария Генадьева, филолог, лингвист. — Первая — это слова, позаимствованные из иностранных языков (пандемия, коронавирус, локдаун и пр.). Эти слова, скорее всего, останутся в нашем словарном запасе из-за всеобщей интеграции языков. Вторая группа коронавирусного сленга — это комичные слова (ковидники, застрянтцы или напаниковать) или слова, получившиеся в результате слияния двух и более слов (коронойа, корониалы, ковид-диссиденты и т. д.). Они будут актуальны, пока у людей будет интерес к этой теме. Например, как только заробитчане смогут беспрепятственно пересекать границу, интерес к слову “застрянтцы” пропадет. Третья группа — это слова, которые вошли в разговорный язык из профессионального лексикона или нормативной документации (самоизоляция, обсервация, социальная дистанция и др.). Это группа неологизмов тоже будет оставаться в лексиконе человечества еще долгое время”.

### **Неологизмы COVIDa**

Неологизм (др.-греч. νέος — «новый», и λόγος — «слово») — слово, значение слова или словосочетание, недавно появившееся в языке (новообразованное, отсутствовавшее ранее). Изучением неологизмов занимается наука неология.

#### **Примеры**

Удалёнка, дистант и коронавирус. Эти слова, по праву, можно считать главными новинками. Они звучат из каждого утюга, напечатаны на

вывесках в брошюрах и рекламных объявлениях. Во всех поисковых запросах они сейчас на первом месте. Эти слова плотно закрепились в наших умах, а их смысл стал понятен даже ребёнку.

Помимо классических — карантин, пандемия и самоизоляция, на страницах интернет-порталов стали мелькать — корониалы, маскобесие и зумбомбинг.

**«Зумиться»** — от названия программы ZOOM. **Зумиться** или **зумбиться** — образовалось от названия программы Zoom и означает выйти в видеочат в этой программе.

**«Зумбомбинг»** — явление, когда неизвестный вклинивается в чужую беседу и троллит организатора видеоконференции демонстрацией нецензурных фраз или файлов.

**«Санитайзеры»** — антисептик для рук. дезинфицирующее средство на спиртовой основе. Применяется в основном в качестве антисептика для рук.

**«Контактные»** -люди, которые находились рядом с больным.

**«Подозрительный»** — называют людей с подозрением на коронавирусную инфекцию.

Появились также много примеров со словом КОВИД.

**Ковидный** или **ковидник**-заболевший коронавирусом.

Противоковидный —против ковида.

Слово КОРОНА приобрело еще одно значение.

**«Ковидиот»** — от слов коронавирус и идиот. Но и оно имеет два противоположных значения. Ковидиотами сегодня называют тех, кто отрицает наличие пандемии и ее опасности, нарушает режим самоизоляции, пренебрегает мерами предосторожности. А также и тех, кто, напротив, чересчур паникует: кинулся закупать гречку и туалетную бумагу, моет руки до ран, панически боясь заражения.

**Коронойя** — паранойя на тему коронавируса.

**Коронапокалипсис»** - от слов коронавирус и апокалипсис

**«коронагеддон»** - от слов коронавирус и армагеддон. Армагеддон в эпоху коронавируса.

Неожиданно для всех возникли и **"карантикулы"** - производное от "карантина" и "каникул", когда школьников отправили учиться по домам.

**Корониалы** — то есть дети, родившиеся во время карантина.

**Сидидомцы** — люди, выступающие за полное соблюдение режима самоизоляции и призывающие к этому других.

**Погулянцы** — люди, которые выступают за мягкий карантин — хотя бы с возможностью выйти на пешую прогулку, пробежку или просто во двор с детьми. Враги сидидомцев.

**Удаленка (дистанционка)** — работа из дома. Слово существовало и раньше, но в условиях самоизоляции приобрело особенный смысл, поскольку работать из дома далеко не всем оказалось комфортно — например, родителям с детьми.

**Самоизоляция** — изначально это слово использовалось для определения двухнедельного режима для тех, кто контактировал с людьми, у которых подтвердился коронавирус, либо же с теми, кто вернулся из-за границы. В последующем на самоизоляции пребывали люди, которые относились к группе риска, например, пенсионеры.

**Социальная дистанция** — если до пандемии под социальной дистанцией подразумевалось сокращенное число контактов между людьми, то сегодня это вполне измеримое понятие длиной в 1,5 метра. Социальное дистанцирование используют как профилактическую меру в борьбе с распространением коронавируса.

**Удаленка** — работа офисных сотрудников из дома. Но это не фриланс. Все сотрудники компании по-прежнему остаются на фултайме, под присмотром руководителя через специальные программы.

**Маскобесие** — ситуация с неразберихой вокруг масочного режима.

**Шашлычники** — нарушители самоизоляции, которые устраивают пикники.

### **Наружа**

В апреле 2020 года мультипликатор Олег Куваев после многолетнего перерыва выпустил новый эпизод «Масяни» (если кто вдруг не знает, это короткие и смешные мультики про девушку Масяню, её бойфренда и друзей). По сюжету героиня вместе с семейством сидит на самоизоляции, и внешний мир, который теперь кажется далёким и почти несуществующим, называет наружей. Видео набрало 5 миллионов просмотров, а цитаты и словечки из него утекли в Сеть.

**Курс лимона (имбиря)** — в начале пандемии, когда ходили упорные слухи о возможности лечения коронавируса нового типа с помощью витамина С и имбиря, люди сметали с магазинных полок оба этих продукта. А недобросовестные продавцы подняли цены до неприличных цифр. Тогда и возникло понятие «курс лимона» или имбиря.

Во время эпидемии многие оказались в беде — заболели, остались без денег, не могли сами купить себе продукты. Но нашлись и те, кто пришёл на помощь: волонтеры ходили за покупками для пожилых людей, соседи приносили еду для запертых на карантин, ресторанные сети бесплатно кормили врачей, юристы проводили консультации. Такой всплеск добра, сочувствия и солидарности во времена COVID-19 стали называть *ковидарностью*. Этот симбиоз covid и солидарность. Напоминание, как мы были на удаленке, но все-таки вместе.

В условиях коронавируса понятие «локдаун» появилось от слова **lockdown**. Этот термин описывает ситуацию, когда людям запрещено свободно входить или выходить из зданий либо конкретных зон при ЧС. Зачастую понятие «локдаун» при эпидемии используют для того, чтобы обозначать частичное или полное ограничение социальных контактов.

### **Заключение**

Таким образом, не все появившиеся неологизмы во время пандемии останутся в нашем языке надолго. Коронаслова, позаимствованные из иностранных языков (пандемия, коронавирус, локдаун и пр.) скорее всего, останутся в нашем словарном запасе из-за всеобщей интеграции языков. Комичные слова (ковидники, застрянцы или напаниковать) или слова, получившиеся в результате слияния двух и более слов, (коронойя, корониалы, ковид-диссиденты и т. д.) будут актуальны, пока у людей будет интерес к этой теме.. Здесь важно отметить, что появление комичных слов связано с языковым «креативом», ведь юмор снимает напряжение и помогает отнестись к изменениям спокойно. А слова, которые вошли в разговорный язык из профессионального лексикона или нормативной документации (самоизоляция, обсервация, социальная дистанция и др.) тоже будут оставаться в лексиконе человечества еще долгое время.

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## СОВЕРШЕНСТВОВАНИЕ МЕР БОРЬБЫ С АНТРАКНОЗОМ ОГУРЦА

*Аннотация. Севооборот имеет большое значение в развитии овощеводства, поэтому севооборот целесообразно проводить на естественно поврежденной территории. В результате при посадке рассады огурца на естественно поврежденный участок и использовании смеси извести и серы рост и развитие сеянцев превышали контрольный вариант на 25,2 см. Отдельно следует отметить, что в опыте использовалась именно она. Было замечено, что химикаты не повлияли на рост и развитие рассады огурцов.*

*Ключевые слова; Естественная засоренность почвы, сорт, толщина сеянцев, рост и развитие, фунгицид, заболеваемость, продуктивность, выводы, использованная литература.*

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## IMPROVING MEASURES TO CONTROL ANTHRACNOSE IN CUCUMBER

*Annotation. Crop rotation is of great importance in the development of vegetable growing, so it is advisable to carry out crop rotation in naturally damaged areas. As a result, when planting cucumber seedlings in a naturally damaged area and using a mixture of lime and sulfur, the growth and development of seedlings exceeded the control variant by 25.2 cm. It should be separately noted that it was this mixture that was used in the experiment. It was observed that the chemicals did not affect the growth and development of cucumber seedlings.*

*Keywords: Natural soil contamination, variety, seedling thickness, growth and development, fungicide, disease incidence, productivity, conclusions, literature used.*

Спрос народа Узбекистана на овощные культуры с каждым годом увеличивается, в том числе и при выращивании огурцов в открытом грунте, и несмотря на то, что урожайность, получаемая от него, высокая, урожайность не находится на уровне спроса.

В последние годы достигнуты новые успехи в использовании новых технологий, основанных на опыте передовых ферм.

Но часть полученного урожая погибает из-за распространения болезней. При решении данной проблемы частично эта проблема решается

за счет использования качественных фунгицидов, которые применяются в современном производстве против антракноза огурцов.

Научные исследования, проводимые нашими учеными по снижению заболевания огурцов антракнозом, приводят к уменьшению количества инфекции в почве. Например [1] пришел к такому выводу после многих лет наблюдений. Сделан вывод, что споры антракноза томатов вызывают заболевание вследствие обновления биотипов гриба при многолетнем выращивании огурцов на этом поле.

Из других наблюдений известно [2], что, поскольку споры антракноза огурца приспособлены к повышенной влажности, необходимо не поливать посаженный участок огурца, так как это вызывает распространение спор распространяющегося гриба по участку.

Из наблюдений известно, что обработка разбавленной известковой водой перед посадкой семян является наиболее целесообразным методом борьбы с антракнозом *Colletotrichum lagenarium* [3].

В результате проведенных экспериментов на экспериментальном участке Андиганского сельскохозяйственного и агротехнологического института проведен эксперимент на тему современных мер борьбы с болезнью огурца антракнозом.

Почва опытного участка светло-серая, уровень грунтовых вод 1,0-1,5м. расположен ниже.

**таблица 1**

№	Варианты опыта	Химические субстанции норма l/га, гр/тон	Приложение Сроки	Отдельный Квадрат, га
1	Контроль	-		0.5
2	Медный купарос	15- 20kg/ga	В период вегетации	0.5
3	ИСО	0.5- 1.0 l/ga	В период вегетации	0.5
4	Torso22.5%	0.25l/ga	В период вегетации	0.5

Эксперимент состоит из 4 возвратов, 4 вариантов, все варианты размещены на одном уровне, каждый вариант состоит из 8 рядов, площадь, занимаемая одним вариантом, составляет 144 квадратных метра. 28 апреля, после 5-6-дневной засолки рассады огурцов в теплице, на участке с влажностью почвы 60,-65 % был высажен местный сорт «Орзу».

**таблица 2**

Т/г	Варианты опыта	Толщина саженца тысяча/га	Стебель растения Высота, см.				Количество Шона		Количество о цветов		Количество о фруктов
			10V	20V	30V	10V I	15 V	20V	20V	25V	
										25V	



1	Контроль	29.3	14.6	23.9	41.7	68.1	1.4	2.9	1.6	3.1	5.4
2	Медный купарос	28.7	14.4	26.5	48.3	72.4	2.7	3.5	1.7	3.7	6.1
3	ИСО	28.2	16.3	30.1	54.6	93.3	3.2	4.2	1.9	4.4	7.6
4	Torso 22%	29.0	15.9	29.4	50.9	86.4	2.4	3.4	1.7	3.2	6.3

Как видно из приведенной таблицы 2, толщина сеянцев на опытном участке была близка по вариантам, т.е. от 28,2 тыс. до 29,3 тыс./га, а также по их росту и развитию. Как видно из данных 10 мая разница иная, высота стебля сеянцев во всех вариантах была близка друг к другу, т. е. 14,4, тогда как высота стебля огурца в 3 вариантах составляла 16,3 до см.

Однако в данных, полученных на следующий срок, это равенство нарушилось. В наблюдениях 20 мая высота ростового стебля сеянцев огурца в контрольном варианте отставала от такового у 3 вариантов на 6,2 см или по сравнению с остальными вариантами росли сравнительно невысоко от 2,5 см до -5,5 см. Это мнение основано на данных от 10 июня, что отражено в следующих данных в иной форме, при этом самый высокий показатель зафиксирован у сеянцев огурца варианта 3, высота стебля растений сеянцев в этом варианте по сравнению с контрольной 25,2 см. стал выше, на 20,9 см по сравнению со стандартной версией. вырос высоким. Установлено, что лучший результат на этапе сбора стручков - на 2,3 больше стручков, чем на контроле, а образования цветков - на 2,3 больше. Этот внешний вид сохранился даже на стадии сбора плодов, а у сеянцев варианта было собрано на 2,6 урожая больше, чем в контрольном варианте.

Количество сеянцев растений, учитываемых по вариантам применения разных химических веществ, состоит из 25 единиц, состоящих из 1 и 3 возвратов. По результатам наблюдений количество зараженных антракнозом сеянцев огурца в контрольном варианте до опрыскивания химикатами листьев сеянцев составило 17, тогда как в остальных вариантах этот показатель составлял 12,0-14,5.

На 5-й день после опрыскивания химикатами, полученными по вариантам, на рассаду огурца, зарегистрированную 17 мая, морфологический вид рассады огурца совершенно отличался от предыдущего вида, то есть листья крупные и мелкие, упругие. окраска не отличалась от чистого здорового растения. Исходя из этого, наибольшее восстановление отмечено у сеянцев огурца 3-х вариантов. Перед борьбой с болезнью антракноза было заражено 3 растения куста, при обработке растений этого куста известково-серным отваром против болезни антракноза споры возбудителя в кустах огурца отсутствовали, а на листьях оставались засохшие пятна. Из этого видно, что это вещество, имеющее качество фунгицида, изготовленного из смеси серы с известковым раствором, и его воздействие на возбудителя имеет свойство сохраняться в

растении длительное время. и быстро по сравнению с химическими веществами в эксперименте. При этом во 2-м и 4-м вариантах наблюдались признаки выздоровления растений. Если исчислять восстановление растений в процентах, то в стандартном варианте это появление составило 60,0%, в 4-м варианте - с у химического «туловища» в обработанном варианте это появление составило 64%. На основании этого можно сказать, что эффективность современных фунгицидов, применяемых в производстве в последующие годы, заключается в способности сохраняться в растениях до 6-8 дней.

**таблица 4**

№	Варианты опыта	Толщина саженца тысяча/ га	Количество сбор				Производит ельность т/га	вес одного плода огурца/га
			1	2	3	4		
1	Контроль	29.3	22.9	22.3	21.9	21.0	22.0	97.6
2	Медный купарос	28.7	24.2	24.7	23.0	22.1	23.6	108.1.
3	ИСО	28.2	25.4	24.1	24.9	24.9	24.6	114.9
4	Torso 22%	29.0	23.6	22.9	22.1	24.3	23.2	106.8

Из приведенной таблицы-4 известно, что от семян 3-го варианта получено снижение заболеваемости за счет здоровых растений, т. е. на 2,6 т больше контроля, по сравнению с 1,6 т, в 4 вариантах получен этот показатель более 1,2 тонны.

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## **ЭФФЕКТИВНОСТЬ НИЗКОИНТЕНСИВНОЙ ЛАЗЕРНОЙ ТЕРАПИИ У БОЛЬНЫХ ВУЛЬГАННОЙ ФОРМЫ ПСОРИАЗА**

*Аннотация. Проблема вульгарной формы 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 заболевания в ряд наиболее актуальных проблем медицины. 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.*

*Ключевые слова: вульгарная форма псориаза, лазерная терапия, лютеинизирующий гормон, фолликулостимулирующий гормон, эстрадиол.*

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## **EFFECTIVENESS OF LOW INTENSITY LASER THERAPY IN PATIENTS WITH VULGAN FORM OF PSORIASIS**

*Anotation. The problem of the vulgar form of psoriasis is becoming increasingly important in modern medicine. Increasing incidence in the last decade. Chronic course with frequent relapses, insufficient effectiveness of existing methods of treatment and prevention today place this disease among the most pressing problems of medicine. An important role in the regulation of immunobiological and allergic processes is played by neuroendocrine mechanisms, including the pituitary-gonadal system, through which many protective and adaptive mechanisms are realized under the influence of various allergens on the body.*

*Keyword: Vulgaris form psoriasis, laser therapy, luteinizing hormone, follicle – stimulating hormone, estradiolum.*

**Введение.** 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. 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. 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, однако работ об использовании этого метода у больных вульгарной формы псориаза мало.

**Цель исследования** - является изучение функционального состояния гипофизарно-яичниковой системы на фоне лазерной терапии у больных вульгарной формы псориаза.

**Материалы и методы исследования.** В разработку было включено 39 больных вульгарной формы псориаза, в возрасте от 20 до 50 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 лазерной терапии проводили аппаратом - «МИЛТА – Ф - 01» (рис. 1).



Рис. № 1.

Проведение процедуры лазерной терапии больным вульгарной формы псориаза представлены в таблице № 1.

Проведение процедуры лазерной терапии больным вульгарной формы псориаза

Таблица № 1.

Зона облучения	Частота, Гц	Мощность светодиодов, Вт	Экспозиция, мин.
Проекция почек	600	30-50	2-4
Позвоночник, область сегментарной иннервации	150	30-50	2-4
Верхушки легких	150	30-50	2-4

Параметры воздействия: частота 150 - 600 Гц, мощность светодиодов 30-50 Вт, экспозиция на каждую зону – от 2 до 4 минут, 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, наружно – крем чистотел. Мазь наносилась на пораженную поверхность 2 раз в день на протяжении всего периода проведения ЛТ.

#### 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 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 гипофизарно-яичниковой системы при вульгарной формы 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 артропатической 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±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 достоверно 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±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 гипоестрогения.

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 механизмов стероидогенеза.

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## **РОССИЙСКИЕ МОДЕЛИ МУНИЦИПАЛЬНОЙ ВЛАСТИ**

*Аннотация. В данной статье проводится сравнительный анализ российских моделей муниципальной власти, выделяются особенности, преимущества и недостатки каждой модели. В ходе исследования сделан вывод о том, что идеальной модели, подходящей для любого региона, не существует. Каждый регион вправе выбрать наиболее оптимальную модель.*

*Ключевые слова: муниципальная власть, модель управления, ситу-менеджер, глава администрации, выборы.*

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## **RUSSIAN MODELS OF MUNICIPAL AUTHORITY**

*Annotation. This article provides a comparative analysis of Russian models of municipal government, highlighting the features, advantages and disadvantages of each model. The study concluded that there is no ideal model suitable for any region. Each region has the right to choose the most optimal model.*

*Key words: municipal government, management model, city manager, head of administration, elections.*

Важнейшая проблематика, связанная с управлением на муниципальном уровне, заключается в выборе адекватной модели организации муниципальной власти. Устанавливаемая Федеральным законом от 6 октября 2003 года № 131-ФЗ, опции предлагают пять различных подходов. Согласно уставу муниципального образования,

имеется возможность выбрать одну из этих пяти моделей для структурирования муниципальной администрации [2, с. 178].

В первом варианте, глава муниципального образования избирается населением в ходе муниципальных выборов и возглавляет местную администрацию. Представительные органы, в свою очередь, организуются председателем, избранным из числа депутатов. Глава муниципального образования, исполняющий функции главы местной администрации, обладает полномочием отклонить нормативно-правовой акт, принятый представительным органом муниципального образования. Данное право сопровождается вето-функцией, когда глава мотивирует свое принятое решение отклонить акт или предлагает внести в него изменения и дополнения [1, с. 5].

Во втором варианте, глава муниципального образования также избирается населением в ходе муниципальных выборов, но затем становится членом представительного органа муниципального образования, обладая решающим голосом и исполняя полномочия его председателя. Руководство местной администрацией осуществляется с помощью профессионала (сити-менеджера), назначаемого на основании контракта, заключаемого по результатам конкурса. Количество членов конкурсной комиссии определяется представительным органом муниципального образования. В случае муниципального района, округа, городского округа или внутригородского муниципального образования федерального значения, половина состава комиссии назначается представительным органом соответствующего муниципального образования, а другая половина – руководящим должностным лицом регионального уровня (главой исполнительной власти субъекта РФ).

В третьем сценарии управления муниципальным образованием глава избирается из числа депутатов представительного органа и осуществляет полномочия председателя с правом решающего голоса. В результате такого избрания полномочия депутата, который ранее был избран главой муниципального образования, прекращаются. Местную администрацию в данном сценарии возглавляет назначаемый профессиональный управляющий, согласно условиям контракта, аналогично варианту 2.

Четвертый сценарий был введен Федеральным законом от 3 февраля 2015 года № 8-ФЗ. В данном варианте глава муниципального образования избирается представительным органом муниципального образования из своего состава и выступает в качестве руководителя местной администрации. Полномочия депутата представительного органа, который ранее был избран главой муниципального образования, прекращаются. Представительный орган организуется под руководством председателя, выбираемого из числа депутатов.

Пятый сценарий предполагает, что глава муниципального образования избирается представительным органом муниципального

образования из числа кандидатов, представленных конкурсной комиссией в результате проведения конкурса. Он также возглавляет местную администрацию. Представительный орган организуется под руководством председателя, избираемого из числа депутатов [1, с. 10].

Главное различие между упомянутыми моделями заключается в природе статуса главы местной администрации: выборного, назначенного или принятого на работу по контракту муниципального служащего [4, с. 541]. Каждая из указанных моделей имеют свои преимущества и недостатки.

Достоинства моделей муниципального управления:

- имеет необходимые разрешения и полномочия (модели 1 и 4);
  - объединяет ответственность за подписание и реализацию наиболее важных муниципальных актов (модели 1, 4, 5);
  - обладает защитой от смещения по незначительному поводу (модель 1);
  - четкое деление политических и экономических видов деятельности в муниципальном управлении (модели 2, 3, 5);
  - независимость, меньше склонен к популизму (модели 2, 3, 5);
  - возможность подбора эксперта управления, соответствующего квалификационным требованиям (модели 2, 3, 5);
  - контракт предусматривает четкие критерии оценки задач и условия досрочного расторжения контракта
- установление в контракте четких критериев оценки работы и условий преждевременного расторжения контракта (модели 2, 3, 5) [3, с. 35].

Недостатки моделей муниципального управления:

- отсутствует гарантия избрания достаточно подготовленного управленца, акт права не определяет квалификационных требований (модели 1 и 4);
- зависимость от политических или экономических элит, которые привели его к власти на выборах (модели 1 и 4);
- экономические решения могут быть принесены в жертву политическим нуждам, особенно перед выборами (модели 1 и 4).
- сложность разрешения конфликтов с главами местных органов власти и представительными организациями (модели 1, 2, 3);
- трудно досрочно уволить человека, который не может себя оправдать (модель 1);
- сложности в разработке договорных положений, обеспечивающих, с одной стороны, независимость, необходимую для выполнения поставленных задач, а с другой – подчинение политической воле представительного органа (модели 2, 3, 5);
- отсутствие ясного деления политических и экономических видов деятельности в муниципальном управлении (модели 1 и 4);

– участие 1/2 членов субъектов РФ в конкурсной комиссии и возможное давление на решения комиссии (модели 2, 3, 5) [5, с. 106].

Очевидно, определение оптимальной модели в каждом конкретном случае требует учета множества противоречивых факторов и представляет собой задачу чрезвычайной сложности. Единого идеального варианта, подходящего для всех ситуаций, не существует. Большинство регионов Российской Федерации законодательно регламентируют систему местного самоуправления, в которой глава муниципального образования избирается представительным органом из числа его членов, а глава местной администрации (сити-менеджер) назначается в результате конкурсного отбора.

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**ПРЕДИАБЕТ ВА ҚАНДЛИ ДИАБЕТ 2-ТУРИНИНГ КЕЛИБ  
ЧИКИШИДА ХАВФ ОМИЛЛАРИНИНГ РОЛИ (АНДИЖОН  
ВИЛОЯТИ МАРҲАМАТ ТУМАНИ МИСОЛИДА)**

*Аннотация. Қандли диабет 2-тури (ҚД2) тарқалиши дунё бўйлаб ўсиб бормоқда. Шу муносабат билан унинг патогенезини, диабет билан боғлиқ асоратларни ривожланиши хавфини ва самарали даволаш усулларини яхшироқ тушуниши керак. ҚД 2-тури жуда гетероген касаллик бўлгани учун ҳам фенотиплаш стратегияси асосида предиабет ва қандли диабет билан боғлиқ патогенез ва асоратлар хавфига асосланган профилактика усулларини ишлаб чиқишни талаб этади [1].*

*Мақсад: Андижон вилояти Марҳамат туманида яшовчи аҳоли орасида углевод алмашинуви бузилишлари ва 2-тур қандли диабет ривожланиши учун юқори хавф омилларининг улушини аниқлаш.*

*Материаллар ва усуллар: Углевод алмашинуви бузилишлари ва ҚД2-турини скрининг қилиш ва уларни ривожланишида хавф омилларининг улушини аниқлаш учун Андижон вилоятининг Марҳамат туманида яшовчи 18 ёшдан ошган 2112 нафар аҳоли текширилди.*

*Олинган натижалар: Тадқиқот натижасида предиабет аниқланган беморларда энг юқори хавф омили 40 ёшдан ошган ёш 86,3 % ва кейинги ўринда ирсий мойиллик 76,1 %, ортиқча тана вазни 68,5% ни ташиқил этган бўлса бу кўрсаткичлар 2-тур ҚД аниқланган беморларда куйдагича бўлди энг юқори хавф омили 40 ёшдан ошган ёш 94,3%, ирсий мойиллик 85,1%, ортиқча тана вазни 70,1% ни ташиқил этди.*

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**THE ROLE OF RISK FACTORS IN THE OCCURRENCE OF  
PREDIABETES AND TYPE 2 DIABETES (THE EXAMPLE OF  
MARHAMAT DISTRICT OF ANDIJAN PROVINCE)**

*Abstract. The prevalence of type 2 diabetes (KD2) is increasing worldwide. In this regard, it is necessary to better understand its pathogenesis, the risk of developing diabetes-related complications, and effective treatment methods. As type 2 QD is a very heterogeneous disease, it requires the development of prevention strategies based on the pathogenesis and risk of complications associated with prediabetes and diabetes based on a phenotyping strategy [1].*

*Abstract. The spread of type 2 diabetes mellitus (DM2) is growing worldwide. In this regard, it is necessary to better understand its pathogenesis, the risk of complications associated with diabetes mellitus, and effective treatment methods. Since type 2 CD is a very heterogeneous disease, it also requires the development of prevention methods based on the risk of pathogenesis and complications associated with prediabetes and diabetes mellitus, based on a phenotyping strategy [1].*

*Objective: -to determine the proportion of high risk factors for the development of carbohydrate metabolism disorders and type 2 diabetes mellitus among the population living in the Marhamat district of Andijan region.*

*Materials and methods: to screen for disorders of carbohydrate metabolism and type 2 diabetes and determine the proportion of risk factors in their development, 2112 residents over 18 years of age living in the Marhamat district of the Andijan region were examined.*

*Results: Results: The highest risk factor in patients diagnosed with prediabetes as a result of the study was 86.3% of the age over 40 years and 68.5% of overweight. Further, these indications were the same as in patients diagnosed with type 2 diabetes, hereditary predisposition 85.1%, overweight 70.1%.*

*Key words: prediabetes, type 2 diabetes mellitus, HID, gestational diabetes mellitus, fasting glucose disorders, impaired glucoze tolerance.*

Ҳозирги вақтда нафақат қандли диабет балки предиабет ҳам муҳим метаболик ҳолат сифатида тобора кўпроқ эътироф этилмоқда, бу келажакда йиллик конверсия даражаси 5-10% бўлган очиқ диабетга ўтишининг юқори эҳтимолини башорат қилмоқда [2], бу эса ўз навбатида артериал гипертензия (АГ) ривожланиши билан боғлиқ ва ёки аксинча [5]. Метаболик синдром хавфи остида, гипергликемиянинг ушбу дастлабки ҳолатида фенотипларнинг башоратли ва профилактика натижаларига таъсирини ўрганиш керак.

Предиабет 5 йил ичида 50% ҳолларда ҚД2-турига ўтиши мумкин [8]. Шу муносабат билан, ҚД 2-тури бошланишини кечиктириш, микроваскуляр ва макроваскуляр асоратларни олдини олиш ёки кечиктиришга уринишда предиабетга кўпроқ эътибор қаратилмоқда [9,10,11].

Бутун дунёда семиришининг тарқалишига қараб предиабетнинг тарқалиши ортиб бормоқда [12,13,14,15]. Глюкозага толерантликнинг бузилишининг глобал тарқалиши 2010 йилда 343 миллион (7,8%) деб

баҳоланди, бу Жанубий-Шарқий Осиёда 5,8% дан Шимолий Америка ва Кариб денгизида 11,4% гача [16].

Касалликларни назорат қилиш ва олдини олиш марказларининг Миллий диабет статистик ҳисоботида айтилишича, 2009-2012 йилларда 20 ёшдан ошган америкалик катталарнинг 37% ва 65 ёшдан ошган одамларнинг 51% наҳорги гликемиянинг бузилиши (НГБ) ёки гликирланган гемоглобин (HbA1c) билан ўлчанган ҳолда предиабетга чалинганлиги аниқланган. 2012 йилда Америка Қўшма Штатларининг (АҚШ) бутун аҳолиси учун ушбу ҳисоб-китобларга кўра, предиабет билан касалланганлар тахминан 86 миллион катталар борлигини кўрсатади [17]. 2018-йилда бу кўрсаткич аллақачон катталарнинг 38% дан ортиғини ташкил этган [18].

Хитойда катталар орасида предиабетнинг тарқалиши 50% га етади [19]. Глюкозага толерантликнинг бузилиши (ГТБ) нинг ёшга қараб тарқалиши Непал каби кам даромадли мамлакатларда юқори эканлиги кўрсатилган. Непалда яқинда ўтказилган мета-таҳлил НГБ ва ГТБ асосида предиабетнинг юқори тарқалишини (9,2%) кўрсатди [18]. Предиабетнинг тарқалиши Жанубий Осиё мамлакатларидаги шаҳар шароитида айниқса юқори бўлиб, урбанизация кучайганлиги ва юқори калорияли овқатланиш ва ҳаракатсиз турмуш тарзига ўтишни акс эттиради [20].

Предиабет, ҚД2-тури ва ЮҚТ касалликлари билан касалланишни башорат қилишда асосий параметрларнинг ролини ўрганиш учун биринчи навбатда уларни бир қатор хавф омиллари орасида аниқлаш керак. ҚД 2-тури ривожланиш хавфи юқори бўлган Пима ҳиндулари аҳолиси орасида ўтказилган жуда қизиқарли тадқиқотлар шуни кўрсатдики, гиперинсулинизм, ва инсулинга резистентликнинг юқори даражаси мустақил равишда ҚД 2-тури хавфини оширади [12, 13]. Бундан ташқари вицерал ёғнинг ортиши, жигарнинг ёғли дистрофияси бор беморларда ҳам ҚД2-тури ва ЮҚТ касалликлари хавфи ортиши кузатилган.

Материаллар ва усуллар: Тадқиқот Андижон вилояти Марҳамат туманида 18 ёшдан ошган катта ёшли аҳоли орасида ўтказилди. Тадқиқотга 2112 нафар аҳоли жалб этилди. Текширилувчиларнинг ҳар биридан ДиаХатар сўровномаси олинди, ҳар бир текширилувчининг қонда қанд миқдори ва қон босими ўлчанди. Барча текширилувчиларнинг буйи, вазни, ТВИ, БА, СА, БА/СА нисбатлари чиқарилди.

Олинган натижалар Microsoft Windows 11 дастури орқали Dell компютерида Бирламчи саралаш, намуна олиш ва филтрлаш Microsoft Excel 2013 дастурий таъминот тўплами ёрдамида амалга оширилди, статистик таҳлил эса ва Statistica 10 ва IBM SPSS 26.0 статистик баҳолаш дастури ёрдамида амалга оширилди.

Олинган натижалар: Предиабет ва ҚД 2-тури ривожланишида хавф омиллари 2 гуруҳга бўлинади: 1. Ўзгартириб бўладиган ва ўзгартириб бўлмайдиган хавф омиллари. Ўзгартириб бўладиган хавф омилларига Норационал овқатланиш, алкоғол истеъмоли, чекиш, гиподинамия, АД,

дислипидемия, ортиқча вазн, анамнезида гипергликемия, ЮИК киради. Ўзгартириб бўлмайдиган хавф омилларига эса: 40 ёшдан ошган ёш, ирсий мойиллик, гестацион диабет, аборт, 4кгдан ортиқ вазнда бола туғиш киради.

Тадқиқот давомида юқоридаги маълумотларга асосланган холда хавф гуруҳларини баҳоладик. Унга кўра предиабет аниқланган беморларда хавф омиллар улуши куйдагича бўлди: Ўзгартириб бўладиган хавф омиллари улуши: ортиқча тана вазни 68,5%, дислипидемия 52,8 %, гиподинамия 49,2%, ЮИК 48,0%, А/Д 41,3 %, анамнезида гипергликемия 26,0 %, норационал овқатланиш 13,2%, алкоголь истеъмоли 1,0%, чекиш 3,0%, аборт 0,4% ни ташкил этди. (Жадвал №1)

Ўзгартириб бўлмайдиган хавф омиллари улуши: 40 ёшдан ошган ёш 86,3%, ирсий мойиллик 76,1%, 4кг дан ортиқ вазнда бола туққан аёллар 34,2%,гестацион диабет 3,3 %, аборт 0,4 % ни ташкил этди. (Жадвал №2)

Қандли диабет 2-тури янги аниқланган беморларда эса кўрсаткичлар куйдагича бўлди. Ўзгартириб бўладиган хавф омиллари улуши: ортиқча тана вазни 70,1%, дислипидемия 65,5%, гиподинамия 48,3%, ЮИК 48,0%, А/Д 43,7%, анамнезида гипергликемия 55,2%, норационал овқатланиш 29,9%, алкоголь истеъмоли 3,4%, чекиш 9,2%, ни ташкил этди. (Жадвал №1)

Ўзгартириб бўлмайдиган хавф омиллари улуши: 40 ёшдан ошган ёш 94,3%, ирсий мойиллик 85,1%, 4кг дан ортиқ вазнда бола туққан аёллар 39,1%,гестацион диабет 6,1 %, аборт 0,5% ни ташкил этди. (Жадвал №2)

## Предиабет ва Қандли диабет 2-турининг ривожланишида ўзгартириб буладиган хавф омилларининг улуши

Хавф омиллари	НГБ		ГТБ		НГБ+ ГТБ		ҚД 2		Соғлом		Жами	
	N	%	N	%	N	%	N	%	N	%	N	%
Норационал овқатланиш	101	41,6	111	41,6	66	41,5	26	29,9	514	37,9	818	38,7
Алкоголь истеъмоли	2	0,8	3	1,1	2	1,3	3	3,4	19	1,4	29	1,4
Чекиш	6	2,5	9	3,4	5	3,1	8	9,2	23	1,7	51	2,4
Гиподинамия	116	47,7	137	51,3	76	47,8	42	48,3	620	45,7	991	46,9
АД	186	76,5	53	19,9	37	23,3	38	43,7	326	24,0	640	30,3
Дислипидемия	133	54,7	137	51,3	83	52,2	57	65,5	70	5,2	480	22,7
ТВИ 25 кг м2 юкори	156	64,2	188	70,4	114	71,7	61	70,1	959	70,7	1478	70,0
Анамнезида гипергликемия	49	20,2	72	27,0	53	33,3	48	55,2	47	3,5	269	12,7
ЮИК	118	48,6	129	48,3	74	46,5	43	49,4	182	13,4	546	25,9

## Предиабет ва Қандли диабет 2-турининг ривожланишида ўзгартириб бўлмайдиган хавф омилларининг улуши

Хавф омиллари	НГБ		ГТБ		НГБ+ГТБ		ҚД 2		Соғлом		Жами
	N	%	N	%	N	%	N	%	N	%	
Ёши 40 ёшдан юкори	216	88,9	227	85	134	84,3	82	94,3	1108	81,7	1767
Жинси											
Эркак	35	14,4	24	8,99	19	11,9	29	33,3	201	14,8	308
Аёл	181	67,8	203	76	115	72,3	53	60,9	907	66,9	1459

<b>Ирсий мойиллик</b>	<b>160</b>	<b>65,8</b>	<b>224</b>	<b>83,9</b>	<b>125</b>	<b>78,6</b>	<b>74</b>	<b>85,1</b>	<b>78</b>	<b>5,75</b>	<b>661</b>
<b>Гестацион диабет</b>	<b>4</b>	<b>2,2</b>	<b>7</b>	<b>3,9</b>	<b>9</b>	<b>5,0</b>	<b>11</b>	<b>6,1</b>	<b>0</b>	<b>0,0</b>	<b>31</b>
<b>Аборт</b>	<b>1</b>	<b>0,2</b>	<b>2</b>	<b>0,3</b>	<b>2</b>	<b>0,3</b>	<b>3</b>	<b>0,5</b>	<b>0</b>	<b>0,0</b>	<b>8</b>
<b>4 кг ортиқ вазли бола тугиш</b>	<b>83</b>	<b>34,2</b>	<b>141</b>	<b>52,8</b>	<b>77</b>	<b>48,4</b>	<b>34</b>	<b>39,1</b>	<b>12</b>	<b>0,88</b>	<b>347</b>



Предиабет ва Қандли диабет 2-тури ривожланишида Предиабетнинг асосий фенотипларини аниқлаш имконияти ҳақида кўплаб далиллар мавжуд. Улар метаболик синдромни ривожланиш хавфини табақалаштиришни яхшилаш учун эмас, балки фармакологик таъсир учун дори мақсадларини аниқлаш ва ривожлантириш учун ҳам фойдаланиш имконини беради. Шунингдек хавф омилларини эрта аниқлаш, турмуш тарзини тўғри ташкил қилиш орқали ҚД2-тури ва ЮҚТ касалликлари хавфини олдини олиш ва бу орқали асоратлар ва ўлим хавфини камайтиришга эришиш мумкин. Хулоса: 1. Тадқиқот натижасида предиабет аниқланган беморларда унинг ривожланиши учун ўзгартирса бўладиган энг юқори хавф омили ортиқча тана вазни эканлиги аниқланди ва 68,1%ни ташкил этди.

2. Ўзгартириб бўлмайдиган хавф омилларидан эса энг юқори кўрсаткич 40 ёшдан ошган ёш эканлиги аниқланди ва у 86,3 % ни ташкил этди.

3. 2-тур ҚД аниқланган беморларда эса касалликни ривожланишига олиб келувчи ўзгартирса бўладиган энг юқори хавф омили ортиқча тана вазни 70,1% ни ташкил этди.

4. Ўзгартириб бўлмайдиган хавф омилларидан эса энг юқори кўрсаткич 40 ёшдан ошган ёш эканлиги аниқланди ва у 94,3% ни кўрсатди.

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## **ОСОБЕННОСТИ ДОШКОЛЬНОГО ОБРАЗОВАНИЯ В ЗАРУБЕЖНЫХ СТРАНАХ**

*Аннотация. В данной статье проанализированы особенности систем дошкольного образования зарубежных стран. Выделен положительный опыт и особенности некоторых сторон системы. Проведено сравнение отечественной и зарубежных систем дошкольного образования.*

*Ключевые слова: Дошкольное образование; система дошкольного образования; сравнительная педагогика; педагогический опыт; детство.*

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## **FEATURES OF PRESCHOOL EDUCATION IN FOREIGN COUNTRIE**

*Abstract. In the environmental education of preschoolers, it is important for the teacher to have self-confidence and the ability to become an example in matters of protecting the natural world, i.e. environmental competence of the teacher. This article discusses some issues of technology for organizing environmental education in preschool age.*

*Key words: nature, methodology, object, subject, theoretical foundations, dialectical approach, methodological foundations.*

Пристальное внимание общественности приковано к организации дошкольного образования, к созданию проектов обеспечивающих условия его качественного функционирования. Впервые был разработан стандарт дошкольного образования, основной идеей которого является самоценность детства, создание условий для раскрытия потенциальных сил и возможностей каждого ребенка.

В стандарте дошкольного образования выделяются требования к образовательной программе, к условиям ее реализации и результатам освоения. Образовательная программа дошкольного образования рассматривается как программа психолого-педагогической поддержки позитивной социализации и индивидуального развития детей. Учитывая сложность поставленных перед дошкольным образованием задач, возникает необходимость поиска эффективных технологий дошкольного образования, анализа опыта организации дошкольного образования. Большой потенциал содержится в зарубежных системах дошкольного образования, которые

имеют свою историю, традиции. Опыт зарубежных стран в воспитании детей дошкольного возраста, является попытка, на наш взгляд, выделить самое лучшее и новое для продвижения отечественного дошкольного образования на новый уровень.

Особо серьезное отношение к здоровью ребенка можно отметить в Японии. В каждом детском саду есть коллектив медицинских работников, в состав которых входит: доктор, медицинская сестра, стоматолог, фармацевт, куратор здоровья. Каждый детский сад оснащен бассейном и даже во время каникул дети могут приходить и плавать в нём [1].

В Соединенных Штатах Америки не только заботятся о здоровье дошкольников, но и введено правило: включение в обычную группу детского сада детей с ограниченными возможностями здоровья. Вместе с ними находятся тьюторы. Дети как правило проходят через те же ситуации, что и остальные члены группы, и только при необходимости им оказывается помощь.

Развивающая среда – «это единство социальных и природных факторов, которые могут влиять прямо или косвенно, мгновенно или долговременно на жизнь; это система материальных объектов деятельности ребенка, функционально моделирующая содержание его духовного и физического развития» [4]. Необходимо построить окружающее пространство таким образом, чтобы каждый ребенок чувствовал себя в нем комфортно, имел возможность реализовывать свою индивидуальность, быть личностью среди других детей в группе. Данная проблема в отечественной системе дошкольного образования разрабатывалась рядом известным психологов и педагогов, таких как Т.В. Антонов, Л.М. Кларина, С.Л. Новоселова, Л.А.

Парамонова, В.А. Петровский. В Великобритании создается развивающая среда, которая позволяет детям задействовать тот вид деятельности, который он хочет в данный момент и предоставления детям возможности самостоятельно выбирать и осуществлять ту или иную привлекательную для них деятельность. Когда попадаешь в помещение «ясельной школы», первое, что бросается в глаза, - чрезвычайное изобилие разнообразного оборудования и материалов. На территории, занимаемой группой имеется следующее оборудование: большие мольберты с прикрепленными к ним листами бумаги и наборы крупных банок с красками, кистей, мелков; верстак с тисками, инструментами и материалами (молотки, клещи, гвозди, пилы, куски дерева); ванна с водой, в которой находятся плавающие игрушки и специфические «водяные игрушки» типа водяных мельниц; песочницы с сухим и мокрым песком и множество другого материала, который способствует умственному и физическому развитию ребенка, который способствует воспитанию всесторонней личности [3].

Японию можно ставить в пример всем странам в дошкольном образовании. Развивающая среда очень обширна и дает ребенку полную волю его действий. Все предметы, которые находятся в группе являются копиями взрослых и с ними проводятся реальные действия. Старшие учат младших приемам самообслуживания самостоятельно, без помощи воспитателя. Они показывают подробно одно действие за другим, а после следят за их выполнениями маленьким ребенком.

Организация игровой деятельности детей. По мнению Л.С. Выготского игра – «это творческая переработка пережитых впечатлений, комбинирование их и построение из них новой действительности, отвечающей запросам и влечениям самого ребенка.» Эту же мысль можно проследить в определении Ж. Фабру игра – «окно в мир взрослой жизни». «Игра – это искра, зажигающая огонек пытливости и любознательности». В.А. Сухомлинский. Таким образом игра – основной вид деятельности на всём протяжении дошкольного детства. Она является эффективным средством формирования личности дошкольника, его морально-волевых качеств, в игре реализуется потребность воздействия на мир. В детских садах Японии распространена свободная игра. Свободная игра заключается в том, что ребенок делает, что хочет – рисует, строит модели, участвуют в сюжетно-ролевых и в дидактических играх.

Свободная игра заключается в том, что она свободна от вмешательства взрослого и все возникшие ситуации, конфликты дети решают самостоятельно, учатся находить компромисс, налаживать отношения между собой. Дети не жалуются воспитателю. Что касается совместной игры с воспитателем, то здесь идёт упор на игры с большой физической активностью – бег, танцы, игра с мячом. Каждая игра направлена на решение проблемы с лишним весом, которая актуальна не только в Японии, но и всём мире. Если воспитатель заметит, что ребенок играет с каким-то предметом, не предназначенным для игр или для какой-то деятельности, то он предложит детям оформить этот предмет и придумать всем вместе игры с ним. Так же дети играют в игры, в которых они выполняют реальные действия. Детям могут дать краску и кисти и сказать, что необходимо покрасить забор на участке. Дети сталкиваются с настоящей задачей и с большим удовольствием выполняют ее тщательно и до конца. Детские сады Японии так же поощряют детей за бег и крик, воспринимая детей такими, какие они есть. Драки разрешаются, воспитатель не лезет в них, а только дает понять после как сделать лучше обеим сторонам в решении конфликта, так как виноват каждый. Драка является важным социальным опытом, а не асоциальным поведением. Ставя в сравнение Японии и Китая, необходимо отметить, что каждое действие ребенка находится под строгим наблюдением. В играх дети пассивны, послушны, соблюдают дисциплину и всегда находятся возле взрослого. В детском саду запрещено



плохое поведение, отказ от подчинения взрослого. Плохое поведение пресекается тут же. В ссоры детей воспитатель вмешивается сразу, не давая им разгореться. Весь день, который проводит китайский ребенок в детском саду, очень загружен и поэтому время на игру остается мало. По нашему мнению, китайская система в отношении игры очень сурова, ведь нельзя ребенка лишать самого главного в его детстве, необходимо стараться включать игровые моменты даже на занятиях.

Требования к воспитателю. Воспитатель – ключевая фигура в воспитании ребенка дошкольного возраста. Родители приводят ребенка в детский сад утром и забирает вечером. Воспитатель заменяет маму и папу ребенку на момент его нахождения в детском саду. На него накладывается огромная ответственность за моральное состояние ребенка, за его настрой, комфорт, да и за саму жизнь. Требования, предъявляемые к педагогам детского сада Китая, достаточно высоки, поскольку воспитатели играют важную роль в реализации задач дошкольного образования. Воспитатели должны быть последовательными, спокойными и твердыми и никогда не должны сердиться. Им следует абсолютно ясно давать понять детям, что от них требуется, а что нельзя делать. Главная задача – занять детей полностью. В китайском детском саду у воспитателя и детей нет свободного времени. Свободное времяпровождение считается бесцельным. В китайском детском саду можно встретить мужчину-воспитателя и это не редкость. Это положительно влияет на процесс гендерного воспитания детей. Группа похожа на семью: мама, папа и дети. Квалификация присваивается по результатам письменного тестирования. С помощью тестов проверяются информированность и память. А вот отношение к детям и способность с ними работать таким способом проверить невозможно. Поэтому в японских детских садах работает много людей, которые не любят детей.

Таким образом, теоретический анализ опыта зарубежных систем позволяет нам сделать вывод, что элементы данных систем, несмотря на множество отличительных черт, могут быть полезными для каждого дошкольного образования и способствовать повышению его эффективности.

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## **МЕТОДЫ СОВЕРШЕНСТВОВАНИЯ ПЛАТЕЖНОЙ СИСТЕМЫ В УСЛОВИЯХ УСТОЙЧИВОГО РАЗВИТИЯ ЭКОНОМИКИ**

*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.*

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## **METHODS FOR IMPROVING THE PAYMENT SYSTEM IN CONDITIONS OF SUSTAINABLE ECONOMIC DEVELOPMENT**

*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»<sup>29</sup> 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.

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<sup>29</sup> 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 3458 человек<sup>30</sup>.

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 наличными<sup>31</sup>. 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).

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

<sup>30</sup> www.cbu.uz Ўзбекистон Республикаси Марказий банки маълумотлари

<sup>31</sup> 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 1953727,6 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.

По данным Центрального банка Республики Узбекистан, объем депозитов населения в 2022 году в частных коммерческих банках увеличился на 1,3 процента по сравнению с 2021 годом и достиг 1 953 727,6 миллиарда долларов. составил сумму. Так же мы видим, что количество пользователей дистанционным банковским обслуживанием, т.е. юридические и физические цифры, которые на 1 января 2022 года достигли 10 153 458, которые связаны с расширением качества банковских услуг и широким использованием современных информационно-коммуникационных технологий. технологические, повышающие эффективность работы, внедрения и банковской системы.

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 20322.

Заключение Постановление Президента Республики Узбекистан от 23 марта 2018 года № 3620 «О дополнительных мерах по повышению популярности банковских услуг»<sup>32</sup> описывает деятельность банков и пути устранения имеющихся у них недостатков.

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.

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<sup>32</sup> Постановление Президента Республики Узбекистан О дополнительных мерах по повышению доступности банковских услуг

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 показывает, что он является одним из наиболее актуальных вопросов сегодня.

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## **ПЕРСПЕКТИВЫ СОВЕРШЕНСТВОВАНИЯ ПЛАТЕЖНОЙ СИСТЕМЫ С УЧАСТИЕМ ФИНАНСОВЫХ ИНСТИТУТОВ НОВОГО УЗБЕКИСТАНА**

*Аннотация. В статье выявлены проблемы, связанные с совершенствованием практики использования финансовых ресурсов в инновационном развитии экономики Республики Узбекистан и разработаны научные предложения, направленные на их решение.*

*Ключевые слова: собственные средства субъектов хозяйствования, кредиты коммерческих банков, средства государственного бюджета, иностранные инвестиции, международные кредиты, прочие заемные средства.*

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## **PROSPECTS FOR IMPROVING THE PAYMENT SYSTEM WITH THE PARTICIPATION OF FINANCIAL INSTITUTIONS OF THE NEW UZBEKISTAN**

*Annotation. The article identifies problems associated with improving the practice of using financial resources in the innovative development of the economy of the Republic of Uzbekistan and develops scientific proposals aimed at solving them.*

*Key words: own funds of business entities, loans from commercial banks, state budget funds, foreign investments, international loans, other borrowed funds.*

**Введение.** В нашей стране реализуются комплексные меры по активному развитию цифровой экономики, широкому внедрению современных информационно-коммуникационных технологий во все отрасли и сферы, в первую очередь, в государственное управление, образование, здравоохранение и сельское хозяйство.

В частности, реализация более 220 приоритетных проектов, направленных на совершенствование системы электронного правительства,



дальнейшее развитие местного рынка программных продуктов и информационных технологий, создание ИТ-парков во всех регионах республики, а также обеспечение отрасли квалифицированными кадрами началось.

Кроме того, реализуется комплексная программа «Цифровой Ташкент», предусматривающая запуск геопортала, интегрированного с более чем 40 информационными системами, создание информационной системы управления общественным транспортом и коммунальной инфраструктурой, цифровизацию социальной сферы, и последующее внедрение этого опыта в другие регионы.

**Анализ литературы и методология.** В экономической литературе взгляды на платежную систему и ее совершенствование существенно отличаются друг от друга. А.С.Нешиной, Е.Ф. В работах Жукова, В.П.Полякова и ряда других экономистов безналичные расчеты определяются как перечисление платежей через банковские счета и на основании отказа от взаимных требований.

Например, по определению Е. Жукова, «безналичные расчеты - это расчеты, осуществляемые без использования наличных денег, путем перечисления денежных средств на счета в кредитных организациях и отказа от взаимных требований».<sup>2</sup>

Из этого определения видно, что Е. Жуков различает два аспекта безналичных расчетов: перевод денежных средств через счета, открытые в кредитных организациях, и отказ от взаимных требований. На наш взгляд, такое определение характерно для практики стран с переходной экономикой (Россия, Узбекистан, Казахстан, Украина и др.), где до сих пор существует процедура отказа от взаимных требований. В практике развитых стран отсутствуют расчеты, основанные на отказе от взаимных требований и обязательств. В странах с переходной экономикой из-за низкого уровня финансовых ресурсов экономики существует большой объем дебиторско-кредиторской задолженности между хозяйствующими субъектами.

В таких условиях уменьшение размера дебиторско-кредиторской задолженности, финансовых обязательств хозяйствующих субъектов перед государственным бюджетом

чтобы уменьшить свою задолженность, они вынуждены использовать метод отказа от взаимных требований и обязательств. В учебнике «Банковское дело», изданном под редакцией профессора О. И. Лаврушина, в безналичные расчеты включены следующие три вида расчетов:<sup>3</sup>

- расчеты безналичным расчетом на счета плательщиков и получателей денежных средств, открытые в кредитных организациях;
- расчеты путем отказа от взаимных требований;
- расчеты, осуществляемые путем передачи платежных инструментов в обращение (векселя, варранты и т.п.)

**Обсуждение.** В отличие от приведенного выше определения безналичных расчетов, О.И. По определению Лаврушина платежи, осуществляемые с помощью платежных инструментов, также относятся к безналичным платежам.

Это связано с тем, что, во-первых, в данном определении выражены расчеты, основанные на отказе от взаимных требований, характерных для экономической практики стран с переходной экономикой; во-вторых, признаются безналичные расчеты, произведенные путем перечисления на банковские счета; в-третьих, подчеркивается наличие безналичных расчетов через платежные инструменты.

При расчетах за товары и услуги широко используются два вида платежных инструментов: простые и оборотные коммерческие векселя. Характерно, что коммерческие векселя могут выполнять функцию денег как средства платежа.

Поэтому безналичный расчет может заменить определенную часть средств, вовлеченных в оборот.

Есть и вторая сторона дела. Содержание данного аспекта заключается в том, что коммерческие векселя могут быть обращены несколько раз посредством индоссамента, что позволяет резко уменьшить размер дебиторско-кредиторской задолженности между хозяйствующими субъектами.

Поэтому расчеты, осуществляемые посредством обращения простых и переводных коммерческих векселей, также включаются в состав безналичных расчетов.

**Полученные результаты.** Вместо «банковские счета плательщиков и получателей денежных средств» заменить «текущие банковские счета плательщиков и получателей денежных средств». Это связано с тем, что существует три основных вида банковских счетов поставщиков и плательщиков: текущий депозитный счет, срочный депозитный счет, сберегательный депозитный счет. Но платежные документы пишутся только на текущий депозитный счет. Поэтому, на наш взгляд, в определении должен быть четко прописан текущий депозитный счет.

Перевод экономики Республики Узбекистан на путь инновационного развития является необходимым условием обеспечения ее конкурентоспособности. В «Стратегии действий по дальнейшему развитию Республики Узбекистан», утвержденной Указом Президента Республики Узбекистан от 7 февраля 2017 г. № признано одним из необходимых условий сохранения темпов роста.<sup>5</sup>

Планируется поэтапный переход к новой модели экономики, специализирующейся на производстве «умных» технологий.<sup>1</sup>

В свою очередь, инновационное развитие отраслей экономики создает необходимость создания источников, позволяющих полностью финансировать инновационные затраты.<sup>4</sup>

К источникам финансирования инновационного развития отраслей экономики относятся:

- \* собственные средства хозяйствующих субъектов;
- \* кредиты коммерческих банков;
- \* средства из государственного бюджета;
- \* иностранные инвестиции;
- \* международные кредиты;
- \* прочие привлеченные средства.

**Таблица 1**

**Состав источников финансирования инвестиций в основной капитал в Республике Узбекистан, в процентах**

Источники финансирования	Годы				
	2017	2018	2019	2020	2021
<i>Собственные средства предприятий</i>	55,2	54,7	52,9	53,0	29,4
<i>Средства государственного бюджета</i>	5,3	4,5	4,5	4,5	5,5
<i>Кредиты коммерческих банков и другие заемные средства</i>	10,3	11,2	11,8	10,0	11,0
<i>Иностранные инвестиции и кредиты</i>	19,3	19,8	19,9	21,3	20,4
<i>Другие источники</i>	9,9	9,8	10,9	11,2	33,7
<b><i>Источники финансирования - всего</i></b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>	<b>100,0</b>

Из данных табл. 1 видно, что в 2021 г. вес источников финансирования инвестиций в основной капитал предприятий резко снизился за счет увеличения веса других источников. Это объясняется увеличением доли средств Фонда восстановления и развития Республики Узбекистан, направляемых на финансирование инвестиций в 2021 году. В результате в 2021 году удельный вес средств Фонда восстановления и развития Республики Узбекистан в общем объеме источников финансирования инвестиций в основной капитал составил 8,5 процента.<sup>5</sup>

Среди экономистов существуют разные взгляды на совершенствование практики использования безналичных форм расчетов. Например, согласно теории «открытых оферт», созданной известным экономистом О. Херши, сумма, обещанная к выплате бенефициару, указанному в аккредитиве, является офертой и остается открытой до ее акцепта.<sup>4</sup>

На наш взгляд, теория «открытых предложений» не имеет практического значения для современного состояния системы безналичных расчетов в Республике Узбекистан. Потому что в нашей республике в основном используются обеспеченные документарные аккредитивы. Нет необходимости обещать сумму платежа получателю.

Это связано с тем, что в обеспеченных аккредитивах сумма платежа депонируется на отдельном счете.

**Заключение.** Коммерческими банками нашей республики разработаны следующие научные предложения и практические рекомендации по совершенствованию форм безналичного расчета при оказании расчетных услуг сельскохозяйственным предприятиям:

1. При расчете через платежные поручения необходимо внести как можно меньшую предоплату от количества товара.

2. Необходимо увеличить объем открытия беззалоговых аккредитивов банками сельскохозяйственным предприятиям.

По мнению Х. Рахимовой, ограниченность количества безналичных инструментов в хозяйственном обороте нашей республики, особенно неразвитость практики использования инструментов кредитного характера, является причиной замедления платежных процессов в стране. экономики, приводящие к неисполнению договорных обязательств хозяйствующих субъектов.

- переход к долларизации в малых странах, то есть вывод национальной валюты из обращения и использование доллара США и других ведущих валют в качестве средства обращения, позволяет обуздать инфляцию, улучшить денежное обращение, резко сократить оборот наличных денег вне банков;

- неофициальная, то есть негласная долларизация используется в целях ухода от налогов, незаконной торговли товарами и приводит к ухудшению денежного обращения;

- долларизация не позволяет Центральному банку страны проводить самостоятельную денежно-кредитную политику;

- долларизация требует перехода к валютному управлению;

- в результате долларизации Федеральная резервная система США получит возможность получать большую сумму дохода, то есть сеноража.

Монеты номиналом 1 и 5 не должны быть выпущены в обращение.

В заключении, в экономической литературе содержатся различные взгляды, мнения и мнения по поводу классификации безналичных форм расчетов, совершенствования практики их использования.

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## **ПУТИ ПОВЫШЕНИЯ ОТВЕТСТВЕННОСТИ ПРЕДСТАВИТЕЛЕЙ ГОСУДАРСТВА В ХОЗЯЙСТВЕННЫХ ОБЩЕСТВАХ С ГОСУДАРСТВЕННЫМ УЧАСТИЕМ**

*Аннотация. Учитывая возрастающую, в последнее время, роль представителей государства в хозяйственных обществах с государственным участием, нами была проведена аналитическая работа, результаты которой еще раз подтвердили всю важность и значение участия представителей государства в организации эффективной хозяйственной деятельности предприятий и организаций. Были также определены основные принципы и подходы к порядку проведения оценки эффективности деятельности представителей государства. Предложено разработать положение о проведении оценки эффективности деятельности представителей государства предприятий (акционерных обществ, обществ с ограниченной и дополнительной ответственностью и др.) с участием государства, сделаны выводы и предложения.*

*Ключевые слова: государственные представители, агентство по госактивам, акционерные общества, общества с ограниченной и дополнительной ответственностью, корпоративное управление, наблюдательный совет.*

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## **WAYS TO INCREASE THE RESPONSIBILITY OF STATE REPRESENTATIVES IN BUSINESS COMPANIES WITH STATE PARTICIPATION**

*Annotation. Taking into account the recently increasing role of state representatives in business companies with state participation, we carried out analytical work, the results of which once again confirmed the importance and significance of the participation of state representatives in organizing the effective economic activities of enterprises and organizations. The basic principles and*



*approaches to the procedure for assessing the effectiveness of the activities of state representatives were also identified. It was proposed to develop a regulation on assessing the effectiveness of the activities of state representatives of enterprises (joint stock companies, limited and additional liability companies, etc.) with the participation of the state, conclusions and proposals were made.*

*Key words: State representatives, State Assets Agency, joint stock companies, limited and additional liability companies, corporate governance, supervisory board.*

В Узбекистане за годы независимости особое внимание уделялось обеспечению прав и свобод граждан, демократизации государственной структуры, углублению рыночных реформ, созданию необходимых гарантий в деле защиты частной собственности, предпринимательства, малого и среднего бизнеса. Работа в данном направлении последовательно продолжается. Расширены масштабы политических, социально-экономических, духовно-правовых реформ, приняты стратегические программы, направленные на развитие различных форм предпринимательства для устойчивого роста национальной экономики в условиях рыночных отношений и эффективного использования имеющихся возможностей, создание организационно-правовой базы данной сферы, дальнейшее их совершенствование и либерализацию экономики.

В целях ускоренного проведения институциональных и структурных реформ, внедрения эффективных механизмов управления государственными активами, надежного функционирования рынка капитала, было принято Постановление Кабинета Министров Республики Узбекистан от 29 марта 2021 года №166 «Об утверждении Стратегии управления и реформирования предприятий с государственным участием на 2021-2025 годы».

Кроме того, за последние годы, в республике был принят ряд нормативно-правовых документов, касающихся вопросов управления государственными активами, а также корпоративного управления. В частности, был принят Закон Республики Узбекистан **«Об управлении государственным имуществом»**. Также, Постановлением Президента Республики Узбекистан **«О мерах по эффективной организации деятельности Агентства по управлению государственными активами»** от 24 марта 2023 года №101, было установлено, что с 1 июля 2023 года, в целях внедрения современной системы корпоративного управления на предприятиях с государственным участием, повышения эффективности их деятельности и совершенствования дивидендной политики, размер дивидендов рекомендуется членами наблюдательного совета предприятий с государственным участием, избранными по доле государства, общему собранию акционеров (участников) по согласованию с Агентством по

управлению государственными активами, исходя из инвестиционных проектов, показателей бизнес-плана и финансового состояния предприятий.

В настоящее время действуют 232 акционерных общества в 224 из которых образованы наблюдательные советы. Идет активный период кадровых перестановок в органах корпоративного управления связанных с избранием их новых составов на очередных собраниях акционеров в акционерных обществах. Поэтому, из 1214 мест для представителей государства в наблюдательных советах получили назначение на новый период только 526 представителей. При этом, в соответствии с мировыми тенденциями успешно применяется гендерный принцип: сейчас 118 женщин осуществляют функции представителей государства в 90 акционерных обществах<sup>33</sup>.

Согласно официальной статистике по состоянию на 15 августа 2023 г. имеется следующая картина по кадровому обеспечению органов корпоративного управления и контроля представителями государства на предприятиях с государственным участием.

**Таблица**

**Общие показатели кадрового обеспечения органов корпоративного управления и контроля представителями государства в хозяйственных обществах с государственным участием по состоянию на 15.08.2023 г.**

№ п/п	Наименование показателя	Количество
1.	Всего предприятий	2313
1.1.	Из них: - образован наблюдательный совет	363
1.2.	- образована ревизионная комиссия	113
1.3.	- образован исполнительный орган	1837
2.	Всего членских мест в органах корпоративного управления и контроля	4719
2.1.	Из них: - в наблюдательном совете	1959
2.2.	- в ревизионной комиссии	285
2.3.	- в исполнительном органе	2475

Как видно из таблицы на предприятиях с государственным участием действуют 476 наблюдательных советов и ревизионных комиссий, для комплектования которых требуется 2244 специалиста, больше половины которых являются представителями государства. Масштабность данного явления требует повышенного внимания к вопросам эффективности деятельности представителей государства в хозяйственных обществах с государственным участием.

Представитель государства - доверительный управляющий инвестиционными активами, осуществляющий доверительное управление

<sup>33</sup> По статистическим данным Агентства по управлению государственными активами Республики Узбекистан.

государственной долей или физическое лицо, имеющее на основании соответствующей доверенности полномочия для голосования по государственной доле.

Доверительное управление государственным имуществом возникает на основании договора доверительного управления государственным имуществом, заключаемого между Агентством по управлению государственным имуществом Республики Узбекистан (далее Агентство по госактивам) или органом исполнительной власти на местах и доверительным управляющим.

В мировой практике имеются случаи конфликта интересов государства и его представителей, когда их ответственность перед государством не совсем четко прописывается и закрепляется договорными отношениями. Так, «ослабленная» ответственность за участие государства в управлении акционерными обществами, за директивы, выдаваемые представителям государства на собраниях акционеров и в советах директоров (наблюдательных советах) этих обществ, ведет к снижению качества разрабатываемых директив, к выдвижению на роль представителей государства лиц, недостаточно компетентных в сфере корпоративного управления, в проблематике тех конкретных отраслей, в которых действуют управляемые общества.<sup>34</sup>

Изучение деятельности представителей государства на предприятиях приводит к следующим выводам:

Размеры вознаграждений членам совета директоров (наблюдательных советов) в период исполнения ими своих обязанностей и (или) компенсации расходов, связанных с исполнением ими функций членов совета директоров, устанавливаются решением общего собрания акционеров. Представляется актуальной разработка единообразных основ для формирования директив<sup>35</sup> представителям государства на общих собраниях акционеров по вопросам вознаграждения членов наблюдательных советов. По мнению некоторых экспертов, весьма продуктивна идея формирования корпуса госпредставителей в наблюдательных советах на конкурсных началах, как это начали практиковать в Республике Узбекистан. Утверждается, что идеальными кандидатами на занятие вакансий госпредставителей в наблюдательных советах и ревизионных комиссиях являются независимые специалисты по корпоративному праву и корпоративному управлению. Наличие стратегических соглашений может стать хорошей основой для выстраивания договорных отношений с независимыми специалистами, подбираемыми на роль представителей государственных интересов.

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<sup>34</sup> Дементьев В. Возможности повышения эффективности государства как акционера российских компаний. Теория и практика институциональных преобразований в России. Вып. 7. М., ЦЭМИ, 2006.

<sup>35</sup> Имеются ввиду указания и распоряжения государственных органов государственным представителям, имеющие директивный характер.

Кроме того, ставка исключительно на специалистов по корпоративному управлению представляется сомнительной из-за выносимого на наблюдательный совет значительного спектра вопросов, требующих хорошего знания отраслевой специфики, бизнес планирования, финансового, инвестиционного, а также стратегического менеджмента. Как известно, к компетенции наблюдательного совета общества относятся, в частности, определение приоритетных направлений деятельности общества. Так, реализация стратегических задач, требует от наблюдательного совета выработки инвестиционной, эмиссионной, технической и технологической политики общества.

Исследование показывает, что структура института представителей в настоящее время состоит из работников отраслевых министерств, ведомств и комитетов. Таким образом, можно отметить, что институт представителей государства в основном на 100 % состоит из государственных служащих различных должностей, которые представляют интересы государства в хозяйственных обществах, параллельно со своими основными служебными обязанностями.

Проведенный анализ функционирования этого института позволяет констатировать, что работа представителей государства имеет следующие основные недостатки:

- нерегулярный характер работы представителей государства в хозяйственных обществах, что не позволяет им вникнуть в состояние дел и принимать соответствующие решения, обеспечивающие защиту интересов государства;

- недостаточно эффективное использование представителями государства в органах управления хозяйственных обществ своих полномочий, в случае критического состояния дел в обществе (инициирование созывов наблюдательного совета с детальной проработкой ситуации, постановка вопроса о смещении руководителей хозяйственных обществ, допускающих длительные задержки заработной платы, нерациональное ведение финансово-хозяйственной деятельности, включение в повестку дня органов управления вопросов о состоянии задолженности и мерах по ее погашению и т.д.);

- нерегулярная отчетность представителей государства об их работе в хозяйственных обществах. Как правило, отчеты носят чисто формальный характер, нет особого мнения по различным аспектам деятельности представителей государства даже в тех предприятиях, которые имеют неудовлетворительную структуру баланса;

- недостаточная профессиональная подготовка представителей государства, особенно в части знания действующего законодательства, что в ряде случаев приводит к малообоснованным действиям представителей государства в органах управления акционерных обществ.

Вместе с этим, по результатам проведенного исследования можно сделать следующие выводы:

- для эффективного управления хозяйственными обществами государству целесообразно разумно сочетать использование государственных представителей и независимых членов наблюдательного совета;

- повышение ответственности представителей государства, выполняющих различные функции в наблюдательных советах (советах директоров), приводит к повышению эффективности их деятельности;

- институт представителей государства и независимых членов наблюдательного совета призваны обеспечить соблюдение баланса воли государства и интересов общества при управлении в хозяйственных обществах с государственным участием.

Для дальнейшего повышения ответственности деятельности представителей государства в хозяйственных обществах с государственным участием предлагается основываться на следующих принципах управления государственной собственностью.

1. Необходимость оценки результативности работы представителя государства в соотношении с критериями социальной и экономической эффективности деятельности общества.

2. Системность управления. Этот принцип находит свое выражение во взаимосвязи функций управления собственностью, общей цели управления, обеспечивающей направленность системы элементов управления.

3. Профессионализм. Реализация данного принципа предполагает конкурсную систему при привлечении представителей государства и систему их подготовки и повышения квалификации.

4. Исполнительская дисциплина. Реализация данного принципа должна обеспечивать реализацию государственной инвестиционной политики на местах, усилить ответственность государственных представителей перед уполномоченными государственными органами и усилить ответственность членов органов корпоративного управления перед акционерами.

Исполнение данного принципа может выражаться в обеспечении надлежащей организации следующих процессов:

- обеспечении проведения собраний и заседаний органов корпоративного управления и контроля в установленные сроки;

- личное присутствие членов органов корпоративного управления и контроля на заседаниях этих органов;

- оформление решений органов корпоративного управления и контроля в установленные сроки;

- доведения до сведения исполнителей содержания решений органов корпоративного управления и контроля в установленные сроки;

- мониторинг за исполнением решений органов корпоративного управления и контроля;
- наличие системы стимулирования за ответственное и своевременное выполнение и системы дисциплинарных взысканий за некачественное или несвоевременное выполнение решений органов корпоративного контроля;
- оценка государственными представителями эффективности системы обеспечения исполнительской дисциплины на предприятиях с государственным участием;
- разработка государственными представителями своих предложений по совершенствованию системы обеспечения исполнительской дисциплины.

Изложенные принципы и критерии могут применяться органами, наделенными полномочиями по управлению государственным имуществом. Их применение даст ряд положительных преимуществ, позволяющих значительно повысить эффективность управления государственными активами. Прежде всего, это позволит государству занять позицию активного собственника, получающего через своих представителей достоверную информацию о реальном положении дел в обществах и оперативно принимать соответствующие решения, оценить эффективность работы представителей в количественном выражении, заменить не отвечающих требованиям представителей государства в хозяйственных обществах с государственным участием.

Избрание в качестве представителей государства государственных служащих и профессиональных поверенных не исключает возможности включения в наблюдательный совет хозяйственных обществ с государственным участием независимых директоров, которые не заключают договор на представление интересов государства и не обязаны соблюдать требования уполномоченного органа, действуют в наблюдательном совете, исходя из личного представления об интересах общества и его участников.<sup>36</sup>

По нашему мнению, назначение независимых директоров, которые работают без договора с уполномоченным органом, действуют в наблюдательном совете, исходя из личного представления об интересах общества и его участников, что может не дать ожидаемого результата по защите интересов государства в хозяйственных обществах с долей государства.

Кроме того, представляется целесообразным утвердить Положение о проведении оценки эффективности деятельности представителей государства предприятий (акционерных обществ, обществ с ограниченной и дополнительной ответственностью и др.) с участием государства.

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<sup>36</sup> Гаджиев Н.Г., Коноваленко С.А. "Проблемы повышения эффективности деятельности акционерных обществ с государственным участием" Экономика и бизнес: теория и практика, no. 9-1, 2020, pp. 98-101. doi:10.24411/2411-0450-2020-10699



Основной целью проведения оценки эффективности деятельности представителей государства может являться мониторинг динамики позитивных изменений в практике деятельности представителей государства, совершенствование работы по управлению предприятиями с участием государства и повышение эффективности деятельности представителей государства. Данное Положение могло бы определять основные принципы и подходы к порядку проведения оценки эффективности деятельности представителей государства. Целями проведения такой оценки могли бы быть:

- оценка эффективности деятельности представителей государства по выполнению стратегии управления государственными активами, включая обеспечение финансовой устойчивости предприятий;

- выявление, требующих совершенствования, подходов и слабых мест в организации корпоративного управления предприятием;

- оценка личных усилий по организации гармонизации интересов сторон корпоративных отношений на предприятии;

- оценка наличия совокупных знаний и опыта, необходимых для представления интересов государства с учетом специфики конкретного предприятия;

- разработка и практическое внедрение плана мероприятий по представлению интересов государства на предприятии;

- оценка эффективности системы повышения квалификации (обучения) представителей государства;

- воздействие на повышение конкурентоспособности и инвестиционной привлекательности предприятия с определением долгосрочных и краткосрочных целей и задач управления;

- воздействие на повышение уровня корпоративного управления и информационной прозрачности предприятия;

- обеспечение рассмотрения не реже одного раза в квартал:

- а) отчета исполнительного органа и органов внутреннего контроля предприятий с государственным участием, в том числе о закупках, осуществленных предприятием;

- б) оценка уровня контроля за внедрением исполнительным органом принципов корпоративного управления, изложенных в Стратегии, а также Правилах корпоративного управления для предприятий с государственным участием.

Реализация сформулированных выше предложений по дальнейшему повышению эффективности деятельности представителей государства в хозяйственных обществах с государственным участием позволит:

- установить цели для разработки методики оценки эффективности деятельности представителей государства;

- повысить ответственность представителей государства, выполняющих функции членов наблюдательных советов;

- систематизировать деятельность представителей государства на основе принципов управления государственными активами представителями государства;
- усилить контроль и стратегическое видение у представителей государства в обеспечении реализации государственной инвестиционной политики.

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## УПРАВЛЕНИЕ СИСТЕМОЙ КАЧЕСТВА НА ПРЕДПРИЯТИЯХ

*Аннотация. Приведена информация по совершенствованию системы показателей оценки эффективности системы менеджмента качества, относящейся к различным аспектам деятельности предприятия.*

*Ключевые слова: наука, техника, производство, экономика, качество, управление, система, предприятие, рынок и конкуренция.*

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## QUALITY SYSTEM MANAGEMENT IN ENTERPRISES

*Abstract. Information is provided on improving the system of indicators for assessing the effectiveness of the quality management system related to various aspects of the enterprise's activities.*

*Key words: science, technology, production, economics, quality, management, system, enterprise, market and competition.*

Система менеджмента качества – это система управления аспектами, которые прямо или косвенно влияют на деятельность предприятия (удовлетворенность потребителей). В рыночной и конкурентной среде развитые страны мира рассматривают высокое качество как стратегический коммерческий императив и важнейший источник национального богатства.

Качество во многом определяет репутацию государства, служит основой удовлетворения потребностей каждого человека и общества в целом, является важнейшей составляющей конкурентоспособности.

Только на его основе предприятие может выжить в конкурентной среде и получить необходимую прибыль, поэтому очень важно, чтобы деятельность по совершенствованию и обеспечению качества в рыночных условиях была приоритетной.

Основные причины необходимости улучшения и обеспечения качества:

- непрерывный рост личных, производственных и социальных потребностей;
- повышение роли и темпов научно-технического развития в развитии науки, техники, производства, экономики и всего мирового сообщества;

- совершенствование услуг, дизайна выпускаемой продукции и повышение значимости выполняемых функций;
- увеличение объемов производства продукции и услуг и, как следствие, возможное увеличение стоимости брака и судебных исков;
- неприятие потребителями товаров и услуг сравнительно низкого уровня;
- жесткие требования к интенсификации производства и повышению его эффективности как необходимого фактора успешной работы предприятий.

Современный менеджмент качества основан на том, что деятельность по управлению качеством не может быть эффективной после производства продукции, эта деятельность должна осуществляться в процессе производства продукции. Важна также деятельность по обеспечению качества перед производственным процессом. В целом менеджмент качества как процесс воздействия на соответствующие объекты управления следует рассматривать в рамках науки управления в целом.

Механизм управления качеством продукции – это совокупность взаимосвязанных объектов и субъектов управления, принципов управления, методов и функций, используемых на разных стадиях жизненного цикла продукции и уровнях управления качеством.

Специфический механизм управления качеством продукции на предприятиях реализуется в виде так называемых функций управления, важнейшими из которых являются:

- прогнозирование и планирование повышения качества продукции;
- контроль и учет реализации программ повышения качества;
- анализ и оценка деятельности предприятия и его подразделений по вопросам качества;

За счет реализации управленческих функций в системе управления качеством продукции устанавливается связь между техническими, социальными, организационными и правовыми мерами на всех этапах создания и использования продукции.

Структура формирования и развития механизмов повышения качества продукции представляет собой иерархическую разбивку механизма на его компоненты (элементы, модули), что необходимо для планирования и контроля реализации.

Конструкция должна соответствовать следующим правилам:

1. Каждый уровень иерархии декомпозиции выходных процессов системы менеджмента качества должен быть полным или содержать всю сумму частей процесса, перечисленных на этом уровне детализации.
2. На каждом уровне иерархии структуры сумма характеристик элементов системы менеджмента качества должна быть одинаковой.
3. Нижний уровень декомпозиции должен включать элементы (модули), на основе которых может быть четко определена вся информация,

необходимая и достаточная для управления процессом разработки системы менеджмента качества (например: функциональные характеристики, объем работ, затраты, необходимые ресурсы, исполнители, элементы коммуникации и т. д.).

Состав и характер систем качества регулируются рядом международных и местных стандартов управления качеством продукции. Для потребителей наличие таких систем у производителей продукции является гарантией того, что они будут обеспечены продукцией необходимого качества в полном соответствии с договором (контрактами). Поэтому при заключении договоров потребитель часто требует проверки системы обеспечения качества производителя на соответствие требованиям международных стандартов.

Функциональный анализ процесса управления составляет основу объема работ по каждой функции, определяет количество руководителей и проектирует систему управления. Деятельность общества управляется и контролируется его руководителем и в соответствии с Положением. Утверждает состав исполнительного аппарата общества, издает приказы и дает указания, обязательные для всех работников общества.

Все работники общества принимаются на работу на основании трудового договора, заключаемого с руководителем. Условия трудового договора определяются и исполняются по согласию обеих сторон. Руководитель предприятия является непосредственным руководителем всего персонала предприятия. В соответствии с действующим законодательством руководитель принимает решения о выплате заработной платы, материального стимулирования или штрафов рабочим и служащим, издает приказы и распоряжения. Приказы и распоряжения, полученные руководителем, обязательны для работников предприятия.

Такие понятия, как система, среда, цель и программа, постоянно используются в управлении качеством. Еще есть система управления и система управления. Многие уровни управления предприятием представляют собой управляемую систему.

Система менеджмента качества создается и поддерживается системой менеджмента. Для решения проблем качества необходимо правильно оценивать качество на всех этапах жизненного цикла продукции. Оценка качества основана на формировании менеджмента качества на любом этапе производства и использования продукции. Уровень качества продукции основывается на сравнении показателей качества оцениваемой продукции с соответствующими основными показателями. Базовое значение представляет собой приемлемый уровень, которого можно достичь за определенный период времени. Примером основных значений могут служить лучшие отечественные и зарубежные образцы показателей, достигнутые за определенный период времени с достоверными

качественными данными. Оценка качества продукции – это выбор показателей качества оцениваемой продукции, определение значений этих показателей и сравнение их с показателями, выбранными в качестве основных. Выбор показателей качества продукции осуществляется с учетом цели и условий ее использования, требований потребителей, а также действующих требований к качеству в области использования продукции.

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## **ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ ОБУЧЕНИЯ ОСНОВ ЭЛЕКТРОТЕХНИКИ И ЭЛЕКТРОНИКИ В ВЫСШИХ ВОЕННЫХ УЧЕБНЫХ ЗАВЕДЕНИЯХ**

*Аннотация. В статье анализируется повышение эффективности обучения электротехники и электроники в высших военных учебных заведениях. Формирование знаний и умений по электротехнике и электронике неразрывно связано с созданием условий для их самообразования и саморазвития в профессиональной деятельности.*

*Ключевые слова. Обучение, совершенствование, эффективность, самостоятельно, развитие, подготовка, методика.*

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## **INCREASING TRAINING EFFECTIVENESS FUNDAMENTALS OF ELECTRICAL ENGINEERING AND ELECTRONICS IN HIGHER MILITARY EDUCATIONAL INSTITUTIONS**

*Annotation. The article analyzes the increase in the efficiency of electrical and electronics engineering training in higher military educational institutions. The formation of knowledge and skills in electrical engineering and electronics is inextricably linked with the creation of conditions for their self-education and self-development in professional activities.*

*Keywords. Training, improvement, efficiency, independently, development, preparation, methodology.*

Обзор сегодняшнего состояния преподавания дисциплины электротехники и электроники в высших военных учебных заведениях показывает необходимость совершенствования изучения его в соответствии современных требований к профессиональной подготовке будущих офицеров. Прежде надо определить научно обоснованные методы активизации обучения дисциплине в связи с сокращением объема часов, выделенных на электротехнику и электронику.

На лекциях и лабораторных занятиях следует выдвигать проблемы, стимулирующие работы на самостоятельную подготовку курсантов.

Самостоятельная подготовка должна дополнять и развивать идеи и целевые, полученные на аудиторных занятиях.

Самостоятельная работа курсантов с литературой и конспектами лекций с целью овладения наиболее полным программным материалом и повышения профессиональной подготовки является одним из важных направлений самостоятельной подготовки. А стимулом к любому типу самостоятельной работы является интерес к ней и осознание ее полезности и необходимости. Основная работа преподавателя в этом деле должна быть направлена на развитие у курсантов мотивации к учебе и обеспечение качественной курсанта профессиональной подготовки.

В совершенствовании преподавания курса электротехники наиболее важными являются проведение следующих учебно-методических мероприятий. Необходимо улучшить обеспечение курсантов учебными и методическими пособиями, соответствующими требованиям основной образовательной программы подготовки специалиста данного профиля. Следует совершенствовать тематику научно-исследовательских и учебных работ, обеспечивающих активизацию вовлечения курсантов во все виды учебной деятельности.

Важным в освоении дисциплины электротехники и электроники считается проведение практических занятий по решению задач. Поэтому нужно систематизировать выполнение цикла самостоятельных расчетно-графических с последующими защитами при их сдаче. Организация и проведение такой требует разработки цикла задач по темам и также методических указаний по решению типовых примеров-расчетов.

Эффективность самостоятельной работы над теоретическими материалами обеспечивается при наличии методических указаний по отдельным важным темам, такими как «Электрические машины постоянного тока», «Асинхронные двигатели», «Электрические датчики» и т.д.

Незначительное количество существующих учебных пособий, предназначенных для высших военных учебных заведений, требует систематизации в соблюдении общепринятых условно-графических обозначений, установленных ГОСТ ом, и более строгого подхода при изложении учебного материала, который требуют технические дисциплины. Обзор состояния вопроса показывает о необходимости наличия учебного пособия по электротехнике и электронике для военных вузов, отвечающего современным требованиям науки и практики. В существующих учебных пособиях электротехники и электроники недостаточно освещено значение применения прогрессивных электротехнологий для применения в военном деле.

В приобретении умений и навыков проведения экспериментальных исследований важное место отводится лабораторным занятиям. Содержание этих занятий должно обеспечивать изучение наиболее

распространенных электроизмерительных приборов, электрических машин и других объектов электротехники и электроники, применяемых в военной технике.

Важнейшим этапом лабораторного занятия является подготовительный этап, включающий в себя: ознакомление с целями, содержанием и средствами предстоящих экспериментов; определение теоретического обоснования закономерностей и взаимосвязей, которые составляют основу эксперимента, эксперимента и его выполнение. А успех проведения подготовительного этапа в основном определяется наличием методического пособия к лабораторным работам, обеспечивающего подготовку к экспериментам предварительно во время самостоятельной подготовки и непосредственно на занятиях.

Практика показывает, что во многих случаях предварительная самостоятельная подготовка курсантов к лабораторной работе во время самостоятельной подготовки, позволяет провести теоретическую подготовку эффективно. Как показывает обзор литературы, методические указания к лабораторным работам по электротехнике для военных вузов не выпускались.

Разработанность лекционных демонстраций и умелое использование экранных средств - это один из эффективных способов повышения активности курсантов на лекциях. Основой для повышения эффективности и

результативности познавательной деятельности курсантов является вовлечение их в активную самостоятельную работу и другие виды учебной деятельности по имевшимся целям изучения предмета на базе дидактических средств.

С целью восполнения дефицита времени, отпущенного на изучение курса электротехники и электроники, предлагается введение внеаудиторных занятий и работ с различными целевыми назначениями. Любое учебное занятие может быть эффективным только в том случае, если курсант осознает цель занятия и методы достижения этой цели и имеет соответствующие теме теоретические знания.

Для решения отмеченной проблемы следует вести поиски эффективной методики организации изучения курса электротехники и электроники как целостной учебной дисциплины, отвечающей профессиональной подготовке курсантов в данной области знаний.

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## **ОСОБЕННОСТИ АДАПТАЦИИ ВАХТОВЫХ РАБОТНИКОВ ГОРНОДОБЫВАЮЩИХ ПРЕДПРИЯТИЙ КРАЙНЕГО СЕВЕРА**

*Аннотация. Рассмотрены особенности реализации социосредовых адаптационных стратегий для повышения эффективности профессиональной деятельности сотрудников горнодобывающих предприятий в условиях Крайнего Севера. Выявлены основные направления, требующие адаптационных мероприятий и влияющих на снижение производительности труда. Определены актуальные тенденции формирования социосредовой адаптации на основе мотивации труда и личностно-деятельностного подхода.*

*Ключевые слова: социосредовая адаптация, вахтовый способ, мотивация, территория Крайнего Севера, человеческий капитал, человеческие ресурсы*

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## **FEATURES OF ADAPTATION OF SHIFT WORKERS OF MINING ENTERPRISES OF THE FAR NORTH**

*Abstract. The features of the implementation of socio-environmental adaptation strategies to improve the efficiency of professional activity of employees of mining enterprises in the conditions of the Far North are considered. The main directions requiring adaptation measures and affecting the reduction of labor productivity are identified. The current trends in the formation of socio-environmental adaptation based on work motivation and personal activity approach are determined.*

*Keywords: social and environmental adaptation, shift method, motivation, the territory of the Far North, human capital, human resources.*

*Введение. Проблема адаптации вахтовых работников горнодобывающей отрасли находится в общем проблемном поле*

повышения уровня эффективности управления и мотивации человеческими ресурсами в сложных климатических и метеорологических условиях. Этим обусловлена актуальность исследования. Эффективность – это максимальное использование имеющихся у предприятия ресурсов с наименьшими их потерями для достижения целей деятельности. Управление человеческими ресурсами – один из самых ответственных управленческих блоков, которые требуют аналитики данных, выбора стратегий управления на основе особенностей целевых групп персонала, представленных на предприятии. *Цель исследования:* проанализировать особенности адаптации вахтовых работников предприятий горнодобывающей отрасли на территории Крайнего Севера. *Объект исследования:* механизмы адаптационных стратегий. *Предмет исследования:* реализация социосредовой профессиональной адаптации в условиях вахтового способа организации трудовой деятельности на горнодобывающих предприятиях в условиях Крайнего Севера.

*Методы.* В исследовании применялись-таки методы работы с материалом как анализ, синтез, сравнение, обобщение, классификация.

*Результаты.* Выбор стратегии для более быстрого прохождения адаптационного периода сотрудников горнодобывающих предприятий в условиях Крайнего Севера приносит значимый экономический результат, так как сокращение адаптационного периода повышает производительность труда персонала, воспроизводство и социально-психологическую мотивацию сотрудников. Мотивация, являясь социально-психологической функцией, занимает ключевое место, определяющее производительность труда. Мотивация сотрудников к высокому уровню трудовой деятельности, качества выполняемых производственных и организационных задач – одна из базовых целей управления организацией и менеджмента качества как его подсистемы. При этом важно учитывать и факт ответственности организации перед сотрудником для развития его мотивации к труду, от есть создание таких условий труда, которые стимулируют высококачественный труд и повышение производительности, саморегулирование и самоконтроль.

В связи с этим социосредовая профессиональная адаптация как открытая психологическая система – это по своей сути деятельность по сокращению сроков выхода на максимальный уровень реализации человеческого потенциала при выполнении профессиональных функций, которая должна учитывать комплексную совокупность элементов человеческого потенциала (табл.1):

Физиологический компонент	Характеристика состояния физического и психического здоровья
Профессиональный компонент	Образование, квалификация, опыт работы, профессиональные и общекультурные компетенции
Психологический компонент	Адаптационный потенциал, мотивация к обучению, эмоциональный интеллект

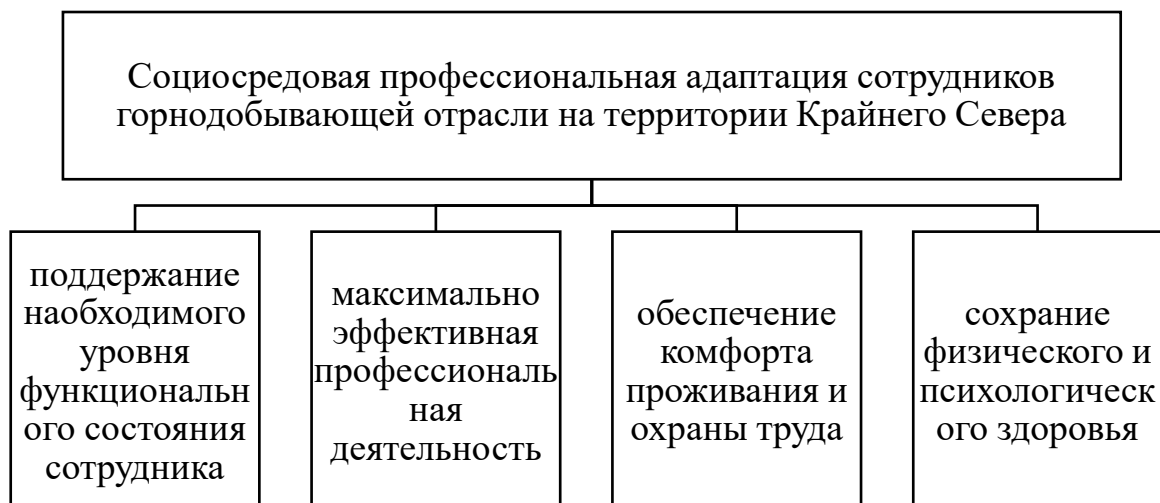


Таблица 1. Совокупность элементов человеческого потенциала

Адаптационные стратегии позволяют сформировать человеческий капитал как систему ценностных установок, профессиональных и общекультурных знаний, способностей и качеств, которые человек может использовать как инструмент для осуществления профессиональной деятельности. Ключевыми понятиями при выборе адаптационных мероприятий в данной сфере экономической деятельности является внутренние факторы (управление бизнес-процессами, мотивация персонала) и внешние (специфика территории и отрасли. Под территориями Крайнего Севера понимается территории, которая расположена к северу от Полярного круга: арктическая ледяная зона, тундра, лесотундра, часть тайги. Эти территории характеризуются экстремальными природно-климатическими условиями: одними из самых низких температур, большой протяженностью, сложностью логистики, необходимостью защиты людей, что определяет вахтовый метод работы сотрудников горнодобывающей отрасли и требует дополнительных материальных и психофизиологических затрат.

В условиях вахтового способа осуществления профессиональной деятельности, при котором сотрудник не возвращается после работы в место своего постоянного проживания, человек переживает состояние стресса, ключевыми факторами которого являются следующие: сложные климатические условия, сложность трудовых функций, отдаленность от привычной среды проживания и окружения. Данные факторы вызывают физические и психологические реакции в организме человека, негативным образом сказывающиеся на уровне выполнения трудовых функций с нарастанием негативных изменений функционального состояния. Согласно проведенным исследованиям динамика негативных изменений представлена нарастанием уровня стресса на 20-25 день вахты до истощения резервных возможностей организма к концу вахтового периода [2].

В целях недопущения такого процесса необходимыми процессами организации социосредовой адаптации являются адаптация *к среде* и *в среде* проживания и трудовой деятельности [2]. В рамках социосредовой профессиональной адаптации сотрудников горнодобывающих предприятий на территории Крайнего Севера выделяются следующие ключевые элементы (рис.1):



*Рис.1. Социосредовая профессиональная адаптация сотрудников горнодобывающей отрасли на территории Крайнего Севера*

Таким образом, социосредовая адаптация предполагает активную личностно-деятельностную позицию и мотивацию самого сотрудника при создании адаптационной среды со стороны предприятия. Создание мотивации является деятельностью, целью которой является формирование субъектной деятельности сотрудника и его побуждение к эффективному труду в целях достижения производственных целей на основании регламентированных (определенных трудовыми функциями) полномочий.

В качестве формирования мотивация и повышения работоспособности персонала, эффективно используются следующие возможности (как индивидуальные, так и групповые), которые могут быть использованы в деятельности организации: разработка эффективных систем оценки и стимулирования труда; социально-психологические аспекты коллективной деятельности; программы повышения квалификации, специализированной подготовки, обучения и развития персонала; траектории планирования карьеры. В социосредовой адаптационной стратегии учитываются такие факторы как физические и психологические характеристики, особенности исполнения трудовых функций, здоровье, стрессоустойчивость, личностный потенциал. Данная адаптация основана на двухуровневой структуре мотивации личности. Первая ступень представляет собой систему конкретных мотивов на основе внешних стимулов. На второй ступени на первый план выходит смыслообразующие мотивы, представляющие собой устойчивые ориентации человека на основе мировоззрения и нравственных ценностей

Со стороны предприятия должны быть обеспечены возможности для быстрой адаптации: производственные (повышение гибкости производства, сокращение производственных издержек и увеличение прибыльности,

совершенствование процессов технического и технологического контроля) и социальные (комфортные условия проживания, медицинское сопровождение, возможность для занятия физической культурой и спортом, командообразование).

Таким образом, адаптация сотрудников, работающих вахтовым способом на горнодобывающих предприятиях на территории Крайнего Севера, являются одним из ключевых факторов, определяющих кадровый потенциал, мотивацию и результативность труда [1]. Результатом адаптации является высокий уровень производительности труда, эффективное использование (сохранение и восстановление) человеческого капитала. У сотрудника должно быть сформировано чувство уверенности и защищенности, определены действенные средства стимулирования и мотивации, обеспечен процесс воспроизводства затраченной энергии (восстановления работников).

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**ЖЕНЩИНЫ НА ВОЙНЕ: НА ПРИМЕРЕ ПОВЕСТИ Б.Л.  
ВАСИЛЬЕВА «А ЗОРИ ЗДЕСЬ ТИХИЕ...»**

*Аннотация. Данная статья посвящена анализу образа женщин и их роли на войне в произведениях великого русского писателя Б.Л. Васильева. В статье раскрывается образ главных героинь в повести Васильева «А зори здесь тихие...» и уделяется внимание героизму и нелегкой женской доле в сложной военной ситуации.*

*Ключевые слова: война, Родина, героический поступок, героизм женщин, образ женщин.*

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**WOMEN AT WAR: ON THE EXAMPLE OF THE NOVEL  
BY B.L. VASILIEV «AND THE DAWNS ARE QUIET HERE...»**

*Annotation. This article is devoted to the analysis of the image of women and their role in the war in the works of the great Russian writer B.L. Vasiliev. The article reveals the image of the main heroines in Vasiliev's story "And the dawns are quiet here.." and pays attention to heroism and the difficult female share in a difficult military situation.*

*Key words: war, homeland, heroic deed, heroism of women, image of women.*

*Война – это грязь, кровь, смерть...  
Женщинам на ней не место.  
Но бывают времена, когда и им  
приходится брать в руки оружие.  
Т.Н. Барамзина.*

На сегодня в русской литературе важное место занимает тема войны. Писатели пытаются донести до читателей всю правду, какая бы она ни была. Со страниц их произведений мы узнаем о том, что война не только радость побед и горечь поражений, но также война - это суровые будни, наполненные кровью, болью, насилием: «Я помню одного убитого бойца.

Он лежал на спине, раскинув руки, и к губе его прилип окурок. Маленький, еще дымившийся окурок. И это было страшней всего, что я видел до и после на войне. Страшнее разрушенных городов, распоротых животов, оторванных рук и ног. Раскинутые руки и окурок на губе. Минуту назад была еще жизнь, мысли, желания. Сейчас — смерть» [6].

О Великой Отечественной войне 1941-1945 годов написано немало книг. К теме «человек на войне» обращались К.Симонов, Б. Васильев, В. Быков, В. Астафьев, В. Распутин, Ю. Бондарев и другие. Все эти писатели показали войну, основываясь на своих переживаниях и горьком опыте.

Бондарев о войне пишет так: «Война пахнет огнём, пеплом и смертью... Война - это горький пот и кровь... Война – это письма, которых ждут и боятся получать, и это особая жгучая ненависть к злу, к уничтожению и смерти; это погибшие молодые жизни, непрожитые великие биографии; это несбывшиеся надежды, ненаписанные книги, несовершившиеся открытия, невесты, не ставшие женами» [3].

Особое место в ряде художественных произведений, посвященных теме войны, занимает повесть Васильева «А зори здесь тихие...», так как она является одним из самых правдивых и точных произведений о войне. Эта повесть не только о подвигах русского народа, но и о героизме женщин, об отважных подвигах слабого пола, с невероятным мужеством сражавшихся наряду с мужчинами против немецких солдат. Как утверждает сам Борис Васильев «Женская смерть страшнее, чем мужская. С женщиной погибает будущее, с мужчиной погибает прошлое. Это принципиальная разница, как полярные знаки. Убили мужчину – убили прошлое, убили женщину – убили будущее!» [7]

Борис Васильев принадлежит к числу тех писателей, которые сами прошли нелегкими дорогами войны и защищали свою Родину с оружием в руках. Борис Васильев одним из первых в истории литературы поднял тему «женщина на войне». Выбор темы является гуманистическим, так как женщины тоже сражались за Родину и умирали за нее.

В данном произведении автор описывает, как в беспощадной и жестокой войне, где даже мужчинам трудно совладать с эмоциями и терпеть физические нагрузки, солдатами становятся девушки, которые ушли на войну по своей же воле.

Автор показывает читателю непростую женскую судьбу и разные жизненные линии, которые могли бы никогда не пересекаться в повседневной жизни, но война объединила их в единое целое.

У этих девушек было разное образование: некоторые учились в университетах, а некоторые окончили только школу. Они также различаются по социальному статусу: кто-то из интеллигентной семьи, а кто-то из глухой деревушки. А также имеют разный жизненный опыт: кто-то уже вышел замуж и потерял мужа на войне, а кто-то только-только мечтал о большой любви. Старшина Васков - это командир отряда, чуткий

и внимательный человек. Наблюдая за бойцами-девушками, он жалеет их и понимает, как тяжело дается девушкам армейская жизнь.

Каждая из девушек индивидуальна, обладает неповторимым характером и трагичной судьбой. Есть общая цель, к которой стремятся эти девушки и она объединяет их всех. Они стремятся защищать свою Родину, свои семьи и своих близких.

Например, Рита Осянина, после смерти мужа она стала беспощадной, изменилась в характере и возненавидела немцев. Она посвятила всю свою оставшуюся жизнь защите отечества, продолжая как бы дело мужа. Иная героиня повести Женя Комелькова пережила трагичную судьбу - на её глазах, немцы расстреляли всю её семью. Несмотря на душевную рану, она оставалась весёлой и общительной. Она так же, как и Рита, добровольно вступила на фронт и стала мстителем и бойцом. Соня Гурвич познакомилась с молодым человеком, который стал ее первой настоящей любовью. Однако этот парень ушел добровольцем на фронт и за ним она.

Все эти девушки погибли на заре своих лет, в расцвете сил, молодости и красоты. В повести описан смертный бой пяти советских девушек и старшины Васкова с отрядом диверсантов-гитлеровцев. Никто: ни юные зенитчицы с тихого разезда номер 171, ни умудренный опытом их командир старшина Васков - не предполагал, что, получив задание найти и захватить в плен замеченных в лесу двух фашистских разведчиков, их маленькая «поисковая группа», вооруженная винтовками, неожиданно натолкнется на шестнадцать с головы до ног вооруженных фашистских головорезов [5].

Б. Васильев, не отказываясь от изображения ужасов, трагедии и последствий, а также не скрывая, с каким трудом получена эта победа, показывает всю истину войны, суровость и правду этой жестокости. Содержание повести подтвердило, что все эти жертвы были не напрасны и все это было во имя спасения Родины от фашизма.

Не за долго до смерти Рита говорит о защите Родины: «Родина ведь не с каналов начинается. Совсем не оттуда. А мы её защищали. Сначала её, а потом уж канал» [4].

Таким образом, группа Васкова, ее бойцы, их бой изображены в повести в естественном переплетении героического и будничного, смешного и возвышенного, радости и горя. Это настоящие живые люди с их натуральными чувствами и невыдуманном поведением. Автор дает глубокое психологическое обоснование мотивации героических поступков девушек. Они осознанно идут на смерть ради жизни на земле [5].

Тема войны не уходит из классической русской литературы, потому что война оказывает огромное влияние на жизни людей, пробуждает чувство сострадания, горя и потери, а также она может быть источником героизма, силы и самопожертвования для лучшего будущего последующих поколений.



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## **МЕТОДЫ ОПТИМИЗАЦИИ ЗАТРАТ И ИЗДЕРЖЕК НА ПРЕДПРИЯТИИ С ПРИМЕНЕНИЕМ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ**

*Аннотация. В статье анализируются современные методы оптимизации затрат и издержек на предприятии, применение которых повышает эффективность производства. Представлены отличительные черты гибких методологий Agile и DevOps.*

*Ключевые слова: оптимизация, закон Парето, таргет-костинг, Agile, Бенчмаркинг, метод ABC, кайзен-костинга, гибкая методология, DevOps.*

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## **METHODS OF OPTIMIZATION OF COSTS AND EXPENSES AT THE ENTERPRISE WITH THE USE OF INFORMATION TECHNOLOGIES**

*Abstract. The article analyzes modern methods of optimization of costs and expenses at the enterprise, the use of which increases the efficiency of production. The distinctive features of Agile and DevOps methodologies are presented.*

*Keywords: optimization, Pareto's law, target costing, Agile, benchmarking, ABC method, kaizen costing, agile methodology, DevOps.*

Об оптимизации издержек предприниматели думают всегда. Как правило, компания максимально сокращает финансовые затраты. Она должна приносить прибыль и для этого применяется ряд методов.

Целью оптимизации производства является его дальнейшая эффективная работа. Издержки и затраты компании можно классифицировать как релевантные, которые можно уменьшить принятием управленческих решений, эффективные, получаемые предприятием за счет производства. В число неэффективных расходов попадают потери, получаемые предприятием в процессе производства: брак, хищение, порча и т.д. Следует выделить затраты прямые, формирующие себестоимость сырья и заработной платы, а так же косвенные, используемые на обеспечение связи, содержание административного аппарата и др.

Анализ затрат и издержек позволяет руководству предприятия принять управленческие решения в части оптимизации носителей затрат. Применяемый в этом случае метод так и называется – Метод применения носителей затрат.

Сокращение расходов, предназначенных для аренды площадей – это самый простой способ оптимизации. Сегодня актуальность приобрела удаленная работа, в связи с чем, предприятие может рассматривать возможность снижения необходимости аренды. Экономия на материалах и сырье предусматривает в первую очередь внедрение ресурсосберегающих технологий, и как вариант: обработку более дешевых материалов или переход на самостоятельное производство необходимого сырья. Еще одна позиция оптимизации – это сокращение времени, которое приходится на создание единицы продукции. Следующим шагом должно стать увеличение объема произведенных товаров. В данном случае необходима модернизация оборудования и внедрение информационных технологий.

Следует отметить, что оптимизация производства часто встречает недопонимание и негатив со стороны персонала. Оно и понятно. Ведь это неизбежные сокращения сотрудников и административного аппарата. Как

следствие - это расширение функциональных обязанностей оставшихся. Необходимость прохождения обучения. И все эти перемены не гарантируют повышения заработной платы.

Не редко на предприятии включается режим «жесткой экономии» в части электрической энергии, транспортных расходов, ремонтных работ.

Рассмотрим Метод применения закона Парето (Pareto's Law). В основе закона Вильфредо Парето лежит принцип, утверждающий, что 20% действий обеспечивают 80% результата. Итак, для получения 80% эффективной деятельности предприятия необходимо принять решение по оптимизации 20 % затрат, составляющих наибольший удельный вес.

В 1965 году в Японии возник таргет-костинг (target costing). Данный метод позволяет формировать целевую себестоимость новой продукции, исходя из планируемой рыночной цены и ожидаемой прибыльности продаж. Такой, знаете, способ защиты, помогающий сберечь деньги компании. Используются инновации таргет-костинга в сфере обслуживания и/или компаниях, разрабатывающих новые виды продукции.

Еще одним инструментом оптимизации, применяемом на предприятии является Бенчмаркинг (Benchmarking). Одной из первых на практике этот метод применила компания Rank Xerox в период кризиса в конце 1970-х годов. Тогда компания потеряла значительную часть рынка, уступив место Kodak, Canon и другим. Чтобы вернуть прежнюю конкурентоспособность, Rank Xerox сравнила свои показатели с показателями конкурентов по пунктам: производственные затраты, способ сборки копировальных аппаратов удовлетворенность клиентов и так далее. Это помогло компании оптимизировать бизнес-процессы, в том числе за счет сокращения затрат на дистрибуцию, и стать лидером в своем сегменте рынка копировальных аппаратов [1]. Таким образом, в данном методе применяют анализ затрат за прошедший период, выявляют причины, сопутствующие отклонениям и принимают решения по их устранению.

В арсенале инструментов для эффективного управления бизнесом достаточно с 80-х годов существует такой метод ABC (Activity-Based Costing), на русский язык его переводят как «учет по видам деятельности», или «функционально-стоимостный анализ» [2].

Метод ABC позволяет предприятию достаточно достоверно определить эффективность использования ресурсов, установить себестоимость продукции или обнаружить дорогостоящие функции с низкой добавленной стоимостью и с успехом их модифицировать.

В 1986 году японец Масааки Имаи предложил метод кайзен-костинга (kizen costing). В отличие от таргет-костинга, достигающего целевой себестоимости на этапе проектирования нового изделия, кайзен-костинг постепенно снижает затраты на этапе производства продукции.

Современное управление производством это внедрение инновационных методов оптимизации и подразумевает изменения

технологий менеджмента и появления доступных информационных технологий, способствующих повышению эффективности производственной сфере. Увеличить скорость создания качественных продуктов, при этом минимизируя возможные риски ошибок, помогает гибкая методология Agile. В первую очередь - это выражается в ориентации на продукт, а не на клиента, в производстве продукции только высшего качества, в снижении себестоимости продукции за счет оптимизации производственного процесса, в подборе персонала с различными навыками и опытом работает над достижением общей цели. Однако в современной оптимизации процессов людей могут полностью заменить программные роботы RPA (robotic process automation), занимающийся, например, обработкой информации из электронной почты или с официальных сайтов.

Методология DevOps так же вдохновляет производственные организации на достижение более высоких результатов. DevOps сочетает подходы и средства, улучшающие способность компаний создавать приложения и сервисы на высокой скорости, благодаря которой повышается уровень обслуживания клиентов, возрастает конкуренция на рынке, повышается эффективность. В данном случае важно все: скорость, быстрая доставка, надежность, масштабирование, оптимизированная совместная работа и безопасность.

Программное обеспечение сегодня поддерживает бизнес и становится его неотъемлемой частью.

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## РАЗВИТИЕ ФОРМ СОБСТВЕННОСТИ В АГРАРНОМ СЕКТОРЕ

*Аннотация.* В данной статье проанализированы факторы, влияющие на формирование и развитие собственности агропредпринимательской деятельности, разработаны научно обоснованные предложения рекомендации по повышению роли в конкурентной среде.

*Ключевые слова:* предпринимательство, творчество, бизнес, частно-индивидуальное предпринимательство, частно-корпоративное предпринимательство, партнерство, агропромышленный комплекс, малый бизнес, кластер, кооперация, домохозяйства.

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## DEVELOPMENT OF OWNERSHIP IN THE AGRICULTURAL SECTOR

*Annotation.* This article analyzes the factors influencing the formation and development of ownership of agro-entrepreneurial activities, developed scientifically based proposals for recommendations on increasing the role in the competitive environment.

*Key words:* entrepreneurship, creativity, business, private-individual entrepreneurship, private-corporate entrepreneurship, partnership, agro-industrial complex, small business, cluster, cooperation, households.

Одна из основных задач экономических реформ в странах-повышение благосостояния населения, а материальной основой экономического роста является производство, обеспечивающее эффективную организацию малого бизнеса и частного предпринимательства. Для этого необходимо улучшить организационные, экономические и частные отношения, а также правильно решить существующие проблемы. Это требует глубокого понимания социально-экономической сущности предпринимательства.

Предпринимательство - это деятельность, при которой в связи с производством товаров и услуг осуществляется фактическое использование собственных или других материальных и денежных ресурсов,



то есть капитала. По этому, предпринимательство связано с функцией капитала.

Малый бизнес и частное предпринимательство - важная составная часть рыночной экономики. Это массовая основа и элемент механизма рыночной конкуренции. Развитие рыночной экономики без предпринимательства, в том числе малого бизнеса, невозможно даже действовать.

Предпринимательство проявляется в государственной, негосударственной, в том числе частной, смешанной формах собственности. Негосударственные формы включают частно-индивидуальное и частно-корпоративное предпринимательство. В свою очередь, субъект частного предпринимательства будет основан на собственном и наемном труде. Частно-корпоративное предпринимательство проявляется как партнерство, смешанное, арендуемые предприятия. Индивидуальное предпринимательство включает себя частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. Коллективная форма предпринимательства включает государственный, сельскохозяйственные кооперативные предприятия, партнерство и самоуправляющиеся фирмы, акционерное общество, предприятия трудового коллектива, и т.д. В зависимости от уровня организации различают индивидуальные и коллективные формы предпринимательства.

Индивидуальное предпринимательство включает частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. К коллективной форме предпринимательства относятся государственные, ширкатные хозяйства, корпорации, партнерство и самоуправляющиеся фирмы, предприятия трудового коллектива, акционерные общества и др. Согласно сфере деятельности, предпринимательство имеет формы производства, оказания услуг, коммерческой деятельности и коммерческого посредничества. Форма предпринимательства в виде малого, среднего и крупного бизнеса в зависимости от количества сотрудников, занятых на предприятии.

Таким образом, формы предпринимательства взаимосвязаны, и любая из них может иметь несколько форм одновременно. Например, форма частного предпринимательства проявляется в разных формах в зависимости от уровня организации, сферы деятельности и количества занятых.

В зависимости от уровня организации бизнеса его проявление в той или иной форме зависит от ряда факторов. Организационная, организационная форма предпринимательской деятельности, прежде всего личная заинтересованность предпринимателя, желание заявить о себе; во-

вторых, сфера деятельности; в-третьих, количество наличных денег; в-четвертых, это зависит от склонности к риску [1].

Одна из современных форм предпринимательства - это корпоративная форма. Он действует в основном в форме акционерного общества. Доля каждого из его участников определяется количеством принадлежащих ему акций [2]. Самым важным преимуществом этой формы бизнеса является очень ограниченная ответственность акционеров, разделение функции капитала, то есть отделение капитала от собственности, возможность привлечения дополнительных средств путем выпуска акций. Такие общества в основном преобладают в сферах экономической деятельности, требующих большего финансовых и материальных ресурсов, технологически крупных масштабов и сложной материально-технической базы.

Исходя из вышеизложенного, можно сказать, что проводимая государством экономическая политика, направленная на построение демократического общества, полноценно функционирующей рыночной экономики, основанной на приоритете частной собственности, в сегодняшнюю стратегию экономического развития должна включать развитие малого бизнеса и частного предпринимательства[3].

В результате экономических реформ в агропромышленном комплексе сформированы хозяйствующие субъекты на основе различных форм собственности и некоторые объекты собственности были приватизированы и преобразованы в частно-индивидуальную, частно-корпоративную формы предпринимательства. В сфере сельскохозяйственного производства агропромышленного комплекса созданы, прежде всего, корпоративные хозяйства, в том числе фермерские, дехканские хозяйства[4].

Культурные, бытовые и торговые объекты в сфере услуг были приватизированы и эксплуатировались как частные предприятия, объекты производственной инфраструктуры были преобразованы в акционерные общества МТЗ, ММТП, поставка удобрений, поставка семян, поставка ГСМ.

Предприятия по переработке сельскохозяйственной продукции были преобразованы в акционерные общества в связи с их большими производственными мощностями и технологиями. В этой сфере сформированы только малые предприятия по переработке овощей и фруктов.

Взаимозависимость деятельности хозяйствующих субъектов на основе разной формы собственности в сфере агропромышленного комплекса создает аграрные отношения. Деятельность всех хозяйствующих субъектов в аграрном секторе приводит к формированию агробизнеса, поскольку агробизнес отличается от предпринимательского движения в других секторах. Потому что на основе этой отрасли является производство сельскохозяйственной продукции в связи с земельными отношениями. Это означает, что в агропромышленном комплексе есть особенности организации частного предпринимательства.

Эффективная организация текущей и будущей деятельности малых предприятий и частных предпринимателей, работающих в агропромышленном секторе сегодня. соотношение должно быть обеспечено.

Эффективность текущей и будущей деятельности малых предприятий и частных предпринимателей, действующие в агропромышленном секторе зависит от соотношения прибыли и затрат.

На наш взгляд, в связи с взаимозависимостью агропромышленного комплекса целесообразно наладить кооперацию, объединяющую отрасли, и это сотрудничество базируется на материальной базе крупных фермерских хозяйств и малых перерабатывающих предприятий в сторону предприятий инфраструктуры. Это сотрудничество организовано на основе финансовых слияний предприятий агропромышленного комплекса и является основой для развития сельхозпроизводителей и перерабатывающих предприятий.

Члены кооператива - малые предприятия агропромышленного комплекса, объединенные по функциональным направлениям производства. Осуществляется исполнительным органом на основании решения созданного совета кооператива. Например, в сельском хозяйстве используется около 2500 сельскохозяйственных машин, и не все из них можно приобрести одному малому предприятию. ММТП не имеют возможности приобрести сельхозтехнику.

У государства также нет возможности поставить сложную сельскохозяйственную технику в каждый регион. Потому что развитие сельского хозяйства само по себе не обеспечивает стабильности в стране. Другие отрасли также нуждаются в развитии. Его может поощрять государство только через организационные, правовые, экономические и финансовые стимулы.

В такой ситуации можно объединить возможности малых предприятий и стать самодостаточными на кооперативной основе. Члены совместного кооператива в области техники и технологий добровольно объединят свои финансовые ресурсы для закупки сельхозтехники, приобретения перерабатывающей техники, закупки необходимого оборудования для предприятий инфраструктуры.

Использование техники и технологий, полученных за счет накопленных финансовых средств, полностью используется собственниками имущества по решению совета кооператива, членам кооператива предоставляются льготы в их услугах. С малых предприятий, не являющихся членами кооператива, взимается полная плата за обслуживание. Прибыль от этого вычитается из затрат на организацию и деятельность кооператива и распределяется между собственниками в соответствии с их вкладом. Этот порядок взаимодействия целесообразно применить и в других функциональных сочетаниях.

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## **РАСПРОСТРАНЕНИЕ БОЛЕЗНИ «МУЧНИСТАЯ РОСА» НА БАХЧЕВЫХ КУЛЬТУРАХ И МЕРЫ БОРЬБЫ С НЕЙ**

*Аннотация. В данной статье приводятся сведения о мучнисторосяные болезни бахчевых культур в условиях Андижанской области. Определены болезни мучнистая роса на дыне, на тыкве и на арбузе, а также изучена закономерность развития болезни. Полученные данные имеют научное и практическое значение для защиты от мучнистой росы бахчевых культур.*

*Ключевые слова: мучнистая роса, Арбуз – Citrullus lanatus (Thub.) Matsum. et Nakai, дыня – Cucumis melo L., тыква – Cucurbita pepo L., клейстотеции, конидиеносцы, мицелий.*

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## **SPREAD OF POWDERY MILDEW DISEASE ON MELOON CROPS AND MEASURES TO CONTROL IT**

*Annotation. This article provides information about powdery mildew diseases of melons and melons in the Andijan region. Powdery mildew diseases have been identified on melon, pumpkin and watermelon, and the pattern of disease development has also been studied. The data obtained have scientific and practical significance for the protection of melons and melons from powdery mildew.*

*Key words: powdery mildew, Watermelon – Citrullus lanatus (Thub.) Matsum. et Nakai, melon – Cucumis melo L., pumpkin – Cucurbita pepo L., cleistothecia, conidiophores, mycelium.*

**Введение.** Арбуз - Citrullus lanatus (Thub.) Matsum. et Nakai, дыня - Cucumis melo L., тыква - Cucurbita pepo L. являются растениями универсального использования. Их плоды богаты сахаром, органическими кислотами, витаминами, солями железа, фосфора, калия, а также веществами, способствующими регулированию многих физиологических процессов в организме человека.

Возбудителем заболевания становится грибковая инфекция. Гриб *Erysiphe* распространен повсеместно, является облигатным паразитом. Мучнистая роса приносит значительный вред бахчевым культурам. Пораженные листья становятся хрупкими, края их заворачиваются книзу, листья засыхают. От болезни гибнут целые плети и в течение короткого времени могут погибнуть посевы на целых участках.

За последние годы ареал этого заболевания увеличивается, поражаются кроме плодовых деревьев, зерновые культуры, кустарники, бахчевые культуры и декоративные растения. В Узбекистане и (в Центральной Азии) мучнистая роса поражает арбуз, дыню, тыкву и является очень опасным заболеванием. Симптомы заболевания проявляются во всех фазах развития растений в форме белых мучнистых пятен на обеих сторонах листьев.

При сильном поражении стебли и листья покрываются мучнистым налетом. Листья становятся желтыми и засыхают. При интенсивном развитии заболевания засыхают целые петли. Плоды патоген не заражает, но у больных растений они развиваются мелкими и не сочными. Возбудителями заболевания на дынях и арбузах являются эризофовые (мучнисторосые грибы). Первичное весеннее заражение растений осуществляется при помощи аскоспор, созревающих в большинстве случаев в клейстотециях на опавшей листе к весне. В Средней Азии аски созревают осенью. Во время вегетации растений патогены распространяются конидиями. Возбудитель болезни мучнистая роса зимует в растительных остатках и в сорняках.

Возбудителями заболевания на тыкве, дынях и арбузах являются эризофовые (мучнисторосые грибы) – *Erysiphe cichoracearum* DC.f. *cucurbitacearum* Pot., *Sphaerotheca fuliginea* Poll. f. *cucurbitae* Jacz. Они относятся к сумчатым грибам. Мучнистая роса бахчевых культур – вредоносное заболевание. Вследствие воздействия патогена плоды образуются мелкие и в очень малом количестве. Мицелий – белый обильный, чаще расположен на верхней стороне листа. Конидиеносцы – короткие. Конидии – собраны в цепочки. Клейстотеции – с короткими, неразветвленными придатками. Образуются крайне редко. В каждом по 12 асков. Аски – яйцевидные, на ножке, с двумя аскоспорами. Размер 57,0–77,0x23. Аскоспоры – бесцветные, эллиптические. Размер 20,0–22,0x9,0–11,0 мкм. Растения пораженные *Sph. fuliginea* f. *Cucurbitae* становятся слабыми. Патоген вызывает усыхание листьев, из-за чего уменьшаются качественные и количественные показатели урожайности. Мицелий – розовато-серый, в основном формируется с нижней стороны листа. Клейстотеции – диаметр 90–100 мкм. Чаще всего образуются на нижней стороне листа. Клетки перидия имеют неправильную форму, извилистые, длиной до 55 мкм. Придатки немногочисленные, почти бесцветные или светло-коричневые, длиной до 5 мкм, часто недоразвитые. Аски – округлые, желтоватые. Размеры 57–82x48–60



мкм. В каждом клейстотеции развивается одна аска. Аскоспоры – эллиптические, бесцветные. Размеры: 20–25x12–15 мкм. В каждой аске по 5–8 аскоспор.

Во время вегетации растений патогены распространяются конидиями. Первичное весеннее заражение растений осуществляется при помощи аскоспор, дозревающих в большинстве случаев в клейстотециях на опавшей листве к весне.

Для научного познания необходим выбор определённых объектов исследования, проблем и методов их изучения. Во время проведения исследований мы фиксировали в тетрадах характерные особенности возбудителя и собрали пораженные листья растений для гербария. Они послужили основанием для нашей научной работы.

Для определения вида возбудителя в лабораторных условиях провели микологический анализ, а также использовали определитель (Пидопличко, 1977-1978 и др.) и “Флора грибов Узбекистана” (1983-1997).

**Результаты.** Наблюдения проводили в 2023 году в фермерском хозяйстве “Собитхон ота” Улугнарского района Андижанской области, где выращивали арбуз и дыню, в фермерском хозяйстве “Ширмонбулок фахри” Булакбашинского района на тыкве, дыне и на арбузе, а так же на опытных полях “Научно-исследовательского института картофеля и овощебахчевых культур на участках Андижанской научно-экспериментальной станции”.

Определяли встречаемость мучнистой росы на листьях дыни собранных в фермерском хозяйстве “Собитхон ота” Улугнорском районе Андижанской области. В фермерском хозяйстве “Собитхон ота” Улугнарского района на 18,1 гектаре было выращено дыня, где были поражены целые петли. При обнаружении признаков мучнистой росы обработали пораженные участки суспензией серы. Обработку провели 2 раза и распространение возбудителя снизилась на (8- 12%), а поражаемость на (0-30%, в среднем 1-10%).

**Таблица 1**

***Распространение мучнистой росы на бахчевых культурах в условиях Андижанской области. (2023 г.)***

Район, фермерское хозяйство	Вид культуры и площ. (га)	Вид возбудителя и её распространение (%)
Фермерское хозяйство “Ширмонбулок фахри” Булакбашинского района	Тыква 0,5 га	Мучнистая роса (10%) ( <i>Erysiphe cichoracearum</i> )
	Дыня 0,5 га	Не выявлено
	Арбуз 1,0 га	Мучнистая роса (22%) ( <i>Erysiphe cichoracearum</i> )
Фермерское хозяйство “Собитхон ота” Улугнарского района	Тыква 0,5 га	Мучнистая роса (14%) ( <i>Erysiphe cichoracearum</i> )
	Дыня 11,8 га	Мучнистая роса (12%) ( <i>Erysiphe cichoracearum</i> )

	Арбуз 1,0 га	Мучнистая роса (18%) ( <i>Erysiphe cichoracearum</i> )
“Научно-исследовательский институт картофеля и овощебахчевых культур на участках Андижанской научно-экспериментальной станции”	Дыня 0,5 га	Мучнистая роса (10%) ( <i>Sphaerotheca fuliginea</i> )
	Арбуз 1,5 га	Мучнистая роса (18%) ( <i>Erysiphe cichoracearum</i> )

Из пораженных частей растений были собраны образцы для гербария и проведена фитопатологическая экспертиза. В фермерском хозяйстве “Ширмонбулок фахри” Булакбашинского района на тыкве выявлено мучнистая роса, возбудитель гриб *Erysiphe cichoracearum* DC. f. *cucurbitacearum* Pot. (размер конидий 15-29x9-19 мкм, в среднем 19,4x12,7 мкм) поражаемость составила 10%, на арбузе (размер конидий 17-52x9-32 мкм, в среднем 31,6x21,0 мкм), поражаемость 22%, а в фермерском хозяйстве “Собитхон ота” Улугнарского района на дыне поражаемость составила 12%, (размер конидий 32-35x14-21 мкм, в среднем 33,0x18,3 мкм).

Заражение может произойти из-за отсутствия воды на поверхности растения, но в то же время, высокая влажность воздуха, недостаточное освещение и утренние росы, способствует развитию болезни. Соблюдение севооборота с возвращением тыквенных культур на прежнее место через 3–4 года, соблюдение оптимальных сроков посева являются мерами предупреждения и защиты. В Узбекистане против мучнистой росы в период вегетации эффективен фунгицид Байлетон 25% см. п. (0,3-0,5 кг/га) и измельченная сера (15-30 кг/га). Применение этих препаратов способствуют избежать поражения растений, если в дальнейшем будет развиваться болезнь нужно применять Байлетон 25% см. п. 3 раза, серу 5-7 раз в период вегетации. Избежать их распространения помогают своевременные профилактические опрыскивания (как минимум 2–3 раза) фунгицидам Байлетон 25% см. п. (0,3-0,5 кг/га).

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## **СТАТИЧЕСКОЕ ИСПЫТАНИЕ ПЛИТ ПОКРЫТИЙ С КОМПОЗИТНОЙ АРМАТУРОЙ**

*Аннотация. Определение прочности, деформативности, жесткости и трещиностойкости плит покрытия со стеклокомпозитной арматурой в соответствии с требованиями ГОСТ 8829-94.*

*Ключевые слова: прочность, трещин стойкость, ширина раскрытия трещин, композитная арматура, испытание на изгиб.*

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## STATIC TESTING OF COATING PLATES WITH COMPOSITE REINFORCEMENT

*Annotation. Determination of strength, deformability, rigidity and crack resistance of coating slabs with glass-composite reinforcement in accordance with the requirements of GOST 8829-94.*

*Key words: strength, crack resistance, crack width, composite reinforcement, bending test.*

Применение композитной арматуры (АКП) будет расти год от года, особенно для конструкций, эксплуатирующийся в условиях агрессивных сред. АКП может успешно заменить стальную арматуру в таких областях строительства как очистные сооружения, силосы, бункеры, морские и береговые сооружения и многие другие. Проектная документация с конструкциями, армированными АКП получает положительные заключения как не государственных, так и государственных экспертиз. Однако в нормативных документах по обследованию не указывается, какие контролируемые параметры определять при проведении обследований конструкций. А также возможность применения таких плит в жилых и производственных зданиях.

С целью изучения возможности применения железобетонных плит с стеклопластиковой арматурой в зданиях, были проведены экспериментальные исследования.

-Испытание плиты производилось на специальном стенде в соответствии с ГОСТ 8829-94 [1] ниже приведенной последовательностью:

-на испытательной схеме плиты условными знаками нанесены расстановку всех приборов: прогибомеры П-1, П-2 служат для определения прогиба плиты в 1/2 пролета; микроскоп МПБ-2 -для регистрации ширины раскрытия трещин.

После установки плиты на стенде произведено ее освидетельствование.

Плита загружалась штучными грузами в соответствии с испытательной схемой (рис. 1).

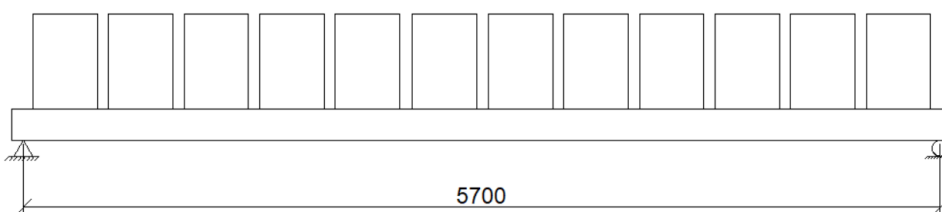


Рис. 1. Схема загрузки плиты

Грузы прикладывались симметрично от опор к центру ступенями, каждая из которых не превышала 10% от контрольной нагрузки при проверке прочности и 20% при проверке жесткости. После каждой ступени загрузки, для стабилизации деформации плиты, она выдерживалась под нагрузкой не менее 10 мин. За это время производился тщательный осмотр поверхности плиты, фиксировался появление трещин, измерялась их ширина, и снимались отсчеты по приборам. Разгрузка плиты произведена такими же ступенями, которые были приняты при загруженные. Оценку трещиностойкости плиты производилась по ширине раскрытия нормальных трещин.

Таблица 1. Фактические геометрические размеры плит и прочность бетона

№ п/п	Марка изделия по заводской маркировке	Техническая документация	Основные размеры, мм			Фактический прочность $R_b$ , МПа
			длина	ширина	высота	
1	ПК-1, 59.12 АСК-14-1200/58	Пробные образцы плит покрытия	5830	1198	200	23
2	ПК-2, 59.12 2 Ø14 А 400+ + 2 Ø14 АСК -14-1200/58	Пробные образцы плит покрытия	5835	1196	200	22,5
3	ПК-3, 59.12 4 Ø14 А 400	Пробные образцы плит покрытия для сравнения	5838	1195	210	22,4

*Примечание: В плите ПК-2 59.12 приняты две крайние арматуры из стеклокомпозитной, а две средние стальные.*

## Результаты испытаний

Фактические прогибы плит приведены в табл.2.

Таблица №2. Результаты испытаний плит по жёсткости

№ п/п	Марка изделия	Проверка жёсткости	
		Нагрузка, кН	Фактический прогиб, f мм
1	ПК-1, 59.12; АСК -14-1200/58	39,00	31,0 > 1/200
2	ПК-2, 59.12; 2 Ø14 А 400+ + 2 Ø14 АСК -14-1200/58	39,00	16,0 < 1/200
3	ПК-3, 59.12; 4 Ø14 А 400	39,00	10,0 < 1/200



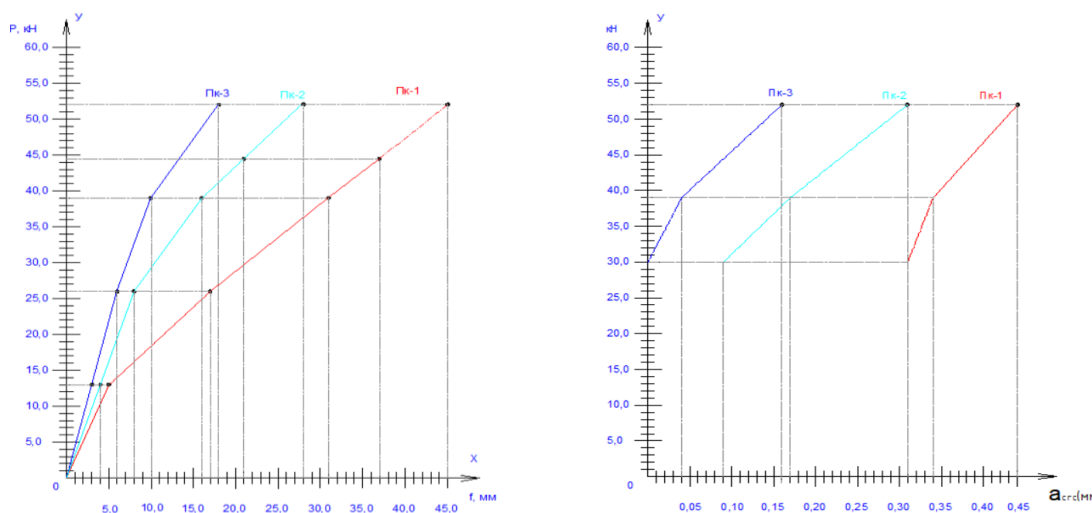
**Рис. 2. Образование трещины после испытания**

Таблица № 3. Результаты испытаний плит по трещиностойкости

№ п/п	Марка изделия	Нагрузка, кН	Ширина раскрытия трещин, мм
1	ПК-1, 59.12 АСК -14-1200/58	39,00	0,34 > [a <sub>крс</sub> ] = 0,3
2	ПК-2, 59.12; 2 Ø14 А 400+ + 2 Ø14 АСК -14-1200/58	39,00	0,18 < [a <sub>крс</sub> ] = 0,3
3	ПК-3, 59.12; 4 Ø14 А 400	39,00	0,04 < [a <sub>крс</sub> ] = 0,3

Примечание: Несущая способность плиты армированные стальными арматурами 4 Ø14 А 400 составляет 450 кг/м<sup>2</sup> без учета собственного веса.





**Рис.3. Графики «P-f» и «P-a<sub>cr</sub>»**

В результате испытания установлены:

Плиты, армированные стеклопластиковой арматурой 4 Ø14 АСК -14-1200/58 (**Пк-1**, ГОСТ 31938-2012) не пригодны для использования в качестве плит перекрытий и покрытий. Так как при одинаковой нагрузке прогиб этой плиты оказался в 3 раза больше чем плиты, армированной стальной арматурой 4 Ø14 А 400 (**Пк-3**). Предельный прогиб по табл.19.КМК 2.01.07-96 «Нагрузки и воздействия» при длине 6м не должна превышать 1/200 пролета. Ширина раскрытия трещин при одинаковой нагрузке оказался 8 раза больше чем плиты армированной стальной арматурой (рис.2).

2. Плиты, армированные стеклопластиковой 2 Ø14 АСК -14 – 1200/58 [2] и стальной 2 Ø14 А 400 арматурой (смешанное армирование) (**Пк-2**) пригодны для использования в качестве плит перекрытий. Так как при одинаковой нагрузке прогиб этой плиты оказался в 1,6 раза больше чем плиты, армированной стальной арматурой 4 Ø14 А 400 (**Пк-3**).

Плиту **Пк-2** можно эксплуатировать под нагрузкой 3 кН/м<sup>2</sup> без учета собственного веса плиты.

Ширина раскрытия трещины **Пк-2** при нагрузке 3 кН/м<sup>2</sup> с учетом собственного веса плиты составила 0,09 мм, а прогиб – 10 мм.

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## **ОСОБЫЕ МЕХАНИЗМЫ ЗДОРОВЬЯ СОЦИАЛЬНОЙ И ДУХОВНОЙ СРЕДЫ В МАХАЛЛЯ**

*Аннотация. В статье подчеркивается необходимость оказания всесторонней поддержки молодежи Узбекистана, обеспечения ее прав и свобод, своевременного выявления проблем, связанных с данной темой, и их объективного выражения в рамках улучшения социальной и духовной среды в микрорайонах.*

*Ключевые слова: Вертикальная система, духовная среда, неорганизованная молодежь, государственная политика в отношении молодежи, «Один интеллектуальный духовный покровитель для одного квартала», «Концепция непрерывного духовного образования».*

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## **SPECIFIC MECHANISMS OF SOCIAL AND SPIRITUAL ENVIRONMENT HEALTH IN NEIGHBORHOODS**

*Annotation. The article highlights the need to provide comprehensive support to the youth of Uzbekistan, ensure their rights and freedoms, identify problems related to the topic in a timely manner and express them objectively within the framework of improving the social and spiritual environment in the neighborhoods.*

*Key words: Vertical system, spiritual environment, unorganized youth, state policy regarding youth, "One intellectual spiritual patron for one neighborhood", "Concept of continuous spiritual education".*

Институт соседства, основанный на демократическом, свободном гражданском обществе в Новом Узбекистане, сегодня признан странами мира как система национального управления. Его правовая основа полностью определена в статье 127 нашей Конституции, в которую на основании референдума, состоявшегося 30 апреля 2023 года, были внесены изменения: «В поселках, селах и селлах, а также городах собрания граждан в кварталах г. города, села и селла являются органами самоуправления и

избирают председателя. Органы самоуправления граждан не входят в систему органов государственной власти и решают вопросы местного значения самостоятельно, в соответствии с законом, исходя из интересов граждан, исторических особенностей развития, а также национальных ценностей, местных обычаев и традиций. имеет право решать. Государство создает необходимые условия для осуществления деятельности органов самоуправления граждан, помогает им в реализации установленных законом полномочий. Порядок избрания органов самоуправления граждан, организация их деятельности и их полномочия определяются законом» [1].

Трудно представить институт соседства не только в системе национального управления, но и воспитания молодежи района и любых связанных с ними вопросов без вмешательства соседства. Также тот факт, что сегодня 60% населения нашей страны составляет молодежь, свидетельствует о том, что этот вопрос является одной из приоритетных задач политики нашей страны. Подчеркнув, что повышенное внимание к молодежной политике достигло своего пика с 2017 года, в выступлении Президента Шавката Мирзиёева на IV съезде Молодёжного общественного движения «Камолот» в марте 2019 года были выдвинуты вопросы в пяти важных инициативах Президента, направленных на содержательное организации свободного времени, в законах «О государственной политике в отношении молодежи», а также «О мерах по коренному совершенствованию системы работы с молодежью в микрорайонах» RQ-92 – задачи, решения которых представлены, служат основой для нашей мнение. Анализ литературы по теме. В годы независимости особое внимание уделяется дальнейшему развитию микрорайона и его процветанию. Уважение и последовательное продвижение национальных и духовных ценностей, сформировавшихся в кварталах, популяризация лучших обычаев и традиций нашего народа, изучение и исследование роли квартала в воспитании молодежи в духе национальной независимости входят в число наиболее актуальных тем..

**Методология исследования.** Постановление Президента Шавката Мирзиёева от 19.01.2022 № RQ-92 «О мерах по коренному совершенствованию системы работы с молодежью в микрорайонах»; Данное решение предусматривает четыре основные цели: внедрение новых механизмов управления работой с молодежью; создание вертикальной системы работы с ними; решение проблем молодежи непосредственно в районах; дальнейшее повышение эффективности духовно-просветительской и воспитательной работы в образовательных учреждениях [2]. Для достижения этой цели уделяется внимание наиболее проблемному моменту системы работы с молодежью в Узбекистане. Создается уникальный механизм охвата молодых мужчин и женщин района. Именно так можно оценить введение должности молодежного лидера в микрорайонах. Анализ и результаты. В настоящее время 32 процента

населения нашей страны, или 10 миллионов, составляют молодые люди в возрасте до 30 лет [3]. Отсюда ясно, что необходимо обеспечить здоровую социальную и духовную среду среди молодежи до 30 лет, бороться с преступностью, укреплять ее идеологический иммунитет. «Мы создаем совершенно новую систему и новую модель государства, нам нужны люди, которые дадут жизнь этой модели... Мы рассчитываем на молодое поколение, которое сможет преодолеть нынешние трудные времена. Мы откроем им все пути, предоставим им полную возможность для их работы»[4]. В соответствии с Указом Президента «О мерах по выводу системы работы с людьми на новый уровень», новая система базируется на в каждом микрорайоне будет внедрен принцип «Процветающее и безопасное микрорайон». Всестороннее содействие полной и эффективной реализации принципа «Благополучное и безопасное соседство» в обществе, налаживание тесного сотрудничества граждан с органами самоуправления в улучшении социально-духовной среды в семьях и микрорайонах – основная цель министерства... это одна из задач и мероприятий.

С точки зрения местоположения каждого микрорайона, условий быта его жителей и географического положения целесообразно организовывать интересы и свободное время молодежи исходя из основного источника существования микрорайона. Кроме того, роль профессоров и учителей района несравненна в том, чтобы направить молодежь на правильный путь и познакомить ее с черным и белым. Прикрепление профессоров и преподавателей для молодежи района на базе общины имеет положительный эффект с педагогической точки зрения. В этом плане для нашей благополучной жизни в Новом Узбекистане важна наша молодежь, духовно зрелая, физически сильная, имеющая собственное независимое мнение, особенно насыщенное чувством принадлежности к обществу. Стоит отметить слова британского государственного деятеля и политика Уинстона Черчилля: «Чтобы быть хорошим, нужны перемены, а чтобы быть лучшим из лучших, нужно больше перемен»[5]. Тот факт, что глава нашего государства неоднократно подчеркивает, что в сегодняшнее опасное время всем нужно быть начеку, начинать перемены в первую очередь, является доказательством того, что сегодня никто не имеет права сидеть сложа руки в кварталах.

**Выводы и предложения.** В заключение следует отметить, что Махалля испокон веков была колыбелью добра и просвещения для нашего народа. Это также место, которое объединяет все живущие здесь народы своими национальными традициями и ценностями. Кроме того, район является социальным и духовным спутником и поддерживает население во всех аспектах. По словам президента Шавката Мирзиёева, «Соседство – это светлое лицо и зеркало совести нашего общества»[6], поэтому можно понять, что здоровая духовная среда в кварталах во многом является признаком совести соседства. Здесь 3 мая 2019 года согласно

постановлению Президента Республики Узбекистан № PQ-4307 «О дополнительных мерах по повышению эффективности духовно-просветительской деятельности» подготовлен проект «Концепции непрерывного духовного образования». и утвержден решением Кабинета Министров. На основе этой концепции была разработана система обеспечения непрерывности образования ребенка в семье, а также на всех этапах обучения. То есть организовать научно-обоснованное программно-методическое обеспечение, гарантирующее духовность ребенка, соответствующие его возрасту навыки и квалификацию, ожидаемый уровень компетентности от рождения до 25 лет. Выступление Председателя Республиканского совета духовности и просвещения, Президента Республики Узбекистан Шавката Мирзиёева на совещании, состоявшемся 19 января 2021 года «Если тело жизни общества – экономика, то его душа и дух – духовность» поставить точку на такие ситуации, как пренебрежение ценностями и образованием молодежи района, проводить адресную работу с учащимися местных учебных заведений и их родителями с целью ранней профилактики правонарушений среди молодежи района, уважаемой нации, внесший большой вклад в развитие нашей страны, основываясь на принципах проекта «Встреча поколений» с участием представителей поколений ветеранов, «Один интеллектуальный духовный спонсор для одного микрорайона», «Один просвещенный человек – наставник для пяти молодежь» С привлечением профессоров и преподавателей высших учебных заведений, творческой интеллигенции, социально активной интеллигенции создана система работы «Квартал», «хоноданбай», «фукаробай». Также необходимо создать конкретные механизмы, направленные на улучшение социально-духовной среды в округе и в духовной сфере. В рамках этих процессов мы сочли чрезвычайно важным внести следующие предложения.

1. Книгам принадлежит особая роль в улучшении социально-духовной среды, поэтому чтение книг среди населения и молодежи в направлении формирования культуры чтения среди населения, особенно молодежи, и социологический вопрос книг, которые они любят читать надо учиться по списку и основной задачей создать библиотеку в каждом микрорайоне. При этом целесообразно организовать конкретные и целевые мероприятия по внедрению среди населения методов интересного чтения книг.

2. Учитывая рост количества семейных разводов сегодня, необходимо отдельно работать с семьями, которые находятся на грани развода и имеют высокую вероятность развода. В этом случае необходимо организовать психологическую подготовку таких семей. В этом направлении считается целесообразным широкое привлечение к участию представителей религиозной сферы.



3. В направлении дальнейшего развития внутреннего туризма необходимо организовать поездки в регионы нашей страны, где расположены исторические памятники и духовное наследие населения микрорайона, состоящего из неорганизованной молодежи микрорайона.. Организация туристической поездки для неорганизованной молодежи, не выехавшей за пределы своего района, оказывает существенное положительное влияние на формирование патриотических идей.

4. В целях дальнейшего укрепления чувства любви и привязанности к району, при наличии экспонатов истории района и людей, ставших гордостью района, в сознании жителей будет возрождаться чувство национальной идентичности. молодежь.

5. Необходимо широко использовать наиболее эффективные методы пропаганды в целях формирования национальных ценностей в сознании населения, особенно молодежи. Каждая нация – это нация со своим языком, обычаями, традициями, культурой и историей. Как мы можем стать зрелыми и совершенными людьми, если не знаем своей национальной традиции, если не следуем ей, если не используем ее в своей жизни и в воспитании наших детей! Человека, не знающего своей национальной традиции, нельзя назвать совершенным человеком.

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## **ПРОБЛЕМНАЯ СИТУАЦИЯ КАК ОСНОВНАЯ ЕДИНИЦА ОБУЧЕНИЯ ИНОЯЗЫЧНОМУ ОБЩЕНИЮ**

*Аннотация. В данной статье рассматривается использование проблемных ситуаций в качестве основной единицы обучения иноязычному общению (ИО). Автор определяет понятие проблемной ситуации, обосновывает ее использование в обучении ИО, а также выделяет преимущества и недостатки этого подхода. В статье также представлены различные методики использования проблемных ситуаций в обучении ИО.*

*Ключевые слова: проблемная ситуация, обучение иноязычному общению, коммуникативность, самостоятельность, творчество, мотивация.*

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## **PROBLEM SITUATION AS THE BASIC UNIT OF TEACHING FOREIGN LANGUAGE COMMUNICATION**

*Abstract. This article discusses the use of problem situations as the main unit of teaching foreign language communication (FLC). The author defines the concept of a problem situation, justifies its use in teaching IR, and also highlights the advantages and disadvantages of this approach. The article also presents various methods for using problem situations in teaching FLC.*

*Key words: problem situation, teaching foreign language communication, communication skills, independence, creativity, motivation.*

**Введение.** Обучение иноязычному общению (ИО) является одной из важнейших задач современной системы образования. Эффективность обучения ИО во многом зависит от выбора методических подходов и средств, используемых в процессе обучения. Одним из таких подходов является обучение на основе проблемных ситуаций.

При создании оптимальной модели учебного процесса важно сочетать традиционный информационный путь изложения материала с проблемным. Использование этого принципа способствует развитию творческого

мышления студентов, делает учебный материал более доказательным, превращая знания в убеждения, приучает одновременно внимательно слушать и критически оценивать поступающую информацию, обеспечивает формирование у будущего специалиста познавательной активности и интереса к избранной профессии.

Как наиболее эффективный в условиях ПО обучения интерактивный подход (в качестве разновидности личностно-деятельностного подхода) к изучению иностранных языков целесообразнее всего реализовать, если принять за единицу обучения в качестве основополагающей проблемную ситуацию.

**Проблемная ситуация.** Проблемная ситуация – это ситуация, в которой возникает противоречие между имеющимися знаниями и опытом обучающегося и требованиями, предъявляемыми к его деятельности. Решение проблемной ситуации требует от обучающегося активной познавательной деятельности, направленной на поиск новых знаний и способов действия. Проблемные ситуации могут быть различными по своей сложности и характеру. Они могут быть основаны на противоречиях между:

- ✓ фактическими знаниями и жизненным опытом обучающегося;
- ✓ теоретическими знаниями и практическими умениями;
- ✓ различными способами решения одной и той же задачи;
- ✓ различными точками зрения на один и тот же вопрос.

Проблемная ситуация как основная единица обучения ИО: Проблемная ситуация может быть использована в качестве основной единицы обучения ИО. В этом случае обучение строится на основе следующих принципов:

➤ Принцип проблемности – Обучение ИО должно быть проблемным, т.е. направлено на развитие у обучающегося способности самостоятельно решать проблемные ситуации, возникающие в процессе общения на иностранном языке.

➤ Принцип коммуникативности – Обучение ИО должно быть коммуникативным, т.е. направлено на развитие у обучающегося способности использовать иностранный язык для общения в реальных ситуациях.

Использование принципа проблемности в обучении означает, что знания не преподносятся обучаемому в детерминированном, завершенном виде, предназначенном лишь для запоминания, а даются в динамике перехода от незнания к знанию, при активном участии самых обучаемых в получении части этих знаний в результате самостоятельной работы над решением специально подобранных проблемных задач. [1]

Принцип проблемности играет большую роль в формировании интереса к содержанию обучения и самой учебной деятельности, что в свою очередь, повышает учебную мотивацию и дает возможность учащимся проявить умственную самостоятельность и инициативность. Как

справедливо отмечает А. А. Леонтьев: «... мышление начинается с создания проблемной ситуации и возникновения мотива для интеллектуальной деятельности в этой ситуации» [2]

При реализации принципов проблемного обучения достигаются две цели:

✓ учащийся получает необходимые знания не как совокупность сведений из различных областей науки и практики, а как систему взаимосвязанных представлений для самостоятельного решения практических задач в его дальнейшей деятельности;

✓ учащийся приобретает устойчивые навыки творческого решения возникших задач. Организация проблемного обучения предполагает создание проблемной ситуации и организацию необходимых условий для решения поставленных проблем.

Проблемная ситуация с точки зрения методики преподавания иностранных языков определяется как «совокупность условий (речевых и неречевых), стимулирующих учащихся на совершение действия, заданного содержанием ситуации» [3]

Принцип индивидуализации. Обучение ИО должно быть индивидуализированным, т.е. учитывать индивидуальные особенности обучающегося.

Преимущества использования проблемных ситуаций в обучении ИО - Использование проблемных ситуаций в обучении ИО имеет ряд преимуществ:

✓ Проблемные ситуации способствуют развитию у обучающегося познавательной активности и самостоятельности.

✓ Проблемные ситуации способствуют развитию у обучающегося способности решать коммуникативные задачи на иностранном языке.

✓ Проблемные ситуации способствуют развитию у обучающегося творческого мышления и креативности.

Недостатки использования проблемных ситуаций в обучении ИО - Использование проблемных ситуаций в обучении ИО также имеет ряд недостатков:

✓ Проблемные ситуации могут быть сложными для понимания и решения, что может привести к снижению мотивации у обучающегося.

✓ Решение проблемных ситуаций требует от обучающегося определенных знаний и умений, которые могут отсутствовать у него в начале обучения. [4]

Проблемные ситуации на занятиях по языку создаются на основе моделирования жизненных ситуаций, представляющих для учащихся интерес. Проблемная ситуация создается путем постановки познавательной проблемы преподавателем, самим студентом или возникает самопроизвольно в процессе изложения материала на занятии или при

самостоятельной работе студента. В связи с этим с методической точки зрения различают три уровня степени реализации принципа проблемности:

1) сочетание элементов метода проблемного изложения с самостоятельной реконструктивно-вариативной или частично-поисковой деятельностью обучаемого;

2) проблемное изложение материала с самостоятельной работой студентов по образцам;

3) применение исследовательского метода, когда преподаватель лишь описывает проблемную ситуацию, предоставляя обучаемому возможность самостоятельно сформулировать проблемную задачу и решить ее.

В целом проблемную ситуацию уместно рассматривать как основу приобретения обучаемым новых навыков и умений и одновременно трансформацию его знаний. Проблемная ситуация характеризуется:

❖ наличием преграды, интеллектуального затруднения на пути к цели, которой является решение проблемной задачи или нахождение выхода из психологической проблемной ситуации;

❖ необходимостью выбора одного из нескольких вариантов решения проблемы, задачи;

❖ наличием «информационного неравновесия», т.е. неполных исходных данных;

❖ столкновением интересов, противоположных по содержанию взглядов. [5]

Главным элементом проблемной ситуации является неизвестное, новое, то, что должно быть открыто для правильного выполнения задания или нужного действия. Проблемная ситуация возникает не всегда, а только в определенных случаях, когда учебный материал организован в соответствии

со следующими дидактическими принципами:

➤ материал должен соответствовать уровню подготовленности и возможностям учащихся;

➤ вопросы задания должны быть сформулированы с учетом интереса, прошлого опыта учащихся, основаны на ранее усвоенных знаниях, однако проблема должна быть новой и направлять познавательную деятельность на поиск, исследование;

➤ проблемная ситуация должна потенциально заключать в себе свойства динамичности. Разрешение основной проблемы должно протекать на фоне решения цепи соподчиненных проблем, вытекающих одна из другой и показывающих причинно-следственные отношения между изучаемыми явлениями и процессами;

➤ формулировка и постановка проблемы не должны быть искусственным «навязыванием», учащимся того или иного задания, задачи, а должны быть «преподнесены так как будто вызваны самим ходом

изучения материала и вызывать внутреннее стремление, потребность у самого студента в решении этих проблем.

Методики использования проблемных ситуаций в обучении ИО - Существует множество методик использования проблемных ситуаций в обучении ИО. Наиболее распространенными являются следующие методики:

➤ Методика проблемного изложения. В рамках этой методики преподаватель излагает проблемную ситуацию и предлагает обучающимся самостоятельно найти решение.

➤ Методика эвристической беседы. В рамках этой методики преподаватель задает обучающимся вопросы, направленные на поиск решения проблемной ситуации.

➤ Метод проектов. В рамках этого метода обучающиеся самостоятельно разрабатывают проект, направленный на решение проблемной ситуации. [6]

Рассматривая мотивационный аспект взаимодействия видов речевой деятельности на примере обучения иностранному языку в неязыковом вузе по методу «языковых задач», который, в сущности, являет собой пример проблемного обучения, Е. И. Бейдер перечисляет ряд психологических условия формирования у студентов сильных и устойчивых мотивов в овладение иноязычной речью:

➤ взаимосвязь различных видов речевой деятельности должна быть в определенном смысле естественной на протяжении всего курса обучения;

➤ переход от одного вида речевой деятельности к другому в процессе обучения должен быть мотивирован;

➤ процесс овладения видами речевой деятельности должен быть максимально приближен к основной учебной деятельности студентов;

➤ различные виды речевой деятельности должен стать средством извлечения ценной информации в области специальности и обмена этой информацией в процессе обучения иностранному языку. [7]

**Заключение:** Использование проблемных ситуаций в обучении ИО является эффективным методом, способствующим развитию у обучающегося способности решать коммуникативные задачи на иностранном языке. При использовании проблемных ситуаций в обучении необходимо учитывать индивидуальные особенности обучающегося и сложность проблемной ситуации. Проблемная ситуация - это ситуация, в которой возникает противоречие между имеющимися знаниями и опытом обучающегося и требованиями, предъявляемыми к его деятельности. Решение проблемной ситуации требует от обучающегося активной познавательной деятельности, направленной на поиск новых знаний и способов действия.

Обоснование актуальности – В современном мире иноязычное общение становится все более важным навыком, необходимым для

успешной реализации в различных сферах деятельности. Обучение ИО должно быть направлено на развитие у обучающегося способности решать коммуникативные задачи в реальных ситуациях. Проблемные ситуации позволяют создать условия для такого обучения, поскольку они моделируют реальные ситуации общения и требуют от обучающегося поиска решения, применимого в конкретной ситуации. [8]

Сущность и структура проблемной ситуации – Проблемная ситуация характеризуется следующими признаками:

✓ Неопределённость. Обучающийся не знает, как решить проблемную ситуацию.

✓ Целевая направленность. Обучающийся должен найти решение, которое соответствует поставленной цели.

✓ Коммуникативная направленность. Решение проблемной ситуации требует от обучающегося использования иностранного языка.

✓ Проблемная ситуация может быть представлена в различных формах, например, в виде задачи, вопроса, ситуации, сюжета.

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## **КЛАСТЕРЛАР ВА ФЕРМЕР ХЎЖАЛИКЛАРИНИНГ ҲУДУДИЙ ТАРКИБИ ВА ИХТИСОСЛАШУВИ**

*Аннотация. Ушбу мақолада кластер тушинчаси ва унинг қишлоқ хўжалигидаги ўрни хусусида тўхталган. Юртимизда кластер тизимининг фаолияти ва келажакдаги истиқболлари тўғрисида ҳамда Сурхондарё вилоятида кластер соҳасида амалга оширилган ишлар таҳлил қилинган. Кластерларни ташкил қилишида географик омиллар хусусида тўхталган. Сурхондарё вилоятида фермер хўжаликлари томонидан қишлоқ хўжалиги маҳсулотлари, жумладан пахтачилик, галлачилик, боғдорчилик, узумчилик, поллизчилик, сабзавот, чорвачилик, паррандачилик, баликчилик, асаларичилик, каби тармоқлар ва уларнинг ривожига ҳақида сўз юритилади.*

*Калит сўзлар: кластер, агрокластер, фермер хўжалиги, «Ангор Сурхон гурури», кластерлар томонидан қайта ишлаш, Сурхондарё, кластер ташкил қилиш, географик омиллар. Суғорма деҳқончилик, техник экинлар суғорма деҳқончилик, суғориладиган ерлар, умумий майдон, тупроқ, сув.*

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## **TERRITORIAL COMPOSITION AND SPECIALIZATION OF CLUSTERS AND FARMS**

*Annotation. This article focuses on the concept of cluster and its role in agriculture, About the activity of the cluster system from our country and work carried out in the cluster sector in Surkhandarya region, The role of geographical*

*factors in the organization of a cluster system is discussed. In the Surkhandarya region, agricultural products, including cotton growing, grain growing, horticulture, viticulture, policing, vegetables, animal husbandry, poultry, fishing, beekeeping, etc., and their development are discussed.*

*Keywords: the concept of cluster, Agrocluster, operating enterprises, Try pride of Angor Surkhan, processing by clusters, Current clusters in Surkhandarya, the nature of geographical factors in the formation of the cluster. Irrigated agriculture, farm, technical crops irrigated agriculture, cultivated land, total area, soil, water.*

Кластерлар концепцияси ўтган асрнинг охирларида ишлаб чиқилган бўлиб, моҳиятан иқтисодий ва унинг турли бўғин ва бирликларини ишлаб чиқариш, техник-технологик, бошқарув жиҳатдан самарали хўжалик фаолиятини ташкил этиш ва таъминлашга хизмат қилади.

“Кластер” тушунчаси илк бор 1990 йилда инглиз Майкл Портер томонидан “Давлатларнинг рақобатдош афзаллиги” номли асарида келтирилган ва унда 10 та саноат жиҳатдан ривожланган давлатларнинг ривожланиш тарихини таҳлил қилгач, Майкл Портер кластерларнинг пайдо бўлиши иқтисодий ривожланиш ва саноатлаштириш жараёни таркибининг ажралмас қисмидир, деган фикрга келган. Шундай қилиб, кластер–ўзаро боғлиқ корхоналарни бирлаштиришнинг бир шакли бўлиб, бу ҳудуд иқтисодийнинг рақобатбардошлигини ошириш имконини беради. Ташкиллаштириш шакли жиҳатидан, кластерни–вертикал равишда интеграцияланган тузилма дейиш мумкин. Кластер услубини ўлчаш, айниқса бир-бири билан боғлиқ булган корхоналар мавжуд ҳудудлар учун катта аҳамиятга эга. Кластерлар ҳудудларнинг иқтисодий мустақиллигини мустаҳкамлашда катта роль ўйнайди. Ушбу ёндашув иқтисодий жиҳатдан устувор тармоқлар ва лойиҳаларни аниқлаш имконини беради. Ҳудудлар иқтисодийнинг ривожлантиришда кластерли ёндашувнинг асосий афзалликларидан бири–иқтисодий омилларнинг родини кучайтириш ва маъмурий омилларнинг родини камайитиришдан иборат бўлиб, ҳудудий маъмурий бирликларнинг роли фақат дастлабки босиқда юқоридир, холос.

**Агрокластер**–тажриба сифатида. Ушбу лойиҳани амалга ошириш доирасида пахта ва бошқа экинларни етиштириш учун 18 минг гектар ер ажратилган. Пахта ва тўқимачилик фаолияти билан бир қаторда, ушбу кластер бошқа қишлоқ хўжалиги экинларни етиштириш, гўшт ва сут маҳсулотларини ишлаб чиқариш ҳамда уларни қайта ишлашга ихтисослашган. Бошқа экинларни етиштириш учун фермер ва деҳқон хўжаликлари, ҳамда қуйидаги фаолиятлар юритадиган корхоналар киради:

- пахтани қайта ишлаш;
- ёғ-мой маҳсулотлари ишлаб чиқариш;
- тўқимачилик корхоналари;

- сут, гўшт ва тухум масулотларини ишлаб чиқариш ва уларни қайта ишлаш (чорва ва паррандачилик хўжаликлари);

- қишлоқ хўжалиги масулотларини сақлаш ва қайта ишлаш.

Давлат органлари билан биргаликда кластер фаолиятини назорат қиладиган ташкилот ирригация ва мелиорация тизимларининг мунтазам равишда тозалаб турилишини ва кластернинг ишлаб чиқариш эҳтиёжлари учун узлуксиз сув билан таъминлаб беради.

Сурхондарёда ҳозирда давлат томонидан ташкил этилган кластерлар ҳақида. Давлатимиз раҳбари Ш.Мирзиёев бу ҳақда 2018 йил январда Сурхондарё вилоятига сафари чоғида кўрсатмалар берган эди. Шуларнинг асосида бугунги кунга келиб, Сурхондарёда 6 та тўқимачилик кластери ташкил этилди. Улар жами пахта майдонининг 67 фоиздан зиёдини қамраб олган. 2020-2021 йилларда бу кўрсаткични 100 фоизга етказиш режалаштирилган. Кластер тизими соҳага замонавий технологиялар ва инновацион ишланмаларни жорий қилишда муҳим омил бўлмоқда.

«Ангор Сурхон ғурури» масъулияти чекланган жамиятида ҳам янги иш услуби асосида ҳосилдорлик ва маҳсулотларнинг рақобатбардошлиги оширилмоқда. Кластернинг жами майдони 9 минг 180 гектар бўлиб, шундан 8 минг 100 гектаридан кўпроғига экин экилади. Жумладан, бу йил қарийб 5 минг гектар ерда ингичка толали пахта етиштирилган.

Юртимиз олимлари томонидан яратилган «Сурхон-14», «Сурхон-16» навлари икки йил мобайнида тажрибадан ўтказилди. Ингичка толали бу нав экстремал об-ҳаво шароитларига, сувсизлик, гармсел ва зараркунда ҳашаротларга чидамлилиги, эртапишарлиги билан аҳамиятли. Толасининг узунлиги, пишиқлиги, текстилбоплиги сабабли жаҳон бозорида харидоргир ҳисобланади. Бошқа навлар билан меҳнат ва ресурс сарфи бир хил бўлгани ҳолда ингичка толанинг иқтисодий самарадорлиги 60 фоиз кўп бўлади. Яна бир муҳим омил — бу йил зараркунанда ҳашаротларга қарши курашиш учун давлат бюджетидан 120 миллиард ажратилган эди. Жумладан, Сурхондарё вилоятида бу ишларга 13 миллиард сўм йўналтирилди. Вилоятда ингичка толали ғўза навларини кўпайтириш ва экин майдонларини кенгайтириш, олимларни рағбатлантириш бўйича чора тадбирлар амалга оширилмоқда.

Давлатимиз раҳбарининг 2019 йил 23 октябрдаги фармони билан Ўзбекистон Республикаси Қишлоқ хўжалигини ривожлантиришнинг 2020-2030 йилларга мўлжалланган стратегияси қабул қилинди. Унга мувофиқ, юқори кўшилган қийматли маҳсулотлар ишлаб чиқариш мақсадида мевасабзавот кластерлари ташкил этилмоқда. 2019 йил 11 декабрда бу борада Президент қарори қабул қилиниб, барча ташкилий-ҳуқуқий асослар яратиб берилди. Ўтган қисқа вақтда ҳокимликлар томонидан 86 та шундай кластер ташкил этиш бўйича таклифлар шакллантирилди.

Қайд этилганидек, кластерлар томонидан қайта ишлаш, сақлаш ва қуритиш бўйича 430 минг тонна қўшимча қувватларни ишга тушириш юзасидан 96 та лойиҳа режалаштирилган. Шунингдек, 6 минг гектарда

интенсив боғ ва 8 минг гектарга яқин майдонда узумзор барпо қилиш бўйича лойиҳалар ишлаб чиқилган. 2020 йилда 410 миллион долларлик маҳсулотлар экспорти амалга оширилди.

Сурхондарё вилояти Шеробод тумани «Сурхондарё Агрохизмат» МЧЖ, «Шеробод пахта тозалаш» АЖ, «Дўстлик», «У. Юсупов», «Бўстон» ва «Таллашкон» пахта тайёрлаш пунктлари мавжуд. Пахта-тўқимачилик ишлаб чиқариш ва кластерлари пахта хом ашёси етиштириш даврида илғор замонавий инновацион технологияларни жалб этган ҳолда пахта ҳосилдорлигини қўшимча 10 центнерга оширади, 2020 йил пахта ҳосилидан бошлаб республика минтақаларида янгидан ташкил этиладиган ва экин майдонлари кенгайтириладиган пахта-тўқимачилик ишлаб чиқаришлари ва кластерлари ташкил этилган бўлиб улар қаторига-Сурхондарё вилояти Термиз ва Музработ туманлари, «Инденим Слустер» МЧЖ, «Музработ пахта тозалаш» АЖ, Денов туманида «Шашмокашоб» МЧЖ Агросаноат фирмаси, Сариосиё туманидаги «Сариосиё пахта тозалаш» АЖ барча пахта тайёрлаш пунктлари киради Ҳозирда Сурхондарё вилоятида қуйидаги пахта-тўқимачилик ишлаб чиқариш ва кластерлари вужудга келтирилган:

“Ангор Сурхон ғурури” МЧЖ, Ангор тумани.

“Сурхондарё Агрохизмат” МЧЖ Бандихон, Қизирик, Шеробод туманлари.

“Термиз Жайхун Кластер” МЧЖ Бандихон, Жарқўрғон, Қумқўрғон туманлари.

“Сурхон Сифат Текстил” МЧЖ Денов тумани. “Шошмақашшоб” МЧЖ Олтинсой, Узун, Сариосиё туманлари. Инденим Слустер МЧЖ Термиз тумани.

Кластерлар пахта етиштиришдан тортиб, то хом ашёдан тайёр маҳсулот ишлаб чиқариш билан яқунланадиган тўлиқ тўқимачилик иш жараёни циклини яратади. Инновацион тўқимачилик кластери ташкил этилиб, ўзлари етиштирган пахтани қайта ишловчи замонавий фабрика ва завод қурилади.

Сурхондарё вилоятида жами 5698 та фермер хўжалиги мавжуд бўлиб уларга ажратилган 683553 минг г йерда ўз фаолиятини амалга ошириб келмоқда. Сурхондарё вилоятида сўнги йилларда қишлоқ хўжалиги маҳсулотлари етиштиришнинг салмоғи ортиб бораётганини кўрга ташланади. 2016 йил бошида вилоятда ялпи қишлоқ хўжалиги маҳсулотлари ҳажми 8737,2 млрд. сўмни ташкил қилган бўлса, ушбу рақам 2017 йилга келиб 11608,1 млрд сўмни, 2018 йилга келиб эса 15046,2 млрд сўмлик қишлоқ хўжалиги маҳсулотини ташкил қилган, бундан кўришимиз мумкинки сўнги йилларда қишлоқ хўжалиги маҳсулоти ҳажмининг ортиб бориши кузатилади. Ушбу фермер хўжаликлари ўз навбатида бир қанча турларга бўлинади булар қуйидагилар. Пахта-ғаллачилик, ғаллачилик, боғдорчилик, боғдорчилик-узумчилик, узумчилик, сабзаот–полизчилик, сабзаот–ғаллачилик, чорвачилик, тутчилик, паррандачилик, баликчилик,

асаларичилик, теракчилик ва бошқалар. Ушбу маълумотларни инобатга олган ҳолда вилоятдаги фермер хўжаликларининг қанча маҳсулот ишлаб чиқаришини кўриб чиқамиз.

Фермер хўжаликларининг бир йиллик ҳосили учун экилган барча экинлар (кузги экилганини қўшган ҳолда г ) фермер хўжаликлари учун ажратилган йерлар 180805 г ни ташкил қилади ушбу ажратилган майдони таққослаш мақсадида, барча хўжаликлар учун ажратилга майдонлар 253132 г майдони ташкил этади. Бунда кўришимиз мумкунки фермер хўжалигига ажратилган ерлар кўплиги ва бу ерлардан олинадиган маҳсулотлар билан ҳам фермер хўжаликлари ажралиб туради. Қуйида айрим турдаги маҳсулотларнинг ишлаб чиқарилишини кўриб чиқамиз ғалла ҳосили учун фермер хўжаликларига ажратилган ерлар 109254 г майдонга экилган бўлиб шундан олинган ҳосил еса 551954 тоннани ташкил этади. Ғалла асосан кенг майдонларда Сурхон-Шеробод текислигида кўп етиштирилади. Бошоқли экин тури сфатида қараладиган ва асосан чорва моллари учун етиштириладиган, эртапишар экин тури арпа саналади. Арпа асосан Сурхондарё вилоятида лалмикор ерларида етиштирилади, у вилоятнинг жанубий туманларида апрел ойининг ўрталарида йиғим жарайони бошлб юборилади, Музрабод, Ангор, Термиз туманларида апрпа ўрими бошланган вақтда вилоятнинг Денов, Сариосё, Узун ва Олтинсой туманларида еса 20-30 кун баъзан 40 кунгача фарқ қилади. Арпа экилган умумий майдон фермер хўжаликлари учун 818 г ни ташкил этган ҳолда, ушбу майдондан олинган ҳосил еса 2155 тоннани ташкил этади. Донли экинлар қаторига кирадиган маккажўхори экинини ҳам вилоятимизда етиштириш учун ажратилган ерлар 108 г ни ташкил этган ҳолда ушбу майдондан 5367 тонна маккажўхори ҳосили етиштирилган. Маккажўхори асосан иккинчи экин тури сфатида экиладиган экин тури саналади. Вилоятдаги фермер хўжаликлари томонидан шоли ҳосили ҳам етиштирилади. Шоли асосан сувни кўп талаб қиладиган экин тури бўлиб, қишлоқ хўжалигида гуруч етиштиришда алоҳида аҳамиятга эғалиги билан ажралиб туради. Шоли экини учун ажратилган ерлар майдони фермер хўжаликларида 234 г ер майдондан 3615 тонна ҳосил олинган. Шоли етиштиришда 3 та туман яқол ажратиб кўрсатишимиз мумкун, булар Музрабод, Олтинсой, Денов туманлари ҳисобланади. Ушбу туманларда шоли майдонлари кенг тарқалганини кўришимиз мумкун. Шоли сувни кўп талаб қиладиган дехқончилик маҳсулоти саналади. Техник экинлар-маҳсулотни етиштириш мобайнида агротехник ишловлар бериш ва экинга биологик (гумус, ишқори бирикмалар) қўшиш йўли билан дехқончилик маҳсулоти етиштириш киради. Вилоятдаги фермер хўжаликларида 69100 г ер майдонга техник экинлар етиштирилади, ваҳолангки вилоятда барча тоифадаги хўжаликларда 77461 г ер майдога техник экинлар етиштирилади бу еса жами техник экинларнинг 89 % ни ташкил этади. Вилоятдаги фермер хўжаликларида 69100 г майдонга техник экинлар етиштирилган бўлса



шундан 68140 г ер майдонга ғўза эклади бу эса техник экинларнинг асоси қисмини ташкил этади. Фермер хўжаликлари томонидан ерёонғоқ ҳосилини етиштириш ҳам ривожланган бўлиб экилган майдон 16 г ни ташкил этган бўлса, ундан олинадиган ҳосил эса 15895 тоннани ташкил этади. Ёерёонғоқ ва картошка экини фермер хўжаликлари томонидан иккинчи экин сифатида экилади.

Юқоридагилар билан бирга, кластерларни ташкил қилишда географик омилларнинг ролига ҳам эътиборни қаратиш лозим. Зеро, ҳудуднинг табиий агроиклим хусусиятлари, хомашё ва меҳнат салоҳияти, транспорт инфратузилма билан таъминланганлик даражаси, ўз навбатида кластерларни ташкил қилишнинг ҳудудий таркибига ҳамда иқтисодий самарадорлигига ўз таъсирини кўрсатади. Сурхондарё вилоятида фермерчиликни ривожланишининг тармоқлар ва ҳудудий таркибини қисқача таҳлил қилиш шуни кўрсатадики, вилоятда келгусида фермерчиликни жадал ривожланиб бориши билан бирга, уни тармоқ ҳамда ҳудудий таркибини янада такомиллаштиришнинг агроиклимий, ер-сув, меҳнат ресурслари билан таъминланиш каби катта имкониятларга эга эканлиги маълум бўлади.

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## **ПУТИ РАЗВИТИЯ МАРКЕТИНГА В УЗБЕКИСТАНЕ**

*Аннотация. В данной статье дана информация о некоторых недостатках в области маркетинга, маркетинга в Узбекистане, а также о подходящих решениях. При освещении этой статьи использовалась некоторая литература, а также личное мнение автора.*

*Ключевые слова: маркетинг, реклама, бизнес, рынок, недостаток, решение, разработка, лицензия, организация.*

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## **WAYS TO DEVELOP MARKETING IN UZBEKISTAN**

*Abstract. This article provides information about some of the shortcomings in the field of marketing, marketing in Uzbekistan, as well as suitable solutions. Some literature, as well as the personal opinions of the author, were used in reporting this article.*

*Key words: marketing, advertising, business, market, disadvantage, solution, development, license, organization.*

Введение. Когда дело доходит до маркетинга, Большинство из нас представляют корпорацию или глобальный бренд, состоящий из отдела маркетинга и различных специалистов по рекламе. Фактически, любой бизнес, даже малый бизнес, должен рассматривать использование маркетинга как эффективный инструмент, помогающий понять потребности клиентов и удовлетворить их запросы.

Сейчас на рынке нет компании, работающей без использования маркетинговых инструментов. Просто кто-то делает эту работу целенаправленно, кто-то по прихоти использует разные методы, не понимая ценности такого инструмента.

Далее будут высказаны мнения о недостатках и путях развития маркетинга в Узбекистане. Некоторые из недостатков и решений, задействованных в развитии маркетинга в Узбекистане, следующие:

- Тарифы и ограничения: в Узбекистане тарифы, лицензии и ограничения, установленные для рекламы, могут ограничивать маркетинговую деятельность.

- Эта система законов и правил может ограничить центральные организации в планировании рекламных и маркетинговых кампаний.

*Решение:* организации должны соблюдать законные меры предосторожности, чтобы обеспечить надлежащую и другую активную клиентскую разработку и запросы, прежде чем они смогут выполнять свою маркетинговую деятельность. Для этих организаций было бы неплохо иметь уполномоченного юриста, который поможет.

2. Экспорт данных и статистики: ограничение доступа к данным и экспорта данных для иностранцев создает недостатки. Это затрудняет для организаций выполнение необходимого аналитического анализа, контроль и обеспечение массового мышления.

*Решение:* организации могут работать с автоматизированными решениями для хранения, сбора и анализа данных и статистики в своих системах. Также рекомендуется сотрудничать со специальными структурами для обмена информацией по договорам и соглашениям.

3. Онлайн - платежи и электронное финансирование: в Узбекистане также есть недостатки в сфере онлайн-платежей и электронного финансирования. Существует недостаток интеграции банковских платежных систем, оптимальности карточных систем и электронных платежных средств.

*Решение:* организациям необходимо искать решения в аспектах использования смешанных систем, заключать контракты, сотрудничать с банками и демонстрировать клиентам удобство использования простых, надежных и управляемых платежных систем.

4. Квалификация работников маркетинга: недостатком является недостаточная квалификация специалистов и кадров в области маркетинга в Узбекистане. Это требует от организаций поиска квалифицированного

персонала в области маркетинга, предоставления им опыта и знаний и инвестирования в их развитие.

*Решение:* организациям рекомендуется сотрудничать в областях, курсах и тренингах по маркетингу в университетах, чтобы сосредоточиться на маркетинге и привлечь квалифицированный персонал. Чтобы это еще больше усилилось, важно сотрудничать с персоналом, который присоединяется к маркетингу через частные маркетинговые отделы и организации.

Для устранения этих недостатков организациям доступно несколько решений. Среди таких решений можно выделить юридические обсуждения и взгляды, более быструю адаптацию к волатильности, использование систем онлайн-платежей и отслеживание квалифицированного маркетингового персонала в социальных сетях.

*Методология.* Теперь мы можем упомянуть и другие способы. Существует несколько путей развития маркетинга в Узбекистане. Некоторые основные пути могут быть следующими:

1. Таргетинг и сегментация: для понимания взаимодействия и профиля клиентов в Узбекистане необходимо использовать документацию. Определив требования клиентов, их можно разделить на различные сегменты (группы) в зависимости от пола, возраста, города/провинции, данных. Очень важно предлагать соответствующие таким сегментам услуги или продукты, организовывать рекламные и различные маркетинговые кампании.

2. Интернет-маркетинг: в связи с ростом числа пользователей Интернета в Узбекистане возрастает значение интернет-маркетинга. Использование социальных сетей (facebook, instagram, telegram и т. д.), веб-сайтов, электронного маркетинга, SEO (поисковая оптимизация) и других онлайн-платформ может помочь организациям поддерживать свое присутствие и инновации на одном этапе.

3. Портфель продуктов и услуг: перед созданием маркетинговых кампаний также важно проанализировать портфель продуктов и услуг организации. Необходимо, чтобы продукты расширялись, предлагались новые услуги с целью удовлетворения новых требований и запросов, а также чтобы существующие услуги и продукты по возможности обновлялись.

4. Сотрудничество с компетенциями: большое значение имеет сотрудничество контрактных конкурентов на рынке Узбекистана с компетенциями, задействованными в этой области. Совместная работа с компетентностями позволяет осваивать маркетинговые стратегии, оценивать опыт и знания, идентифицировать новых создателей.

5. Брендинг: необходимо создать собственный бренд организации или продукта, создать его имидж и ценить критику в продажах. Поддержка ряда

инструментов брендинга, его реализация также являются одним из путей развития маркетинга.

Это всего лишь несколько способов развития маркетинга - для их реализации каждая организация должна сформулировать свою маркетинговую стратегию в соответствии с нашим контрактом и требованиями.

#### *Заключение*

Подводя итог, можно еще раз сказать, что в развитии маркетинга в Узбекистане действия могут быть использованы по нескольким темам. Вот некоторые из этих действий:

1. Постоянная связь клиентов с сайтами: в условиях растущей волатильности интернета организациям важно, чтобы их сайты могли развиваться дальше и предоставлять клиентам последние новости о документации, информации, событиях и продуктах. В настоящее время, входящие клиенты с мобильных устройств должны уделять большое внимание организации и представлению проектов.

2. Развитие маркетинга в социальных сетях: наряду с ростом числа пользователей социальных сетей в Узбекистане будет расти и массовая посещаемость социальных сетей. Для организаций важно рекламировать, завоевывать доверие, взаимодействовать и общаться с клиентами на платформах социальных сетей. Маркетинг в социальных сетях требует создания оригинального и распределенного контента, а также разработки международных каналов социальных сетей.

3. Маркетинг личного образа жизни: маркетинг образа жизни также важен в Узбекистане. Мероприятия, в которых налажено адекватное общение с клиентами, предоставление необходимого маркетингового сотрудничества общественным организациям и установление отношений с влиятельными лицами, показывают, что маркетинг образа жизни для организаций претерпел изменения.

4. Мобильные приложения и электронная коммерция: рост мобильных приложений и электронной коммерции в Узбекистане также является одним из важных факторов развития. Организациям необходимо сосредоточиться на мобильных приложениях, оптимизировать свои платформы для мобильных приложений, совершать покупки в интернете и использовать возможности для привлечения клиентов с улучшенными вариантами оплаты.

5. Influencer Marketing: Influencers также являются ярким примером в Узбекистане. Организации используют маркетинг влияния как способ привлечь внимание общественности к своим брендам и продуктам. Среди влиятельных лиц такие люди, как блоггеры, каналы YouTube и лидеры социальных сетей, сотрудничают с четвертыми сторонами.

Эти усилия действий могут быть использованы для развития маркетинга в Узбекистане. Также в развитии маркетинга для организаций

важны стратегии, адаптированные к отраслям, альтернативные способы использования социальной собственности, интеграция и предоставление умственных ресурсов.

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## **ВЛИЯНИЕ КВАЛИФИЦИРОВАННОСТИ СПЕЦИАЛИСТОВ НА РАЗВИТИЕ ОБЩЕСТВА В ЦЕЛОМ**

*Аннотация. В этой статье говорится о том, что преподавание и обучение являются сегодня одной из самых актуальных проблем в мире, и что качественное образование играет важную роль в спасении мира, в котором мы живем, от различных проблем.*

*Ключевые слова: образование, обучение, наука, наука, качество, Возрождение, учитель и тренер, нация.*

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## **INFLUENCE OF QUALIFICATION OF SPECIALISTS ON THE DEVELOPMENT OF SOCIETY AS A WHOLE**

*Abstract. This article talks about the fact that teaching and learning is one of the most urgent issues in the world today, and that quality education plays an important role in saving the world we live in from various problems.*

*Key words: education, training, science, science, quality, Renaissance, teacher and trainer, nation.*

Преподавание и обучение стали сегодня одной из самых актуальных проблем в мире. Потому что уже не секрет, что качественное образование играет важную роль в спасении мира, в котором мы живем, от различных проблем. Из-за этого страны выделяют много денег на сектор образования. Президент Шавкат Мирзиёев в своих Посланиях сказал: «Самое большое богатство – это ум и знания, величайшее наследство – хорошее образование, а величайшая бедность – это невежество!» Нетрудно понять вышеизложенную идею, даже когда говорят. При этом наименование 2023 года «Годом внимания к людям и качественному образованию» имеет глубокий смысл и смысл. Для повышения уровня знаний нашего Президента не только молодежи, но и членов нашего общества в целом необходимы, прежде всего, знания и высокая духовность. Слова мудрецов, что это будет, в первый стих нашей священной книги Коран, особое внимание уделяется знанию и просвещению, как «Читай», «Читай» и около



900 слов слова «Ильм». Тот факт, что оно имеет разные значения, означает важность этого призыва.

В одном из выступлений нашего Президента было высказано такое обнадеживающее мнение: «Мы поставили перед собой великую цель – заложить в нашей стране основы Третьего Возрождения, для этого нам нужна среда, которая будет воспитывать новых хорезмов, – Берунис, Ибн Синас, Улугбеки, Навои и Бабур.» и нам нужно создать условия".

Успех реформ в системе образования во многом зависит от учителей и тренеров. В нашей стране создаются все условия для дальнейшего повышения репутации учителей и тренеров, для того, чтобы наша молодежь была образованнее, сильнее, мудрее и, конечно же, счастливее нас. Мы должны расценивать это как высокое уважение к учителям и тренерам нашей страны. Ежегодно накануне «Независимости» и «Дня учителя и тренера» учителя, показавшие пример в образовании, награждаются высокими наградами и званиями нашего государства. Ответственные, но почетные профессии педагогов и тренеров можно сравнить с одним факелом. Потому что это скромные люди, посвятившие свою жизнь тому, чтобы расчищать путь другим. В нашем народе не зря говорят, что учитель – воспитатель нации. Учитель закладывает фундамент будущего, развивая ученика, которого он учит сегодня. Будущее принадлежит нашим детям, а их учитель-наставник приведет их к вершине совершенства.

«Чем совершеннее образование, тем счастливее живут люди», — говорят мудрецы. Для того, чтобы образование было идеальным, абсолютно нельзя допускать появления пробела в этом вопросе", - сказал в своих выступлениях Президент Шавкат Мирзиёев. "Физически и духовно совершенные молодые люди являются решающей силой нашего сегодняшнего и завтрашнего дня". назван. Поэтому тот, кто признает свои права, опирается на собственные силы и возможности, может самостоятельно подходить к происходящим вокруг событиям и в то же время видеть свои личные интересы в гармонии с интересами страны и народа. Воспитание людей, совершенных во всех отношениях, является для нас важным вопросом. В современном быстро меняющемся мире ощущаются изменения в нашем менталитете, Интернет, телефон, различные иностранные идеи и деструктивные идеологии начали омрачать нашу жизнь. Быстрое развитие любой страны, достижение определенных достижений, благополучие народа зависят от уровня внимания, уделяемого образованию и будущему молодежи в этой стране. В Узбекистане проблема молодежи является одним из наиболее приоритетных направлений государственной политики. В стране создана мощная база по защите прав и интересов молодежи, созданию для нее условий и возможностей.

В последние годы в нашей стране строятся сотни школ и новых высших учебных заведений, которые вызывают всеобщее восхищение, укрепляют их техническую базу, оснащают образовательными

инструментами мирового уровня, всемерно поощряют труд работников образования. Это дело государства, мы все знаем, что оно поднялось на уровень политики и находится в постоянном внимании.

Конечно, такие условия имеют свои особенности, но для нас самое главное, можно сказать, что решающим является вопрос о том, кто преподает в таких местах знаний, профессиональных навыков, знаний и мы никогда не должны забывать, что это связано с опытом, ответственность и целеустремленность.

Сама жизнь требует, чтобы современный учитель стал творческой личностью, неустанно работающей над собой, широкой во всех аспектах кругозора, умеющей эффективно использовать передовые педагогические и информационные технологии, обладающей высокими качествами, глубоко проникающими в сердца молодежи. «Всем нам ясно, что краеугольным камнем развития и той силой, которая делает страну могучей, нацию великой, являются наука, образование и воспитание. Наше завтра, светлое будущее нашей страны тесно связано, прежде всего, с системой образования и тем образованием, которое мы даем нашим детям», - сказал Президент Шавкат Мирзиёев. Образование и обучение – тесно связанные понятия. Эти мысли зависят от наших наставников, которые сегодня учат и воспитывают наших детей. Настоящее и будущее общества, его культурный, образовательный и духовный потенциал определяются уровнем развития системы образования. В каждом своем выступлении Президент Шавкат Мирзиёев неоднократно подчеркивает, что учителя, педагоги и тренеры являются создателями фундамента третьего ренессанса, садовниками сада просвещения и духовности. В действительности учитель – это человек, который регулирует духовный мир человечества, направляет его путь к добру, несет светоч знаний и способен вести учеников по своим стопам.

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## **ОЦЕНКА ЭФФЕКТИВНОСТИ ИСПОЛЬЗОВАНИЯ ОСНОВНЫХ СРЕДСТВ ПРЕДПРИЯТИЯ**

*Аннотация. Для непрерывного и стабильного функционирования предприятия, необходимы определенные средства и источники. Одним из главных таких источников, можно, выделить основные фонды, роль которых, а также эффективное использование при различных экономических отношениях всегда важна и актуальна. Следовательно, главный источник прибыли для любых предприятий, национально значимых для страны, является разумное, умелое, достаточно полное использование основных фондов, со своевременной их модернизацией и обновлением.*

*Ключевые слова: основные средства, эффективность, денежные средства, фонды обращения.*

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## **ASSESSMENT OF THE EFFICIENCY OF USE OF FIXED ASSETS OF THE ENTERPRISE**

*Abstract. For the continuous and stable functioning of an enterprise, certain funds and sources are necessary. One of the main such sources can be identified as fixed assets, the role of which, as well as their effective use in various economic relations, is always important and relevant. Consequently, the main source of profit for any enterprise that is nationally significant for the country is the reasonable, skillful, fairly complete use of fixed assets, with their timely modernization and renewal.*

*Key words: fixed assets, efficiency, cash, circulating funds.*

Основные средства — это материальные активы, которые предприятие содержит с целью использования в процессе производства или поставки товаров, предоставления услуг, сдачи в аренду другим лицам или для осуществления административных и социально-культурных функций, ожидаемый срок полезного использования (эксплуатации) которых более одного года (или операционного цикла, если он более года). При этом в учете объект основных средств признается активом, если существует вероятность того, что предприятие получит в будущем экономические выгоды от его использования и его стоимость может быть достоверна, определена [2, с. 86].

Единицей учета основных средств в бухгалтерском учете является объект основных средств — законченное устройство со всеми приспособлениями и принадлежностями к нему; конструктивно обособленный предмет, предназначенный для выполнения определенных самостоятельных функций; обособленный комплекс конструктивно объединенных предметов одинакового или разного назначения, имеющих для их обслуживания общие приспособления, принадлежности, управление и единый фундамент, в результате чего каждый предмет может выполнять свои функции, а комплекс — определенную работу только в составе комплекса, а не самостоятельно; прочий актив, отвечающий определению основных средств, или часть такого актива, контролируемая предприятием.

Отметим, что: если один объект основных средств состоит из частей, которые имеют разный срок полезного использования (эксплуатации), то каждая из частей может быть признана в бухгалтерском учете как отдельный объект основных средств.

Первоначальная стоимость основных средств — стоимость, которая включает фактические затраты по их возведению (сооружению, изготовлению) или приобретению, расходы по их доставке и установке, а также иные расходы, необходимые для доведения данного объекта до готовности к эксплуатации без налога на добавленную стоимость и иных возмещаемых налогов [1, с. 72].

Исключением являются общехозяйственные и иные аналогичные расходы (кроме случаев, когда они непосредственно связаны с приобретением, сооружением или изготовлением основных средств) они не включаются в фактические затраты на приобретение, сооружение или изготовление основных средств.

Первоначальная стоимость основных средств, внесенных в счет вклада в уставный (складочный) капитал организации, признается их денежная оценка, согласованная учредителями (участниками) организации, если иное не предусмотрено законодательством Российской Федерации.

Первоначальная стоимость основных средств, полученных предприятием по договору дарения, признается их текущая рыночная стоимость на дату принятия к бухгалтерскому учету.

В бухгалтерском учете возможно изменение первоначальной стоимости основных средств в случаях: достройки, дооборудования, модернизации, реконструкции, частичной ликвидации и переоценки объектов основных средств.

Стоимость основных фондов, при которой они были приняты к учету, не подлежат изменениям. В бухгалтерском учете основные средства, принятые к учету, могут изменить первоначальную стоимость основных средств в случаях: дооборудования, реконструкции, достройки, модернизации, частичной ликвидации и переоценки объектов основных средств [3, с. 56].

Для того чтобы современное предприятие могло нормально функционировать и осуществлять свою деятельность ему необходимо обладать достаточными ресурсами. Иными словами иметь определенные средства и источники, с помощью которых можно реализовывать материальные блага, хранить необходимый объем товарных запасов, реализовать проводку транспортных, разгрузочных, фасовочных и других подготовительных операций, выполнять производственные функции, предоставлять услуги, работу и отдых рабочими предприятия, повышать производительность их работы и эффективность хозяйствования всего предприятия. Прежде всего, такими средствами выступают основные фонды, которые состоят из зданий, сооружений, машин и оборудования и т.д.

Все основные средства, находящиеся в хозяйственном ведении организации в независимости от порядка их формирования, в том числе совокупность его оборотных средств (сырья, материалов и других материальных ресурсов) принято называть материально технической базой предприятия.

Основные средства участвуя в производственном процессе длительное время, обслуживают множество производственных циклов при этом постепенно изнашиваются, частями перенося свою стоимость на готовую продукцию, сохраняя при этом натуральную форму. Эта особенность основных фондов делает необходимым их максимально эффективное использование.

Таким образом, для того чтобы планировать основные средства и учитывать их в балансе используются натуральные и стоимостные показатели. Натуральные показатели необходимы для расчета производственных мощностей, составления баланса наличия оборудования, характеристики их технического состояния. Все основные средства учитываются в денежном выражении. Стоимостные показатели необходимы для оценки динамики основных средств, планирования расширенного производства, определения износа, расчета себестоимости продукции и рентабельности организации. Для каждого предприятия целесообразен интерес к стоимостным характеристикам основных фондов,



анализ их состояния, потребностей необходимой замены устаревших фондов.

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## **НОВЫЙ УЗБЕКИСТАН И ПЕРЕХОД В «ЗЕЛЕНУЮ ЭКОНОМИКУ»**

*Аннотация. В данной статье анализируются международные и национальные подходы к концепциям “зеленой экономики” и “зеленого развития”. В статье описана стратегия перехода к зеленой экономике в Узбекистане, перспективные показатели страны.*

*Ключевые слова: зеленая экономика, зеленое развитие, зеленый рост, зеленая энергетика.*

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## **NEW UZBEKISTAN AND TRANSITION TO A GREEN ECONOMY**

*Annotation. This article analyzes international and national approaches to the concepts of “green economy” and “green development”. The article describes the strategy for the transition to a green economy in Uzbekistan and the country's promising indicators.*

*Key words: green economy, green development, green growth, green energy.*

В результате роста населения, развития науки и техники, потребностей человека на Земле возникли ряд экологических проблем. Поэтому сегодня сложно говорить о чистой природе. Леса и зелёные пространства на земле сокращаются, природные площади используются под сельское хозяйство, природа и воздух загрязняются различными отходами и газами. Кроме того, в природе случаются стихийные бедствия, такие как

наводнения, лесные пожары, пыльные бури и землетрясения. Все это в конечном итоге нарушает баланс природы.

Сегодня канал Коштепа, строящийся в Афганистане, оказывает существенное влияние на экологию и экономику нижнего Амударьинского региона Узбекистана. Важным фактором является формирование «Зеленой экономики» за счет снижения существующих экологических рисков и эффективного использования ограниченных ресурсов.

«Зеленая экономика» — это экономика, которая ведет к улучшению благосостояния людей и социальной справедливости, а также к значительному снижению экологических рисков и экологического дефицита<sup>37</sup>. Формирование «зеленой» экономики поможет решить такие экологические проблемы, как неразумное использование водных ресурсов, загрязнение воздуха, вырубка лесов, деградация земель и изменение климата.

По мнению зарубежных экспертов, 10 экологических навыков, распространенных в различных сферах производства для перехода к «зеленой» экономике, то есть: дизайн, лидерство, управленческие навыки, энергетика, городское планирование, ландшафтный дизайн, коммуникация, управление отходами, закупочные и финансовые навыки пользуются большим спросом.

51-я цель стратегии «Узбекистан – 2030» – переход к «зеленой экономике» и резкое увеличение показателей использования возобновляемых источников энергии, составляющих ее основу. Данная цель включает в себя следующие задачи:

1. Доведение возобновляемых источников энергии до 25 тысяч мегаватт и доли в общем потреблении — до 40 процентов.

2. Развитие рынка «зеленых сертификатов» в промышленности и внедрение практики «экологической маркировки».

3. Снижение расхода природного газа путем модернизации 3 тепловых электростанций мощностью 3 ГВт.

4. Внедрение системы оценки энергоэффективности (энергоаудита) квартир в многоэтажных домах.

5. Перевод городского общественного транспорта полностью на экологически чистое топливо.

6. Создание системы мониторинга, охватывающей все парниковые газы, в сфере изменения климата (MRV).

7. Сокращение парниковых газов относительно единицы ВВП на 30 процентов по сравнению с их уровнем в 2010 году.<sup>38</sup>

Приоритетными направлениями стратегии «Переход к «зеленой» экономике Республики Узбекистан на 2019-2030 годы» являются:

<sup>37</sup>Зеленая экономика: Учеб. А. В. Вахабов, Ш. Х. Хаджибакиев и другие. – Ташкент.: «Университет», 2020. – 262 с.

<sup>38</sup>Указ Президента Республики Узбекистан от 11 сентября 2023 года №ПФ-158.

1. Повышение энергоэффективности базовых отраслей экономики;
2. Диверсификация потребления энергоресурсов и развитие использования возобновляемых источников энергии;
3. Адаптация и смягчение последствий изменения климата, повышение эффективности использования природных ресурсов и сохранение природных экосистем;
4. Разработка финансовых и нефинансовых механизмов поддержки «зеленой» экономики.

В результате реализации Стратегии к 2030 году ожидается:

- снижение удельных выбросов парниковых газов на единицу валового внутреннего продукта на 35 процентов от уровня 2010 года;
- увеличение производственной мощности возобновляемых источников энергии до 15 ГВт и доведение их доли в общем объеме производства электрической энергии до более 30 процентов;
- повышение энергоэффективности в сфере промышленности не менее чем на 20 процентов;
- снижение энергоемкости, приходящейся на единицу валового внутреннего продукта, на 30 процентов, в том числе за счет расширения использования возобновляемых источников энергии;
- значительное повышение эффективности водопользования во всех отраслях экономики, внедрение водосберегающих технологий для орошения на площади до 1 млн гектаров;
- расширение зеленых зон в городах до более 30 процентов путем посадки по 200 миллионов саженцев в год и доведение общего количества саженцев до более 1 миллиарда;
- доведение показателя запасов лесного фонда республики до более 90 миллионов кубометров;
- увеличение уровня переработки образуемых бытовых отходов до более 65 процентов<sup>39</sup>.

Согласно решению Президента Республики Узбекистан «О мерах по реализации проекта «Использование инновационных углеродных ресурсов для реформирования энергетики» с участием Всемирного банка, переход к «зеленой экономике» до 2030 года и «зеленому прогрессу» Проект «Использование инновационных углеродных ресурсов для энергетических реформ» (iCRAFT) будет реализован в Узбекистане в целях реализации задач, определенных в программе «роста», обеспечения низко углеродного развития национальной экономики, в частности промышленности. Для этой цели Всемирный банк выделит средства в размере 46,25 миллиона долларов США. В республиканском масштабе проект будет реализован в течение 2023-2028 годов.<sup>40</sup> Также в начале октября 2023 года Узбекистан впервые

<sup>39</sup>Постановление Президента Республики Узбекистан от 4 октября 2019 года № PQ-4477.

<sup>40</sup> Постановление Президента Республики Узбекистан от 8 августа 2023 года № PQ-271.

разместил на Лондонской фондовой бирже зеленые суверенные еврооблигации на сумму 4,25 триллиона сумов и еврооблигации на сумму 660 миллионов долларов.

Средства, полученные от зеленых облигаций, будут направлены на внедрение водосберегающих технологий, развитие железнодорожного и метрополитена, организацию санитарно-очистных работ и обеспечение чистоты в населенных пунктах, создание экологических лесных насаждений против ветровой эрозии и песчаного затопления водохозяйственных объектов. для финансирования зеленых проектов, таких как<sup>41</sup>. Это, в свою очередь, окажет положительное влияние на снижение экологических проблем.

Устойчивое развитие экономики Узбекистана, разработка долгосрочной стратегии структурных изменений требуют учета внутренних и глобальных процессов и проблем. Одной из таких проблем является неэффективность технологий, используемых в экономике нашей республики, особенно медлительность отрасли по переработке отходов, что беспокоит представителей промышленности и ученых. 110 миллионов ежегодно. в атмосферу выбрасывается более тонн CO<sub>2</sub>, в результате чего 4,5 млрд. доллар потерян. Ветряная установка мощностью 500 кВт (миллион кВтч/год) позволяет избежать выброса токсичных веществ в атмосферу по сравнению с тепловой электростанцией. То есть предотвращает выброс в атмосферу 750-1250 тонн CO<sub>2</sub>, 8 тонн оксидов серы, 6 тонн дыма и 70 тонн золы.

В настоящее время только в городе Ташкенте Республики Узбекистан введены в эксплуатацию 8 кластеров по сбору, переработке и подготовке продукции из ТБО, мощность 146 000 тонн в год, 400 тонн бытовых отходов в сутки запущен перерабатывающий завод. В Каракалпакстане построено мусороперерабатывающее предприятие мощностью 78 тыс. тонн в год. В городе Навои введен в эксплуатацию завод по переработке 200 тонн отходов в сутки. Кроме того, в Узбекистане введено в эксплуатацию 186 полигонов, а 34 млн. тонны мусора закапываются в землю<sup>42</sup>. Если в Узбекистане один фермер кормит 10-13 человек, то в "зеленых" странах, перешедших на "зеленую экономику" - Швеции, Финляндии и Южной Кореи, 1 фермер кормит 50-60 человек<sup>43</sup>.

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## ВАЖНЫЕ АСПЕКТЫ НЕМЕЦКОГО ОПЫТА ВЫРАЩИВАНИЯ СЕЛЬСКОХОЗЯЙСТВЕННОЙ ПРОДУКЦИИ

*Аннотация.* В данной статье описывается зарубежный опыт сельскохозяйственного производства Германии. В статье отражены основные факторы эффективной организации крестьянских хозяйств Германии.

*Ключевые слова:* сельское хозяйство, аграрные отношения, кооперативные отношения, зарубежный опыт, субсидия, государственная поддержка.

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## IMPORTANT ASPECTS OF THE GERMAN EXPERIENCE IN GROWING AGRICULTURAL PRODUCTS

*Annotation.* This article describes the foreign experience of agricultural production in Germany. The article reflects the main factors of the effective organization of farms in Germany.

*Keywords:* agriculture, agrarian relations, cooperative relations, foreign experience, subsidy, state support.

Эффективная организация крестьянских хозяйств, выступающих в качестве основного экономического субъекта сельскохозяйственного производства в Республике Узбекистан, и их развитие на инновационной основе требует изучения опыта развитых стран в этом направлении и внедрения его существенных аспектов в экономику нашей республики.

В частности, важно изучить опыт немецкого государства среди развитых стран. Потому что Германия – одна из стран, играющая ведущую роль в производстве и экспорте продуктов питания в мире. В результате финансовой политики государства, известной как «зеленый план», которая поддерживает и поощряет фермеров и крестьянские хозяйства, 85 процентов потребностей страны в продовольствии обеспечиваются сельскохозяйственными кооперативами. Но на базе этих

сельскохозяйственных кооперативов работают крестьянские (дехканские) хозяйства.

Сельское хозяйство Германии считается важной отраслью экономики страны и занимает второе место в Европе после Франции. Он обеспечивает 100% спроса внутреннего рынка на молоко, 90% спроса на мясо, 85% спроса на сахар и 80% спроса на пшеницу.

Сельскохозяйственное производство в этой стране основано на малых и средних семейных фермерских хозяйствах, и по состоянию на 2021 год действовало 292,7 тыс. крестьянских хозяйств.

Основными факторами эффективной организации сельскохозяйственной деятельности в Германии уместно признать следующие:

***Во-первых, в направлении стимулирования экономики со стороны государства:***

Одним из видов господдержки в Германии является введение механизма субсидирования выращивания этих ферм. Например, льгота в размере 500-550 евро за гектар обрабатываемой фермой пашни каждый год. Средства, выделенные на поддержку со стороны государства, переводятся на счета домохозяйств. Это считается 70% их дохода от реализации продукции.

Поскольку производство молока в Германии считается низкорентабельным, правительство выделяет премиальные средства на поддержку внутреннего рынка. Например, в Баварии эта сумма составляет в среднем 50-60 евро за корову. Также есть возможности увеличить эту сумму в зависимости от повышения уровня ухода за каждой коровой.

Такой подход позволяет повысить воспроизводство и адекватно поддерживать эффективность производства молока. Также заслуживает внимания внедрение механизмов экономического стимулирования фермерских хозяйств, которые организовали производство на основе использования альтернативных источников энергии и эффективно использовали сельскохозяйственные земли, сохранили и улучшили их мелиоративное состояние.

В этой стране очень важное место также занимает система кредитования фермеров и крестьянских хозяйств, которая позволяет им получать кредиты под 1-3 процент почти на 50 лет.

***Во-вторых, по направлению специализации и кооперации в производстве сельскохозяйственной продукции:***

Известно, что в Германии сохранились традиции специализации на определенном виде продукции, основанные на природных и экономических условиях регионов. Благодаря этим традициям сельское хозяйство остается одним из самых сильных секторов экономики Германии.

В частности, в городе Муттерштадт насчитывается 1500 членов крестьянских хозяйств, специализируемых на овощеводстве, которые известны на всю страну как «Огород Германии» или «Немецкий сад».

В этой стране действуют кооперативы, занимающиеся виноделием, выращиванием зерна, животноводством, овощеводством, закупкой и переработкой мяса.

Также 90 процентов крестьян являются членами Союза крестьян Германии, что позволяет фермерам эффективно взаимодействовать с государственными органами на региональном и федеральном уровне, участвовать в законодательных отношениях. В частности, районные ассоциации признаны важным звеном системы Союза крестьян Германии. Например, только в Фулд-Хюнфельдском районном в союз объединены 2424 хозяйства, им оказывают различные услуги 12 сотрудников, оснащенных современным оборудованием.

Этот союз возглавляет директор, избираемый съездом и подчиняющийся ему. Деятельность финансируется за счет членских взносов и платных услуг. В Германии организуются тематические клубы новых крестьян, чтобы предотвратить развал крестьянских хозяйств и пробудить интерес к фермерству среди молодежи. Основная задача таких клубов или ассоциаций – информировать молодежь о положительных результатах становления фермерами.

На базе таких союзов часто проводятся различные семинары, тренинги, выставки и мастер-классы. Фермеры и крестьяне стараются участвовать в специальных обучающих курсах и встречах, направленных на то, чтобы следить за последними достижениями в области сельского хозяйства, идти в ногу со временем и использовать различные инновации в сельском хозяйстве.

Этот процесс, при соответствующей поддержке государства, массовой кооперации и организационной солидарности фермеров и крестьян, немецкие семейные фермы, выращивающие мелкие товары, успешно поддерживают порядок сельской жизни, позволяют получать высокие доходы и обеспечивать население высококачественной продукцией питания.

***В-третьих, секрет успешности немецкого сельского хозяйства – его кооперация.*** Она превращает объединенное крестьянство в один из мощных секторов экономики. Без неё не смогли бы в одиночку хозяйствовать даже многочисленные мелкие и средние фермерские хозяйства. В Германии существуют кооперативы, занимающиеся виноделием, зерно производством, животноводством, овощеводством, закупкой и разделкой мяса.

***В-четвёртых, секрет успешности - способность крестьян Германии к самоорганизации, их обустроенность и оснащённость***

*современными оборудованием и техникой, умение сочетать личные и коллективные интересы.*

Размер обрабатываемых полей в товариществе колеблется от 0,5 га и более. Выращиваются на них зерновые культуры, картофель, сахарная свекла. Имеется полный набор современной техники, хранящейся в ангарах. Например, перед началом уборки специальная кампания по качеству берёт пробы с поля крестьян или фермеров, и исследует их в лаборатории. В течении 48 часов даётся допуск на поставку овощей в кооператив. Свежие овощи постоянно охлаждаются до продажи. Это обеспечивает их высокое качество от поля до прилавка.

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## **ИНТЕГРАЦИЯ УЗБЕКСКОГО ТЕКСТИЛЬНОГО ИСКУССТВА В СОВРЕМЕННУЮ МОДУ**

*Аннотация. В статье освещается уникальное слияние исторического текстильного мастерства Узбекистана с новаторскими тенденциями современной моды. Анализируется влияние культурного наследия на текстильную индустрию страны, отражающее сохранение традиционных практик и их преобразование в условиях глобализации. Основное внимание уделяется разнообразию тканей, таких как икат, адрас, сузани, а также техникам ткачества и символизму узоров и цветов, которые несут в себе отпечатки истории и идентичности узбекского народа. Изучается, как эти элементы интегрируются в современные модные тенденции и как мировые дизайнеры, такие как Оскар де ла Рента и Дом моды Dior вдохновляются узбекскими мотивами. Статья подчеркивает значимость сохранения культурного наследия через призму текстильного дизайна и предлагает взгляд на узбекский текстиль как на средство культурной экспрессии и носителя социальных кодов.*

*Ключевые слова: Узбекистан, текстильная промышленность, традиционное ремесло, современная мода, культурное наследие, дизайн одежды, текстильное искусство, глобализация, модные тенденции, сохранение традиций, инновационные технологии.*

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## **INTEGRATION OF UZBEK TEXTILE ART INTO CONTEMPORARY FASHION**

*Abstract. The article highlights the unique fusion of Uzbekistan's historical textile craftsmanship with the innovative trends of contemporary fashion. It analyzes the impact of cultural heritage on the country's textile industry, reflecting the preservation of traditional practices and their transformation in the*



*context of globalization. The focus is on the diversity of fabrics such as ikat, adras, suzani, as well as weaving techniques and the symbolism of patterns and colors that carry the imprints of history and the identity of the Uzbek people. It explores how these elements are integrated into modern fashion trends and how world designers, such as Oscar de la Renta and the fashion house Dior, are inspired by Uzbek motifs. The article emphasizes the importance of preserving cultural heritage through the prism of textile design and offers a view of Uzbek textiles as a means of cultural expression and a carrier of social codes.*

*Keywords: Uzbekistan, textile industry, traditional craft, contemporary fashion, cultural heritage, clothing design, textile art, globalization, fashion trends, tradition preservation, innovative technologies.*

Узбекистан сегодня находится на перекрестке, где пересекаются традиционное ремесленное мастерство и современные инновационные технологии. Это сочетание открывает новые возможности для текстильной промышленности страны, позволяя сохранить культурное наследие, улучшить качество и экологичность продукции.

Цель данной статьи – проследить, как культурные традиции Узбекистана влияют на выбор тканей и элементы дизайна в современной одежде. В статье проведен анализ исторического значения текстильных традиций, изучено влияние культурных обычаев на выбор материалов и техник в текстильной промышленности, а также приведены примеры того, как эти элементы интегрируются в современные тенденции моды. Статья стремится подчеркнуть значимость сохранения культурного наследия Узбекистана через призму текстильного дизайна и моды.

Ткань в Узбекистане – это не только средство для создания одежды, но и способ выражения социального статуса, региональной принадлежности и даже религиозных убеждений. Ткани не просто служат материалом для создания одежды – они являются носителями культурных кодов, истории и идентичности народа Узбекистана [1]. Издавна узбекские ткани, такие как шелк и адрас, были известны своим качеством и красотой, что делало их желанным товаром на Великом Шелковом пути. Ткани несут в себе отпечатки многовековых традиций, каждый узор и цвет символизируют определенные аспекты узбекской культуры. Например, плодородие и благополучие часто изображаются через изображения граната или алмазных форм. Красный цвет символизирует красоту и жизненную силу, синий – воду и небеса, зеленый – природу и новую жизнь [2]. В таблице 1 мы систематизировали информацию о разновидностях традиционных тканей, производимых в разных областях Узбекистана [3, 4, 5, 6]. Мы видим, что каждый регион страны славится своими уникальными техниками ткачества и вышивки, что позволяет дизайнерам черпать вдохновение для создания современной одежды с национальным колоритом.



Таблица 1.

### Исторические и современные традиции текстильного производства в регионах Узбекистана

Название ткани	Регион изготовления	Описание
Бязевый икат / Хлопковый икат	Бухара, Самарканд, Ферганская долина, Зеравшанская долина, Ташкент	Икат - технология окрашивания нитей, при которой нити окрашиваются до ткачества, создавая размытые или "плывущие" узоры. Ткань может быть выполнена из хлопка, называется бязевый икат или хлопковый икат.
Адрас	Бухара, Самарканд, Ферганская долина, Зеравшанская долина, Нурата,	Полушелковая ткань, где шелковая нить образует икатовый узор и расположена вдоль ткани, а хлопковая - поперек.
Шелковый икат	Бухара, Самарканд, Ферганская долина, Зеравшанская долина, Маргилан	Ткань из 100% шелка с икатовым узором.
Шелковый ала-бахмаль / Вельвет	Бухара	Шелковая ворсовая ткань с икатовым узором, использовалась особами королевской крови, технология производства была практически утеряна, но восстановлена в 1990-х. Состав 90% шелка и 10% хлопка.
Занданечи	Бухара	Хлопчатобумажные и шелковые ткани атласного переплетения
Бекасаб / Банорас, Пасма, Дуруя, Якруя	Бухара, Самарканд, Ферганская долина, Нурата, Наманган, Маргилан, Шахрисябз, Китаб, Карши, Хива	Полосатая ткань из шелка и хлопка, традиционно используемая для мужских халатов.
Жанда / Алфи	Бухара, Самарканд, Ферганская долина	Жанда содержит 10-15% шелка, а алфи на 100% состоит из хлопка, редкие ткани со сложным плетением нитей, используются преимущественно для мужской одежды.
Атлас, Хонатлас	Бухара, Самарканд, Ферганская долина, Маргилан	Шелковая ткань с блестящей глянцевой поверхностью, яркими цветами и сложными узорами, известная также как хан-атлас икат.

Название ткани	Регион изготовления	Описание
Карбос, алоча, футу, чит	Бухара, Самарканд,	Хлопчатобумажные ткани разного переплетения, набивные ткани
Парчи касаба, кимхо	Самарканд	Шелковые ткани с тканым узором
Калами, алоча	Самарканд	Полосатые хлопчатобумажные ткани,, подвергались дополнительной обработке после ткачества, чтобы придать им определенные качества, такие как мягкость, глянец или дополнительную плотность.
Суси	Бухара, Самарканд,	Полосатые хлопчатобумажные ткани
Козюнен-ала, Кесе-ала, Кзыл-ала, Мелле, Алаша,	Кунград	Хлопчатобумажная ткань в полоску, крупную клетку. Нити этих тканей часто были довольно толстыми и имели неровное кручение, что могло придавать тканям особый характер и текстуру
Шатраги-марелли, Рыккалеме, Калеме, Мамзорлы-ала	Ходжейлинский район	Хлопчатобумажная ткань в полоску. Ткани могли быть орнаментированы с использованием специальных техник, таких как джанда (чередование цветов в утке) и абрбанди (резервирование отдельных участков нитей перед окраской). Это позволяло создавать узоры с пестрым заполнением или расплывчатые контуры
Сузани	Сурхандарья	Это не ткань, а вид ручной вышивки, который традиционно выполняется на хлопковой или шелковой основе. Сузани известны своими сложными цветочными и медальонными узорами и часто используются как покрывала, шторы или декоративные панно.
Кигиз (войлочные ковры)	Сурхандарья, Хорезм	Шерстяные изделия, используемые в юртах как для внешнего, так и для внутреннего убранства. Основа обычно из грубой шерсти темных тонов, а узоры из светлой окрашенной шерсти. Существуют различные техники изготовления, включая вкатывание узоров в войлок, аппликацию и мозаичную технику.

Представленный анализ дает понимание богатства традиционного текстильного производства в Узбекистане, который охватывает шерстяные, хлопчатобумажные и шелковые ткани, а также различные виды переплетения и узоров, характерные для разных регионов страны. Все эти ткани не только служили практическим целям, но и были выражением культурной идентичности, социального статуса и эстетических предпочтений народов, проживавших на территории современного Узбекистана. Каждый регион страны вносил свой вклад в разнообразие традиционных тканей, что отражает богатую палитру культурного наследия страны в наше время.

Исторические события, такие как завоевания, торговые отношения и социально-экономические изменения, оказали значительное влияние на текстильную промышленность современного Узбекистана. Например, после завоевания региона Александром Македонским, в узбекские ткани начали вноситься эллинистические мотивы. В XX веке производство традиционных тканей было стандартизировано, что привело с одной стороны к широкому распространению узбекских шелковых и хлопчатобумажных тканей, с другой стороны, промышленное производство привело к уменьшению разнообразия узоров и техник их изготовления. В настоящее время открытие Шелкового пути способствует распространению узбекских тканей по всему миру, увеличивая их популярность и доступность [7].

Сегодня дизайнеры одежды активно исследуют и внедряют традиционные узбекские ткани, привнося в моду уникальное сочетание исторического наследия и современных тенденций. Это не только способствует возрождению интереса к национальным мотивам, но и открывает новые горизонты для творчества в мировой моде. Дизайнеры ценят традиционные материалы за их яркость, текстуру и уникальные узоры, которые придают одежде особый характер. Например, знаменитые кутюрье с мировым именем использовали традиционные узбекские ткани в своих коллекциях в разные годы:

- Оскар де ла Рента – считается первооткрывателем иката для мировой модной индустрии. Он впервые ввёл икат в свою весеннюю коллекцию в 2005 году, презентовав шесть моделей с узорами, что стало открытием для fashion-индустрии. Он продолжал работать с икатом, в том числе в коллекциях 2008 и 2013 годов. После его смерти, дизайнеры Лаура Ким и Фернандо Гарсия, возглавившие бренд Oscar de la Renta, также использовали икат в весенне-летней коллекции 2019 года [8].

- Dior – в коллекции прет-а-порте весна-лето 2021, Мария Грация Кьюри использовала икат, создавая топы-бандо, шорты, пальто-халаты и другие элементы гардероба, включая аллюзии на стиль Востока.

- Ralph Lauren – создал весеннюю коллекцию 2022 года, вдохновленную узбекским икатом, с классическими силуэтами и мотивами ручной работы, подчеркивающими нестандартность и свободу.

- Итальянские дизайнеры Бенедетта Маркезани, Екатерина Скотти и Роберто Камерино создали современную интерпретацию сумки в стиле 60-х годов, используя икат из Бухары.

- Hermès – французский Дом высокой моды представил коллекцию посуды «Voyage en Ikat», вдохновленную мотивами узбекских национальных тканей.

- Belle Ikat – немецкая компания, производящая женскую одежду с применением техники окрашивания икат и вышивания. Производство расположено в Ферганской долине, Узбекистан.

Современные технологии предоставляют узбекским текстильным производителям возможности для улучшения качества и расширения ассортимента тканей. Например, использование цифровой печати на традиционных тканях позволяет создавать более сложные и многоцветные узоры, сохраняя при этом характерные черты ручного ткачества. Также применение новых методов окрашивания и отделки может улучшить износостойкость тканей и сделать их более удобными в уходе, не теряя при этом их традиционного вида. Глобализация оказала значительное влияние на распространение узбекских тканей за пределы страны.

С одной стороны, все это привело к увеличению интереса и спроса на эти уникальные материалы в мировой моде, с другой – вызвало опасения по поводу культурной аутентичности и сохранения традиционных методов производства. Однако многие отечественные дизайнеры и бренды стремятся к тому, чтобы их использование традиционных тканей способствовало устойчивому развитию и поддержке местных сообществ.

Сохранение культурного наследия через одежду – это не просто модный тренд, это способ передачи знаний и умений будущим поколениям. Например, в Узбекистане существуют проекты, направленные на возрождение древних техник ткачества иката, которые включают обучение молодых ремесленников. Также широко используют традиционные ткани и мотивы в современной одежде узбекские дизайнеры:

- Dildora Kasimova Brand – дизайнер Дильдора Касимова выпускает одежду и аксессуары, вдохновленные народным искусством, таким как золотое шитьё и вышивка сюзанае, что отражает восточные мотивы и узбекскую культуру.

- Inside by Sana – бренд предлагает повседневную одежду с национальными узорами, включая верхнюю одежду и платья из иката, а также современные бомберы и телогрейки из адраса.

- Nadi\_uz – Надира Абдурахманова, основательница бренда, называет себя амбассадором узбекского чапана, и её работы известны во многих уголках мира.

- STONE CITY – предлагает сумки, рубашки, шарфы, платья и корсеты из адраса и атласа, все ручной работы узбекских ремесленников, часто сочетая национальные мотивы с базовыми цветами.

- Fratelli Casa – этнобренд, который производит товары с восточными орнаментами, включая одежду, обувь, аксессуары и домашний текстиль, популярные как у местных жителей, так и у туристов.

- Nice Coffee Toys – сотрудничает с узбекскими иллюстраторами и художниками, создавая уникальные украшения, такие как серьги в форме тубетеек или броши с танцовщицами в национальных костюмах.

- Mursak – бренд, который привносит узбекские традиционные узоры в современную мужскую и женскую одежду. Они известны тем, что

вдыхают новую жизнь в классические силуэты с помощью ярких икатов и богато украшенных тканей.

• LALI – это бренд, который объединяет начинающих дизайнеров, стремящихся адаптировать традиционное этническое искусство и красоту наследия Центральной Азии к современной моде, чтобы сделать ее более доступной.

Эти примеры показывают, что традиционные узбекские ткани могут быть успешно интегрированы в современный дизайн одежды, при этом сохраняя историческую ценность и культурное значение.

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## **АРИСТОТЕЛЬ ВА ЭВКЛИД ТАДҚИҚОТЛАРИДАГИ ИЛМИЙ НАЗАРИЯЛАРГА ФАРОБИЙНИНГ БИЛДИРГАН ФИКРЛАРИ**

*Аннотация. Мақолада Аристотель ва Эвклиднинг тадқиқотларидаги илмий назарияларга қомусий олим Абу Наср Фаробийнинг қараишлари ҳақида фикр юритилади. Фаробийнинг фанда назария билан амалиётнинг уйғунлиги ҳақидаги аниқ мисоллар келтириб ўзининг шарқона қараишларини айтиб ўтади. Яқин Шарқ минтақасининг ўрта аср маданиятига хос бўлган бу позитсия нафақат Фаробийнинг фалсафий тушунчасида, балки Ўрта Осиё меъморлари ва безак рассомлари санъатида ҳам намоён бўлади. Фаробий моҳир геометрик техникалар меъморчилик дизайнининг асоси эканлигини ҳам кўрсатиб беради.*

*Таянч сўзлар: файласуф, ренессанс, Ўрта Осиё, Аристотель, Эвклид, математика, санъат, геометрия, архитектура, тафаккур.*

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## **FARABI'S VIEWS ON THE SCIENTIFIC AND THEORETICAL RESEARCH OF ARISTOTLE AND EUCLID**

*Annotation. The article examines the views of encyclopedist Abu Nasr Farabi on the scientific theories of Aristotle and Euclid. Farabi gives specific examples of the harmony of theory and practice in science and talks about his Eastern views. This position, typical of the medieval culture of the Middle Eastern region, was reflected not only in the philosophical understanding of Farabi, but also in the work of Central Asian architects and decorative artists. Farabi also demonstrates that skillful geometric techniques are the basis of architectural design.*

*Key words: philosopher, Renaissance, Central Asia, Aristotle, Euclid, mathematics, art, geometry, architecture, thinking.*

Жаҳон маданиятига катта ҳисса қўшган Марказий Осиёлик машҳур файласуф, қомусий олим. Фаробийнинг тўлиқ исми Абу Наср Муҳаммад ибн Муҳаммад ибн Узлуғ Тархон. Фаробий 873 йилда туркий қабилалардан бўлган ҳарбий хизматчи оиласида, Сирдарё қирғоғидаги Фороб – Ўттор деган жойда туғилган. У туғилган ҳудуд Сомонийлар томонидан бошқарилиб, араб халифалигининг шимолий чегараси ҳисобланган. Ўрта



асринг бир қанча илмий ютуқлари, умуман Яқин ва Ўрта Шарқ мамлакатларида тараққийпарвар ижтимоий-фалсафий тафаккур ривожининг номи билан боғлиқ. Форобий ўз замонаси илмларининг барча соҳасини мукамал билган ва бу илмлар ривожига катта ҳисса қўшган. Ўз маълумотини ошириш учун араб халифалигининг маданий маркази ҳисобланган Бағдодга келди. Бағдодда бу даврда мусулмон дунёсининг турли ўлкаларидан, хусусан, Марказий Осиёдан келган олимлар тўпланишган эди. Бу ерда турли фанларни ўзлаштириб билимларини чуқурлаштиришда давом этди. У илмий даражасини оширгач, фаннинг деярли барча соҳаларини эгаллаб 160 дан ортиқ асарлар ёзди.

Форобий илмий тадқиқотларини турли даврларда турли миллат ва элат олимлари томонидан ўрганилган ва ҳозиргача ўрганиб келинмоқда. Буни мисоли сифатида манбаларга мурожаат қиламиз масалан:

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*Sobirov T.R., Omonov Q.K.* Pedagogik mahorat jurnali 2021у. 1son. Buxoro 2021.

Бундан ташқари яна бир қатор манбаларни кўришимиз мумкин. Келтирилган манбаларда Фаробийнинг турли қирралари ҳақидаги маълумотлар келтирилган. Бизлар ушбу мақола орқали Абу Наср Фаробийнинг Аристотель ва Эвклиднинг фанлар таснифиги кўшимчалар

қилганлиги ва бу қўшимчаларнинг асослаб берганлиги ҳақида фикр юритамиз.

Аристотельнинг фикрича, математика фанларига арифметика, геометрия, астрономия ва муסיқа киради. Ал-Форобий бу таснифни қайта кўриб чиқиб, математика фанлари қаторига санаб ўтилган фанлардан ташқари оптика, оғирликка эга бўлган жисмлар ҳақидаги фан ва "моҳир техникалар илми" - илм ал-ҳиёлни ҳам ўз ичига олади дейди. Таржимада бу атама механика сифатида илмий фойдаланишга кирди, чунки у юнонча механик атамасининг аниқ таржимасини англатади. Айни пайтда, сўнги тадқиқотлар аниқланганидек, Илм ал-ҳиёл жуда кенг тушунча бўлиб, кўплаб амалий санъатларни, шу жумладан меъморчиликни ҳам ўз ичига олади. Шу муносабат билан ал-Форобий шундай ёзади: Кўплаб геометрик маҳоратли техникалар мавжуд бўлиб, улар орасида риёса ал бина - қурилишни бошқариш санъати, меъморий иншоотларнинг лойиҳаларини чизиш ҳақида гап боради.

Эвклид геометрияси - оғирлиги, текстураси, ранги, ёруғлиги, сояси бўлмаган, визуал идрок ёки истиқбол билан боғлиқ бўлмаган хаёлий нукталар, чизиқлар, текисликлар ва ҳажмлар деб айтса Фаробий санъат объектларида моддий томондан ифодалайди: Амалий. геометрия, агар дурадгор ишлатса, ёғоч жисмнинг чизиқлари ва сиртларини, агар темирчи ишлатса, темир корпусни кўриб чиқади. Худди шунинг учун ҳам амалий геометрия мутахассиси чизиқларни тасаввур қилади, сиртлар, квадратлар, думалоқ ва учбурчак жисмлар материя сифатида, бу амалий санъатнинг маҳсулидир дейди. Айтилганлардан маълум бўладики, жисмоний бўлмаган рақамлар ва ҳажмлар билан ишлайдиган мавҳум Эвклид геометрияси бошқа нарса ва санъат геометрияси бошқа нарса.

Форобий, айниқса, моҳир геометрик техника амалий санъат асосларини ифодалайди ва жисмлар, фигуралар, тартиб, жойлашув ва ўлчовларга нисбатан қўлланилишини алоҳида таъкидлайди. (Бунга архитектура, дурадгорлик, ёғоч ўймакорлиги, ганч ўймакорлиги бошқалар киради.)

Форобий бахтга эришишга бағишланган яна бир рисоласида бахтнинг асоси билим бўлиб, уни эгаллаш сон ва миқдорларни ҳисобга олишдан бошланиши кераклигини ёзади. Форобий фикрича, арифметика ва геометрия барча фан ва санъатларга кириб боради. Дарҳақиқат, математика фанлари ва муסיқанинг ўзаро таъсири натижасида муסיқанинг математик назарияси пайдо бўлади ва меъморий шаклни қуриш учун геометриядан фойдаланиш архитектурада геометрик техника фанини - геометрик уйғунлаштиришни келтириб чиқаради. Бошқача айтганда, бадий ишлаб чиқаришнинг ўзига хос тарихий шароитида геометриянинг поэтиклашуви содир бўлди. Яқин Шарқ минтақасининг ўрта аср маданиятига хос бўлган бу позитсия нафақат Фаробийнинг фалсафий тушунчасида, балки Ўрта Осиё меъморлари ва безак рассомлари санъатида ҳам намоён бўлади. Форобий

моҳир геометрик техникалар меъморчилик дизайнининг асоси эканлигини аниқлаб, “Маънавий маҳоратли техникалар китоби” рисоласини ва геометрик фигураларнинг нозикликлари ҳақидаги табиий сирларни ёзади. Айни пайтда рисоланинг мураккаб сарлавҳаси Фаробийнинг эстетик дунёқарашини акс эттиради. Моҳир геометрик техникада у яхшироқ нисбатлар, мукамал нисбатлар, санъат объектларининг геометрик уйғунлиги билан боғлиқ гўзаллик сирларини очиш учун ижодий изланишлар олиб боради. Бу қарашлари билан у фанни-илмни назарияларга асосланиб ҳаётий амалиёт билан узвий боғлиқлигини шарқона мисоллар билан кўрсатиб ўтади.

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## **ЯЗЫКОВЫЕ СТЕРЕОТИПЫ И ПРЕДРАССУДКИ СРЕДИ МОЛОДЕЖИ: КАК ИЗБАВИТЬСЯ ОТ НИХ И ИСПОЛЬЗОВАТЬ ЯЗЫК ДЛЯ УКРЕПЛЕНИЯ ТОЛЕРАНТНОСТИ**

*Аннотация. Данная статья рассматривает проблему языковых стереотипов и предрассудков среди молодежи и их влияние на общение и толерантность в обществе. Анализируются, какие языковые стереотипы и предрассудки существуют среди молодежи, как они формируются и какие негативные последствия они могут иметь для общества. В статье также предлагаются практические советы по тому, как избавиться от языковых стереотипов и предрассудков, а также как использовать язык для укрепления толерантности и гражданского общения. В целом, статья направлена на то, чтобы помочь молодежи осознать важность толерантности и грамотного общения на языке, а также научиться использовать язык для укрепления этих ценностей в обществе.*

*Ключевые слова. Стереотип, дискриминация, религия, эмпатия, толерантность, социальный статус, гражданское общение, критическое мышление.*

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**LANGUAGE STEREOTYPES AND PREJUDICES AMONG YOUTH:  
HOW TO GET RID OF THEM AND USE LANGUAGE TO  
STRENGTHEN TOLERANCE AND CIVIC COMMUNICATION**

*Annotation. The article examines the problem of language stereotypes and prejudices among young people and their impact on communication and tolerance in society. The authors analyze what language stereotypes and prejudices exist among young people, how they are formed, and what negative consequences they can have for society. The article also offers practical advice on how to eliminate language stereotypes and prejudices, as well as how to use language to strengthen tolerance and civic communication. Overall, the article aims to help young people realize the importance of tolerance and competent language communication, as well as learn how to use language to reinforce these values in society.*

*Keywords: stereotype, discrimination, religion, empathy, tolerance, social status, civic communication, critical thinking.*

В современном обществе языковые стереотипы и предрассудки являются распространенным явлением в обществе, которое может привести к негативным последствиям, таким как дискриминация, непонимание и конфликты. Среди молодежи эта проблема особенно актуальна, поскольку они часто подвержены влиянию различных стереотипов и предрассудков.

Основные языковые стереотипы и предрассудки среди молодежи могут касаться различных аспектов жизни, таких как внешность, происхождение, религия и т.д.

Причины возникновения и поддержания языковых стереотипов и предрассудков могут быть различными. Они могут быть связаны с недостатком информации о других культурах, страхом перед ними, а также с негативным опытом общения с людьми из других культур. Недостаток общения и знаний о других культурах может привести к формированию стереотипов и предрассудков.

Для борьбы с языковыми стереотипами и предрассудками важно развивать критическое мышление и эмпатию у молодежи. Критическое мышление позволяет оценивать информацию и анализировать ее, а эмпатия помогает понимать чувства и переживания других людей. Образование также играет важную роль в этом процессе, поскольку позволяет расширить знания о других культурах и учиться уважительно относиться к различиям.

Важно также осознавать, что языковые стереотипы и предрассудки могут быть связаны с недостатком информации о других культурах, страхом перед ними, а также с негативным опытом общения с людьми из других культур. Недостаток общения и знаний о других культурах может привести к формированию стереотипов и предрассудков.

Одним из способов борьбы с языковыми стереотипами и предрассудками является использование языка для укрепления толерантности и гражданского общения. Особенности коммуникации в интернете и социальных сетях могут привести к распространению языковых



стереотипов и предрассудков. Поэтому важно учитывать эти особенности и использовать язык для формирования толерантного общества.

Толерантность — это уважительное отношение к различиям между людьми, включая их культуру, религию, политические взгляды и т.д. Использование языка для укрепления толерантности означает использование слов и выражений, которые не оскорбляют или не унижают других людей на основе их различий.

Как же можно использовать язык для укрепления толерантности? Во-первых, необходимо избегать использования языка, который может вызвать негативные эмоции у других людей. Например, использование оскорбительных слов или выражений на основе национальности, пола или религии может привести к конфликту и непониманию.

Во-вторых, необходимо использовать язык, который позволяет уважительно относиться к различиям. Например, использование слова "разнообразие" вместо слова "отличие" позволяет уважительно относиться к различиям между людьми.

Гражданское общение — это процесс взаимодействия между гражданами в рамках общественной жизни. Использование языка для укрепления гражданского общения означает использование языка, который позволяет людям лучше понимать друг друга и строить диалог на основе взаимного уважения.

Как же можно использовать язык для укрепления гражданского общения? Во-первых, необходимо избегать использования языка, который может вызвать недопонимание или конфликт. Например, использование слишком сложных слов или терминов может привести к тому, что другие люди не смогут понять, о чем идет речь.

Во-вторых, необходимо использовать язык, который позволяет строить диалог на основе взаимного уважения. Например, использование слова "мы" вместо слова "они" позволяет создать ощущение единства и взаимопонимания.

Использование языка для укрепления толерантности и гражданского общения имеет большое значение в современном обществе. Оно позволяет создать атмосферу взаимного уважения и понимания, что в свою очередь способствует развитию толерантного и гражданского общества. Необходимо помнить, что язык — это не только средство общения, но и средство воздействия на других людей. Поэтому важно использовать его с уважением и заботой о других.

Современный мир не представляется возможным без интернета и социальных сетей. Они стали неотъемлемой частью нашей жизни и являются одним из главных инструментов коммуникации. Однако, коммуникация в интернете и социальных сетях имеет свои особенности.

Во-первых, интернет и социальные сети позволяют нам общаться с людьми из разных уголков мира. Это открывает перед нами огромные



возможности для обмена информацией и опытом. Однако, в такой коммуникации часто отсутствует непосредственное общение лицом к лицу, что может привести к недопониманию и конфликтам.

Во-вторых, интернет и социальные сети позволяют нам выражать свое мнение и делиться информацией. Однако, в такой коммуникации часто отсутствует контроль за достоверностью информации, что может привести к распространению ложной информации и фейковых новостей.

В-третьих, интернет и социальные сети позволяют нам общаться анонимно. Это может привести к тому, что люди становятся более агрессивными и неуважительными в своих высказываниях, так как не боятся наказания за свои слова.

Как же можно использовать интернет и социальные сети для укрепления коммуникации? Во-первых, необходимо избегать использования агрессивного языка и оскорбительных выражений. Необходимо помнить, что на другой стороне экрана сидит реальный человек, который может обидеться или недопонять наши слова.

Во-вторых, необходимо проверять достоверность информации, которую мы получаем в интернете и социальных сетях. Не стоит распространять ложную информацию и фейковые новости, так как это может привести к серьезным последствиям.

В-третьих, необходимо уважительно относиться к мнению других людей и не использовать анонимность для агрессивных высказываний. Необходимо помнить, что в интернете и социальных сетях также действует закон о защите чести и достоинства.

Коммуникация в интернете и социальных сетях имеет свои особенности, однако, если использовать их правильно, они могут стать мощным инструментом для укрепления коммуникации и обмена информацией. Необходимо помнить, что за нашими словами стоит реальный человек, и использование интернета и социальных сетей должно происходить с уважением к другим людям и сознательностью.

Итак, языковые стереотипы и предрассудки являются серьезной проблемой в современном обществе. Они могут привести к недопониманию, конфликтам и даже дискриминации. Однако, молодежь имеет большие возможности для борьбы с этими проблемами.

Во-первых, необходимо осознавать свои языковые стереотипы и предрассудки. Не стоит принимать их как данность, а скорее учиться смотреть на мир с разных сторон и не сужать свой кругозор.

Во-вторых, необходимо использовать язык для укрепления толерантности и гражданского общения. Язык может стать мощным инструментом для поддержания диалога и уважительного отношения к другим людям.

В-третьих, необходимо обучаться языковым навыкам и культуре общения. Это поможет избежать недопонимания и конфликтов в общении с людьми из разных культур и национальностей.

Использование языка для укрепления толерантности и гражданского общения может стать ключевым фактором в борьбе с языковыми стереотипами и предрассудками. Молодежь имеет большие возможности для этого, и необходимо использовать их в полную меру.

В заключение, языковые стереотипы и предрассудки могут привести к серьезным проблемам в обществе, но молодежь имеет возможность бороться с этими проблемами. Осознание своих языковых стереотипов и предрассудков, использование языка для укрепления толерантности и гражданского общения, а также обучение языковым навыкам и культуре общения — это ключевые факторы в борьбе с языковыми проблемами. Молодежь должна использовать свои возможности в полную меру, чтобы создать более толерантное и гармоничное общество.

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## **ОРГАНИЗАЦИИ БУХГАЛТЕРСКОГО УЧЕТА В СЕРВИСНЫХ КОМПАНИЯХ**

*Аннотация. В статье рассмотрены вопросы научные исследования в связи с этим ведутся в таких направлениях, как ведение хозрасчета по международным стандартам, классификация переменных и постоянных расходов, разделение их на классы для бухгалтерского учета. однако в исследованиях недостаточно изучены вопросы цифровизации путем применения новых современных технологий с целью совершенствования учетной политики автотранспортных предприятий.*

*Ключевые слова: аудит, учет, затраты, процессы управления, себестоимость продукции.*

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## **ACCOUNTING ORGANIZATIONS IN SERVICE COMPANIES**

*Annotation. The article discusses issues of scientific research in this regard being carried out in such areas as cost accounting according to international standards, classification of variable and fixed expenses, dividing them into classes for accounting. however, research has not sufficiently studied the issues of digitalization through the use of new modern technologies in order to improve the accounting policies of motor transport enterprises.*

*Key words: audit, accounting, costs, management processes, production costs.*

В мире особое внимание уделяется научным исследованиям по организации и ведению бухгалтерского учета в сервисных компаниях, пассажирских транспортных компаниях по международным стандартам. Научные исследования в связи с этим ведутся в таких направлениях, как ведение хозрасчета по международным стандартам, классификация переменных и постоянных расходов, разделение их на классы для

бухгалтерского учета. Однако в исследованиях недостаточно изучены вопросы цифровизации путем применения новых современных технологий с целью совершенствования учетной политики автотранспортных предприятий.

В Узбекистане сфера автомобильного транспорта является одной из ключевых составляющих социально-экономической инфраструктуры, и ее высокий уровень развития важен для экономического развития страны. Говоря о важности данной сферы: «Эта область является кровяной жилой экономики. Мы не сможем обеспечить стабильное развитие экономики, если не поднимем транспортную отрасль и логистику на новый уровень»<sup>44</sup>, — подчеркнул глава нашего государства. Сегодня мировой экономический спад из-за пандемии коронавируса переходит в фазу восстановления, и в этом процессе транспортная логистика, как и другие отрасли экономики, демонстрирует серьезную тенденцию к снижению.

Корень данной схемы всегда должна находиться под постоянным контролем и вниманием. На наш взгляд, эта задача решается на основе организации учета произведенных расходов по системе прямых затрат.

Выводы по данной главе: на автотранспортных предприятиях одним из основных показателей в формировании прибыли от хозяйственной деятельности предприятия является учет расходов; в нынешних условиях нет единой системы учета и расчета себестоимости услуг автотранспортных предприятий; для автотранспортного предприятия очень важное значение имеет обеспечение баланса между дополнительными доходами и маржинальными расходами в учетной политике; предприятию целесообразно организовывать учет по системе учета затрат (Direct Costing), основанной на разделении совокупных затрат на постоянные и переменные затраты.

В ходе исследования на изучаемом предприятии (в АЖ «Урта Осиё Транс») при анализе действующего хозяйственного контроля мы установили, что на предприятии имеют место приписки и фальсификация, а именно:

1. – преувеличение дальности перевозки и веса перевозимого груза;
2. – фальсификация товарно-транспортной документации;
3. – расчет веса перевозимого груза не по фактическому весу, а по грузоподъемности автомобиля;
4. – преувеличение количества рейсов.

5. Для устранения подобных ситуаций было предложено внедрить в деятельность акционерного общества «Урта Осиё Транс» цифровизацию первичных данных бухгалтерского учета, которые предоставляют водители. Онлайн-платформу (Avto-stat.uz) начали использовать в тестовом режиме. А это предусматривает оперативное получение, обработку первичных

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<sup>44</sup> Мирзиёев Ш.М. Были рассмотрены предложения по развитию транспортного сектора. Выступление на совещании по вопросам развития транспортного сектора. <https://president.uz/uz/lists/view/5566>

документов бухгалтерского учета, расчет фиксированной (суточной, месячной) выручки в реальных ценах и обеспечение достоверности информации.

Шины подвижного состава представляют собой сложную техническую конструкцию и обладают различными характеристиками. Поэтому мы считаем, что внутри каждой группы количественный бухгалтерский учет на складе нужно вести по отдельным деталям (шинам, камерам).

Автомобильные шины в резерве и в обращении учитываются на счете 10 «Материалы» по субсчету 1040 «Запасные части», в нем отражаются запасные части, предназначенные для ремонта, замены устаревших деталей автотранспортного средства. Однако, на наш взгляд, учитывая специфику аналитических данных, следует открыть для автомобильных шин дополнительно еще три субсчета (к примеру – 1041 «Приемка шин в первоначальном виде», 1042 «Изношенные шины, на которые начислена амортизация», 1043 «Переработанные шины»). Таким образом можно обеспечить полноту сведений о шинах, имеющихся в организации. Использование таких счетов также позволяет получить по мере возможности более детальную информацию о количестве, объеме, сорте, стоимости и классификационной группе автомобильных шин. Кроме этого, использованные автошины можно переработать, поэтому в учете должны быть следующие аналитические данные: «автомобильные шины в запасе», «задние автомобильные шины», «автомобильные шины в ремонте». Переработанные и отпущенные на эксплуатацию шины из субсчета 1070 нужно вернуть на счет 1043.

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## **РОЛЬ УЧЕТА АВТОТРАНСПОРТНЫХ ПРЕДПРИЯТИЯХ И НАУЧНО-ТЕОРЕТИЧЕСКИЕ ОСНОВЫ ЕГО ИССЛЕДОВАНИЯ**

*Аннотация. В статье рассмотрены вопросы место бухгалтерского учета на автотранспортных предприятиях и научно-теоретические основы его исследования, а также изучены бухгалтерский учет автотранспортных предприятий, оказывающих населению Узбекистана транспортные услуги, его организационно-правовые основы, специфика и проблемы транспортного хозяйства Нового Узбекистана.*

*Ключевые слова: заработная плата, учет, аудит, процессы управления, себестоимость продукции.*

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## **THE ROLE OF ACCOUNTING FOR MOTOR TRANSPORT ENTERPRISES AND THE SCIENTIFIC AND THEORETICAL BASIS OF ITS RESEARCH**

*Annotation. The article discusses the place of accounting in motor transport enterprises and the scientific and theoretical foundations of its research, as well as studies the accounting of motor transport enterprises that provide transport services to the population of Uzbekistan, its organizational and legal foundations, the specifics and problems of the transport economy of New Uzbekistan.*

*Key words: wages, accounting, audit, management processes, production costs.*

В условиях интеграции в мировую экономику география клиентов стремительно расширяется за счет маршрутов за пределами государственных границ, и транспорт все больше носит экспортно-импортный характер. Нарастает необходимость формирования финансовых показателей в единой системе. В связи с этим необходимым условием

становится применение МСФО (международных стандартов финансовой отчетности) в бухгалтерском учете транспортных компаний.

Теоретически в себестоимость должны быть включены нормативные производственные расходы, однако на практике возникают избыточные расходы на сырье и материалы, топливо и запасные части. Как и во всех отраслях, для правильного определения себестоимости услуг на автотранспортных предприятиях и правильной организации их учета важное значение имеет правильное определение точек возникновения расходов и центров ответственности. Поэтому на автотранспортных предприятиях формирование себестоимости и ведение учета по месту возникновения расходов следует организовать на основе изучений.

Учитывая специфику автотранспортных предприятий, прежде чем изучить затраты и их состав, особенно затрат, формирующих себестоимость услуг, остановимся на точках возникновения затрат. В любом хозяйствующем субъекте правильное определение точек возникновения затрат и центров ответственности имеет большое значение. Правильное определение точек возникновения затрат не только дает экономический эффект предприятию, но также обеспечивает правильное, точное и своевременное выполнение учетных работ. В связи с этим, в работе исследованы общие положения по точкам возникновения затрат и частные положения, непосредственно связанные со спецификой автотранспортных предприятий.

В целом, основной целью учета затрат по месту их возникновения является правильная организация их управления и учета. На наш взгляд, управление затратами – это применение процедур, требований, норм и методов, возникающих на основе знаний об эффективной экономии ресурсов предприятия для получения выгоды от них на более высоком уровне.

С учетом статистических показателей участия автотранспортных предприятий в общем объеме грузопассажирских перевозок, можно увидеть, что за последние пять лет оно остается одним из основных показателей и занимает доминирующее положение в секторе пассажирских перевозок (таблица 1).

Таблица 1

Оборот грузоперевозок по видам транспорта<sup>45</sup>

Показатели	2018 г.	2019 г.	2020 г.	2021 г.	2022 г.	В 2022 году по сравнению с 2018 годом (в %)
<b>Транспортные грузоперевозки, млн т</b>	1243	1319,8	1366,7	1420,2	1398,9	<b>112,5</b>
<i>железная дорога</i>	68,4	70,1	70,6	72,0	73,6	<b>107,6</b>
<i>автомобиль</i>	1102,2	1177,7	1238,2	1282,0	1261,7	<b>114,4</b>
<i>трубопроводы</i>	72,4	72,0	57,9	66,2	63,5	<b>-114</b>
<i>воздушные пути, тыс.т.</i>	13,1	10,4	5,3	9,1	10	<b>-131</b>
<b>транспортные пассажирские перевозки, млн чел.</b>	5951,5	6025,1	5295,9	6029,7	6170,8	<b>103,6</b>
<i>железная дорога</i>	22,1	22,9	6,2	7,9	9	<b>-245</b>
<i>автомобиль</i>	5852,8	5915,2	5248,5	5914,2	6017,5	<b>102,8</b>
<i>воздушные пути</i>	2,6	3,2	0,9	3,0	4,1	<b>157,7</b>
<b>электротранспорт (метрополитен)</b>	69,1	79,2	38,8	101,8	136,7	<b>196</b>

Как видно из таблицы, за последние пять лет спрос на транспортные услуги имел большой диапазон между грузовыми и пассажирскими перевозками. К примеру, можно увидеть увеличение объемов грузоперевозок

железнодорожным (107,6%) и автомобильным транспортом (114,4%) и резкое сокращение объемов перевозки грузов воздушным транспортом (-131%). Это объясняется тем, что цены на авиаперевозки увеличились и крупные экспортеры и импортеры предпочитают перевозить грузы по железной дороге.

За последние пять лет услуги по перевозке пассажиров также продемонстрировали частичный рост. Так, перевозки пассажиров воздушным транспортом увеличились на 157,7%, а перевозки метро – на 196%.

В последние годы перевозки пассажиров железнодорожным транспортном сократились и составили -245%. В первую очередь это обусловлено

<sup>45</sup> Данные официального сайта Агентства по статистике. <https://stat.uz/uz/rasmiy-statistika/services-2>

эпидемиологической обстановкой и тем, что железнодорожным транспортом больше стали перевозить грузы.

Выводы по первой главе: данная отрасль занимает ключевое место в устойчивом росте экономики, удовлетворении социальных потребностей населения в транспорте, а также в составе ВВП страны; организация, ведение бухгалтерского учета в автотранспортных предприятиях и формирование отчетности регламентируются действующим законодательством о бухгалтерском учете и нормативными документами государственных органов. Кроме этого, с учетом особенностей автотранспортных предприятий в учетную политику также можно включить требования внутренних ведомственных документов. В учетной политике автотранспортных предприятий следует конкретно установить методы признания показателей, отражающих доходы от выполнения работ (оказания услуг) транспортом, расходы по ним и итоговые финансовые результаты, а также ведения учета.

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### **О НЕОБХОДИМОСТИ ОПРЕДЕЛЕНИЯ НАКЛОНА УРОВЕННОЙ РЕЙКИ ГИДРОЛОГИЧЕСКОГО ПОСТА “ЧИНАЗ”**

*Аннотация. В статье описывается методика определения крена водомерной рейки гидрологического поста “Чиназ”. Излагается способ оценки точности определяемых величин и функции на основе теории математической обработки геодезических измерений для уровенных постов. Приведены расчетные формулы для вычисления величины смещения рейки. Выполнены геодезические измерения с помощью оптико-электронного тахеометра Trimble M3DR5. Произведен анализ точности наклона водомерной рейки, а также вычислены средние квадратические ошибки единицы веса измеренного смещения. По результатам измерений и вычислений были определены поправки к оси рейки относительно отвесной линии. Доказана, что точность измерений находится в пределах допустимого, что говорит о корректности данных. Отмечается, что точное определение крена позволит более корректно вычислить объем запаса воды.*

*Ключевые слова: водомерная рейка, крен, точность, геодезические измерения, уровеньный пост.*

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### **THE NECESSITY OF DETERMINING THE INCLINATION OF THE LEVEL GAUGE OF THE CHINAZ HYDROLOGICAL STATION**



*Abstract. The method for determining the roll of a water gauge at the Chinaz hydrological station is given in this paper. A method for assessing the accuracy of the determined quantities and functions based on the theory of mathematical processing of geodetic measurements is given here. Formulas for calculating the displacement value of a water gauge are shown. Geodetic measurements were carried out using a Trimble M3DR5 optical-electronic total station. An analysis of the accuracy of the inclination of the water-measuring staff of the level post was carried. The root mean square errors of the unit weight of the displacement of the axis of the water rod are calculated based on the measurement results. Based on the results of measurements and calculations, corrections for the deviation of the rod axis relative to the plumb line were determined. It has been proven that the measurement accuracy is within acceptable limits, which indicates the correctness of the data. It is noted that an accurate determination of the roll will make it possible to more correctly calculate the volume of water reserves*

*Key words: water gauge, roll, accuracy, geodetic measurements, level post.*

**Введение.** Определение высот реперов государственной геодезической сети и уровенного поста “Чиназ” производилось в конце прошлого века методами полигонометрии и нивелирования 4 класса [3,6]. Эти данные зафиксированы в журналах и отчетах управления гидрометеорологической службы. С течением времени плановые и высотные координаты этих пунктов должны быть повторно переизмерены и вычислены. Однако, эти измерения не были выполнены из-за реформирования организации и ограниченности финансирования. Только в 2019 году начали производить некоторые геодезические измерения кафедрой геодезии и геоинформатики для научно-исследовательских целей. Результаты измерений и вычислений были опубликованы в периодических журналах, на международных конференциях и научных семинарах по водным проблемам [9]. Тем не менее, задача уточнения координат реперов и водомерных реек остается до конца не решенной.

Традиционно высотную привязку реперов уровенных постов к государственной нивелирной сети осуществляется методом геометрического или тригонометрического нивелирования. Для этого используют оптико-электронные нивелиры и тахеометры. Но, самым быстрым и оперативным способом является тригонометрическое нивелирование (рис.2), в которой высота вычисляется по формуле [2]. При использовании этого метода появляются некоторые погрешности в тригонометрических функциях и ошибки определения угла с помощью вертикального круга. В действительности, точным методом является геометрическое нивелирование. Естественно, стабильностью пунктов и реперов является сохранение точности всех измерений. С течением времени должна быть уточнена геодезическая основа гидрологических станций.

Одним из основных звеньев улучшения является повышение точности координат реперов и свайных реек, закрепленных в прибрежной зоне. Измерение высоты уровня реки определяется на гидрологических станциях и уровенных постах с использованием водомерной рейки и регистратора [5]. По этим результатам можно определить метрические характеристики водной поверхности и вычислить объем воды на определенном интервале времени. Основным средством измерения уровня воды является водомерная рейка с сантиметровой шкалой, которая жестко установлена на берегу реки. Должны быть соблюдены основные требования к оси и нулю рейки. Незначительное смещение нуля пункта этой реки по вертикали приводит к неточности регистрации уровня воды. С течением времени и в результате осадки, просадки и влияние боковой силы потока воды, водомерные рейки испытывают деформацию относительно вертикально оси [4,8]. Смещение рейки по вертикали приводит к определенному крену, которая может быть определена различными способами: визирования (с применением теодолитов); координирования; измерением углов или направлений. Однако, прежде чем производить геодезические измерения, необходимо выполнить предварительную оценку точности изменения крена и смещения нуля свайной рейки на основе статистического анализа.

Целью работы является определение смещения оси свайной рейки гидрологического поста “Чиназ” и оценка точности величины этого смещения методами математической статистики и дисперсионного анализа [1]. При этом возникает задача линейно-угловых измерений с помощью геодезических приборов, а также лазерных дальномеров.

**Измерения и вычисления.** На основе вышеизложенных теоретических интерпретаций был произведен расчет средней квадратической ошибки функций для деформации свайной рейки. Для этой цели произведено измерение длины отвесной линии от верхней части свайной рейки до уровенной поверхности воды на территории гидрологической станции с электронно-оптическим тахеометром Trimble M3DR5 и лазерным дальномером. Трудность измерения заключается в том, что отметка нуля водомерной рейки была ниже верхнего уровня реки Сырдарья. Тем не менее, произведен расчет смещения оси рейки относительно вертикали, которая направлена по результирующей ускорения силы тяжести. Одновременно выполнено измерение расстояния между основным, рабочим и водомерной точками. При измерении использовался лазерный отражатель, геодезическая рулетка и нитяной отвес, с помощью которых были произведены измерения. После несложных преобразований получена предварительная средняя квадратическая ошибка единицы веса для отклонения угла и линейного смещения.

$$m_{\Delta}^2 = (\cos \beta)^2 m_{\beta}^2 S^2 + m_{\xi}^2 (\sin \beta)^2 (1)$$

$$m_{\beta}^2 = \frac{m_{\Delta}^2 - m_{\xi}^2 (\sin \beta)^2}{(\cos \beta)^2 S^2} (2)$$

В результате полученная точность углового смещения составила  $\pm 0.26''$ , а для длины свайной рейки  $\pm 0.2$  см. Поскольку смещение незначительное, то средняя квадратическая ошибка смещения составила 0.01 см.

Используя линейно-угловые измерения отклонения свайной рейки с помощью электронно-оптического тахеометра можно получить экспериментальную точность по всей совокупности тестовых измерений. При этом, была допущено условие, что измерения выполнены с одинаковой точностью и одним прибором. По методу наименьших квадратов было вычислено математическое ожидание из всей совокупности измерений.

Используя разности между измеренными значения отклонения угла оси свайной рейки и значением математического ожидания, можно построить график дисперсии по всему массиву данных. Такой же график можно построить и для линейного смещения вертикальной оси рейки. При этом возникает вопрос о количестве измерений для оценки надежности и достоверности полученных величин. Экспериментально доказано, что количество измерений должно быть минимум 20. Если же количество измерений больше 50, то применяется формула Гаусса для вычисления средней квадратической ошибки. Также производится расчет средней квадратической ошибки среднего значения или математического ожидания. Многие ошибочно считают, что это является критерием точности каждого измерения. Применение же закона больших чисел к массиву данных не всегда приводит к улучшению точности вычисления. Это зависит от исходных данных и инструментальной точности, которая определяется лабораторным путем или в метрологическом полигоне. Следует отметить, что измерения выполнялись при одном положении электронно-оптического тахеометра Trimble M3DR5. Конечно же здесь присутствует коллимационная ошибка инструмента, которая не влияет на точность измерений и ее можно считать постоянной. Также измерение производилось с помощью рулетки и линейки для проверки надежности вычислений, а также доказательства о существовании крена водомерной рейки, хотя невооруженным глазом видно, что имеется явное отклонение рейки от вертикальной оси. Экспериментальные расчеты помогут произвести аналогичные измерения для других гидрологических постов, которые расположены вдоль прибрежной зоны.

Таким образом, можно сделать вывод о том, что оценка точности определяемых величин и функции на основе теории математической обработки геодезических измерений является необходимой процедурой при выполнении многократных геодезических измерений. Это позволяет установить предельные значения отклонения измеренных величин от среднего арифметического и тем самым выявить грубые ошибки в процессе

измерений, которые влияют на окончательный результат вычисленных величин. Если эти величины малы, то становится очевидным, что необходимо со всей тщательностью производить измерения и вычисления. Потому что это влияет на водный баланс прибрежной зоны. Следовательно, незначительное изменение вертикальной оси свайной рейки влияет на точность измерения уровня водной поверхности.

Использование современных электронно-оптических и глобальных спутниковых навигационных систем позволяют более точно вычислить метрические характеристики реки и, тем самым, выявить места, где происходит минимальный и максимальный расход воды. Особенно, это важно при постройке каналов и дренажных систем в прибрежной зоне [7]. Горизонтальное смещение приводит к изменению площади водной поверхности и границы прибрежной зоны. В будущем, необходимо произвести полную автоматизацию всего процесса измерений и вычислений, используя современные цифровые технологии и геоинформационные системы. Постоянный мониторинг турбулентности верхней части реки с помощью комплекса технических средств дает основание к точному исследованию морфометрических и гидрологических характеристик, а также изучения экологической обстановки в окрестности прибрежной зоны.

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## **ИССЛЕДОВАНИЕ КОГНИТИВНЫХ ДИСФУНКЦИЙ ВО ВРЕМЯ ПРИСТУПОВ МИГРЕНИ**

*Аннотация. Когнитивные расстройства способствуют инвалидности пациентов во время приступов мигрени и не учитываются в исследованиях мигрени. Нейропсихологические исследования, проведенные во время приступов, дали противоречивые результаты из-за различий в конструкции и ограничений.*

*Ключевые слова: когнитивные расстройства, мигрень, головная боль, инвалидизация.*

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## **RESEARCH OF COGNITIVE DYSFUNCTIONS DURING MIGRAINE ATTACKS**

*Annotation. Cognitive disorders contribute to the disability of patients during migraine attacks and are not taken into account in migraine studies. Neuropsychological studies conducted during seizures have yielded contradictory results due to differences in design and limitations.*

*Keywords: cognitive disorders, migraine, headache, disability.*

Мигрень – это хроническое заболевание, характеризующееся повторяющимися приступами сильной головной боли, сопровождающейся тошнотой, светобоязнью и шумом в ушах. Мигрень может существенно снижать качество жизни человека, ограничивая его способность работать и общаться.



Наша цель выявить изменения в когнитивных функциях пациентов с мигренью во время приступов мигрени с помощью комплексного набора когнитивных/поведенческих тестов, одновременно контролируя потенциальные помехи.

**Материал и метод исследования.** Состоял из рандомизированного двухпериодного перекрестного исследования, требующего двух обследований одного и того же пациента в двух разных состояниях: состояние 1 — во время нелеченного спонтанного приступа мигрени без ауры (приступ мигрени — М); состояние 2 — в период отсутствия головной боли, не вызванной лечением (исходный уровень — В), когда с момента последнего приступа прошло минимум 72 часа. Порядок оценки был рандомизированным: половина пациентов проходила первую оценку во время отсутствия головной боли (В→М), тогда как другая половина впервые проходила оценку во время приступа (М→В). Между оценками требовался минимальный интервал в один месяц. Этот дизайн имел целью контролировать практический эффект и свести к минимуму необходимость определения ожидаемой величины улучшения нейропсихологического тестирования между такими краткосрочными повторными оценками. Оценки проводились в рабочее время и в течение 24 часов после начала нападения. Приступы, произошедшие ночью или в выходные дни, приступы с аурой и приступы, купированные abortивными препаратами в течение предыдущих 12 часов, не учитывались. Критерии ICHD-II для мигрени без ауры и отсутствия ауры в предыдущие 48 часов были повторно проверены непосредственно перед когнитивной оценкой при оценке во время приступа.

Лица были исключены, если у них не было подходящего нападения в течение двухлетнего периода после вербовки. По истечении пятилетнего периода участия авторы решили прекратить исследование, несмотря на то, что первоначальная цель оценки 50 участников не была достигнута.

Набор и включение участников исследования осуществлялся специалистами по головной боли, которые проверяли критерии исследования и проводили стандартную клиническую оценку, включая предыдущую историю болезни и физическое обследование. После получения информированного согласия данные были собраны и включали проверку диагноза ИБС-II, пола, возраста, года обучения, продолжительности заболевания, частоты приступов, продолжительности и интенсивности, а также использования профилактического лечения и других текущих методов лечения. Влияние мигрени оценивалось с помощью опросников «Тест на головную боль» (НТ)-6 и «Качество жизни, специфичное для мигрени» (MSQoL). Депрессивные симптомы и тревога были количественно оценены с помощью шкалы депрессии Цунга и опросника состояния тревожности (STAI), поскольку депрессия и тревога являются частыми сопутствующими заболеваниями мигрени и могут влиять



на нейропсихологические показатели. Оценка приступа включала вопросы о текущих особенностях приступа, а также об интенсивности боли, которая оценивалась перед тестированием по 10-балльной визуально-аналоговой шкале (ВАШ).

**Результаты.** В исследование были включены тридцать девять пациентов с эпизодической мигренью (37 женщин, средний возраст 38 лет), и 24 завершили исследование. Участники показали худшие результаты во время приступа в большинстве когнитивных тестов по сравнению со статусом без головной боли, и значительно хуже по скорости чтения слов ( $p = 0,013$ ), вербальному обучению ( $p = 0,01$ ), кратковременному вербальному воспоминанию ( $p = 0,01$ ). =  $0,01$ ) и без ( $p = 0,013$ ) семантических подсказок и отложенное припоминание с ( $p = 0,003$ ) и без ( $p = 0,05$ ) семантических подсказок. Обнаруженные различия не были связаны с возрастом, полом, грамотностью, порядком состояния, интервалом между оценками, тревогой, интенсивностью боли или продолжительностью приступа.

**Вывод.** Когнитивные способности снижаются во время приступов мигрени, особенно в отношении скорости чтения и обработки информации, вербальной памяти и обучения, что подтверждает субъективные жалобы пациентов. Эти данные позволяют предположить существование обратимой дисфункции головного мозга во время приступов мигрени без ауры, которая может быть связана именно с мигренью или быть следствием обработки острой боли мозгом.

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## **ВЛИЯНИЕ СОВРЕМЕННЫХ ТЕХНОЛОГИЙ И СОЦИАЛЬНЫХ СЕТЕЙ НА ФОРМИРОВАНИЕ МОЛОДЁЖИ**

*Аннотация. Эта научная статья исследует влияние современных технологий и социальных сетей на формирование молодёжи. С развитием цифровых средств связи и доступности мобильных устройств, молодёжь сталкивается с новыми вызовами и возможностями в своей социальной, культурной и образовательной жизни. Статья рассматривает влияние современных технологий на молодёжь, как положительное, так и негативное, и предлагает перспективы для будущих исследований и разработок в этой области.*

*Ключевые слова: молодёжь; современные технологии; влияние; технологии; гаджеты; социально-психологическое влияние, социальные сети.*

*Современная эпоха характеризуется революцией в области информационных технологий. Молодёжь, выросшая в этой цифровой эпохе, оказывается в уникальном положении, где технологии становятся неотъемлемой частью их повседневной жизни. В данной статье мы рассмотрим влияние современных технологий на формирование молодёжи, обратив внимание на как положительные, так и негативные аспекты этого воздействия.*

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## **THE INFLUENCE OF MODERN TECHNOLOGIES AND SOCIAL NETWORKS ON THE FORMATION OF YOUTH**

*Abstract. This scientific article explores the influence of modern technologies and social networks on the formation of youth. With the development of digital communications and the availability of mobile devices, young people are faced with new challenges and opportunities in their social, cultural and educational lives. The article examines the impact of modern technology on youth, both positive and negative, and offers prospects for future research and development in this area.*

*Key words: youth; modern technologies; influence; technologies; gadgets; socio-psychological influence, social networks.*

Сегодняшняя молодежь выросла в эру цифровых технологий, где интернет и социальные сети стали неотъемлемой частью повседневной жизни. Они предоставляют широкие возможности для общения, обмена информацией и культурным контекстом. Это приводит к созданию новых форм социальных взаимодействий и коммуникации. Вместе с тем, существует риск потери навыков реальной коммуникации. Постоянное виртуальное взаимодействие может привести к снижению умения распознавать невербальные сигналы и эмоциональные состояния собеседника. Таким образом, активное использование технологий требует развития новых навыков для эффективного общения. Технологии также оказывают влияние на психологическое состояние молодежи [1]. С одной стороны, они предоставляют доступ к образовательным и развлекательным ресурсам, способствуя развитию и культурному обогащению. С другой стороны, слишком интенсивное воздействие может привести к стрессу, изоляции и зависимости.

Важно подчеркнуть необходимость поиска баланса между виртуальным и реальным миром. Молодежь должна осознавать, что реальные взаимодействия и личные контакты не менее важны для ее социального развития, чем виртуальные общение и сетевые связи. Современные технологии предоставляют огромные возможности для общения и саморазвития, но необходимо помнить о влиянии, которое они оказывают на социально-психологический аспект молодежной жизни. Важно находить золотую середину между виртуальным и реальным миром, развивая и поддерживая качественные межличностные отношения. Исходя из этого рассмотрим положительные и негативные стороны влияния современных технологий и социальных сетей на формирование молодёжи.

*Положительное влияние:* современные технологии предоставляют молодым людям доступ к образовательным ресурсам и онлайн-курсам. Это способствует расширению знаний и развитию навыков. Социальные сети и мессенджеры создают возможность поддерживать связь с друзьями и родственниками, независимо от географического расположения. Молодёжь может использовать технологии для выражения своего творчества через блоги, влоги, музыку, искусство и другие средства.

*Негативное влияние:* молодёжь может столкнуться с проблемами зависимости от смартфонов и социальных сетей, что может влиять на их психическое и физическое здоровье. Виртуальное взаимодействие иногда замещает личное общение, что может привести к социальной изоляции и уменьшению навыков общения. Проблемы с конфиденциальностью и безопасностью: Молодёжь может столкнуться с угрозами в сети, такими как кибербуллинг и нарушение личной конфиденциальности.

Для более полного понимания влияния современных технологий и гаджетов на молодёжь требуются дополнительные исследования. Кроме того, существует несколько рекомендаций для обеспечения позитивного воздействия технологий на молодёжь:

1. цифровая грамотность: Включение обучения цифровой грамотности в школьные программы для развития навыков безопасного и эффективного использования технологий.

2. поддержка здоровых онлайн-привычек: Образовательные и общественные организации должны проводить кампании о здоровых онлайн-привычках и борьбе с цифровой зависимостью.

3. развитие позитивных онлайн-сообществ: поддерживать создание и участие в положительных онлайн-сообществах, где молодёжь может развивать интересы и общаться с пользой.

4. социальная ответственность технологических компаний: поощрять технологические компании к разработке продуктов и сервисов, способствующих здоровому образу жизни.

Современные технологии и гаджеты играют значительную роль в жизни молодёжи. Они предоставляют уникальные возможности для образования, социального взаимодействия и самовыражения, но также несут риски, связанные с зависимостью и безопасностью. На протяжении последних десятилетий, технологические инновации стали неотъемлемой частью повседневной жизни людей. Этот доклад исследует влияние современных технологий на оба поколения и рассматривает их положительные и отрицательные аспекты. Современные технологии предоставляют молодым людям доступ к образованию и информации в несравненных масштабах. Интернет и мобильные устройства позволяют получать знания и изучать новые предметы в любое время и в любом месте. Социальные сети и мессенджеры помогают молодому поколению поддерживать контакт с друзьями и семьей, даже на расстоянии. Это способствует развитию социальных навыков и укреплению отношений [2]. Игры и приложения на мобильных устройствах могут способствовать развитию креативности, решения задач, и обучению новым навыкам. Слишком большое время, проведенное перед экраном, может привести к зависимости от гаджетов и социальных сетей. Это может оказать негативное воздействие на физическое и психическое здоровье.

Молодые люди также подвержены онлайн-буллингу и негативным воздействиям социальных сетей, что может вызвать стресс и психологические проблемы. Технологии, такие как видеозвонки и мессенджеры, помогают пожилым людям поддерживать связь с детьми и внуками, даже если они находятся в других странах. Смарт-технологии и медицинские приборы позволяют пожилым людям удобнее и безопаснее жить независимо в своих домах. Некоторые пожилые люди могут испытывать трудности в освоении новых технологий и чувствовать себя

исключенными из цифрового мира. Пожилые люди могут быть более уязвимыми перед кибермошенничеством и атаками в сети, если они не обладают достаточной цифровой грамотностью.

Современные технологии оказывают значительное воздействие как на молодое, так и на пожилое поколение[3]. Понимание как положительных, так и отрицательных аспектов этого воздействия поможет обществу развивать сбалансированный подход к использованию технологий и максимизировать их пользу, минимизируя негативные последствия. Интернет, социальные сети и мобильные устройства, изменили не только нашу повседневную жизнь, но и наши социальные взаимоотношения. Эти изменения оказывают влияние как на молодежь, так и на старшее поколение, и важно понимать, как современные технологии воздействуют на наши отношения с другими людьми.

Социальные сети стали неотъемлемой частью жизни молодежи и старшего поколения. Они предоставляют возможность поддерживать связь с друзьями и семьей, независимо от физического расстояния. Однако, виртуальная коммуникация может заменить реальные встречи и разговоры, что может привести к утрате глубоких и качественных отношений.

Многие проводят больше времени в интернете, что может привести к снижению активности на улице и в реальном мире. Это влияет на способность людей общаться и устанавливать личные контакты. Виртуальные отношения становятся все более распространенными, особенно среди молодежи. Однако, они могут быть менее стойкими и глубокими, чем отношения в реальной жизни[5]. Кроме того, многие молодые люди становятся зависимыми от социальных сетей и мобильных устройств, что влияет на их психологическое состояние и социальные навыки. Современные технологии предоставляют множество преимуществ, но важно находить баланс между виртуальным и реальным миром. Молодежь и старшее поколение должны осознавать влияние технологий на свои социальные взаимоотношения и уделять внимание развитию качественных реальных отношений.

В заключение стоит подчеркнуть, что в последние времена в сфере интернет-сообществ и социальных сетей наблюдается дефицит оригинальных идей, способных стимулировать качественный и количественный рост в этой области. Может быть, скоро снова станет актуальным традиционное общение в реальной жизни, где люди встречаются и ведут разговоры в непосредственном контакте. Несомненно, такой вид общения более сложен и требует больших усилий, иногда даже вызывает негативные эмоции. Однако взамен он предоставляет возможность общаться с реальными живыми людьми, которые, возможно, принесут не только не всегда приятную, но и полезную и конструктивную информацию, в отличие от бессмысленных сообщений на страницах социальных сетей. И вот здесь проявляется основная проблема сетевых



ресурсов, о которой постоянно говорят психологи и социологи: люди проводят часы и дни, увлеченно сидя на своих любимых порталах, вместо того чтобы находить новые знакомства и общаться в реальной жизни.

Многие сосредотачиваются на количестве виртуальных друзей, рассматривая их как показатель своей популярности. Они проводят много времени, пытаясь набрать как можно больше "друзей". Возможно, это связано с личными комплексами или же они пытаются снять скучное время, но многие действительно считают такое поведение важным, не осознавая, что это не приносит реальных пользы. Важно понимать, что эти онлайн-усилия не влияют на их реальную жизнь. Кроме того, стоит отметить, что в последнее время в мире интернет-сообществ и социальных сетей не наблюдается новых идей, способных изменить качество и количество активности в данной сфере, подобно тому, как это сделал Facebook в своё время.

Сегодня большая редкость увидеть молодежь, читающую газеты или внимательно просматривающую телевизионные выпуски новостей. Поэтому возможно, что скоро войдёт в моду классическая форма общения – знакомства и беседы в реальном мире[4]. Безусловно, эта форма намного сложнее сетевой, требует больших усилий и порой приносит негативные эмоции, зато взамен мы получим общение с реальными, живыми людьми, которые хоть и могут огорчить неприятной правдой, но зато и могут помочь реальным делом, а не бессмысленными фразами в вашем профиле очередной социальной сети.

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## **СОЦИАЛЬНАЯ АКТИВНОСТЬ ГОРОДСКОГО И СЕЛЬСКОГО НАСЕЛЕНИЯ**

*Аннотация. В нашем современном обществе роль личности становится все более инновационной в процессе общественного развития. Люди проявляют разные уровни социальной активности на разных этапах истории. Следующие исследования были посвящены социальной активности и ее связям с обществом. Это связующее звено позволяет понимать личность и наблюдать за реальностью, а также над самим собой. Важной и актуальной темой в наше время является социальная активность городского и сельского хозяйства.*

*Ключевые слова: город; село; социальная активность; личность; гражданское общество; население.*

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## **SOCIAL ACTIVITY OF URBAN AND RURAL POPULATION**

*Annotation. In our modern society, the role of the individual becomes increasingly innovative in the process of social development. People exhibit different levels of social activity at different stages of history. The following research is dedicated to social activity and its connections to society. This connecting link allows for understanding the individual, observing reality, and introspection. An important and relevant topic in our time is the social activity of urban and rural agriculture.*

*Keywords: city; countryside; social activity; personality; civil society; population.*

Современное общество всегда делит человечество на две основные группы: сельское и городское. Каждая из этих групп обладает достаточной успешностью, в сфере социальной активности. В данной статье мы рассматриваем различия между социальной активностью сельского и городского населения.

Сельское население, в отличие от городского, обитает соответственно в сельской местности, где преимущественно основным занятием является

ведение хозяйства, и часто имеют более тесные связи между собой, поскольку они живут в небольших общинах, где все знают друг друга. Это способствует большей социализации и взаимопомощи между жителями. Например, данный житель может охотно помочь своему соседу в работе на поле. В местности также наблюдаются традиции, которые отражают уровень социальной активности. Например, местные праздники и общественные мероприятия могут быть местом встреч всех жителей, где они могут общаться, делиться опытом, совместно проводить время. Такие события способствуют развитию социальных связей и формированию межличностных отношений.

Однако, у мировой цивилизации есть свои ограничения в плане доступа к определенным услугам и культуре. [5]. В маленьких деревнях не всегда есть возможность посетить культурные мероприятия, поликлиники или просто погулять в парке. С другой стороны, городское население, живущее в городах и крупных населенных пунктах, обладает гораздо большей социальной активностью по сравнению с сельским населением. В городах есть множество хороших условий для общения, развлечений и образования. Горожане чаще посещают культурные и спортивные мероприятия, общественные места и заведения.

В свою очередь, городская жизнь приводит к большей анонимности и независимости, поскольку в городе люди не всегда знают друг друга. В городах более распространены социальные сети и онлайн-сообщества, которые позволяют людям находить единомышленников, делиться информацией и общаться без привязки к географическому местоположению. Однако, как и в сельской местности, в городе есть свои проблемы. Одним из таких проблем является высокий уровень демографии населения, быстрый ритм жизни и некоторые социальные проблемы, такие как более лояльное отношение к девиантным личностям, что приводит к росту преступности в местностях. [2]

Термин «социальная активность» исследуется уже много лет в различных областях, как социология, философия, психология и педагогика. Однако, до сих пор определение этого понятия может быть неоднозначным и противоречивым. Когда мы говорим о социальной активности, важно понимать, что она может быть разделена на различные виды:

*трудовая активность*, которая проявляется в отношениях личности к трудовым обязанностям, другими словами, это социальная активность в рамках управленческой деятельности,

*общественно-политическая активность*, которая возникает в политической системе, где личность выполняет функции не только как работник, но и как политический деятель в различных степенях,

*духовная активность* включает в себя созидательную деятельность личности, которая является ведущей частью динамичного и целенаправленного процесса.

Следует учитывать, что увеличение социальной активности происходит только при использовании инструментов, которые вовлекают граждан в процесс принятия решений, современных повседневных вопросов на муниципальном уровне и обеспечения необходимых условий жизни.[1].

Результаты исследования, направленного на определение и сравнение социальной активности городского и сельского населения Сурхандарьинской области (г.Термез, Денов, Шурчи, Шерабад, Байсун, Намуна, Ангор), были получены путем онлайн-анкетирования жителей (160), с учетом их возраста и пола в период с марта по май 2023 года.

Первым вопросом анкеты было выяснение отношения респондентов к общественной деятельности в целом (праздники, фестивали, хашар, собрания), и к активным участникам данной деятельности. Результаты показали следующее: половина опрошенных (50%) считает, что люди занимаются общественной деятельностью с целью принесения пользы обществу, в то время как почти такое же количество респондентов (46,5%) выбрали вариант "для самоутверждения", что указывает на важность общественной деятельности для самоуверенности личности. Только 1% выбрали ответ "от нечего делать", а 2,5% оказались не в состоянии ответить.

Социальная активность может варьироваться в различных формах, одной из которых является участие в общественных организациях. [4]. Итак, мы решили выяснить, сколько респондентов принимают участие в мероприятиях, в рамках общественных организаций.

Для того, чтобы узнать, в каких областях социальная активность наиболее эффективна для жителей, мы предложили список организаций и попросили респондентов самостоятельно записать свои ответы. Вот как распределились ответы: 31,3% из тех, кто положительно ответил на предыдущий вопрос (участвует ли человек в общественных организациях), твердо в профсоюзных организациях; 13,6% рекомендуют волонтерское движение; 9,1% поступили в спортивные клубы; 14,7% предпочитают творческие коллективы; 8,1% участвуют в военных отрядах. Мы также определили возможность респондентам добавить свой вариант ответа («Другое»), и таким вариантом воспользовались 23,2% респондентов. Следует отметить, что большую часть самостоятельных ответов можно отключить уже в направлении, поскольку респонденты просто конкретизировали название организации. Далее следовал вопрос, какими средствами вы пользуетесь для получения информации различного рода. Некоторые из них заявили, что предпочитают читать новости в чатах в Телеграмме или получать информацию от своих бабушек. Другие отметили, что они подписаны на официальную страницу области в социальной

сети. Особое внимание следует обратить на то, что некоторые респонденты (7%) отметили другие источники информации, которые они используют. Таким образом, можно сделать вывод, что жители области чаще всего полагаются на интернет-источники, включая социальные сети и мессенджеры, чтобы получить информацию

Данные массового опроса позволяют сделать несколько выводов. Во-первых, жители активно обращаются к общественно-значимым действиям и следят за нововведениями в регионах и регионах. Во-вторых, почти половина опрошенных являются участниками общественного питания организаций и вносят вклад в полезную и значимую деятельность в обществе и областях. Наконец, следует также отметить, что абсолютное большинство респондентов осознают важность и сознательность деятельности и социальной активности в жизни каждого гражданина.

Существуют также несколько существенных факторов, в которые влияют на проявление социальной активности между сельскими жителями и жителями городов.

1. Образование: Уровень образования и доступ к высшему образованию обычно выше в городах, что дает больше возможностей для получения высшего образования. Это может привести к более высокой социальной активности городского населения, поскольку у них больше знаний и навыков для участия в общественной жизни.

2. Работа и занятость: Городское население обычно имеет больше возможностей для трудоустройства и развития карьеры, в то время как население села, часто ограничено в выборе профессии и имеет более ограниченные возможности для трудоустройства. Это может влиять на экономическую активность, так как доступ к ресурсам и возможности для участия в общественной жизни ограничены.

3. Инфраструктура и доступ к услугам. Городское население имеет более лучший доступ к инфраструктуре и различным жизненно необходимым и развлекательным услугам, таким как здравоохранение, культура, спорт и т.д. Это может обеспечить более высокую социальную активность, так как люди имеют больше возможностей для участия в различных мероприятиях и имеют больше причин для общения с различными другими людьми.

4. Социальная среда: Городская среда обычно более динамична и многообразна, с большим количеством социальных событий и возможностей для общения. Это может стимулировать экономическую активность горожан, в то время как в сельской местности социальная среда может быть более ограниченной и малоактивной и ограничиваться определённой общиной.

5. Культурные и социальные ценности. Проявление культурных и социальных ценностных отношений между городским и сельским народами также могут повлиять на их экономическую активность. Например, в

сельской местности может быть более сильная традиционная и религиозная культура, которая может зависеть от активности и низкого уровня развития сельского хозяйства.

6. Уровень дохода: Уровень дохода может оказывать влияние на экономическую активность, так как доступ к различным мероприятиям и возможности участия в них могут быть ограничены для людей с низким уровнем дохода. Городское население обычно имеет более высокий уровень доходов, что может обеспечить их более высокую социальную активность по сравнению с сельским населением.

Сравнение социальной активности городского и сельского населения может быть усложнено, поскольку они имеют разные условия и возможности для участия в общественной жизни. Необходимо учитывать контекстуальные факторы и особенности каждой группы населения, для более точной оценки и сравнения их социальной активности.

Для улучшения информационной поддержки и коммуникации с населением, можно использовать активное использование интернет-источников, включая социальные сети и официальные страницы министерств, и доверенных новостных каналов и каналов блогеров (Edu.uz, Kun.uz, Xushnudbek.uzи т.д.) для распространения актуальной информации и обратной связи с жителями. Также рекомендуется участие в общественно-значимых мероприятиях для привлечения и обеспечения общественной активности жителей[3].

Ещё раз отметим, что социальная активность жителей в селах и городах имеет важное значение для общественного развития и благополучия. В нижеследующей рекомендации представлены стратегии и методы, которые могут помочь увеличить социальную активность жителей в сельских и городских общинах.

#### 1. Создание общественных пространств

Создание и поддержание общественных пространств, таких как парки, скверы, общественные библиотеки и центры, способствует взаимодействию между жителями. Рекомендуется инвестировать в развитие общественных пространств, организовывать культурные и образовательные мероприятия в этих местах, поддерживать программы волонтерства для обустройства и ухода за общественными местами.

#### 2. Социальные мероприятия и фестивали

Организация социальных мероприятий и фестивалей способствует объединению сообщества и стимулирует социальную активность. Рекомендуется поддерживать и финансировать организацию разнообразных мероприятий, от ярмарок до культурных фестивалей, поощрять местные инициативы в создании и проведении мероприятий, привлекать местных художников, музыкантов и культурных деятелей для участия в фестивалях.

#### 3. Образование и информационные ресурсы



Повышение образованности и информированности жителей может способствовать их участию в общественной жизни. Рекомендуется разрабатывать программы образования и культурного обмена, обеспечивать доступ к информационным ресурсам через общественные библиотеки и интернет, проводить образовательные мероприятия и семинары на актуальные темы.

#### 4. Участие в принятии решений

Вовлечение жителей в процесс принятия решений, связанных с развитием и управлением сообществом, может увеличить их социальную активность. Чтобы достичь этой цели, нужно создавать механизмы обратной связи и диалога между властями и жителями, организовывать общественные слушания и консультации, поощрять участие жителей в местных органах самоуправления.

#### 5. Развитие цифровых технологий

Использование цифровых технологий, таких как социальные сети и мобильные приложения, может содействовать общению и координации.[3].Для этого требуется обучать жителей использованию цифровых платформ для общения и обмена информацией, создавать онлайн-платформы для обсуждения и координации инициатив, разрабатывать мобильные приложения для облегчения взаимодействия.

Эти научные рекомендации могут служить основой для разработки и реализации программ по увеличению социальной активности жителей сел и городов. Важно адаптировать их к конкретным потребностям и особенностям каждого сообщества.

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## **ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ ПРОФИЛАКТИЧЕСКИХ МЕРОПРИЯТИЙ**

*Аннотация. В статье говорится о социальной значимости обеспечения безопасности пешеходов и роли профилактической работы в обеспечении безопасности дорожного движения.*

*Ключевые слова: автомобильный транспорт, безопасность дорожного движения, дорожно-транспортные происшествия, пешеходы, профилактические мероприятия, водитель, пассажир.*

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## **INCREASING THE EFFECTIVENESS OF PREVENTIVE MEASURES**

*Annotation. The article talks about the social importance of ensuring pedestrian safety and the role of preventive work in ensuring road safety.*

*Key words: road transport, road safety, traffic accidents, pedestrians, preventive measures, driver, passenger.*

В обеспечении безопасности движения человек участвует как основные участники дорожного движения: водитель, пассажир и пешеход. Среди них особое место занимают водитель и пешеход. По мере роста экономического потенциала Республики Узбекистан развиваются автомобильный транспорт и коммуникации. Такие изменения связаны с уровнем социального развития нашего населения. Развитие сети порождает определенные проблемы в сфере обеспечения безопасности движения: возникновение дорожно-транспортных происшествий, в результате которых люди гибнут или получают травмы различной степени тяжести, возникновение пробок на автомагистралях и улицах города, загрязнение окружающей среды. Самая печальная из проблем-это физические потери людей.

Если проанализировать дорожно-транспортные происшествия по возрасту виновных в дорожно-транспортном происшествии водителей, больше всего, то есть 22,5%, было совершено водителями в возрасте от 25 до 30 лет. Отмечается, что большая часть аварий, а именно 15,9%, приходится на период с 15:00 до 18:00. 15,5% составляет четверг дней недели, а суббота - 15,2%.

Среди объективных и субъективных причин возникновения дорожно – транспортных происшествий наибольшее количество составляют несоблюдение установленной скорости – 15,8%, не возведение разделительных барьеров на дороге – 13,6%, не установка ограждений (заборов), ограничивающих движение пешеходов - 11,6%, неопытность водителя - 10,6% и не организация пешеходных переходов - 10,3%. (Рис. 1).



**Рис.1.**Объективные и субъективные причины возникновения дорожно- транспортных происшествия

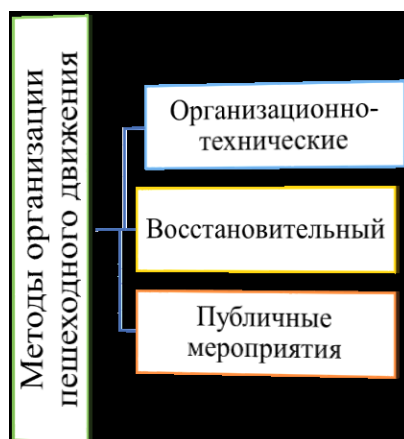
Способность повышать безопасность пешеходов является важным компонентом усилий по предотвращению дорожно-транспортных происшествий. Их можно избежать, потому что пешеходы не должны воспринимать это состояние как постоянный риск, пока они участвуют в дорожном движении. Тот факт, что основной риск для пешеходов представляет собой движущееся транспортное средство, хорошо известен и включает в себя множество различных факторов: поведение водителей, культуру, знания правил дорожного движения, навыки управления транспортными средствами, особенно умение выбирать безопасную скорость и управлять автомобилем в состоянии алкогольного опьянения, состояние тротуара, отсутствие или отсутствие разметки проезжей части и многое другое. Уровень развития инфраструктуры для пешеходов является одной из гарантий безопасности пешеходов.

Во многих странах для оказания неотложной помощи в необходимых усилиях по спасению жизней пострадавших пешеходов, а также для

предотвращения низкой производительности травматологических служб. В Концепции обеспечения безопасности дорожного движения в Республике Узбекистан на 2022-2026 годы определены ряд мероприятий, направленных на спасение жизни пострадавших пешеходов [2].

Каждый день, когда большая часть населения нашей страны участвует в качестве водителей, пешеходов или пассажиров, навыки управления транспортным средством для водителей являются важным показателем в обеспечении безопасности движения пассажиров и пешеходов. Управление транспортным средством-организация их повседневной работы, отдыха на основе нормативных актов, можно без преувеличения сказать, что это важный социальный вопрос, имеющий большое общественное значение для обеспечения безопасности дорожного движения. Его успешная организация гарантирует жизнь и здоровье людей.

Важное место в обеспечении безопасности участников дорожного движения занимает проведение агитационно-пропагандистской работы. В ходе мероприятия по безопасности движения основное внимание уделяется подготовке сотрудников Управления безопасности дорожного движения территориального управления внутренних дел совместно с другими службами, отделами внутренних дел города и района к проведению различных мероприятий с привлечением широкой общественности, в том числе "ночь", "Внимание, дети", "День безопасности дорожного движения", "Внимание пешехода", "Внимание железная дорога", "скорость" и другие профилактические мероприятия должны проводиться эффективно, в то время как все предприятия в регионе в процессе мероприятия-планирование встреч и пропагандистских мероприятий в организациях, махаллях и образовательных учреждениях, организация тематических выступлений в средствах массовой информации, изготовление баннеров и плакатов, подготовленных УВД, в местах массового скопления граждан, предприятиях-организациях, махаллях, на перекрестках с высокой интенсивностью движения, перед учебными заведениями, изготовление общих баннеров, плакатов и лозунгов, пропагандирующих безопасность движения, к ним относятся подвешивание на зданиях и транспортных средствах, занимающихся пассажирскими перевозками. Пропорциональное регулирование движения транспортных средств и пешеходов затруднено. При расчете нормативных и нормативных режимов движения отдельных групп пешеходов по движению движущихся водителей при естественном расчете всех отклонений трудно учесть физиологические факторы пешеходов это еще раз подчеркивает сложность поставленной задачи.



**2-рис. Методы профилактических мероприятия**

Организацию пешеходного движения можно разделить на несколько групп (рис. 2):

организационно-техническую – для комплексного изучения пассажиропотока в условиях крупного города с целью проведения расчетов и расширения научных исследований по организации мер безопасности и поиск путей разработки технических средств регулирования пешеходного движения;

реконструкционная-оценка воздействия сети дорожной инфраструктуры на безопасность пешеходов крупных населенных пунктов и планирование ее перепроектирования.

массовые мероприятия-массовые мероприятия, направленные на обеспечение безопасности пешеходов, организуемые УГИБДД.

К сожалению, развитие городской транспортно-дорожной сети и ее инженерного оборудования в целом отстает от роста городского населения.

Важное значение приобретает обеспечение участников дорожного движения информацией о дорожно-транспортных происшествиях.

Предупреждение дорожно-транспортных происшествий связано, конечно, с соблюдением водителем и пешеходами правил безопасности движения. Важно помнить, что водитель является не только руководителем транспортного средства, но и лицом, ответственным за безопасность движения[3]. К сожалению, некоторые водители забывают об этой ответственности и ответственности, что приводит к различным неприятностям.

Надо сказать, что исходя из современных требований, МВД, в том числе входящая в его состав Государственная служба безопасности дорожного движения, принимает меры по широкому использованию возможностей передовых технологий. Это помогает предотвратить нарушения безопасности дорожного движения, а также прояснить абстрактные, спорные дорожно-транспортные происшествия.

Есть еще одна ситуация, отрицательно влияющая на безопасность движения, которая, если таковая имеется, связана с умением пешеходов не пренебрегать правилами дорожного движения, пренебрегать ими. Об этом свидетельствует тот факт, что различные неприятности с участием пешеходов все еще встречаются. Для удобства пешеходов на большинстве наших оживленных улиц были построены специальные подземные и надземные дорожки. В целях обеспечения безопасности в республике Каракалпакстан и во всех областных центрах, в городе Ташкенте, установлены ограждения посередине дорог. Однако, не принимая во внимание эти удобства, нет недостатка в людях, которые рискуют своей жизнью, нарушая правила дорожного движения. К сожалению, эти ошибки взрослых сказываются и на детях. Случаи использования мобильного телефона и планшета при переходе дороги, ношения различных устройств в ухе и игнорировании окружающей среды, особенно среди учащихся школ, академических лицеев и профессиональных колледжей, студентов высших учебных заведений, являются “традицией”, побуждающей каждого из нас к осознанию.

В результате проведенного анализа можно сделать вывод-в целях обеспечения безопасности всех участников дорожного движения, повышения необходимой квалификации и укрепления дисциплины рекомендуется систематически выполнять:

- систематическое формирование у молодежи, прежде всего, учащихся общеобразовательных учреждений с помощью специалиста необходимых знаний, обучения, навыков безопасного и законопослушного поведения в рамках дорожного движения;

- Организация выступлений, интервью и встреч на республиканских и местных телеканалах ответственных сотрудников органов внутренних дел, направленных на обеспечение профессионального и понятного освещения причин и последствий несоблюдения правил безопасности дорожного движения, в том числе вопросов ответственности пешеходов в рамках дорожного движения;

- широкое привлечение представителей общественности и институтов гражданского общества к организации и проведению пропагандистских мероприятий в области обеспечения безопасности дорожного движения;

- внедрение качественно новых механизмов привлечения страховых, мобильных и рекламных организаций к пропаганде важности и необходимости поддержки мероприятий по безопасности дорожного движения на основе анализа передового зарубежного опыта;

- установка тематических рекламно-пропагандистских средств иных средств, предназначенных для обеспечения безопасности дорожного движения, в первую очередь в местах интенсивного движения транспортных средств, на дорогах общего пользования, международного и республиканского значения.



Особую роль в усилиях по обеспечению безопасности дорожного движения в нашей стране и повышению бдительности в этом населения играет мера безопасности движения. Важно отметить, что это было бы уместно, если бы традиционное мероприятие дало признательные результаты.

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## **ОБЩИЕ МЕТОДИЧЕСКИЕ ВОПРОСЫ МЕДИКО-ГЕОГРАФИЧЕСКИХ ИССЛЕДОВАНИЙ**

*Аннотация. В статье рассмотрены общие методологические вопросы медико-географических исследований: методы медико-географических, эколого-гигиенических и эколого-эпидемиологических исследований; статистические методы; методы экологического мониторинга и методы медико-географического картирования. Состояние здоровья населения, экологическое воздействие природных и антропогенных факторов на людей, а также внесены уточнения географического анализа нозологической ситуации территориальной дифференциации заболеваний. Изучено региональное распространение и динамика отдельных заболеваний нозологических единиц.*

*Ключевые слова: Медико-географические исследования, здоровье человека, региональное распространение болезней, нозологические единицы, нозоэкология, факторы окружающей среды, медицинская статистика, медико-географическое картографирование.*

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## **GENERAL METHODOLOGICAL ISSUES OF MEDICAL-GEOGRAPHICAL RESEARCH**

*Abstract. The article discusses general methodological issues of medical-geographical research: methods of medical-geographical, ecological-hygienic and ecological-epidemiological research; statistical methods; methods of*

*ecological monitoring and methods of medical-geographical mapping. The state of health of the population, the ecological impact of natural and anthropogenic factors on people, and also clarifications have been made to the geographical analysis of the nosological situation of the territorial differentiation of diseases. The regional distribution and dynamics of individual nosological units of diseases have been studied.*

*Keywords: Medical-geographical research, human health, regional distribution of diseases, nosological units, nosoecology, environmental factors, medical statistics, medical-geographical mapping.*

В мире на глобальном, региональном и локальном уровнях заболеваемость и продолжительность жизни связаны с территориально-географическими различиями и негативным влиянием природных и социально-экономических факторов на здоровье населения. Современное направление вектора «Окружающая среда – здоровье» – это не только природные условия, но и факторы окружающей среды, а также определение причинно-следственной связи между окружающей средой и населением, создание карт, отражающих медико-географическую ситуацию в мире и в отдельных регионах, для стран и их регионов. При разработке медико-географических прогнозов и, как следствие, в совершенствовании системы здравоохранения необходимо учитывать региональную дифференциацию заболеваемости населения.

А. Г. Воронов (1981) выделяет три отрасли медицинской географии: медицинское ландшафтоведение, медицинское регионоведение и нозогеографию. Известно, что нозогеография изучает географическое распространение отдельных нозологических единиц (заболеваний) и причины их распространения в нозорайоне или его части в связи с местными природными и социально-экономическими условиями.

Состояние здоровья населения все чаще признается показателем конечного экологического воздействия природных и антропогенных факторов на людей, а здоровье принимается в качестве основного критерия качества окружающей среды, которое определяется главным образом уровнем комфорта или дискомфорта. Если здоровье человека нормальное, то и окружающая среда считается здоровой. А если отношения человека с окружающей средой сопровождаются отклонением от нормы и проявляются в виде заболеваний, то окружающая среда считается нездоровой. Если жизнь человека становится невозможной из-за характера взаимоотношений, окружающая среда оценивается, как абсолютно экстремальная [2:7].

Развитие основ теории и практики нозоэкологии с учетом геоэкологической, нозологической и социально-экономической составляющих позволяет сформировать комплексную картину состояния здоровья населения, проживающего в зоне экологического стресса.

Географический анализ нозологической ситуации помогает определить региональную дифференциацию заболеваний. Структура и динамика нозологии позволяют разработать целенаправленные профилактические и контрольные мероприятия для улучшения здоровья населения. И, наконец, обобщение ситуации в социально-экономической сфере служит основой для реализации конкретных мер по улучшению качества жизни, что является краеугольным камнем социально ориентированной политики независимого Узбекистана.

Важнейшими источниками информации для проведения медико-географических исследований в Республике Каракалпакстан являются Каракалпакский отдел Института здравоохранения и медицинской статистики Министерства здравоохранения и статистические сборники Госкомстата Республики Узбекистан за 2009-2021 годы. Показатели, как правило, рассчитываются на 100 000 жителей, а показатели отдельных половозрастных и социальных групп населения рассчитываются на 1000 человек соответствующей группы.

Классификация болезней, используемая на практике Министерства здравоохранения Республики Узбекистан и Республики Каракалпакстан, незначительно отличается от международной номенклатуры болезней и регистрируется по следующим классам: I - зарегистрированные распространенные болезни; II - некоторые инфекционные и паразитарные заболевания; III - злокачественные опухоли; IV - заболевания эндокринной системы; V - болезни крови и органов кроветворения; VI - психические и поведенческие расстройства; VII - заболевания нервной системы; VIII - болезни глаза и его вспомогательного аппарата; IX - заболевания уха и молочных желез; X - заболевания системы кровообращения; XI - заболевания органов дыхания; XII - заболевания пищеварительной системы; XIII - заболевания мочеполовой системы; XIV - осложнения беременности, родов и послеродового периода; XV - заболевания кожи и подкожной клетчатки; XVI - заболевания опорно-двигательного аппарата и соединительных тканей; XVII - врожденные аномалии; XVIII - индивидуальные состояния, возникающие в перинатальном периоде; XIX - симптомы, признаки, отклонения от нормы; XX - травмы и отравления.

Кроме того, изучены региональное распространение и динамика заболеваний отдельных нозологических единиц. Например, туберкулез, который относится к категории инфекционных и паразитарных заболеваний, болезни почек, которые относятся к категории болезней органов пищеварения и т. д. На наш взгляд, при анализе экологически детерминированных заболеваний лучше изучать вредные экологические факторы, сопоставляя их с динамикой заболеваемости отдельных групп населения. Это: сельские жители, женщины, дети до 14 лет, дети до 1 года и т.д. В соответствии с рекомендациями ВОЗ общепринятым показателем оценки здоровья населения или индикаторным

показателем в современной методике является уровень младенческой смертности (смертность детей до 1 года на 1000 живорождений). Классификацию болезней и патологических состояний по степени и характеру зависимости от факторов внешней среды изучили, определили и разработали А. П. Авицын и А. Г. Воронов. В данную классификацию в упрощенном и сокращенном виде включены следующие:

I - эндогенные заболевания: а) наследственные болезни; б) заболевания, связанные с повреждением плода в утробе матери.

II - экзогенные заболевания: а) болезни, связанные с влиянием экологических факторов; б) заболевания, связанные с влиянием внешних факторов.

В нашей статье основным объектом исследования являются заболевания экзогенного происхождения, которые в основном связаны с влиянием вредных факторов внешней среды и в меньшей степени техногенных факторов.

Качество атмосферного воздуха изучалось на основании данных Управления гидрометеорологии РК и лабораторного комплекса Республиканской санитарно-эпидемиологической службы. Использовалась также специальная научная литература по медицинской географии, экологии, физической географии, медицине, общей и социальной гигиене. Кроме того, для оценки медико-географической ситуации использованы отчетные данные научно-исследовательских учреждений, осуществляющих мониторинг дельты Амударьи (Институт биоэкологии Каракалпакского отделения Академии наук Республики Узбекистан).

Статья основана на статистических данных о состоянии окружающей среды (атмосферного воздуха, питьевой воды) Республиканской санитарно-эпидемиологической службы, параметрах динамики загрязнения, особенно данных Министерства здравоохранения РК за 2009-2021 годы.

Приоритет используемых данных санитарно-эпидемиологической службы в нашей статье заключается в том, что комплекс лабораторных служб, включающий в себя санитарно-гигиенические, токсикологические, радиологические, бактериологические, вирусологические, паразитологические лаборатории, лаборатории особо опасных инфекций, прошел государственную аттестацию и акредитация, а также среди служб, осуществляемых мониторинг экологических объектов является наиболее компетентным органом.

1-таблица

**Доля образцов химически загрязненной водопроводной воды в 2009-2021 годах в %составляет**

Районы	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Муйнакский	0	16,9	20,9	26,2	36,4	7,3	15,8	11,6	6,8	23,1	28,9
Кунградский	36,7	42,9	26,8	18,4	8,9	14,1	13,1	14,6	17,5	5,5	18,0
Канликульский	<b>50,0</b>	28,2	63,2	<b>60,9</b>	<b>54,8</b>	<b>51,5</b>	47,0	<b>51,5</b>	26,8	х	9,9
Шуманайский	25,1	29,3	35,4	34,4	37,3	27,2	21,2	29,0	27,5	21,2	23,8

<b>Западный</b>	<b>37,3</b>	<b>29,3</b>	<b>36,6</b>	<b>35,0</b>	<b>34,3</b>	<b>25,0</b>	<b>24,3</b>	<b>26,7</b>	<b>19,7</b>	<b>16,6</b>	<b>20,2</b>
Тахтакупирский	11,2	23,5	30,7	29,9	13,6	18,2	9,9	16,7	15,5	10,4	21,3
Караузакский	21,5	16,6	21,2	9,6	14,3	8,6	22,2	14,7	16,0	х	38,5
Чимбайский	21,0	32,3	13,3	23,0	35,0	42,8	16,2	12,6	7,0	32,5	16
Кегейлийский	3,8	0,7	12,1	12,7	20,5	6,5	7,2	20,4	7,0	х	9,8
<b>Северный</b>	<b>14,4</b>	<b>18,3</b>	<b>19,3</b>	<b>18,8</b>	<b>20,8</b>	<b>19,0</b>	<b>13,9</b>	<b>16,1</b>	<b>11,4</b>	<b>21,5</b>	<b>21,4</b>
г. Нукус	20,8	6,1	30,5	29,8	20,2	14,4	24,1	34,5	12,0	11,8	20,2
Нукусский	32,8	11,0	12,3	12,9	10,2	32,4	<b>51,5</b>	33,4	31,7	х	37,8
Ходжейлинский	40,4	19,5	29,6	29,3	16,6	21,8	26,8	<b>52,7</b>	12,2	22,2	20,6
Тахиаташский	38,5	20,3	х	Х	х	х	2,2	14,8	10,0	14,7	12,1
<b>Центральный</b>	<b>33,1</b>	<b>14,2</b>	<b>24,1</b>	<b>24,0</b>	<b>15,7</b>	<b>22,9</b>	<b>26,2</b>	<b>33,9</b>	<b>16,5</b>	<b>16,2</b>	<b>22,7</b>
Амударьинский	24,0	0	26,6	33,9	31,6	33,3	37,8	43,1	14,8	21,4	24,6
Берунийский	35,6	40,7	37,7	<b>58,5</b>	<b>54,7</b>	47,3	34,0	70,9	74,3	75,8	<b>63,9</b>
Элликалинский	33,3	5,2	15,1	12,3	19,6	12,2	10,4	21,4	16,3	8,5	24,1
Турткульский	39,2	22,6	25,9	37,3	29,7	18,5	14,5	19,6	16,7	х	32,5
<b>Южный</b>	<b>33,0</b>	<b>22,8</b>	<b>26,3</b>	<b>35,5</b>	<b>33,9</b>	<b>27,8</b>	<b>24,2</b>	<b>38,8</b>	<b>30,5</b>	<b>35,2</b>	<b>36,3</b>
<b>РК</b>	<b>28,0</b>	<b>18,5</b>	<b>28,6</b>	<b>30,6</b>	<b>26,6</b>	<b>23,1</b>	<b>23,2</b>	<b>31,6</b>	<b>20,3</b>	<b>19,4</b>	<b>23,4</b>

Районы размещены по удаленности центров от старого побережья Аральского моря, поскольку на практике, чем ближе административная территория к Аральскому морю, тем более выражены последствия экологических катастроф. Такой подход значительно повышает ясность в изучении и охвате экологически детерминированных заболеваний с нозогеографической точки зрения.

Еще одним важным подходом является изучение динамики формирования вредных факторов внешней среды и возможности возникновения заболеваний вследствие негативного эколого-гигиенического воздействия в условиях РК.

ДДТ (дихлордифенил трихлорэтан), один из стойких органических загрязнителей, как известно, вызывает генетические, репродуктивные и поведенческие отклонения у животных и людей. Кроме того, это вредит эндокринной и иммунной системе организма, а также онкологическим патологиям. По статистике, ежегодно от 1 до 2 миллионов работников сельского хозяйства травятся пестицидами.

Если сформулировать этот подход проще, то изучение зависимости состояния здоровья населения от влияния вредных экологических и гигиенических факторов должно идти не только от вредных факторов к заболеваниям, но и в обратном направлении. Это значит, что если число заболеваний увеличится, то и вредные факторы могут увеличиться.

По мнению С.М. Малхазова (2009), в настоящее время все последствия применения пестицидов, других органических и неорганических веществ для здоровья человека и биоты остаются неизвестными [6:23]. Даже в США, одной из самых развитых стран, список из 48500 широко используемых веществ не содержит информации о токсичном воздействии 79% из них.



Нет информации о последствиях загрязнения атмосферного воздуха и почвы, например, сколько мусорных баков и свалок сжигают пластиковую тару в городах и селах. Поэтому невозможно выявить все экологические причины и условия в рамках одного исследования, даже если это крупномасштабное исследование. Однако доступные нам методы исследования позволяют выявить вредные эколого-гигиенические факторы вызываемые и ведущие к заболеваниям.

Следует отметить, что в зоне антропоэкологического кризиса Аральского моря не существуют болезнь Минамата вызванная отравлением ртутью, болезнь Итай-Итай вызванная кадмием, болезни Юшо и Ю Ченг вызванные мышьяком, а также техногенные экологические заболевания.

В то же время в Республике Каракалпакстан наблюдается рост загрязнения питьевой воды, ухудшение социально-гигиенических и экономических условий жизни населения, заболеваемость органов дыхания, сопутствующие заболевания, вызванные туберкулезом, а также сравнительно высокий уровень заболеваемости, кишечные инфекции. Кроме того, наблюдается тенденция роста врожденных аномалий и перинатальных заболеваний. Эпизоотические процессы особо опасных и зоонозных инфекций контролируются Минздравом, учреждениями ветеринарной службы. Иногда наблюдаются единичные случаи заболевания у сельскохозяйственных животных, у человека случаев заболевания не зарегистрировано. Профилактическая вакцинация против бруцеллеза и сибирской язвы в группах высокого риска может предотвратить заражение людей этими заболеваниями

**Заключение.** Таким образом, в данной статье использованы методы медико-географических, эколого-гигиенических и эколого-эпидемиологических исследований; статистические методы; использованы методы экологического мониторинга, что позволяет определить состав вредных для здоровья факторов окружающей среды и перечень конкретных нозологических форм вызываемых ими заболеваний в районах и городах республики.

По мнению Б. Б. Прохорова и А. Г. Гранберга, на уровень здоровья населения влияют состояние экономики, реальные доходы населения и продолжительность жизни. По нашему мнению, помимо социально-экономических проблем решающее влияние на состояние здоровья населения оказывают вредные факторы окружающей среды, особенно в низовьях Амударьи, в Южном Приаралье, усугубленном экологической катастрофой.

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## **БАНДЛИКНИ ТАЪМИНЛАШ ОРҚАЛИ КАМБАҒАЛЛИКНИ ҚИСҚАРТИРИШ**

*Аннотация. Мазкур мақолада мамлакатда бандликни таъминлаш орқали камбағалликни қисқартириши имкониятлари келтирилган.*

*Калит сўзлар: бандлик, тадбиркорлик, камбағалликни қисқартириши, инновацион ривожланиши, мономарказ, аҳоли даромадлари, инвестиция.*

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## **REDUCING POVERTY THROUGH EMPLOYMENT CREATION**

*Abstract. This article presents the possibilities of reducing poverty by providing employment in the country.*

*Key words: employment, entrepreneurship, poverty reduction, innovative development, monocenter, personal income, investment.*

Ўзбекистон Республикасини инновацион ривожлантириш стратегиясининг бош мақсади – инсон капиталини тараққий эттиришдир. Мазкур ҳужжатда 2030 йилга келиб Ўзбекистонни Глобал инновацион индекс рейтингда жаҳоннинг 50 та илғор мамлакати қаторига киритиш асосий вазифалардан бири этиб белгиланди. Жаҳон банкининг бугун эълон қилинган янги тадқиқот натижалари ҳукуматларга болалар саломатлигини сақлаш ва уларга таълим беришга оид энг яхши натижалар келгусида аҳоли ва мамлакатлар даромадларини сезиларли даражада ошириши мумкинлигини намоён қилмоқда.

Бандликни таъминлаш ва камбағалликни қисқартириш мақсадида мамлакатимизда маъмурий ислохотлар доирасида илк бор минимал истеъмол харажатлари қиймати жорий этилди. Аҳоли бандлигини таъминлаш учун оилавий тадбиркорликка 15 триллион сўм имтиёзли кредит ва субсидиялар, деҳқончилик учун 200 минг гектар ер ажратилди. Шу даврда 300 мингга яқин тадбиркорлик субъекти ташкил қилиниб, 20 мингта

корхона фаолияти кенгайтирилди. Ўтган йили 1 миллион нафар аҳоли камбағалликдан чиқарилди. Яқинда қабул қилинган Конституциямизда ҳам камбағалликни қисқартириш бўйича давлат ўзига мажбуриятлар сифатида камбағалликни қисқартириш ва бандлик вазирлиги ҳудудларда янгича ишлаш чора-тадбирларини белгилади. Жумладан, салоҳиятли тадбиркорларни қўллаб-қувватлаб, янги иш ўрни яратишга рағбатлантириш масаласи кўриб чиқилди. Бунинг учун улар билан малакали ишчи тайёрлаш бўйича шартномалар тузилиб, корхоналарда кўплаб “амалий мономарказ”лар ташкил қилинади. Давлат бунга зарур маблағлар ажратиш билан бирга инфратузилма, кредит, солиқ ва бошқа масалалар бўйича енгилликлар беради. Тадбиркор эса камбағал аҳолини даромадли иш билан таъминлайди.[1]

Маълумки, камбағалликни қисқартириш бўйича Хитойнинг тажрибаси эътиборга молик. Мамлакатимиз делегацияси буни ўрганиш ва янги ёндашувларни ишлаб чиқиш учун яқинда Хитойда бўлиб қайтди. Камбағалликни қисқартириш ва бандлик вазирлигига экспертлар жалб қилинди. Хитой тажрибаси асосида ҳар бир вилоятда биттадан туманни камбағалликдан чиқариш бўйича алоҳида дастур амалга оширилиши белгиланди. Бунда камбағаллик юқори бўлган туманларда йўл-транспорт, электр, алоқа ва туризм инфратузилмасини яхшилаш, кичик ва ўрта шаҳарларни ривожлантириш, маҳаллаларни саноатлаштиришга эътибор қаратилади.

Жорий йилда оилавий тадбиркорликка 13 триллион сўм кредит ва 1,5 триллион сўм субсидиялар ажратилапти. Шунингдек, камбағалликни қисқартириш ва бандликни таъминлаш бўйича 37 турдаги субсидиялар мавжуд. Лекин уларни ажратиш шартлари оилаларнинг ижтимоий-иқтисодий ҳолати, лойиҳанинг ўзини ўзи оқлаш муддатидан қатъий назар, барча учун деярли бир хил бўлиб, шу боис кредит ва субсидияларни ҳар бир камбағал оилага алоҳида ёндашув асосида тақдим этиш таклифи маъқулланди. Камбағалликни қисқартириш ва бандлик вазирлигини халқчил тизимга айлантириш, 100 дан ортиқ ижтимоий хизматларни бевосита маҳалланинг ўзида йўлга қўйиш мақсадга мувофиқлиги таъкидланди. [2]

Инсон капиталини ривожлантириш тажрибаларига кўра инсон капитали индексида асосан *омон қолиш, таълим ва соғлиқ* каби кўрсаткичлар инобатга олинади. Индекснинг биринчи нашрида 157 давлат рейтинги тақдим этилган. Инсон капиталига бошқалардан кўпроқ сармоя киритаётган энг фаол мамлакатлар бешлигидан Сингапур, Жанубий Корея, Япония, Ҳонконг ва Финляндия ўрин олган. Рейтингда шунингдек, Марказий Осиёнинг уч давлати натижалари келтирилган - Қозоғистон 31-ўрин, Қирғизистон 76-ўрин ва Тожикистон 89-ўрин. Жаҳон банкининг Ўзбекистондаги ваколатхонаси раҳбари Хидеки Морининг таъкидлашича: “Ўзбекистон ҳукумати иқтисодий трансформация ва мамлакат келажаги

учун ҳал қилувчи аҳамиятга эга бўлган инсон капитали ривожига давлат инвестицияларини киритиш заруратини тан олади. Биз Ўзбекистонни Инсон капиталини ривожлантириш лойиҳасини қўллаб-қувватловчи дунёнинг қолган 27 мамлакатига қўшилган Марказий Осиёдаги биринчи мамлакат бўлгани билан олқишлаймиз”[3]. Демак, ушбу фикрлардан кўриниб турибдики, Ўзбекистонда инсон капиталини ривожлантириш мақсадида ҳар томонлама пухта ўйланган мақсадли йўналишлар ишлаб чиқилган.

Шунингдек, маҳаллабай ишлаш ва тадбиркорликни ривожлантириш агентлигининг аҳолини тадбиркорликка жалб қилиш жамғармаси ҳисобидан яқка тартибдаги тадбиркор сифатида рўйхатдан ўтган ёки кичик корхоналар ва микрофирмаларни давлат рўйхатидан ўтказган вақтдан бошлаб биринчи 3 ой давомида ижарага олинган бино ва иншоотларнинг ижара ҳақини тўлаш харажатларини қоплаш учун базавий ҳисоблаш миқдорининг 10 бараваригача миқдорида субсидия тўланади. Тадбиркорлик фаолиятини қўллаб-қувватлаш давлат жамғармаси маблағлари ҳисобидан тадбиркорлик фаолиятини амалга ошириш учун умумий қиймати 5 миллиард сўмдан, фоиз ставкаси Марказий банк асосий ставкасининг 1,5 бараваридан ошмаган тижорат банкларининг миллий валютада ажратиладиган кредит ва лизинглари бўйича унинг асосий ставкадан ошган, бироқ асосий ставканинг 30 фоизидан кўп бўлмаган қисмини қоплаш учун уч йил муддатгача компенсация тақдим этилади.

Бугунги кунда жаҳон бозорида товарлар ва хизматлар ўртасида рақобат тобора кучайиб бораётган бир шароитда ривожланаётган мамлакатлар иқтисодиётини инновацион ривожлантириш технологик жиҳатдан ортда қолишни имкон қадар қисқартириш ва рақобатбардошликни таъминлашнинг деярли ягона йўли ҳисобланади. Ҳар қандай давлатнинг инновацион тараққиётдаги муваффақияти кўп жиҳатдан унинг инновациялар соҳасида давлат сиёсатини нечоғлиқ самарали олиб бориши ҳамда инсон капиталини сифатли шакллантиришига боғлиқ.

Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг: “Мақсад-илм-фанни тубдан ривожлантириш, юксак натижадорликка йўналтирилган иқтисосликлар бўйича миллий лабораториялар тизимини яратиш, илмий ишланмаларни тижоратлаштириш, халқаро рейтингларда мамлакатимиз фани нуфузини кўтариш, асосий мақсадимиз-мамлакатимизда инсон капиталини ривожлантиришдир”[1], деган сўзлари инсон ресурсларини ривожлантириш соҳасига қаратиладиган юксак эътиборнинг яна бир амалий ифодасидир.

Таълим ва соғлиқни сақлаш йўналишига маблағ ажратиш инсон капиталига киритиладиган инвестицияларнинг муҳим қисми ҳисобланади. Биринчидан, таълим қай даражада ривожланган бўлса, миллий иқтисодиётда шунга мос касбий тайёргарликка эга бўлган ходимлар фаолият кўрсатади ва шунга мос иқтисодий ўсишга эришилади. Таълим соҳаси иқтисодий ўсишнинг кафолати бўлиб ҳисобланади. Жаҳоннинг

етакчи олимлари томонидан ўтказилган тадқиқотлар ҳар бир қўшимча таълим йили инсон умумий даромадини ўртача 10 фоизга оширишини кўрсатган. Албатта, ушбу жараёнда таълим сифатига эътибор ҳам муҳим омил бўлади.

Иккинчидан, таълим билан бир қаторда соғлиқни сақлашга маблағ ажратиш ҳам муҳим ҳисобланади. Бу касалликлар ва ўлимнинг қисқаришига, инсон умрининг меҳнатга лаёқатли қисмининг узайишига, шу билан бир қаторда, инсон капиталининг фаолият кўрсатиш вақтини узайишига олиб келади.

Мамлакатда аҳолининг интеллектуал салоҳияти юқори даражага кўтарилиши иқтисодиёт реал секторида инновацион фаолиятни ривожлантиришга ва жамият аъзолари эҳтиёжининг қондирилиши доимий равишда таъминланиб борилишига эришилади. Инсон капиталини ривожлантириш дунё бўйича етакчи олий таълим муассасаларини ўз ичига олган рақобатбардош ва мослашувчан таълим тизимига асосланган. Бутун дунё бўйлаб барча олий таълим муассасаларининг меҳнат жамоалари ўз таълим муассасаларининг нуфузи, унинг глобал рейтингда юқори ўрни учун курашади.

Хулоса қилиб айтадиган бўлсак, юқори малака ва кўникмага эга кадрлар ислохотлар самарасининг гаровидир. Ҳар томонлама билимга эга бўлган, касб-ҳунар эгаллаган фуқораларимиз тадбиркорликнинг исталган соҳасида фаолият кўрсатиши ҳамда ўзининг даромадига эга бўлиши учун имконият яратилади. Мамлакатимизда ташкил этилган мономарказлар фаолият кўрсатиши ушба масалаларни ҳал этилишида етакчи механизм бўлиб хизмат қилади.

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## **АСАЛАРИЛАР ВА ИҚЛИМ ЎЗГАРИШИ: БАҲҚАРОР АСАЛАРИЧИЛИККА ЯНГИ ЁНДАШУВЛАР**

*Аннотация. Ушбу мақолада бугунги глобал иқлим ўзгариши шароитида асаларичилик тармоғини самарали ташкил этишга таъсир кўрсатаётган тизимли муаммолар таснифланган ҳолда уларни ечимига қаратилган илмий таклиф ва амалий тавсиялар келтирилган.*

*Калит сўзлар: асаларичилик, асал етиштириши, тармоқ, иқлим ўзгариши, муаммо, тизим, хусусият, жиҳат, ресурс.*

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## **BEES AND CLIMATE CHANGE: NEW APPROACHES TO SUSTAINABLE BEEKEEPING**

*Abstract. In this article, in the context of today's global climate change, the systematic problems that affect the effective organization of the beekeeping network are classified, and the scientific proposal and practical recommendations aimed at their solution are presented.*

*Key words: beekeeping, honey production, network, climate change, problem, system, feature, aspect, resource.*

Бугунги кундаги глобал иқлим ўзгариши, хусусан, ҳаво ҳароратининг кескин кўтарилиши фонида дунёда йирик экологик муаммолар юзага келмоқда. Дунёга хавф солаётган бундай муаммолар Марказий Осиё, хусусан, Ўзбекистонни ҳам четлаб ўтаётгани йўқ. Жойларда сув танқислиги натижасида қишлоқ хўжалиги ишлаб чиқаришини самарали ташкил этиш мураккаблашмоқда. Бу ҳолат эса ўсимлик дунёси учун мақбул ҳароратни ва сув ресурсларига бўлган талабни меъёрлар даражасига таъминланмаслиги натижасида экинлар ўсиши ва ривожланишига ўз салбий таъсирини кўрсатмоқда. Натижада асаларичилик тармоғида озуқа таъминотининг миқдори ва давомийлиги камаймоқда.

Асаларичилик тармоғида ишлаб чиқариш жараёни табиий-иқлим шароитларига ўта боғлиқлиги, тармоқда мавсумийлик хусусиятлари кучлилиги, унинг депрессив ҳолати, ишлаб чиқариш ва технологик жараёнларнинг модернизациялашмаганлиги ва диверсификациялашмаганлиги, меҳнат ва моддий харажатларнинг юқори даражадалиги ўрганилаётган тармоқнинг иқтисодий ўсишига ижтимоий-иқтисодий таҳдидларни келтириб чиқаради.

Асаларичилик тармоғида ишлаб чиқаришни самарали ташкил этиш бевосита саноат маҳсулотларининг нархига ва уларнинг сифат стандартларига мос келишига боғлиқ бўлганлиги туфайли тармоқ рақобатбардош эмас. Шунинг чун ҳам асаларичилик тармоғи озик-овқат таъминоти тизимига етарли даражада интеграциялашмаган.

Шу боисдан ҳам, асаларичилик тармоғини давлат томонидан қўллаб-қувватлашнинг устувор йўналишларини аниқлаб олиш ва ҳар бир йўналиш кесимида рағбатлантириш дастакларини ишлаб чиқиш объектив зарурият ҳисобланади.

Асаларичилик маҳсулотларини ишлаб чиқариш ва сотишни давлат томонидан тартибга солиш соҳанинг самарали ривожланишига таъсир кўрсатиш усуллари ва воситаларини ўз ичига олган механизм сифатида кўриб чиқилиши керак. Бунда қуйидагилар назарда тутилиши зарур: тегишли норматив-ҳуқуқий ҳужжатларнинг таркиби ва тузилиши; давлат харидларини ташкил этиш; саноат субсидиялари; ишлаб чиқарилган маҳсулотлар сифатини назорат қилиш; асаларичиликни илмий таъминлаш; ихтисослашган кадрларни тайёрлаш ва қайта тайёрлаш; асаларичиликнинг соғлиқни сақлаш, жисмоний тарбия, спортга таъсири; асаларичилик маҳсулотларини ишлаб чиқариш ва сотиш жараёнларини солиқ билан тартибга солиш; тармоқни стратегик бошқариш ва унинг ташқи иқтисодий алоқаларини мустаҳкамлаш.

Ушбу масалаларда иқлим ўзгариши шароитида асаларичилик тармоғини ривожлантиришнинг мазкур йўналишлар доирасида яхлит ҳолда ташкилий, ҳуқуқий, ижтимоий, иқтисодий, экологик манфаатларнинг мувозанатлашган нуқтасини топиш долзарб масала ҳисобланади. Шу боисдан ҳам соҳага бозор муносабатларининг қарор топиши билан биргаликда, давлатнинг доимий равишда ташкилий-ҳуқуқий, ижтимоий ҳамда иқтисодий масалаларга аралашувлари талаб этилади.

Асаларичилик тармоғини давлат томонидан қўллаб-қувватлашнинг мазкур йўналишлари ичида иқтисодий дастаклар орқали қўллаб-қувватлаш муҳим аҳамият касб этади. Жумладан, олиб борилган монографик тадқиқотлар ва ижтимоий сўровномалар ҳамда кузатувлар натижасида асаларичиларни қийнаб келаётган, уларнинг фаолият самарадорлигига ўз салбий таъсирини ўтказиб келган бир қатор муаммолар борлиги маълум бўлди.

Бундай муаммолар сифатида қуйидагиларни санаб ўтиш мақсадга мувофиқ ҳисобланади:

1. Асаларичилик тармоғида наслдор сермахсул, табиий хусусиятларимизга мос келадиган ари зотларининг оммалашмаганлиги, мавжудларини эса сақлаб қолишдаги қийинчиликлар, наслчилик хўжаликларини етарли даражада эмаслиги ва уларнинг талаб ва стандартлар асосида фаолият олиб бормаётганлиги, бунинг учун давлат назорати ва кўмаги остида фаолият юритаётган илмий-тадқиқот институтларининг мавжуд эмаслиги.

2. Асаларичилик субъектларида айниқса эрта баҳорда (феврал-май ойларида) табиатдан келаётган шира миқдори етишмаслиги натижасида ариларни қўшимча озуқа билан етарли даражада таъминлашдаги муаммолар. Бу муддатда аричиларга шакар харид қилиши учун маблағ етишмайди. Асаларичини ўтган йиллардан қолиб кетган маҳсулоти бўлган ҳолатда ҳам унинг харидори аниқ бўлмаслиги сабабли, улгуржи харидорлар эса жуда паст нарх таклиф қилиши натижасида асаларичи асални сотмаслиги туфайли шакар харид қила олмайди. Бундай ҳолатда эса асаларичи ариларга шакар етишмаслиги сабабли қўшимча озуқа бериш муддатини узайтиришга мажбур бўлади. Бу ҳол эса она ари томонидан айнан уруғлаш мавсуми фаол бўлган муддатда уруғ қўйиш миқдорига таъсир қилади. Натижада асалари оиласи яхши ривожланмай қолади. Бу ҳол бевосита яқуний ҳосил миқдорига таъсир қилади. Мазкур ҳолат маҳсулот таннархини ошиб кетишига олиб келади.

3. Тадқиқотлар натижасидан келиб чиқиб айтиш мумкинки асаларичилик тармоғидаги касаллик ва ҳашоратларга қарши ишлов бериш учун аниқ бир тизим мавжуд эмаслиги, асаларичиларга аниқ бир касаллик тури ва унга қарши ишлаш бўйича ветеринар шифокор кўрсатмаси берилмаслиги натижасида ҳар доимгидик ветеринария дорихона сотувчилари томонидан тавсия қилинган дорилар орқали ишлов берилади. Мутахассис ветеринар шифокор томонидан 4-5 та ари оилалари яхшилаб ўрганилиб чиқилиб, касалликни аниқ белгиларидан келиб чиқиб ташхис қўйилмаганлиги туфайли аксарият ҳолларда асаларилар нобуд бўлишига олиб келмоқда.

4. Маълумки, табиатдан шира келишига қараб асаларичилар ариларни бошқа ҳудудларга (туман, вилоят, республика) қўчириб олиб юришади. Лекин тармоқ фаолиятини тартибга солиш ва бошқаришдаги ҳуқуқий механизмларнинг аниқ эмаслиги натижасида тегишли ташкилот ва маҳаллий аҳоли томонидан асаларичиларни ширага бой бўлган жойларга бориб эркин жойлашишига тўсқинликларга дуч келмоқда. Ваҳоланки шу ҳудудда фаолият юритаётган кластер ёки фермер хўжаликлари кишлок хўжалиги экинлари ҳосилини чанглатиб берганлиги ва уни сифатини ҳамда ҳосилдорлигини ошириб берганлиги учун асаларичини экин майдонлари атрофига келиб жойлашишини рағбатлантириш мақсадга мувофиқ

ҳисобланади. Лекин амалиётда тескари механизм ишламоқда. Яъни асаларичилар асаларисини кластер ёки фермер ҳудудидаги дала майдонлари атрофига олиб бориб қўйса, ер эгасини рағбатлантирмоқда. Бу ҳисоб китоб аксарият ҳолларда натура асал кўринишида амалга оширилмоқда. Шу билан биргаликда ушбу кластер ёки фермер хўжалиги бошқа асаларичиларни ҳам шу майдонга киришига руҳсат бериш ҳолатлари ҳам кўп учрайди. Бу ҳол эса асаларичи учун катта ноқулайликларни ҳамда иқтисодий жиҳатдан қўшимча сарф харажатларни келтириб чиқаради. Бундай ҳолатда асаларичи бошқа жой кўриши ва тезда кўчиб чиқиб кетиши шарт бўлади. Шу билан биргаликда кластер ва асаларичи ўртасидаги интеграцион алоқалар, томонларнинг тенг манфаатлари асосида келишувлар бўлмаганлиги сабабли пахтага захарли моддалар қўлланилишини олдиндан огоҳлантирмаслиги натижасида асалариларни нобуд бўлишига олиб келади. Бу ҳолат эса асаларичига арилар сонини камайиб кетишига, айрим ҳолларда тўлиқ нобуд бўлишига олиб келган ҳолда жуда катта иқтисодий зарар келтиради.

5. Шунингдек, ўрганилган асаларичилик субъектларининг 97,4 фоизи асалари уяларини ўсимлик тури ва шира келишига қараб камида 150 км масофа атрофида, аксарият хўжаликлар эса 1000-2500 км масофа оралиғида кўчириб олиб юришига тўғри келади. Бундай ҳолатда аксарият асаларичилик субъектлари ёлланма транспорт воситаларидан фойдаланиши, улар томонидан кўрсатилаётган хизмат нархлари жуда юқорилиги, нахт кўринишдаги маблағ етишмаслиги натижасида аксарият ҳолларда бундай ҳисоб китоблар натура кўринишида бозор баҳосидан 35-50 фоиз паст бўлган баҳода асал бериш орқали амалга оширилиши аниқланди. Асалари павилионларини кўчириш ишлари куннинг тунги қисмида кечаси арилар уяларига қайтиб кирганидан сўнг амалга оширилиши ҳам алоҳида қўшимча ресурс ва маблағларни талаб этади.

6. Сўровнома натижалари ва монографик тадқиқотларга асосланган ҳолда шуни айтиш жоизки, асаларичилик тармоғида фаолият юритаётган асаларичилар асаларичилик бўйича аниқ маълумотга эга эмаслиги ҳам тармоқни ўзига хос бўлган хусусиятларидан келиб чиқиб илмий жиҳатдан ёндашилмаганлиги ва аксинча узоқ йиллик тажрибаларга асосланган ҳолда фаолият юритаётганлиги натижасида бугунги глобал иқлим ўзгариши анамал совуқ ва иссиқ об-ҳаво таъсирида, ҳамда ўсимликларнинг ҳашорат ва зараркунандаларига қарши ишлов бериш мақсадида гербицид, фунгицид ва пестицидлардан фойдаланган вазиятда қандай йўл тутиш кераклиги каби масалалар бевосита тармоқда малакали мутахассисларни етишмаслигини кўрсатмоқда.

7. Шунингдек, тармоқнинг энг асосий муаммоларидан бири бу етиштирилган маҳсулотни сотиш масаласи ҳисобланади. Монографик тадқиқотлар ва сўровномлар натижасидан келиб чиқиб айтиш керакки айрим асаларичиларнинг 8-10 йиллик маҳсулотлари сотилмай турган бўлса, айрим асаларичилар айланма маблағ етишмаслиги ва оиладаги бирламчи

эҳтиёжларни таъминлаш мақсадида ўз етиштирган маҳсулотларини улгуржи сотувчиларга бозор баҳосининг 50 фоиз қисмидан баланд бўлмаган нархда сотишга мажбур бўлишади. Бунинг асосий истеъмолчилари туман (шаҳар) марказидаги деҳқон бозорларига чакана савдо билан шуғулланувчи тадбиркорлар ҳисобланади. Улар асаларичилардан айнан мавсум даврида асалари маҳсулотларини улгуржи нархларда харид қилишади ва бозорларда чакана савдо билан шуғулланишади. Бу муаммо айниқса асаларичилик билан шуғулланишни бошлаган янги ҳаваскор тадбиркорлар учун самарали фаолият юритишига катта тўсқинлик қилмоқда. Сабаби узоқ йиллардан буён асаларичилик билан шуғулланиб келаётган тажрибали аричиларнинг тармоқ маҳсулотларини харид қилиб олиши учун олдиндан шаклланган миқдорлари мавжуд. Бироқ асаларичилик тармоғига инвестиция киритиб фаолиятини 1-2 йил олдин бошлаган ҳаваскор асаларичилар учун маҳсулотни сотишдаги муаммолар туфайли ва ари парваришидаги мавсумий машаққатлар сабабли тадбиркорликнинг осонроқ даромад олиб келадиган бошқа турига ўтиб кетишига сасаб бўлмоқда.

Хулоса қилиб айтганда, ҳозирги кунда асаларичилик тармоғини ривожлантириш учун юқорида таъкидлаб ўтилган ташкилий, иқтисодий ва ҳуқуқий жиҳатдаги муаммоларни тизимли ҳал қилиниши тармоқни барқарор ривожлантириш асосида аҳолини табиий асал, саноат корхоналарини эса хом ашёга бўлган талабини доимий қондириш имконияти вужудга келади.

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## **АСАЛАРИЧИЛИКДА РАҚАМЛИ ИНҚИЛОБ: ИННОВАЦИЯЛАР УЧУН САМАРАЛИ СУБСИДИЯЛАР**

*Аннотация. Мақолада асаларичилик тармогида рақамли технологияларни трансформация қилишни рағбатлантиришнинг ташкилий ва иқтисодий дастаклари ифодаланган. Тармоқда рақамли технологияларни жорий этишни субсидиялаш бўйича таклифлар баён этилган.*

*Калит сўзлар: асаларичилик, рақамлаштириш, рағбатлантириш, рақамли технология, субсидия, "Асаларичиликда технологик трансфер", 3D қурилмалари, сунъий йўлдош навигацияси, Big Data.*

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## **THE DIGITAL REVOLUTION IN BEEKEEPING: EFFECTIVE SUBSIDIES FOR INNOVATION**

*Abstract. The article describes the organizational and economic levers for promoting the transformation of digital technologies in the beekeeping industry. Proposals for subsidizing the introduction of digital technologies in the network are described.*

*Keywords: beekeeping, digitization, incentives, digital technology, subsidy, "Technological transfer in beekeeping", 3D devices, satellite navigation, Big Data.*

### **Кириш**

Ривожланган давлатлар тажрибаси кўрсатишича қишлоқ хўжалигини рақамлаштириш билан боғлиқ тадбирлар доим давлат назоратида ва қўллаб-қувватлаш механизмлари ёрдамида амалга оширилади. Хусусан АҚШ, Германия, Япония каби технологик ривожланган ҳамда хусусий сектор улуши ва хизмат кўрсатиш сифати юқори бўлган давлатларда ҳам айнан қишлоқ хўжалиги учун рақамлаштириш масаласи давлатнинг зиммасига юклатилган.

Шунинг учун ҳам мамлакатимиз аҳолисини табиий ва органик маҳсулотларга бўлган талабини таъминлаш, қишлоқ хўжалиги экинлари ҳосилдорлигини ошириш мақсадида асаларичиликни ривожлантириш ва уни замонавий инновацион технологиялар билан қуроллантириш мақсадида тармоқда ташкилий ва иқтисодий рағбатлантириш дастакларига зарурият ортиб бормоқда.

### **Асосий қисм**

Тадқиқотларимиз асосида асаларичиликда рақамли технологияларни трансфармация қилишни рағбатлантириш йўллари сифатида ташкилий ва иқтисодий дастаклардан кенг фойдаланиш лозим деб ҳисоблаймиз. Хусусан ташкилий йўналишда қуйидаги вазифаларни амалга ошириш мақсадга мувофиқ:

- “Ақлли асалари уялари”ни ташкил қилиш, мамлакатимиз иқлим шароитларига мослаштиришга оид тадқиқотлар ва тажрибаларни олиб бориш;

- рақамли қурилмалар, масофадан бошқариш воситалардан фойдаланишга оид ҳуқуқий асосларни такомиллаштириш, барча учун содда тизим яратиш;

- рақамли қурилмалардан фойдаланишни оммалаштириш, тарғиб қилиш, тушунтириш ишларини олиб бориш мақсадида семинарларни тақшил этиш;

- ақлли қурилмалар билан жиҳозланган асаларичилик хўжаликларини ўрмон фонди ерларидан мақсадли ва тартибли фойдаланиш йўллари ташкил этиш ва бошқалар.

Шунингдек асаларичиликда рақамли технологияларни жорий этишни рағбатлантиришнинг иқтисодий йўналишлари сифатида қуйидаги вазифаларни бажариш лозим деб ҳисоблаймиз. Жумладан:

- рақамли технологияларни тўлиқ жорий этган хўжаликлар учун имтиёзли кредитлаш тизимини жорий этиш, суғурталаш тизимини такомиллаштириш;

- хўжалик билан ҳамкорликда кооперацион алоқалар орқали ақлли қурилмаларни ишлаб чиқарувчи корхоналарни молиявий қўллаб-қувватлаш;

- жами асалари оилалари сонининг маълум улушига рақамли технологияларни жорий этган хўжаликларни табақали субсидиялаш тизимини жорий этиш;

- асаларичиликда рақамли технологияларни жорий этишни молиявий қўллаб-қувватлашга қўмаклашувчи фондларни ташкил этиш ва ривожлантириш ва бошқалар.

Ушбу ташкилий ва иқтисодий дастакларнинг ҳар бирининг амалиётдаги ўрни беқиёс бўлиб, у монографик тадқиқотларда ҳам ўзининг тасдиғини топган. Айниқса суғурталаш, имтиёзли кредитлаш, субсидиялаш

масалалари ҳамда соҳани молиялаштирадиган алоҳида жамғармаларнинг шаклланиши ўзининг ижобий таъсирини кўрсатиши таъкидланган.

Шу боис тадқиқотларимизда субсидиялаш ҳамда махсус жамғармаларни ташкил этиш ҳамда уларни молиялаштириш йўналишларига алоҳида урғу қаратган ҳолда илмий талифлар асосланган. Жумладан ҳудудларда ўтказилган сўровномалар таҳлиллари кўрсатишича бир асалари хўжалиқда ўртача 1 та павилион (32 яшиқ, 64 та оила) парваришланишини эътиборга олинса, унда камида 4 та яшиқ (12,5 фоизи) доимий назоратдаги, рақамли технология билан жихозланган бўлиши талаб этилади. Шундагина асалариларнинг кунлик ҳолатини минимал даражада реал вақт режимида мониторинг қилиш имконияти мавжуд бўлади.

Шундан келиб чиққан ҳолда асаларичилик хўжалиқлари учун рақамлаштиришга субсидия ажратишда минимал меъзон белгиланиши таклиф этилмоқда. Ушбу меъзонни минимал даражада бажарган ҳамда уни павилиондаги яшиқлар сонига мос равишда ошириб боришдан манфаатдор бўлган хўжалиқларни табақали субсидиялаш тизимини жорий этиш мақсадга мувофиқ (1-жадвал).

#### 1-жадвал

#### Рақамли технологияларни жорий этган асаларичилик хўжалиқларини субсидиялаш тизими ва унинг табақалари<sup>46</sup>

Субсидиялаш миқдори	Минимал меъзон	Табақалашган ҳолда қўлланилиши		
		Минимал талабни бажарган	30 фоизга жорий этган	50 фоизга жорий этган
БХМ нинг 5 баробари миқдорида	Жами яшиқлар сонининг 12,5 фоизида рақамли технология жорий этиш	1,0	5,0	10,0
<b>Шунингдек минтақавий, ўсимлик туридан келиб чиққан ҳолда коэффициентлар ҳам жорий этиш мумкин</b>				
Тоғ ва тоғ олди асаларичилиги учун		1,0	5,0	10,0
Пахтачилик асаларичилиги учун		1,0	8,0	12,0
Чўл ва ярим чўл асаларичилиги учун		1,5	6,5	11,0

Рақамли технологияларни жорий этган асаларичилик хўжалиқларини субсидиялашда 2023 йил ҳолатига амалиётдаги баҳодан келиб чиққан ҳолда БХМ нинг 5 баробари миқдорида субсидия ажратиш таклиф этилмоқда.

Ушбу миқдор хўжалиқда мавжуд жами яшиқлар сонининг 30 фоизида жорий этган хўжалиқлар учун 5 коэффициентга кўпайтирилиши ҳамда 50 фоизида жорий этилган бўлса 10 коэффициентда қўлланилиши мақсадга мувофиқ.

<sup>46</sup> Муаллиф томонидан таклиф этилган

Шу билан биргаликда ушбу миқдор тоғ ва тоғ олди асараричилиги учун қўлланилиб, кимёвий препаратлар таъсири юқорилигини инобатга олган ҳолда пахтачилик ҳудудларида асал етиштирадиган хўжаликлар учун мос равишда 30 фоизга 8 ҳамда 50 фоизда 12 коэффицентлар таклиф этилади.

Бозор муносабатлари шароитида хусусий секторнинг ўрни ошиб бориши табиий жараён бўлиб, давлат томонидан субсидиялаш бу дастлабки босқичларида, хўжаликларнинг оёққа туриб олиши ва янги технологияларнинг кенг тарғиб қилиниши учун хизмат қилиб, истиқболда у бозор механизмлари ёрдамида ишлаб кетиши лозим бўлади.

Бунинг учун эса ушбу технологияларни жорий этишни молиялаштирадиган тузилмалар, қўллаб-қувватлайдиган идоралар ташкил этилиши мақсадга мувофиқ. Шунинг учун тадқиқотларимизда “Асараричиликда технологик трансфер” жамғармасини ташкил этиш лозим деб ҳисоблаймиз (1-расм).



1-расм. “Асараричиликда технологик трансфер” жамғармасининг такшилий-иқтисодий муносабатлари<sup>47</sup>

<sup>47</sup> Муаллифлар томонидан ишлаб чиқилган.

Ушбу жамғарманинг мақсади асаларичилик хўжаликларида замонавий рақамли технологияларни жорий этишни молиявий қўллаб-қувватлаш, уларни имтиёзли кредитлар, янги технологияларнинг амалиётга жорий этилишига кўмаклашиш, хўжаликларнинг қизиқиш ва кўникмаларини ошириб бориш ҳисобланади.

Ушбу жамғарма ўз фаолияти жараёнида қуйидаги вазифаларни бажаради. Хусусан:

- асаларичилик хўжаликларининг моддий-техник базасини мустаҳкамлаш, рақамли технологияларни жорий этиш, ўрганиш мақсадлари учун кредит ресурсларини ажратиш ҳамда ундан фойдаланишни янада кенгайтириш;

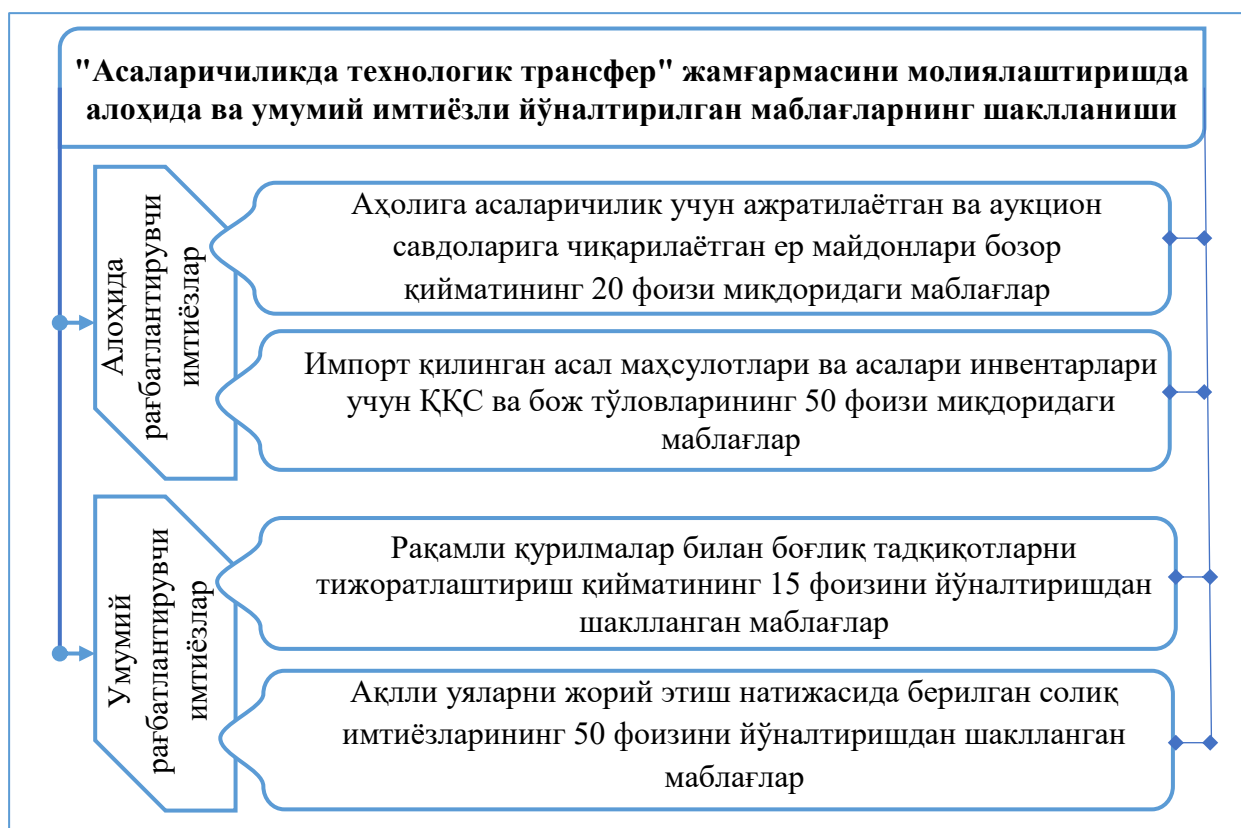
- асал етиштирувчиларнинг инновацион фаолиятини молиявий қўллаб-қувватлаш, замонавий қурилмалар яратиш, ишлаб чиқариш ва жорий этишни рағбатлантириш;

- асаларичиликни ривожлантиришга қаратилган мақсадли давлат, тармоқ ва ҳудудий дастурларни, илмий-техник лойиҳаларни молиялаштириш, шу билан биргаликда ушбу тадбирларни жорий этишда иштирок этиш;

- рақамли технологияларни жорий этишда айланма маблағларга муҳтож бўлган асал етиштирувчилар, қайта ишловчилар ҳамда хизмат кўрсатувчилар фаолиятига кўмаклашиш;

- асал ва асаларичилик маҳсулотларини ташишга мўлжалланган махсус автотранспорт воситалари, асбоб-ускуналар, қурилмалар билан таъминлаш мақсадлари учун лизинг фаолиятини йўлга қўйиш, ушбу мақсадлар учун манфаатдор томонлар билан ҳамкорлик қилишдан иборат.

Ушбу жамғарманинг молиявий ресурсларини шакллантиришда давлатнинг мақсадли ва донорлик пул маблағлари билан биргаликда алоҳида ва умумий имтиёзлар билан йўналтирилган маблағларнинг шаклланиши мумкин бўлган манбаалар таклиф этилади (2-расм).



**2-расм. "Асаларичиликда технологик трансфер" жамғармасини молиялаштиришда алоҳида имтиёзлар билан йўналтирилган маблағларнинг шаклланиши<sup>48</sup>**

Унга кўра алоҳида рағбатлантнрувчи имтиёзли маблағлар сифатида аҳолига асаларичилик учун ажратилаётган ва аукцион савдоларига чиқарилаётган ер майдонлари бозор қийматининг 20 фоизи миқдоридаги маблағлар ҳамда импорт қилинган асал маҳсулотлари ва асалари инвентарлари учун ҚҚС ва бож тўловларининг 50 фоизи миқдоридаги маблағларни йўналтириш таклиф этилмоқда.

Шунингдек, умумий рағбатлантнрувчи имтиёзли маблағлар сифатида рақамли қурилмалар билан боғлиқ тадқиқотларни тижоратлаштириш қийматининг 15 фоизини йўналтиришдан шаклланган маблағлар ҳамда ақлли уяларни жорий этиш натижасида берилган солиқ имтиёзларининг 50 фоизини йўналтиришдан шаклланган маблағлардан шаклланиши мақсадга мувофиқ.

#### **Хулоса ва таклифлар**

Хулоса қилиб айтганда, "Асаларичиликда технологик трансфер" жамғармасини ташкил этиш орқали асаларичиликни рақамлаштириш, ақлли уяларни жорий этишга хусусий секторни жалб қилиш, соҳада олиб борилаётган илмий инновацион лойиҳаларнинг якуний ишланмаларини

<sup>48</sup> Муаллифлар томонидан ишлаб чиқилган.



амалиётга жорий этиш кўламини кенгайтириш, унинг тижоратлашиш, хўжаликларнинг моддий техник ва молиявий рағбатларга эга бўлишига замин яратиб бериш, провардида эса ижтимоий (озик-овқат хавфсизлиги, илм-фан ривожини, технологик қуролланиш, кўникмаларнинг шаклланиши) ҳамда иқтисодий (юқори фойда, рақобатбардош бозор сегментига эга бўлиш, нобутгарчиликни камайтириш) каби бир қатор самараларнинг юзага келишига хизмат қилади.

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## **СОЗДАНИЕ SQL-ЗАПРОСОВ В РЕЛЯЦИОННЫХ БАЗАХ ДАННЫХ**

*Аннотация. В статье изложены методы создания SQL-запросов в реляционных базах данных. Рассмотрена реляционная модель базы данных на примере Кокандского педагогического института. Приведены примеры на составление простых запросов и подзапросов на языке SQL с помощью инструкции SELECT.*

*Ключевые слова: SQL-оператор SELECT, простые запросы, подзапросы, внутренний подзапрос, внешний запрос,*

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## **CREATING SQL QUESTIONS IN RELATIONAL DATABASES**

*Annotation. The article outlines the methods for creating SQL queries in relational databases. The relational database model is considered using the example of the Kokand Pedagogical Institute. Examples are given for compiling simple queries and sub queries in SQL using the SELECT statement.*

*Keywords: SQL SELECT statement, simple queries, sub queries, internal sub query, external query.*

В настоящее время язык SQL (Structured Query Language) является самым популярным языком баз данных. В повседневной жизни нам приходится работать с базами данных, язык SQL предназначен именно для этого. Каждый раз, когда вы выбираете имя в адресной книге электронной почты, вы обращаетесь к базе данных. И даже когда вы вставляете свою пластиковую карту в банкомат, проверка PIN кода и остатка на счете идет через базу данных[Форта2014].

Рассмотрим реляционную модель на примере Кокандского педагогического института. Начнем работу с составления реляционной концептуальной схемы.

**Под концептуальной схемой** понимается описание логической структуры всей БД. Концептуальная схема педагогического института

включает в себя 6 отношений под названиями ЗДАНИЕ, ФАКУЛЬТЕТ, ЗАНЯТИЯ, ПРЕДМЕТ, ГРУППА, ЭКЗАМЕН.

Ниже приведена реляционная концептуальная схема информационной модели педагогического института:



Реляционная БД, соответствующая данной концептуальной схеме, выглядит следующим образом:



Реляционная концептуальная схема информационной модели педагогического института изображена с помощью кластера (см.рис.1). В

этой концептуальной схеме объекты предметной области изображены в виде таблиц, которые отличаются друг от друга геометрическими фигурами или цветом.

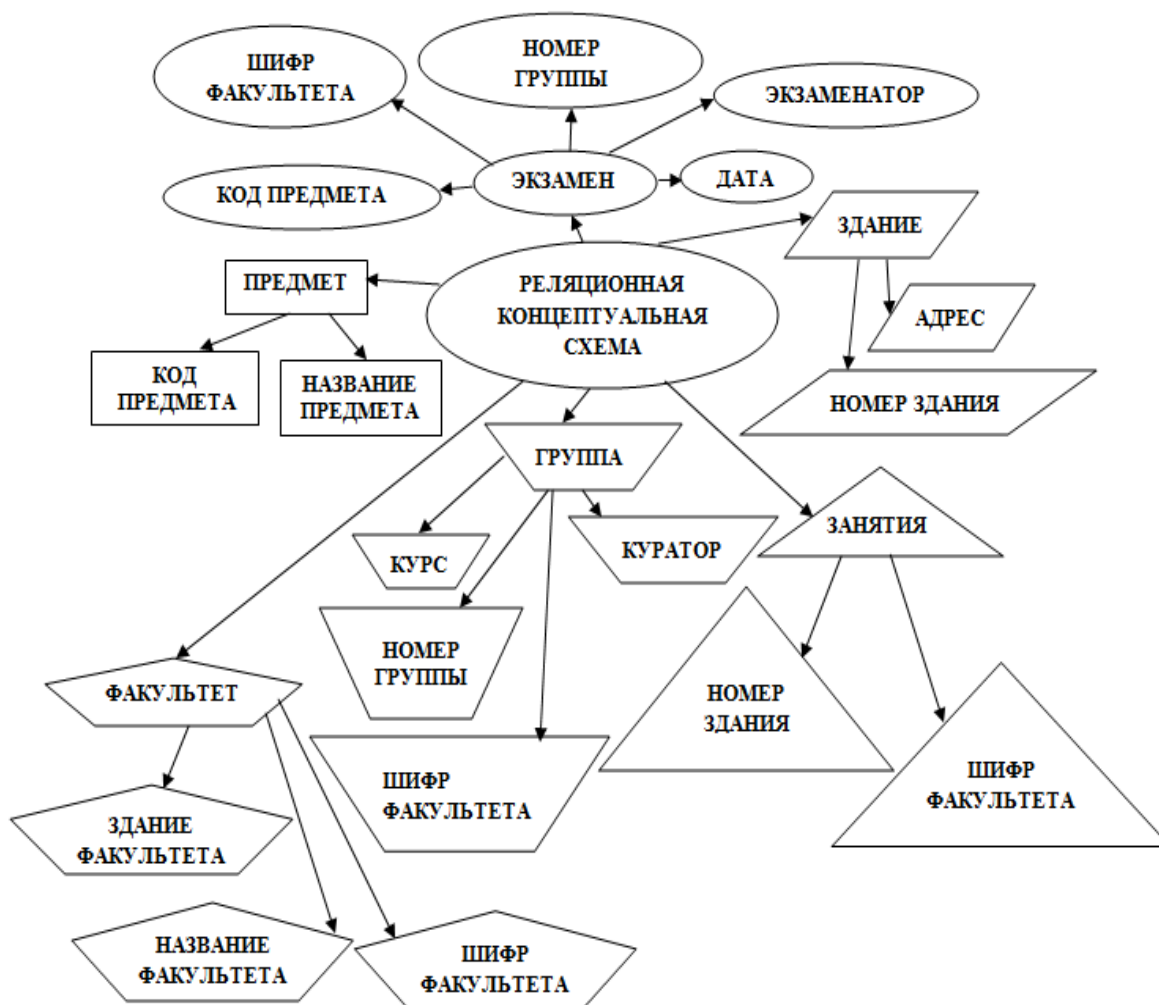


Рис.1. Реляционная концептуальная схема

Чаще всего возникает задача построения запросов на извлечение данных. Для этих целей используется SQL-оператор SELECT. Инструкция SELECT предназначена для извлечения одного или нескольких столбцов из таблицы. Чтобы при помощи инструкции SELECT извлечь данные из таблицы, нужно указать как минимум две вещи: что именно вы хотите извлечь и откуда.

Начнем с простой инструкции SELECT.

**Пример1.** Требуется получить ключи всех экзаменов, принимаемых Иномовым на факультете Ф.

```

Для решения этой задачи можно написать следующий запрос:
SELECT КОД_ПРЕДМЕТА, ШИФР_ФАКУЛЬТЕТА, НОМЕР_
ГРУППЫ
FROM ЭКЗАМЕН
WHERE ЭКЗАМЕНАТОР= 'Иномов' AND
    
```

ШИФР\_ФАКУЛЬТЕТА='Ф';

Результат данного запроса:

КОД\_ПРЕДМЕТА ШИФР\_ФАКУЛЬТЕТА НОМЕР\_ГРУППЫ

-----

Ф-2Ф4

Ф-1Ф5

Многие инструкции представляют собой простые запросы: посредством отдельных инструкций извлекаются данные из определенных таблиц. Для извлечения данных из нескольких таблиц в SQL применяются **подзапросы**: запросы, которые вложены в другие запросы.

**Пример 2.** Найти номера всех зданий, в которых могут заниматься группы второго курса:

Для решения этой задачи можно написать следующий подзапрос:

```
SELECT НОМЕР_ЗДАНИЯ
FROM ЗАНЯТИЯ
WHERE ШИФР_ФАКУЛЬТЕТА IN (SELECT
ШИФР_ФАКУЛЬТЕТА
FROM ГРУППА
WHERE КУРС =2);
```

Подзапросы всегда обрабатываются, начиная с самой внутренней инструкции SELECT в направлении “изнутри наружу”. При обработке предыдущей инструкции СУБД в действительности выполняет две операции.

Вначале она выполняет внутренний подзапрос:

```
SELECT ШИФР_ФАКУЛЬТЕТА FROM ГРУППА WHERE КУРС =2
```

Результат внутреннего подзапроса:

```
ШИФР_ФАКУЛЬТЕТА
```

-----

ФГ

Ж

Внутренний подзапрос возвращает два шифра факультета: ФГ и Ж, которые затем используются как предложение WHERE внешнего запроса в формате с разделителем в виде запятой, необходимом для оператора IN.

Теперь внешний запрос становится таким:

```
SELECT НОМЕР_ЗДАНИЯ FROM ЗАНЯТИЯ WHERE
ШИФР_ФАКУЛЬТЕТА IN (ФГ,Ж)
```

Запрос внешнего уровня возвращает искомые данные:

```
НОМЕР_ЗДАНИЯ
```

-----

1

4

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## **ВЛИЯНИЕ ПРОЦЕССОВ ВЕТРОВОЙ ЭРОЗИИ НА СЕЛЬСКОХОЗЯЙСТВЕННЫЕ КУЛЬТУРЫ**

*Аннотация. Ветровая эрозия наносит серьезный ущерб сельскому хозяйству, экономике и окружающей среде. Поэтому актуальна проблема защиты почв от ветровой эрозии и пыльных бурь.*

*Ключевые слова: эрозия, экономике, проблема, ветровой эрозии.*

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## **INFLUENCE OF WIND EROSION PROCESSES ON AGRICULTURAL CROPS**

*Abstract. Wind erosion causes serious damage to agriculture, the economy and the environment. Therefore, the problem of protecting soils from wind erosion and dust storms is urgent.*

*Keywords: Wind erosion, agriculture, economy, problem, dust storms.*

Исследования носят методический характер при разработке технологии борьбы с ветровой эрозией в условиях бесплодных почв, длительно орошаемых в Кашкадарьинской области, в борьбе с ветровой эрозией, а также в разработке технологии их воздействие на агрофизические свойства почвы, мелиорацию земель, рост, развитие и продуктивность растений проводили в соответствии с руководствами. Также в ходе исследований были изучены агрохимические и агрофизические свойства почвы, проведены фенологические наблюдения за растениями.

Необходимо подчеркнуть, что до более поздних времен окружающие леса были застроены декоративными деревьями, из-за распространения на полях сельскохозяйственных вредителей и болезней применялось много токсичных агрохимикатов. До сих пор используются в основном биологические методы, в связи с чем, учитывая полное использование земель, настало время создания экологических лесов с декоративными и плодовыми деревьями.

Учитывая это, мы провели эксперименты в условиях дефолированных бесплодных почв на территории совхоза «Сурхан»

Чиракчинского района. Пыльные бури наблюдаются в этом районе 40-60 раз в год и вызваны преимущественно ветрами, дующими с юго-запада. Скорость ветра в этом районе составляет 25-30 м/сек, иногда даже выше.

Большинство полей опытного полевого хозяйства имеют уклон с юго-востока на северо-запад, а ветер дует с севера и северо-запада. Чтобы снизить негативное воздействие дующего ветра, в качестве фона из высоких растений были выбраны подсолнухи.

Экспериментальное поле было выбрано из поля сельскохозяйственных культур, где ветер воздействует на ряды перпендикулярно.

Опыты проведены в 3-х повторностях, биометрические и фенологические наблюдения проведены на хлопчатнике и подсолнечнике. В опыте в качестве фона высаживали сорт хлопчатника «Бухоро-6» и сорт подсолнечника «Красотка».

Наблюдения за полевым опытом показали, что высота стебля подсолнечника, служившего барьером, составляла 1 июня, 1 июля, 1 августа и 1 сентября соответственно 105; 160; 200; 210 см. Высота хлопка было соответственно 42; 63; 90; 110; см.

Таблица 1

**В эксперименте были изучены следующие варианты (междурядье 90 см)**

1	Открытый грунт (контроль), всходы хлопчатника не защищены, масса хлопка	100 %
2	16 рядов хлопка, защищенные 4 рядами подсолнухов, вес хлопка	80 %
3	20 рядов хлопка, защищенные 4 рядами подсолнухов, вес хлопка	83 %
4	24 ряда хлопка, защищенные 4 рядами подсолнухов, вес хлопка	86 %

На основании полученных данных было отмечено, что ожидаемым результатом было то, что в открытом грунте возник дефицит элементов культуры типа хлопчатника, он рассыпался под воздействием жарких летних ветров, а остальные элементы культуры были принудительно открыт к 1 сентября. Отмечено, что общее количество стручков на одно растение в открытом грунте было в 2,2-3,2 меньше, чем на каждое растение в защищенном грунте.

Таблица 2

## Урожайность хлопка по вариантам на опытном поле, (ц/га)

№	Варианты	Производительность, ц/га			Дополнительный выход по сравнению с контролем, + -
		2021	2022	Средняя урожайность, ц/га	
1	Открытый грунт (контроль), всходы хлопчатника не защищены, масса хлопка	26,6	27,6	27,1	-
2	16 рядов хлопка, защищенные 4 рядами подсолнухов, вес хлопка	30,9	31,8	31,3	4,2
3	20 рядов хлопка, защищенные 4 рядами подсолнухов, вес хлопка	30,4	32,4	31,4	4,3
4	24 ряда хлопка, защищенные 4 рядами подсолнухов, вес хлопка	29,2	30,3	29,7	2,6

По данным продуктивности установлено, что защищенные кусты хлопчатника отличаются друг от друга защищенностью от сильных ветров. Например, в варианте с размещением через каждые 24 ряда 4-рядного подсолнечника с гектара самой низкой урожайности получено 2,6 ц/га прибавки. В варианте с размещением через 16 рядов урожайность хлопка составила 4,2 ц/га, в варианте с размещением через 20 рядов получено дополнительно 4,3 ц хлопка с гектара.

При этом положительном результате были повреждены листья хлопчатника при наблюдавшемся сильном ветре, предотвращено рассыпание элементов урожая, получен более высокий урожай по сравнению с открытым грунтом, в результате доказана высокая эффективность изучаемого метода. Если учесть положительное влияние этого мероприятия на плодородие почвы, пищевую ценность стеблей подсолнечника для скота, то эффективность мероприятия будет еще выше.

**По результатам эксперимента были сделаны следующие выводы и предложения:**

- в республике, особенно в Кашкадарьинской области, сильные ветры наблюдаются преимущественно в засушливые и жаркие периоды года. В это время температура воздуха высокая, а относительная влажность низкая. Ветры возникают в жаркую и влажную погоду, высушивают почвенную влагу, нарушают водный режим растений, разливают в хлопчатнике многие элементы урожая и вызывают снижение урожайности;

- эффективность временных ограждений в период вегетации зависит от их правильного размещения, особенно размещение против ветра высокоэффективно;

- если место посадки защитных культур менять каждый год в течение вегетационного периода, агрофизические и агрохимические свойства почвы улучшатся;

- ограждения защищают хлопчатник от сильных ветров в наиболее ответственный период его развития, предохраняют кусты хлопчатника от механических повреждений, сильной транспирации, не дают растениям быстро засыхать, эффективность ограждений зависит от их правильного размещения, особенно размещения перпендикулярно ветер очень эффективен;

Необходимо обратить особое внимание на толщину временных барьеров. Выращивание хлопка дает хорошие результаты на полях, где сформированы 4-рядные живые изгороди, и не вызывает неудобств при работе между посевными рядами и уборке урожая.

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**АНАЛИЗ ПРЕДОТВРАЩЕНИЕ СИЛЬНЫХ ВЕТРОВ,  
ПОВРЕЖДАЮЩИХ ПОЛЯ, И ПОВЫШЕНИЕ  
ПРОИЗВОДИТЕЛЬНОСТИ С ПОМОЩЬЮ НОВЫХ ДЕРЕВЬЕВ  
ИХОТЫ**

*Аннотация. Ветровая и почвенная эрозия наносят большой ущерб сельскому хозяйству, экономике и экологии. Поэтому проблема защиты почв от ветровой эрозии и пыльных бурь является одной из актуальных задач современности.*

*Ключевые слова: Ветровая эрозия, почвенные частицы, ускоренная эрозия, лесной покров, условия пыльных бурь, процессы дефляции, естественный дренаж, легкие и серые почвы.*

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**ANALYSIS PREVENTING HIGH WINDS DAMAGING FIELDS AND  
INCREASING PRODUCTIVITY WITH NEW TREES**

*Abstract. Wind and soil erosion cause great damage to agriculture, the economy and the environment. Therefore, the problem of protecting soils from wind erosion and dust storms is one of the urgent problems of our time.*

*Key words: Wind erosion, soil particles, accelerated erosion, forest cover, dust storm conditions, deflation processes, natural drainage, light and gray soils.*

Известно, что в Чиракчинском районе часто наблюдаются сильные ветры, в том числе пыльные бури. Благодаря легкому и незасоленному механическому составу почв, особенно бледно-серых и бесплодных, а также тому, что испаряемость в 12-15 раз превышает количество осадков, а также тому, что весной поверхность почвы открыта, при сильных ветрах почва подвергается дефляции (ветровой эрозии). В этом случае будет снесена наиболее плодородная часть почвы и сильно пострадают сельскохозяйственные культуры.

Ветровая эрозия широко распространена в большинстве регионов мира и причиняет огромные потери, в связи с чем борьба с этим бедствием является одним из приоритетных вопросов во многих странах. Этот вид

эрозии широко распространен и в Узбекистане (Центральная Фергана, Сырдарья, в приграничных с Кызылкумом районах Джизакской области, в приграничных с Каракумами районах Кашкадарьинской области, Бухарской области, Сурхандарьинской области и Бекобадском районе Ташкентской области) нанося большой ущерб к сельскохозяйственным культурам. Учитывая это, данный фактор, вызывающий процессы дефляции, в основном делится на два типа: это сильные ветры и легкость механической структуры почвы.

Если в местности сильные ветры, но состав почвы тяжелый, процессы дефляции могут происходить медленно или вообще не происходить. Причина в том, что почвы с тяжелым механическим строением содержат много пылящих, мутных коллоидных частиц, которые связывают между собой общие частицы в почве. Связывание частиц друг с другом происходит крайне медленно. Поэтому в легких почвах должен быть фактор, отделяющий частицы друг от друга. Только тогда дефляционные процессы могут не произойти или замедлиться.

Предлагаемые насаждения икоты не только улучшат состав почвы, но и послужат для контроля грунтовых вод и улучшения мелиорации земель. В частности, корни деревьев поглощают грунтовые воды и испаряют их через листья сельскохозяйственных культур. Этот процесс у растений называется транспирацией. То есть рожи икота выполняют функцию естественного дренажа, снижают уровень минерализации грунтовых вод и предотвращают вторичное засоление почвы. Предполагается также, что создание лесных насаждений улучшит общую экологическую ситуацию, а после окончания срока службы деревьев они станут ценным продуктом для заготовки древесины, дров для строительства и других сфер.

Плнтации икоты занимают всего 2,5-3,5% площади поля и позволяют повысить урожайность до 16-22%. Поэтому при этом, что самое главное, плодородие земли сохранится и при последующих урожаях.

Такие факторы, как блокировка посевной площади от ветра, перепад температур, длительное сохранение влаги в почве, создают благоприятные условия для жизнедеятельности микроорганизмов. Это, в свою очередь, создает условия для увеличения объемов и качества урожая при одновременном повышении плодородия почвы.

Ведь чем длиннее деревья в ряду, тем шире диапазон воздействия. По этой причине целесообразно создать новую систему посадки гранатовых, миндальных и финиковых деревьев из плодовых деревьев с целью предотвращения дефицита продуктов питания на примере плантаций клена, ольхи, тополя, шелковицы, ивы.

Считаю целесообразным: Определение особенностей крыльев растений разных видов, определение их геометрических размеров, а также определение расстояния между крыльями и между лесами, а также проведение экспериментальных исследований, решение вопросов



практического использования разработанных рекомендаций. по проектированию и использованию живых изгородей, необходимые экономические расчеты-выполнение книг, а также разработка и совершенствование методов защиты почвы от ветровой эрозии, научное обоснование причин ветровой эрозии и особенностей процесса.

Создание икотских рощ имеет важное значение для обеспечения плодородия почвы в сельском хозяйстве и сохранения ее высокого плодородного слоя. Одной из неотложных задач сегодняшнего дня является создание новых садов, предотвращение сильных ветров, наносящих ущерб полям, на которых засажена сельскохозяйственная продукция, в том числе рисовые культуры, выращивание высококачественных натуральных влажных фруктов с фруктовых деревьев на благо нашего народа.

В зоне легких сероземов, орошаемых под влиянием сильных ветров нашей республики, четырехрядная лесополоса, расположенная на расстоянии 200 м друг от друга, является оптимальным вариантом защиты полей, засеянных семенами.

#### **Считаем целесообразным реализовать следующее:**

- Изучить особенности возникновения ветроэрозионных процессов на примере Чиракчинского района;
- Определение оптимального значения лесных и закулисных показателей против дефляции в условиях орошаемых бледно-серых почв Чиракчинского района;
- Анализ уровня засоления почвы на практике в специальной лаборатории;
- Создание новой системы посадки 3-рядной шелковицы, тополя, миндаля и деревьев на посевных полях против них с учетом направления сильных ветров;
- Все проводимые научные исследования проводятся в полевых условиях.

В процессах ветровой эрозии экономическая эффективность противодефляционных мероприятий определяется учетом наилучшей ширины лесов (200 м), защищающей сильные посевы от воздействия сильных ветров и пыльных бурь.

Полевые эксперименты и лабораторные анализы проводятся на основании утвержденных методических указаний по проведению научно-исследовательских работ по техническим проектам.

#### **Заключение**

В крупной экономической зоне Кашкадарьинской области в качестве важных социально-экономических и экологических задач выделена разработка и совершенствование мероприятий по защите почв от ветровой эрозии, то есть от пыльных бурь. Учитывая это, аграриям рекомендуется сажать декоративные деревья, а основной задачей является защита почвы и посевов от вредного воздействия сильных ветров и пыльных бурь, в том

числе предотвращение пересадки семян в хлопковой отрасли. Кроме того, были даны разработка и совершенствование методов защиты почв от ветровой эрозии, причины ветровой эрозии и возникновения эрозионного процесса, а также особое внимание уделялось мероприятиям, проводимым на научной основе их специфических особенностей.

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## **ЯНГИ ЎЗБЕКИСТОН: ИҚТИСОДИЁТНИ ДЕМОКРАТЛАШТИРИШНИНГ БАЪЗИ БИР ЖИҲАТЛАРИ**

*Аннотация. Иқтисодиётни демократлаштириш деганда бозор билан боғлиқ ислохотларни янада чуқурлаштириш, кучли бозор инфратузилмасини яратиш, барқарор ва ўзаро мутаносиб мустаҳкам иқтисодиётнинг муҳим шарти бўлган эркин иқтисодиёт тармоқларини тезроқ жорий этиш тушинилади. Барқарор иқтисодиёт, энг аввало, жамиятдаги ялпи демократик ўзгаришларнинг асосини, ижтимоий муносабаиларнинг мазмун-моҳиятини белгилаб берадиган иқтисодиётни эркинлаштиришни тақазо этади.*

*Калит сўзлар: Янги Ўзбекистон, бозор иқтисодиёти, иқтисодиётни демократлаштириш, эркинлаштириш, хусусийлаштириш, иқтисодиётда давлат улушини камайтириш, яширин иқтисодиёт, иқтисодиётни модернизациялаш, валютани эркинлаштириш, рақобатбардошликни ошириш, монополияга қарши курашиш, давлат активлари.*

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## **NEW UZBEKISTAN: SOME ASPECTS OF DEMOCRATIC ECONOMY**

*Abstract. Democratization of the economy means deepening of market-related reforms, creation of a strong market infrastructure, faster introduction of free economic sectors, which is an important condition for a stable and mutually balanced economy. A sustainable economy, first of all, defines the basis of gross democratic changes in society, the liberalization of the economy, which determines the content and essence of social relations.*

*Key words: New Uzbekistan, market economy, democratization of the economy, liberalization, privatization, reduction of the state share in the economy, hidden economy, modernization of the economy, currency liberalization, increasing competitiveness, fight against monopoly, state assets.*

Мамлакатимиз озод ва эркин тараққиёт йўлини танлаб, демократик ҳуқуқий давлат барпо этиш орқали фуқаролик жамияти асосларини шакллантиришга интилмоқда. Ўзбекистонда демократик ўзгаришларни янада чуқурлаштириш ва фуқаролик жамияти асосларини шакллантириш

концепцияси ҳаётга изчил жорий этилаётир. Бу жамиятимизни демократлаштириш ва эркинлаштириш йўлининг, фуқаролик жамияти асосларини шакллантиришнинг яхлит дастури ҳисобланади.

Давлатимиз раҳбари Шавкат Мирзиёевнинг “Янги Ўзбекистон” газетаси бош муҳаррирининг саволларига берган жавобларида таъкидланганидек, “Янги Ўзбекистон – бу, аввало, янгича иқтисодий муносабатлар, янгича иқтисодий дунёқараш демакдир. Шу боис мамлакатимиз иқтисодиёт тизими тўлиқ қайта қурилмоқда, қанчалик оғир бўлмасин, бозор механизмларини амалда жорий этишни бошладик. Устувор вазифаларимиздан бири бўлган иқтисодий тараққиёт соҳасида ўсиш нуқталарини аниқлаш ва уларга алоҳида аҳамият қаратиш, шу тариқа Янги Ўзбекистон иқтисодиётининг рақобатбардошлигини ошириш муҳим роль ўйнайди”(1).

Устувор мақсад-вазифаларимиз бугунги кунда нималардан иборат? Уларни амалга ошириш йўллари-механизмлари қандай? Ёки иқтисодиёт соҳасидаги демократия деганда нимани тушинамиз?

Иқтисодиётни демократлаштириш деганда бозор билан боғлиқ ислохотларни янада чуқурлаштириш, кучли бозор инфратузилмасини яратиш, барқарор ва ўзаро мутаносиб мустаҳкам иқтисодиётнинг муҳим шарти бўлган эркин иқтисодиёт тармоқларини тезроқ жорий этиш тушинилади.

Барқарор иқтисодиёт, энг аввало, жамиятдаги ялпи демократик ўзгаришларнинг асосини, ижтимоий муносабаиларнинг мазмун-моҳиятини белгилаб берадиган иқтисодиётни эркинлаштиришни тақазо этади.

Иқтисодиёт соҳасини янада демократлаштириш, биринчи навбатда, давлатнинг бошқарув ролини чегаралаш, хўжалик юритувчи субъектларнинг иқтисодий эркинликларини ҳамда иқтисодиётнинг барча соҳаларида хусусий мулк миқёсларини кенгайтириш, мулкдорларнинг мавқеи ва ҳуқуқларини мустаҳкамлашга, яъни фуқаролик жамияти асосларини яратишга қаратилган.

“Биз иқтисодиётимизни модернизация ва диверсификация қилишда алоҳида аҳамиятга эга бўлган хусусийлаштириш жараёнида фақат давлат корхоналарини сотиш эмас, балки уларнинг рақобатбардошлигини ошириш, иқтисодий соҳадаги миллий манфаатларимизни мустаҳкамлашга хизмат қиладиган мутлақо янги ёндошувларни қўллашга устувор аҳамият берилмоқда”( 2 ).

Иқтисодиётдаги давлатнинг рўлини камайтириш қатор ижобий натижаларга олиб келади:

– давлат мулкани хусусийлаштиришни янада кенгайтириш ва унинг тартиб-таомилларини соддалаштириш, хўжалик юритувчи субъектларнинг устав жамғармаларида давлат иштирокини камайтириш, давлат мулки хусусийлаштирилган объектлар базасида хусусий тадбиркорликни ривожлантириш учун қулай шарт-шароитлар яратиш;

– инвестиция муҳитини такомиллаштириш, мамлакат иқтисодиёти

тармоқлари ва ҳудудларига хорижий, энг аввало, тўғридан-тўғри хорижий инвестицияларни жалб қилиш;

– мамлакатнинг ижтимоий-иқтисодий ривожланиш жараёнларини тартибга солишда давлат иштирокини камайтириш, давлат бошқаруви тизимини марказлаштиришдан чиқариш ва демократлаштириш, давлат-хусусий шерикчиликни кенгайтириш, нодавлат жамоат ташкилотлари ва жойлардаги ўзини ўзи бошқариш органларининг ролини ошириш. Умуман олганда, акциядорлик жамиятлари устав капиталида давлат улушини оптималлаштириш, хусусийлаштириш жараёнини самарали ташкил этиш мамлакатимиз иқтисодиёти барқарорлиги ва аҳоли турмуш фаровонлигини оширишни таъминлашда муҳим аҳамият касб этади.

Бугунги кунга келиб, дастлабки самаралар шундан далолат бераптики, Ўзбекистон барқарор иқтисодиётга эришишдек бош мақсадлардан бири сари амалий ишлар кўламини ошириб, аниқ натижаларни қўлга кирита бошлади.

Маҳсулотлар рақобатбардошлигини ошириш орқали хўжалик юритувчи субъектларнинг экспорт салоҳиятини юксалтириш иқтисодий соҳада амалга оширилаётган демократик ислохотларнинг устувор йўналишларидан биридир. Ҳозирги кунда ташқи иқтисодий алоқаларнинг сон ва сифат жиҳатидан ўсиши, экспорт қилинадиган маҳсулотлар тури ва географиясини диверсификация қилиш, экспорт фаолиятига янги корхоналарни жалб қилиш бу жараёнларни ҳар томонлама чуқур ўрганишга янада юксак талаблар қўймоқда.

Иқтисодиётни демократлаштириш, монополияга қарши бошқарувнинг объектив зарурлигини изоҳлашда миллий иқтисодиёт янги моделини шакллантиришга йўналтирилган Ҳаракатлар стратегиясининг моҳият ва мазмуни янги қадам бўлди. Чунончи, унинг учинчи босқичи бўлган 2019 йилда бажариладиган ишларнинг хусусиятлари 2018 йил 28 декабрда тақдим этилган Мурожаатноманинг 1 мақсад вазифаларида ўз аксини топди. Масалан, эътиборни Мурожаатномадаги қуйидаги фикрларга қаратайлик: “...Бизнинг мақсадимиз – ўтган бир йиллик тараққиёт йўлимизни холисона ва танқидий баҳолашдан иборат... Барчамизга аёнки, ислохот - бу янгиланиш, ўзгариш дегани. Ислохотлар ижобий натижа бериши учун, аввало, раҳбарларимиз ва одамларимиз ўзгариши керак. Инсон ўзгарса, жамият ўзгаради. Бу мақсадга эришиш учун биринчи навбатда, барча даражадаги раҳбарлар ва халқ депутатлари, барча етакчилар ўз фаолиятини танқидий таҳлил, қатъий тартиб интизом ва шахсий жавобгарлик асосида ташкил этишларини бугун ҳаётнинг ўзи талаб этмоқда. Замонавий, оқилона бошқарув механизмининг жорий этиш – олдимизга қўйган вазифаларни бажаришнинг асосий шартидир”.

Монополияга қарши курашиш фаолиятининг янги юқори босқичга олиб чиқишда Мурожаатномада баён этилган қолган қуйидаги масалаларнинг амалга оширилишининг ҳам инobatга олиш талаб этилади:

**биринчидан**, иқтисодиётда давлат ролини камайтириш, хусусий секторни жадал ривожлантириш орқали янги иш ўринларини кўпайтириш;

**иккинчидан**, иқтисодиётни модернизация ва диверсификация қилиш, меҳнат унумдорлигини ошириш орқали юқори иқтисодий ўсишни таъминлаш;

**учинчидан**, “яширин” иқтисодиётга қарши курашиш, унинг ҳажмини кескин камайтириш;

**тўртинчидан**, валютани эркинлаштириш сиёсатини изчил давом эттириш, барқарор монетар сиёсатни амалга ошириш;

**бешинчидан**, иқтисодиётни ривожлантиришга доир стратегик вазифаларни рўёбга чиқаришга қодир малакали кадрларни тайёрлаш.

Монополияга қарши бошқарувнинг ташкилий-иқтисодий жиҳатларини ўзлаштиришнинг негизини товар ва молия бозорларида рақобат механизмининг барқарор ишлашига тўсқинлик қиладиган, чекланишига олиб келадиган ёки олиб келиши мумкин бўлган мулкий муносабатларни ифодаловчи ҳаракатлар ташкил этади.

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## **КОРОНАВИРУС ИНФЕКЦИЯСИДАН КЕЙИНГИ НЕВРОЛОГИК АСОРАТЛАР ТАШХИСОТИ**

*Sars-Cov-2* вируси келтириб чиқарадиган янги коронавирус инфекцияси сўнги пайтларда тиббиёт ҳамжамиятида энг кўп муҳокама қилинадиган мавзулардан биридир. Касаллик ва унинг оқибатлари турли мутахассисликлар, жумладан, неврология вакиллари учун кўплаб қийинчиликларни келтириб чиқарди. Хозирги вақтгача давом этаётган пандемия фонида COVID-19 билан боғлиқ турли хил неврологик касалликлар нафақат яқиндан ўрганиш мавзусига айланди, балки энг долзарб тиббий ва ижтимоий муаммолардан бири бўлиб қолмоқда.

Жаҳон миқёсида коронавирус инфекциясининг ўткир даврда ва кейинги доимий узоқ муддатли неврологик оқибатларга бағишланган турли хил неврологик касалликлар бўйича янги илмий тадқиқотлар тобора кўпайиб бормоқда. Шунга қарамай ушбу бузилишларнинг шаклланиш механизмлари тўлиқ ёритилмаган ва кузатув муддати нисбатан қисқа бўлган бўлсада, ҳозирги вақтда COVID-19 билан касалланган ва узоқ вақт давом этадиган доимий неврологик касалликларни ривожлантирадиган беморлар тўғрисида катта миқдордаги маълумотлар тўпланган. [1]. Ушбу ҳолатларни ҳисобга олган ҳолда, коронавирус инфекциясидан кейин асаб тизимининг шикастланиш хусусиятларини ўрганиш мақсадга мувофиқдир.

*Калит сузлар: коронавирус, COVID-19, неврологик асоратлар.*

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## **DIAGNOSIS OF NEUROLOGICAL COMPLICATIONS AFTER CORONAVIRUS INFECTION**

*The novel coronavirus infection caused by the SARS-Cov-2 virus is one of the most discussed topics in the medical community in recent times. The disease and its consequences presented many difficulties for representatives of various specialties, including neurology. Against the background of the pandemic that has been going on until recently, various neurological diseases associated with*

*COVID-19 have not only become the subject of close study, but also remain one of the most pressing medical and social problems.*

*On a global scale, there is an increasing number of new scientific studies on various neurological diseases, focusing on the acute period of coronavirus infection and the subsequent permanent long-term neurological consequences. Despite this, the mechanisms of the formation of these disorders have not been fully covered, and although the duration of observation is relatively short, a large amount of data has been collected on patients currently infected with COVID-19 and developing persistent neurological diseases that last a long time. [1]. Taking into account these cases, it is advisable to study the features of damage to the nervous system after coronavirus infection.*

*Key words: coronavirus, COVID-19, neurological complications.*

**Тадқиқотнинг мақсади** касалхонага мурожат қилган янги коронавирус инфекцияси бўлган беморларда неврологик касалликларнинг хусусиятларини ўрганиш.

**Тадқиқот материаллари ва усуллари** тадқиқот Андижон давлат тиббиёи институти клиникасининг неврология бўлимларида 2021-2022 йилларида даволанган COVID -19 касаллигига чалинган 30 нафар, 18-56 ёшгача бўлган беморлар. Истисно тариқасида ўткир сурункали касалликларнинг мавжудлиги, сил касаллиги ва пневмофиброз, инсон иммунитет танқислиги вируси, юрак нуқсонлари, сурункали гепатит билан кечадиган бошқа касалликлар; COVID -19 намоён бўлишидан олдин ўткир цереброваскуляр ҳодисалар ва марказий асаб тизимининг бошқа касалликлари мавжудлиги бўлган. Тадқиқотда 30 та бемор, 18 ёшдан 78 ёшгача (ўртача ёш 43,1 ёш), улардан 76,7% аёллар ва 23,3% эркаклар эди. Олинган натижаларни объективлаштириш учун асосий гуруҳ беморлари билан асосий хусусиятлари (жинси, ёши, бирга келадиган патологияси) бўйича таққосланадиган таққослаш гуруҳи (совид-19 тарихи бўлмаган 20 kishi) кузатилди.

Неврологик ҳолатни тўлиқ баҳолаш учун чуқурлаштирилган неврологик текширув ўтказилди, шунингдек неврологик шкалалар, тестлар ва анкеталар қўлланилди. Беморнинг аҳолини бундай баҳолаш субъектив кўрсаткичларни (биринчи навбатда шикоятлар) максимал даражада объективлаштиришга ва келажакда ўзгаришлар динамикасини батафсил кузатишга имкон берди.

**Тадқиқот натижалари ва муҳокамаси**

COVID -19 ташхиси билан оғриган беморларнинг неврологик ҳолатини баҳолашда касалхонадан чиққандан 3 ой ўтгач қуйидаги касалликлар аниқланди.

1. 42 (25%) беморда енгил ва ўртача даражадаги когнитив касалликлар борлиги аниқланди. Таққослаш гуруҳида 2 (8%) субъектга енгил когнитив бузилиш ташхиси қўйилган. Шу билан бирга, беморлар асосан хотира

бузилиши, сўзларни танлашдаги қийинчиликлар, ёзишдаги қийинчиликлар (харфларни қайта тартибга солиш ва бошқалар) ҳақида шикоят қилдилар.); ушбу шикоятларнинг пайдо бўлиши касалликнинг ўткир даврига тўғри келди.

2. Уйқу бузилишларининг намоён бўлиши кузатилган – беморларнинг 55,6% да симптомларнинг пайдо бўлиши ёки кучайиши вақти касалликнинг ўткир даврига тўғри келди ва сўнгги 3 ой ичида давом этди.

3. Турли даражадаги депрессия белгилари 38% субъектларда топилган (аёлларда устунлиги билан – 83%); таққослаш гуруҳида 12% одамда енгил ва ўртача депрессив касалликлар аниқланган.

4. Асосий гуруҳнинг 88% беморларида ва таққослаш гуруҳининг 24% беморларида ташвиш даражасининг ошиши аниқланди.

5. 56% беморда қўлланилган шкалалар бўйича турли оғирликдаги астения ҳодисалари кузатилган. Таққослаш гуруҳида астеник симптомлар мажмуаси 24% (6 kishi) ҳолларда аниқланган.

6. Вегетатив дисфункция белгилари илгари мавжуд бўлган белгиларининг бошланиши ёки ёмонлашиши асосий гуруҳнинг 64% нафарида ва таққослаш гуруҳининг 12% беморларида кузатилган.

7. Енгил вестибуляр касалликлар текширилган беморларнинг 62% ва таққослаш гуруҳининг 16% да аниқланган.

Шунингдек, беморларни йил давомида кузатиш тахлили шуни кўрсатдики, COVID-19 билан касалланган 3% беморларга неврологик статусда окуломотор бузилишлар, ва 10% беморларда ҳали ҳам ҳидлаш дисфункцияси сақланиб қолган.

Сўнгги вақтларда коронавирус инфекциясининг узоқ муддатли оқибатлари тўғрисида илмий нашрлар тобора кўпайиб бормоқда. Бу асоратлар касаллик намоён бўлгач 12 ҳафтадан кўпроқ вақт давомида кузатилади, шу сабабли ушбу ҳолат ХКК-10 да муҳокама этилиб расмий касаллик мақомини олди ва халқаро касалликлар таснифига киритилди.

Постковид синдромининг белгиларини бир неча гуруҳларга бўлиш мумкин.

1. Жисмоний фаоллик толерантлигининг кескин пасайиши (ҳатто оз миқдордаги фаоллик ҳам беморнинг тўлиқ чарчашига олиб келганда); ҳаётий фаолият ритмларининг бузилиши (уйқусизлик, ҳаддан ташқари уйқучанлик ривожланиши билан, уйқу инверсияси (кечаси уйғониш, кундузи ухлаш)); мушак оғриғи.

2. Психоэмоционал муаммолар: депрессия (коронавирус билан касалланган беморларнинг кўпчилигида кайфият пасайган, улар узоқ вақт давом этиши мумкин бўлган тушкунлик, депрессия, меланхолияни ривожлантиради); беқарор ҳиссий ҳолат (кайфиятнинг кескин ўзгариши, ўзини паст назорат қилиш билан намоён бўлади); ваҳима ҳужумлари (беморлар руҳий тушкунлик ҳужумларини тасвирлайди). юқори қон босими, бўғилиш, кўнгил айнаш, бош айланиши билан биргаликда кучли

ташвиш). Коронавирустан кейин психоэмоционал ҳолатнинг жиддий бузилиши ўз жонига қасд қилиш натижаси билан яқунланган ҳолатлар тасвирланган.

3. Нафас олиш тизимидаги асоратлар (ўткир даврда нафас олиш бузилиши бўлмаган беморларда ҳам ривожланиши мумкин): ҳаво етишмаслиги ҳисси, кўкрак қафасидаги сиқилиш, бронхоспазмлар. Ушбу аломатлар бир неча кундан бир неча ойгача давом этиши мумкин.

4. Юрак-қон томир тизимидаги асоратлар. Ҳар бешинчи беморда коронавирус инфекцияси қон босимининг ўзгаришига, юрак ритмининг бузилишига ва ўткир ёки сурункали юрак етишмовчилигининг ривожланишига олиб келиши мумкин.

5. Бошқа органлар ва тизимларнинг асоратлари (ошқозон-ичак трактининг бузилиши, сийдик тизимининг яллиғланиш жараёнлари, ҳайз даврининг бузилиши, эндокрин касалликлар, аллергия реакциялар).

6. Асаб тизимининг асоратлари.

Неврологик асоратлар куйидагилар билан ифодаланади: кучли бош оғриғи (мигрен каби доимий ёки пароксизмал); тана харорати бошқарувининг бузилиши (узоқ муддатли субфебриллик ёки гипотермия, титроқ, айниқса кечкурун; кўриш бузилиши (кўз олдида қора доғлар шаклида, лойқа кўриш, фотофоби); парестезия; ҳиднинг бузилиши бўлиши мумкин.

Умуман олганда, инсон ҳужайраларига SRS-Cov-2 тропизми нейронлар, эпителия ҳужайралари, эндотелиоцитлар, нафас олиш эпителийси, ўпка паренхимаси, буйрақлар ва ингичка ичак томонидан ифодаланган ангиотензинга айлантурувчи фермент 2 (ААФ2) рецепторлари томонидан таъминланади. [7, 8]. Вируснинг Марказий асаб тизимида таъсир қилишнинг бир неча йўли мавжуд. Улардан бири ААФ2 рецепторлари [2, 9, 10] ёрдамида мия тўқималарига бевосита вирусли таъсир кўрсатиб, ғалвирсимон пластинка орқали марказий асаб тизимида ўтувчи аксонлар бўйлаб етиб боради. Қон-мия йўли-шикастланган қон томир эндотелийси ёки оқ қон ҳужайралари миграцияси орқали қон-мия тўсиғи орқали қон оқими билан вирусли заррачаларнинг кириб боради [9, 10]. Марказий асаб тизимидаги ААФ 2 рецепторларининг асосий қисми қон томирлари эндотелиясида жойлашганлиги сабабли, SARS-Cov-2 нинг эндотелиал ҳужайраларга кириб бориши кичик ва катта мия томирларининг васкулитининг ривожланиши билан характерли гипериммун жавобни келтириб чиқаради [5]. Шунингдек, у янги коронавирус инфекциясининг оғир кечишида юзага келадиган марказий асаб тизимида кўпроқ билвосита зарар етказиш сабаблари кардиоген мия ярим шарлари ишемияси, коагулопатиялар, септик шок, юқори дозали стероидларни, турли қон томир дориларни, яллиғланиш каскадининг турли қисмларига йўналтирилган дори воситаларининг узоқ муддат қўллаш марказий асаб тизимидаги қон оқимида

фаол таъсир қилувчи ва метаболизмга бевосита ёки билвосита таъсир қилувчи омиллардир.

Шундай қилиб, вируснинг асаб тизимига таъсир қилиш эҳтимоли исботланган, ammo постковид синдромнинг неврологик кўринишларининг хусусиятлари ҳали ҳам аниқланиши керак. Касалликнинг енгил ёки симптомларсиз кечиши бўлган беморларда постковид синдромининг аниқ намоён бўлишини шакллантириш масаласи ноаниқ бўлиб қолмоқда.

Бизнинг тадқиқотимизда олган натижалар ушбу соҳадаги мавжуд тадқиқотлардан бироз фарқ қилади. Шундай қилиб, COVID -19 нинг узок муддатли таъсири кўра, уйку бузилиши сезиларли даражада камроқ тарқалган (субъектларнинг 26% да) ва депрессия белгилари (23% да), астения ва когнитив бузилиш ҳолатлари еса 63% ва 30%, нисбатан [12, 13]. Бу, эҳтимол, беморларни ўрганиш учун жалб қилишнинг ўзига хос хусусиятлари, шунингдек танланган диагностика тестларининг турли сезгирлиги ва ўзига хослиги билан боғлиқ бўлди. Хид бузилиши ва қувватсизликлар COVID -19 чалингандан кейин 6 ой ёки ундан кўп вақт оралиғида беморларнинг 19% да кузатилди ва бу Европа шифохоналардаги реестр маълумотлари билан мос келди. Бизнинг тадқиқотларимиз, албатта, баъзи чекловларга эга, сабаби олинган натижалар COVID-19 пневмониясидан омон қолган барча беморларда неврологик оқибатларни акс еътирмайди, чунки намуна фақат текширувдан ўтишга рози бўлган беморлардан иборат эди.

**Хулоса** қилиб айтганда янги коронавирус инфекциясидан кейин неврологик асоратлар жуда кенг тарқалган ва касалликдан кейин узок вақт давом этади. Шунини таъкидлаш керакки, беморларни батафсил сўроқ қилишда, ҳатто енгил объектив ўзгаришлар ҳам касалликдан олдинги даврга нисбатан кундалик одатий шароитларда нотўғри мослашишга олиб келиши аниқланди.

Ушбу тадқиқот ўпканинг шикастланиши бўлмаган янги коронавирус инфекциясининг асаб тизимига таъсири нуқтаи назаридан оқибатларини ўрганишнинг биринчи босқичидир. Шундай қилиб, бугунги кунда янги коронавирус инфекциясининг ўткир даврида неврологик касалликлар билан боғлиқ кўплаб тадқиқотлар мавжудлигига қарамай, узок муддатли неврологик асоратлар ҳали яхши тавсифланмаган ва ўрганилмаган [15]. Ушбу хусусиятларни ўрганиш, шунингдек, пост-ковид синдромининг неврологик кўринишларининг ривожланиши билан боғлиқ омилларни аниқлаш, пост-ковид неврологик касалликларнинг қулай ва ноқулай натижаларини башорат қилиш нафақат янги патологик ҳолат ҳақидаги тушунчани кенгайтиради, балки даволаш ва профилактика чоралари тизимини ишлаб чиқиш учун бизга ҳам имкон беради.

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## **ОРГАНИЗАЦИОННО-ЭКОНОМИЧЕСКАЯ ХАРАКТЕРИСТИКА LUCKIN COFFEE (瑞幸咖啡)**

*Аннотация. Статья посвящена организационно-экономической характеристике компании "Luckin Coffee (瑞幸咖啡)" - одной из ведущих сетей кофеен на китайском рынке. В статье представлен анализ организационной структуры компании. Статья позволяет получить полное представление о структуре и функционировании "Luckin Coffee" и предоставляет информацию о ключевых аспектах бизнеса этой компании.*

*Ключевые слова. Luckin Coffee, кофейня, организационная структура, персонал, финансовая деятельность, конкурентные преимущества, рынок кофе, Китай.*

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## **ORGANIZATIONAL AND ECONOMIC CHARACTERISTICS OF LUCKIN COFFEE (瑞幸咖啡)**

*Abstract. The article is devoted to the organizational and economic characteristics of the company "Luckin Coffee (瑞幸咖啡)" - one of the leading chains of coffee shops in the Chinese market. The article presents an analysis of the company's organizational structure. The article allows you to get a complete understanding of the structure and functioning of Luckin Coffee and provides information about the key aspects of the company's business.*

*Keywords. Luckin Coffee, coffee shop, organizational structure, personnel, financial activities, competitive advantages, coffee market, China.*

В мире кофейной индустрии происходят значительные изменения, и Китай не остался в стороне от этой глобальной тенденции. Одной из наиболее выдающихся и успешных компаний, активно внедряющих инновации в китайском кофейном рынке, является "Luckin Coffee (瑞幸咖啡)". Начав свою деятельность всего лишь несколько лет назад, "Luckin Coffee" быстро достигла статуса одной из ведущих сетей кофеен в Китае и начала конкурировать с мировыми гигантами, такими как Starbucks.

Цель данной статьи - предоставить организационно-экономическую характеристику "Luckin Coffee", рассмотрев основные аспекты её деятельности. Компания "Luckin Coffee" является примером успешного стартапа, который смог изменить ландшафт кофейного рынка Китая, предлагая потребителям не только высококачественный кофе, но и новый способ его приобретения.

Компания Luckin Coffee, основанная в октябре 2017 года, стала одним из самых ярких примеров смелого вхождения в мировой рынок кофейных сетей. С первыми открытиями кафе в Пекине и Шанхае в январе 2018 года, компания начала свой путь к завоеванию сердец и желудков китайских потребителей, хотя их путь к успеху и скандальная история развития не остались незамеченными.

Уже в июле 2018 года, Luckin Coffee смогла привлечь значительные инвестиции в размере 200 миллионов долларов от GIC (Сингапур), Centurium Capital и Joy Capital, что позволило им активно развиваться и конкурировать на рынке кофе и кофе в Китае. В сентябре того же года, они объявили о стратегическом сотрудничестве с китайским интернет-гигантом Tencent, что только усилило их позиции в мире китайской гастрономии и кофейных напитков. Начиная с 2019 года, Luckin Coffee пережила экспоненциальный рост. К концу года они уже насчитывали около 4,5 тысяч торговых точек по всему материковому Китаю, что позволило им опередить Starbucks, британскую сеть кофеен Costa Coffee и стать серьезным конкурентом американскому гиганту Starbucks.

В мае 2019 года компания провела успешное IPO на бирже NASDAQ, привлекая в ходе этой операции 561 миллион долларов, данный финансовый успех подтверждал их амбициозные планы и амплитуду роста, которую они продемонстрировали в китайской кофейной индустрии, хотя весной 2020 года Luckin Coffee оказалась в центре финансового скандала, который встрепетул инвесторов и обозревателей. Обвинения в фальсификации доходов и расходов стали серьезным ударом по репутации компании. Дополнительно, стало известно, что оптовыми покупателями продукции Luckin Coffee оказались фирмы, связанные с совладельцем компании Чарльзом Лу, данный скандал привел к приостановке торгов акциями компании в апреле 2020 года и их исключению из листинга NASDAQ в июне того же года, получается что, ценные бумаги Luckin Coffee перестали торговаться на одной из крупнейших бирж США. Чтобы справиться с последствиями скандала и восстановить доверие инвесторов, компания приняла существенные изменения в своем руководстве. Основателя компании Чарльза Лу сменил на посту председателя правления Цзинь Го, это решение было важным шагом в направлении восстановления доверия к компании.

Итак, история компании Luckin Coffee - это история амбициозного вхождения на рынок кофейных сетей, стремительного роста, финансового скандала и последующей реорганизации. Компания привлекла множество

внимания как благодаря своим достижениям, так и благодаря проблемам, которые ей пришлось решать. В будущем будет интересно следить за развитием Luckin Coffee и тем, какие уроки могут быть извлечены из ее опыта.

История Luckin Coffee после финансового скандала весной 2020 года превратилась в удивительную историю восстановления и роста. Сентябрь 2020 года ознаменовался штрафом в размере 61 миллиона юаней, наложенным Государственным управлением по регулированию рынка Китая за нечестную конкуренцию. Компания также столкнулась с дополнительными обязательствами перед Комиссией по ценным бумагам и биржам США, обязавшей их выплатить 180 миллионов долларов в связи с обманом инвесторов. Следствием этого стало заявление о банкротстве, поданное Luckin Coffee в феврале 2021 года в Соединенных Штатах.

Однако компания не осталась в пустоте, стремясь уйти от исков кредиторов и справиться с финансовыми проблемами. Декабрь 2021 года принес разрешение федерального судьи Манхэттена на реструктуризацию долга на сумму 460 миллионов долларов и урегулирование ряда коллективных исков инвесторов, данный шаг позволил компании восстановить свои финансовые позиции и вернуться на путь роста.

Весной 2022 года, после успешного завершения реструктуризации долга в соответствии с американским законодательством, Luckin Coffee начала новый этап своего пути. Компания реорганизовала свое высшее руководство, что способствовало укреплению ее позиций, данный период также сопровождался значительным ростом акций, и рыночная капитализация Luckin Coffee достигла впечатляющей отметки в 4,4 миллиарда долларов. В начале 2023 года Luckin Coffee демонстрировала впечатляющие показатели своего развития. Более 9,35 тысячи точек продаж, включая как собственные, так и франчайзинговые, а также впечатляющий рост выручки на 84,5% по сравнению с предыдущим годом, свидетельствовали о восстановлении бренда в глазах потребителей. Особенно обнадеживающим было среднее количество клиентов, совершающих ежемесячные покупки, которое составило 29,5 миллиона человек, что представляло рост на 84,6%.

Март 2023 года принес новые достижения для компании, когда Luckin Coffee вышла за пределы Китая, открыв кафе в Сингапуре, данный шаг был важным моментом в стратегии мирового расширения. К июню 2023 года общее количество торговых точек Luckin Coffee достигло внушительной отметки в 10 000, что свидетельствует о их стремлении охватить новые рынки и нарастить свою глобальную присутствие.

Организационная структура компании Luckin Coffee играет важную роль в ее функционировании и развитии. С учетом успеха и вызванных скандалами вызовов, структура была подвергнута изменениям и реорганизации, чтобы обеспечить эффективное управление и восстановление доверия инвесторов. Давайте рассмотрим организационную структуру этой компании более подробно:

Вплоть до финансового скандала весной 2020 года, Чарльз Лу был основателем и главным исполнительным директором (СЕО) компании, но в ходе реструктуризации и после согласия на выплату штрафов и компенсации инвесторам, Чарльз Лу был смещен с поста главного исполнительного директора, и на его место пришел Цзиньи Го, это изменение в верхнем руководстве было важным шагом в направлении восстановления репутации и доверия к компании.

Dr. Jinyi Guo - Глава Совета директоров, Генеральный директор и Со-председатель Комитета по устойчивому развитию Luckin Coffee. Доктор Гуо окончил университет Бейцзин Цзяотунг, получив степень доктора философии по планированию и управлению транспортом, он также имеет опыт работы в Министерстве транспорта Китая и в компании UCAR Inc. После назначения на пост Председателя и Генерального директора компании, Доктор Гуо приложил максимум усилий к укреплению корпоративного управления и внутреннего контроля, его целью является содействие комплексному улучшению Luckin Coffee в стратегическом, операционном и управленческом планах, а также в механизмах управления и организационной культуре.

Wenbao Cao - Старший вице-президент и исполнительный директор Luckin Coffee. Мистер Цао отвечает за операции компании, включая управление точками продаж, строительство, развитие и обслуживание клиентов. Перед вступлением в компанию, мистер Цао имел более чем 23-летний опыт работы в компании McDonald's China, его вхождение в компанию принесло ценный опыт в операционном управлении в Luckin Coffee.

Weihao (Michael) Chen - Неисполнительный директор, Председатель Комитета по номинациям и корпоративному управлению и Со-председатель Комитета по устойчивому развитию Luckin Coffee, он также является управляющим директором и членом инвестиционного комитета компании Centurium Capital. Мистер Чен является членом Ассоциации сертифицированных государственных аудиторов (АССА) и имеет опыт работы в компаниях Warburg Pincus и Crescent Advisors China, а также в Morgan Stanley Asia Limited и Accenture Consulting Co Limited, он также является директором компании ANE (Cayman) Inc. и председателем ее Комитета по вопросам экологии, социальной ответственности и управления.

Jun Liu - Неисполнительный директор и Управляющий директор Centurium Capital. Мистер Лю обладает степенью доктора юридических наук (J.D.) от университета Вандербилта, он также имеет обширный опыт работы, включая должности Старшего вице-президента в Warburg Pincus и Исполнительного директора в Goldman Sachs в Гонконге. Мистер Лю работал юристом в Cahill Gordon & Reindel LLP в Нью-Йорке и O'Melveny & Myers LLP в Пекине, он имеет лицензию на практику права в Китае и штате Нью-Йорк, а также обширный опыт в области корпоративного управления и управления рисками.

В рамках организационной структуры Luckin Coffee, филиалы и подразделения компании играют важную роль в обеспечении ее оперативной деятельности, это подразумевает собственные точки продаж, франчайзинговые кафе и другие объекты. Как любая крупная компания, Luckin Coffee имеет специализированные подразделения, ответственные за финансовое планирование, бухгалтерию и юридические вопросы, данные отделы обеспечивают соответствие компании законодательству и регулированию, а также управляют финансами и финансовыми отчетами.

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## **ФИНАНСОВЫЙ АНАЛИЗ КОМПАНИИ LUCKIN COFFEE (瑞幸咖啡)**

*Аннотация.* Данная статья представляет собой финансовый анализ компании Luckin Coffee (瑞幸咖啡), крупнейшей сети кофеен в Китае. Анализ охватывает ключевые аспекты финансовой устойчивости, эффективности операций и стратегического положения компании. В статье также рассматриваются факторы, влияющие на финансовое состояние компании, а также перспективы ее развития. Этот анализ может быть полезным для инвесторов, аналитиков и студентов, интересующихся финансами и стратегическим управлением.

*Ключевые слова.* Luckin Coffee, финансовый анализ, финансовая устойчивость.

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## **FINANCIAL ANALYSIS OF LUCKIN COFFEE COMPANY (瑞幸咖啡)**

*Abstract.* This article is a financial analysis of Luckin Coffee (瑞幸咖啡), the largest coffee chain in China. The analysis covers key aspects of the company's financial strength, operational efficiency and strategic position. The article also discusses the factors influencing the financial condition of the company, as well as the prospects for its development. This analysis may be useful for investors, analysts, and students interested in finance and strategic management.

*Keywords.* Luckin Coffee (瑞幸咖啡), The financial analysis, Financial stability.

В мире быстро меняющихся рынков и глобальной конкуренции, финансовый анализ компании становится ключевым инструментом для инвесторов, аналитиков и управляющих. Одной из компаний, которая привлекла внимание мирового сообщества своим быстрым развитием и амбициозными планами, была китайская корпорация Luckin Coffee, или 瑞幸咖啡 в китайском языке. Учрежденная всего несколько лет назад, эта компания стремительно ворвалась на рынок кофейных напитков и заявила о своих амбициях стать одним из мировых лидеров в этой отрасли. Однако, как



говорится, дьявол всегда кроется в деталях, и внимательный финансовый анализ компании Luckin Coffee может помочь нам понять, насколько оправданы её амбиции и какие риски могут возникнуть в будущем.

К 2025 году Китай станет крупным потребителем кофе на триллионном рынке. Основатель компании Циань Чжия заявляет, что у компании достаточно наличных средств, около 2 миллиардов юаней, и планирует расширить сеть магазинов до 4 500 в 2019 году. После внедрения интернета в кофейную индустрию весь рынок переходит на новый этап, и китайский рынок массового потребления кофе становится более зрелым. Согласно данным, продажи кофе в Китае ожидаются значительным ростом в ближайшие годы. По прогнозам Luckin Coffee в отчете о развитии рынка кофе в Китае на 2019 год, если Luckin сможет продать 440 миллионов чашек кофе в 2019 году, это сравнимо с текущими годовыми продажами Starbucks в 400 миллионов чашек. В 2021 году компания достигнет прибыльности с чистой прибылью, и можно использовать PE-значение (28-50) для прогнозирования стоимости, и у нее будет относительно полный и вероятный диапазон стоимости от 1,9 миллиарда до 46,2 миллиарда долларов после размещения на бирже Nasdaq. Luckin Coffee имеет определенные преимущества в обновлении потребительского рынка Китая и концепции мобильного интернета. Компания может расширить рынок благодаря капитальным преимуществам после размещения акций, снизить расходы и увеличить доходы благодаря масштабным преимуществам. Эксперты считают, что с точки зрения капитала, отрасли и потребительского спроса модель прибыли, модель управления и способность к устойчивому развитию Luckin все еще обещают большие перспективы. о важности качественного продукта как отправной точке для всех бизнес-моделей.

Финансовая деятельность компании Luckin Coffee в третьем квартале 2023 года представляет собой впечатляющую картину успешного роста и развития. Давайте подробно рассмотрим основные моменты этого периода:

Общая выручка компании в третьем квартале составила 7,200 миллионов юаней (примерно 986.8 миллионов долларов США), что представляет собой увеличение на 84.9% по сравнению с аналогичным периодом 2022 года, это внушительный рост, который свидетельствует о успешной стратегии компании.

Компания продолжает активно расширяться, открывая 2,437 новых точек продаж в течение третьего квартала, что подразумевает 11 новых магазинов в Сингапуре, данный рост составил 22.5% по сравнению с числом магазинов в конце второго квартала 2023 года, достигнув общего числа в 13,273 магазинов, включая 8,807 собственных магазинов и 4,466 партнерских магазинов.

Среднее количество активных клиентов в третьем квартале составило 58.5 миллионов, что представляет собой увеличение на 132.9% по сравнению

с аналогичным периодом 2022 года, что говорит о значительном росте клиентской базы.

Выручка от собственных магазинов в третьем квартале составила 5,141 миллионов юаней (примерно 704.6 миллионов долларов США), что представляет собой увеличение на 79.3% по сравнению с аналогичным периодом 2022 года, данный рост отражает успешные операции в собственных магазинах компании.

Рост продаж в собственных магазинах в третьем квартале составил 19.9%, в сравнении с 19.4% в аналогичном периоде 2022 года, что свидетельствует о стабильном росте спроса на продукцию компании.

Операционная прибыль собственных магазинов в третьем квартале составила 1,185.4 миллиона юаней (примерно 162.5 миллионов долларов США) с операционной маржой в размере 23.1%, это сравнивается с 771.8 миллионами юаней и операционной маржой в размере 26.9% в аналогичном периоде 2022 года.

Выручка от партнерских магазинов в третьем квартале составила 1,840.8 миллиона юаней (примерно 252.3 миллиона долларов США), представляя рост на 104.7% по сравнению с аналогичным периодом 2022 года.

Чистая операционная прибыль в соответствии с GAAP составила 961.7 миллиона юаней (примерно 131.8 миллиона долларов США), представляя собой маржу в размере 13.4%. Не-GAAP

Финансовые результаты компании Luckin Coffee за третий квартал 2023 года отражают впечатляющий рост и успешное развитие. Давайте более подробно рассмотрим ключевые моменты финансовой деятельности:

Общая выручка в третьем квартале составила 7,200.0 миллионов юаней (примерно 986.8 миллионов долларов США), что представляет собой увеличение на 84.9% по сравнению с аналогичным периодом 2022 года, данный рост был возможен благодаря увеличению числа проданных продуктов, расширению сети магазинов и увеличению количества активных клиентов.

Выручка от продаж продуктов в третьем квартале составила 5,359.3 миллиона юаней (примерно 734.5 миллиона долларов США), что представляет собой увеличение на 78.9% по сравнению с аналогичным периодом 2022 года.

Выручка от свеже сваренных напитков составила 4,869.7 миллиона юаней (примерно 667.4 миллиона долларов США) и представляет 67.6% от общей выручки в третьем квартале 2023 года, это подтверждает популярность напитков, предлагаемых компанией.

Выручка от партнерских магазинов составила 1,840.8 миллиона юаней (примерно 252.3 миллиона долларов США) и представляет 25.6% от общей выручки в третьем квартале 2023 года, это увеличение на 104.7% по сравнению с аналогичным периодом 2022 года.

Общие операционные расходы в третьем квартале 2023 года составили 6,238.3 миллиона юаней (примерно 855.0 миллиона долларов США), что

представляет собой увеличение на 88.5% по сравнению с аналогичным периодом 2022 года, данный рост в основном связан с расширением бизнеса компании.

Операционная маржа компании в третьем квартале снизилась с 15.0% в аналогичном периоде прошлого года до 13.4%, что связано с ценовой стратегией компании, направленной на увеличение доли рынка.

Компания остается фокусированной на предоставлении ценности клиентам, улучшении продуктового ассортимента, а также продолжении стратегии расширения и ценообразования, чтобы обслуживать больше клиентов и расширить глобальное присутствие.

Г-н Рейнут Хендрик Шакед, Главный стратегический офицер компании, покинет свою должность в конце 2023 года по личным причинам, но продолжит консультировать компанию с января 2024 года.

Анализ финансовой деятельности компании Luckin Coffee в третьем квартале 2023 года предоставляет убедительные доказательства её успешного роста и устойчивости на рынке кофейных напитков в Китае. Увеличение выручки на 84.9% по сравнению с аналогичным периодом 2022 года свидетельствует о значительной популярности продукции компании среди китайских потребителей.

Расширение сети магазинов до 13,273 точек продаж, включая как собственные, так и партнерские магазины, говорит о стратегической ориентированности компании на увеличение покрытия и удовлетворение растущего спроса. Рост числа активных клиентов на 132.9% подтверждает популярность бренда среди китайских потребителей. Компания продолжает улучшать качество своих продуктов, что отражается в увеличении выручки от свежесваренных напитков, представляя 67.6% от общей выручки. Несмотря на увеличение операционных расходов, компания остается прибыльной и стремится к расширению своей маржи.

С учетом успешного размещения акций на бирже Nasdaq и стратегии масштабирования, Luckin Coffee остается амбициозным участником рынка и продолжает привлекать внимание инвесторов и аналитиков. Модель прибыли, управления и устойчивого развития компании поддерживают ее перспективы на рынке кофейных напитков в Китае.

Важно отметить, что в современном мире конкуренции и роста, качество продукта остается ключевой отправной точкой для всех бизнес-моделей. Успех компании Luckin Coffee в Китае подчеркивает важность предоставления высококачественной продукции и стратегического роста в соответствии с потребительским спросом. В перспективе, компания продолжит укреплять свою позицию на рынке и способствовать динамичному развитию отрасли кофе в Китае.

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## **ПЛАНИРОВАНИЕ ФИНАНСОВ И МЕТОДЫ ОЦЕНКИ ИНВЕСТИЦИОННЫХ ПРОЕКТОВ**

*Аннотация. В статье рассмотрены актуальные вопросы финансового планирования. Даны законы планирования финансов. Перечислены специальные показатели и совокупности принципиальных подходов и методов. Также в статье даны специальные измерители, которые необходимы для выполнения плана и его мониторинга.*

*Ключевые слова: финансы, планирование, методы, ресурсы, анализ денежных потоков.*

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## **FINANCIAL PLANNING AND METHODS FOR EVALUATING INVESTMENT PROJECTS**

*Annotation. The article discusses current issues of financial planning. The laws of financial planning are given. Special indicators and sets of fundamental approaches and methods are listed. The article also provides special meters that are necessary to implement the plan and monitor it.*

*Key words: finance, planning, methods, resources, cash flow analysis.*

Практикой хозяйствования в рыночных условиях были выработаны подходы, применяющиеся в процессе планирования на отдельных предприятиях, учитывающие как интересы владельцев и инвесторов, так и реальную обстановку на рынках.

Н.В. Колчиной выделяются главные функции в финансовом планировании:

- финансовое планирование обеспечивает финансовыми ресурсами в необходимом количестве и качестве производственную, инвестиционную и финансовую деятельность;
- финансовое планирование определяет пути эффективных вложений капитала, и более рационального его использования;

- при помощи финансового планирования выявляются внутрихозяйственные резервы по увеличению прибыли;
- за счет финансового планирования устанавливаются рациональные финансовые отношения с бюджетами, банками и партнерами;
- именно финансовое планирование обеспечивает контроль за финансовым положением организации [1].

Финансовое планирование как процесс состоит из нескольких этапов, которые проанализированы Петровым В.И. и Базаровым Т.Ю. [2].

Финансовое планирование проводится по собственным законам, с использованием специальных показателей, другими словами, соответствуя методологии, которая является учением о совокупностях принципиальных подходов и методов, специальных измерителей, которые необходимы для выполнения плана, а также его мониторинга [3].

Модель принципов организации системы финансового планирования представлена на рисунке 1.



Рисунок 1 – Модель принципов организации системы финансового планирования [5]



Кроме финансового планирования на многих предприятиях ведется еще и финансовое прогнозирование, которое имеет некоторые отличительные черты.

Задачи финансового прогнозирования представлены на рисунке 2.

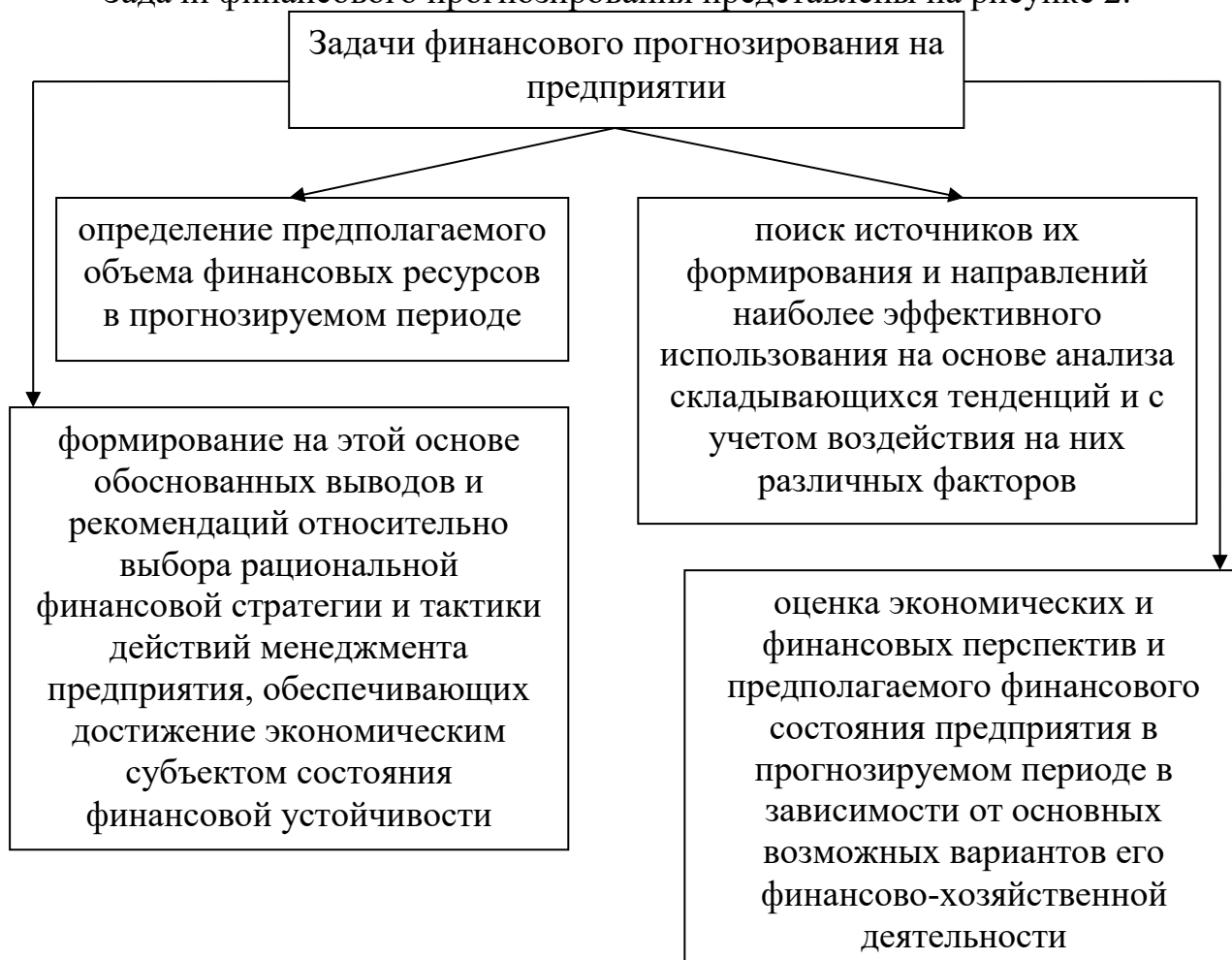


Рисунок 2 – Задачи финансового прогнозирования [4]

Основным условием для инвестирования денежных средств является получение финансовой отдачи от вложенных средств в будущем. Их величина должна позволить покрыть первоначальную сумму инвестиций, направленных на осуществление инвестиционного проекта. При рассмотрении и оценки привлекательности инвестиционного проекта следует рассматривать четыре основополагающих фактора:

- объем инвестиций;
- денежный поток от хозяйственной деятельности организации;
- срок экономической жизни инвестиционного проекта;
- ликвидационная стоимость организации.

Проведение анализа данных четырех показателей и позволяет оценить уровень привлекательности инвестиционного проекта с разных сторон хозяйственной жизни предприятия. Одним из существенных показателей

является значение «cash-flow», то есть денежный поток – обозначающий денежные поступления и денежный отток на предприятии.

Анализ денежных потоков или «cash-flow» обладает огромным значением при оценке деятельности предприятия, однако оценивать инвестиционный проект рациональнее с точки зрения чистого денежного потока, то есть разницы «притока» и «оттока» денежных средств в ходе хозяйственной деятельности, которая и образует так называемый «сухой остаток» денежных средств после уплаты налогов и сборов. Данный показатель рассчитывается по формуле

$$\text{ЧДП} = \text{П} - \text{О} \quad (1)$$

где П - приток денежных средств; О - отток денежных средств.

Основываясь на международной практике по оценке инвестиционных проектов, следует рассматривать более широкий список показателей в зависимости от метода оценки.

- Методы, основанные на дисконтировании;

1. Интегральный эффект (чистая текущая стоимость);

2. Норма рентабельности (внутренняя норма доходности);

3. Индекс рентабельности (индекс доходности дисконтированных инвестиций);

4. Срок окупаемости инвестиций с учетом дисконтирования

- Методы, основанные на бухгалтерском учете.

1. Простой срок окупаемости инвестиций - РР;

2. Показатели простой рентабельности инвестиций (коэффициент эффективности инвестиций) - ARR 3. Индекс доходности инвестиций.

Показатель срока окупаемости инвестиций, то есть «payback period», показывает длительность периода с момента начала инвестиционной деятельности до момента в расчетном периоде, когда кумулятивный чистый денежный поток NV обретает положительное значение и в дальнейшем не становится отрицательным. Данный метод оценки направлен на то, чтобы мы могли определить необходимый срок для возврата суммы денежных средств, потраченный на первоначальные инвестиции в проект. Таким образом, он предполагает тот срок, за который сумма денежных поступлений нарастающим итогом превысит сумму первоначальных инвестиций. Формула расчета представлена ниже:

$$PP = \frac{K_0}{CF_{ср}} \quad (2)$$

где РР - срок окупаемости инвестиций (лет);  $K_0$  - первоначальные инвестиции;  $CF_{ср}$  - среднегодовая стоимость денежных поступлений от реализации инвестиционного проекта.

Модификацией показателя простой окупаемости является показатель, использующий в знаменателе величину средней чистой прибыли вместо общей суммы поступлений денежных средств после уплаты налогов:

$$PP = \frac{K_0}{\text{ЧП}_{ср}} \quad (3)$$

Данный показатель используется для простой оценки того, будут ли возмещены первоначальные инвестиции в рамках срока экономической жизни инвестиционного проекта, однако данный показатель не является реальным критерием прибыльности, подразумевает линейную величину финансовых поступлений от проекта и не рассматривает вопрос дисконтирования денежного потока. Помимо этого, он не рассматривает поступление денежных средств после окончания срока окупаемости. Данный показатель рационально использовать при простой оценке инвестиционного проекта на одной из первоначальных стадий при оценке его общей привлекательности для инвестирования денежных средств.

Показатель расчетной нормы прибыли (Accounting Rate of Return) является обратным по содержанию сроку окупаемости капитальных вложений. Данный показатель отражает процентное отношение денежных поступлений к уровню денежных средств, использованных на первоначальные инвестиции.

$$ARR = \frac{CF_{cr}}{K_0}(4)$$

Данные показателю позволяют судить о ликвидности и рискованности проекта, ведь слишком длинный срок окупаемости проекта предполагает повышенную рискованность проекта.

С целью того, чтобы ценность поступлений и выплат будущих периодов соответствовала текущему моменту времени следует использовать метод дисконтирования, то есть приводить все поступления финансовых средств к одной дате, к их стоимости на момент начала инвестиций. Расчет дисконтированного денежного потока стоит проводить на основе умножения на коэффициент дисконтирования на момент поступления средств.

$$\alpha = (1+r)^{-t},(5)$$

где  $r$  – ставка дисконтирования;

$t$  – порядковый номер периода жизненного цикла проекта.

Следует также рассчитывать такие показатели, как NPV, IRR, PI и срок окупаемости при оценке рациональности инвестиций методом дисконтированного денежного потока. Показатель NPV представляет собой сумму всех денежных потоков предприятия, дисконтированных и приведенных к начальному периоду инвестиций, то есть к нулевому этапу. Данный показатель является основным при оценке эффективности инвестиционных проектов.

$$NPV = \sum_{t=0}^n CF * \alpha_t(6)$$

где  $CF_t$  – величина чистого денежного потока  $t$ -го периода жизненного цикла

При значении  $NPV > 0$  инвестиционный проект признается привлекательным и проект признается прибыльным. При значении  $NPV = 0$

инвестиционный проект окупает лишь затраты, направленные на его реализацию, но не приносит прибыли в рамках расчетного периода.

Дисконтированный срок окупаемости инвестиций (DPP) имеет вид:

$$DPP = \min n, \text{ при котором } CF_t \frac{1}{(1+r)^t} \geq IC$$

Данный показатель позволяет оценить срок окупаемости инвестиционного проекта более точно с учетом дисконтированного денежного потока. Индекс прибыльности проекта PI показывает отношение величины денежного потока и величины уровня предполагаемых затрат на инвестиции в проект. Для расчета данного показателя используется формула:

$$PI = \sum_t \frac{CF_t}{(1+r)^t} : IC(7)$$

При значении  $PI > 1$  проект признается рентабельным.

Следующий основополагающим показателем для оценки инвестиционного проекта является показатель внутренней нормы доходности, то есть IRR. Данный показатель характеризуется внутренними условиями проекта, то есть под внутренней нормой доходности понимают такое значение ставки дисконтирования, при которой NPV проекта будет равняться нулю.

Таким образом, IRR находится из уравнения:

$$NPV = \sum_{t=1}^n \frac{CF_t}{(1+IRR)^t} = 0(8)$$

Рассмотренные выше показатель эффективности инвестиционных проектов имеют взаимосвязь. Таким образом, проект, который является приемлемым по одному критерию, будет приемлем и по другим.

Если  $NPV > 0$ , то одновременно  $IRR > WACC$  и  $PI > 1$ .

Подводя итог данной главы, следует сказать, что ни один из методов оценки и ни один из критериев не является самостоятельным для принятия решения об эффективности инвестиций. Каждый из критериев является уникальным и обладает определенной нагрузкой в принятии решения. Все вышеперечисленные показатели стоит рассматривать в комплексе, рассматривая средневзвешенную стоимость капитала, статические и динамические показатели оценки. Только на основании полного проведенного анализа будет возможно принять решение о целесообразности вложения денежных средств в отдельно взятый инвестиционный проект.

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## **ПРОДВИЖЕНИЕ ЭФФЕКТИВНЫХ МЕХАНИЗМОВ УПРАВЛЕНИЯ ДЛЯ ОБЕСПЕЧЕНИЯ УСТОЙЧИВОГО СОЦИАЛЬНО- ЭКОНОМИЧЕСКОГО РАЗВИТИЯ ТЕРРИТОРИЙ**

*Аннотация.* Данная статья посвящена изучению путей совершенствования механизмов управления устойчивым социально-экономическим развитием территорий. Устойчивое развитие является важной целью современного общества, и эффективные механизмы управления играют ключевую роль в достижении этой цели. В статье рассматриваются различные аспекты управления устойчивым социально-экономическим развитием территорий, включая политические, экономические и социальные механизмы. Автор обращает внимание на необходимость разработки и внедрения эффективных инструментов, которые способствуют сбалансированному и устойчивому развитию территорий.

*Ключевые слова:* устойчивое развитие, механизмы управления, социально-экономическое развитие, территории, совершенствование, управление, политические механизмы, экономические механизмы.

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## **WAYS TO IMPROVE MANAGEMENT MECHANISMS FOR SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT OF TERRITORIES**

*Annotation.* This article is devoted to the study of ways to improve the management mechanisms of sustainable socio-economic development of territories. Sustainable development is an important goal of modern society, and effective governance mechanisms play a key role in achieving this goal. The article discusses various aspects of managing sustainable socio-economic development of territories, including political, economic and social mechanisms. The author draws attention to the need to develop and implement effective tools that contribute to the balanced and sustainable development of territories.

*Keywords:* sustainable development, management mechanisms, socio-economic development, territories, improvement, management, political mechanisms, economic mechanisms.



**Актуальность** данной статьи проявляется в связи с растущей необходимостью понимания и анализа социально-экономического развития регионов. В современном мире, где регионы играют важную роль в экономике и общественном развитии, мониторинг и изучение их состояния является ключевым инструментом для принятия обоснованных решений.

Статья обращает внимание на методологические вопросы и подходы к мониторингу социально-экономического развития регионов, что помогает улучшить понимание сложных взаимосвязей между различными факторами и процессами. Такой анализ позволяет определить проблемные области и потенциал для устойчивого развития регионов.

В контексте современных вызовов, таких как изменение климата, экономическая нестабильность и социальные проблемы, изучение социально-экономического развития регионов становится еще более актуальным. Это позволяет разработать стратегии и политики, которые способствуют устойчивому развитию регионов, повышению качества жизни и снижению неравенства.

Таким образом, статья делает важный вклад в академическое и практическое понимание мониторинга социально-экономического и устойчивого развития регионов, а также подчеркивает его значимость в современном мире.

**Литературный обзор.** В современном мире обеспечение устойчивого развития территорий становится все более актуальной задачей. Для достижения этой цели необходимо разработать эффективные методы принятия управленческих решений, учитывающие различные аспекты социально-экономического и экологического развития. В данном обзоре рассмотрены научные исследования, посвященные данной проблематике.

В работе "Методические вопросы оценки социально-экономического развития регионов" А.М.Садыкова (2005) представлены методы оценки и анализа социально-экономического развития территорий. Автор предлагает различные подходы к оценке уровня развития и описывает факторы, влияющие на устойчивость развития регионов.

Т.И.Турдиев (2006) в своей работе "Об эколого-экономических аспектах устойчивого развития горных регионов" обсуждает проблемы, связанные с устойчивым развитием горных регионов. Автор подчеркивает важность учета экологических аспектов при принятии управленческих решений и предлагает методические подходы к анализу и оценке устойчивого развития горных территорий.

С.В.Чепель (2019) в своей работе "Принципы и методические подходы к обоснованию рамочных условий долгосрочного развития национальной экономики" рассматривает принципы и методы, которые могут быть использованы для обоснования долгосрочного развития национальной экономики. Автор подчеркивает важность стратегического

планирования и предлагает методические рекомендации для разработки рамочных условий развития.

К.И.Шаклеин (2018) в своей работе "Мониторинг глобальных и национальных трендов - важный этап стратегирования (на примере отрасли кролиководства)" рассматривает важность мониторинга глобальных и национальных трендов при разработке стратегий развития. Автор приводит пример отрасли кролиководства и описывает методы мониторинга, которые могут быть применены для принятия управленческих решений.

Т.М.Ахмедов (2019) в своей работе "Долгосрочная стратегия развития урбанизации в Узбекистане" анализирует долгосрочную стратегию развития урбанизации в Узбекистане. Автор рассматривает различные аспекты устойчивого развития городов и предлагает методические подходы к разработке стратегических решений.

Все эти и другие исследования представляют различные аспекты совершенствования методов принятия управленческих решений для обеспечения устойчивого развития территорий. Они подчеркивают важность учета социально-экономических и экологических факторов, а также необходимость стратегического планирования и мониторинга различных трендов для принятия эффективных решений.

Одним из ключевых выводов этих исследований является необходимость интеграции различных методологий и подходов при принятии управленческих решений. Учет социальных, экономических и экологических аспектов, а также анализ трендов и разработка долгосрочных стратегий являются важными компонентами в достижении устойчивого развития территорий.

Для дальнейших исследований в данной области рекомендуется проведение более подробных эмпирических исследований с участием различных заинтересованных сторон. Это позволит получить более точные и обоснованные рекомендации по совершенствованию методов принятия управленческих решений для обеспечения устойчивого развития территорий.

**Цель** данной статьи заключается в проведении научного анализа и обосновании важности мониторинга социально-экономического развития региона, а также в выявлении его основных задач. Основываясь на существующих исследованиях и теоретических основах, мы стремимся представить аргументированную позицию относительно значимости системного анализа и оценки социально-экономических процессов, происходящих в регионе, а также их взаимосвязи и последствий.

**Материалы и методы.** В данной статье были применены материалы и методы с целью совершенствования методов принятия управленческих решений для обеспечения устойчивого развития территорий. Для достижения этой цели был проведен анализ текущего состояния выбранной территории, используя данные статистических органов, отчеты местных

органов власти и академические исследования. Количественные и качественные методы исследования были применены для получения всесторонней информации о потребностях и проблемах территории. Кроме того, был проведен SWOT-анализ для выявления внутренних и внешних факторов, влияющих на развитие территории. Применение экономических моделей позволило оценить влияние различных стратегий и мероприятий на устойчивое развитие территории. Наконец, кейс-стади был проведен для иллюстрации применения совершенствованных методов принятия управленческих решений и предложения рекомендаций для достижения устойчивого развития территории.

**Результаты и обсуждение.** Управление социально-экономическими объектами и системами на региональном уровне может быть осуществлено с помощью взаимосвязанных правовых, экономических, управленческих и мониторинговых механизмов. Правовые механизмы включают законопроекты, принимаемые законодательными органами как на региональном, так и на государственном уровне. Эти законопроекты содержат нормы гражданского права, которые определяют правила взаимодействия хозяйствующих субъектов, граждан и органов государственной и муниципальной власти. Цель этих норм - обеспечение добросовестности, разумности и справедливости. Правовые механизмы позволяют органам власти воздействовать на экономические, социальные и экологические процессы в пределах своей юрисдикции. Однако, при переходе от административно-командной экономической системы к либеральной возникают проблемы неурегулированности многих правоотношений на субфедеральных уровнях бюджетной и налоговой системы. Важно, чтобы бюджетный (налоговый) федерализм стал системообразующим принципом формирования и развития бюджетной и налоговой системы в условиях рыночной экономики. Еще одним фундаментальным принципом является комплементарность системы власти и административно-территориальной структуры на федеральном и региональном уровнях с бюджетной и налоговой системами на этих уровнях. Этот принцип выражается в соответствующих нормах Конституции и Бюджетного кодекса. Однако существуют проблемы в федеральном и региональном законодательстве, а также в отношениях, связанных с бюджетными и налоговыми полномочиями. Кроме того, муниципальные образования лишены возможности делегировать свои полномочия органам государственной власти. Вопросы разграничения расходных полномочий в бюджетной системе на разных уровнях остаются сложными и актуальными.

В контексте либеральной рыночной экономики, задача государства как в целом, так и на региональном уровне, сводится к обеспечению экономической безопасности, повышению уровня образования граждан и другим аспектам, а роль регулятора перекладывается на рынок и крупных

товаропроизводителей. В этом контексте, федеральные и региональные органы власти используют не только правовые механизмы, но и экономические инструменты для регулирования экономики. Эти инструменты включают установление налоговых льгот, увеличение государственных заказов у отечественных производителей, регулирование учетной ставки, изменение размеров минимальных резервов, операции на рынке ценных бумаг и другие.

С помощью этих инструментов государство стремится влиять на соотношение спроса и предложения на финансовом рынке и рынке ссудных капиталов в желаемом направлении. Однако, с уменьшением роли свободных капиталов и фондовой биржи в финансировании капиталовложений, в наиболее развитых странах эффективность данных инструментов немного ослабла.

В рыночной экономике, достижение устойчивого развития региона требует наполнения бюджетов различных уровней, а также четкого разграничения полномочий и ответственности между федеральными, региональными и муниципальными органами власти. Использование экономических механизмов управления может способствовать этому процессу.

Направления обеспечения устойчивого развития региона включают проведение прединвестиционных исследований, разработку и реализацию национального плана действий по устойчивому развитию регионов, разработку региональных планов действий и программ, а также совершенствование бюджетной, налоговой, тарифной и инвестиционной политики.

Также важным аспектом является создание благоприятных условий для привлечения инвестиций в развитие базовых отраслей экономики регионов, модернизация и диверсификация экономики, а также установление более жестких нормативов платы за загрязнение окружающей природной среды.

Для обеспечения устойчивого развития региона также важна международная кооперация и развитие благотворительности в области охраны природы региона.

Все эти меры способствуют созданию стабильного и устойчивого развития региона, сочетая экономические, социальные и экологические аспекты.

Наполнение бюджетов на различных уровнях и четкое разграничение полномочий и ответственности между органами федеральной, региональной и муниципальной власти являются факторами, способствующими достижению устойчивого развития региона. Применение экономических механизмов управления позволяет определить ряд направлений, направленных на обеспечение устойчивого развития Узбекистана:

- Включение прединвестиционных исследований в рамках целевых программ, направленных на устойчивое развитие региональной системы.

- Разработка и реализация национального плана действий по устойчивому развитию регионов Узбекистана с учетом международных обязательств страны в области природопользования, охраны окружающей среды и устойчивого развития местных территорий.

- Разработка региональных планов действий и программ в области устойчивого развития субъектов Узбекистана.

- Усовершенствование бюджетной, налоговой, тарифной и инвестиционной политики с целью обеспечения устойчивого развития основных отраслей экономики регионов, развития инфраструктуры и социальной сферы, а также повышения экономической эффективности природопользования и природоохранной деятельности на региональном уровне. Важным аспектом является стимулирование переориентации экспорта сырья на продукты глубокой переработки в местах его добычи или близлежащих к ним.

- Создание благоприятных условий для привлечения внутренних и иностранных инвестиций в развитие энергетического, транспортного комплексов и других основных отраслей экономики Узбекистана.

- Ужесточение нормативов платы за загрязнение окружающей природной среды с целью предотвращения дальнейшей деградации региональных экосистем.

- Совершенствование механизмов экологического страхования для учета возможных рисков, связанных с отрицательным воздействием хозяйственной деятельности на уязвимую и трудно восстанавливаемую окружающую среду региона.

- Развитие международного сотрудничества в решении трансграничных проблем с участием международных финансовых институтов.

- Создание условий для стимулирования благотворительности в сфере охраны природы Узбекистана.

Конечно, государственная фискальная политика играет важную роль в регулировании экономики на региональном уровне. Использование инструментов фискальной политики позволяет правительству влиять на уровень выпуска продукции и доходов в регионе.

На региональном уровне государственная фискальная политика может быть направлена на стимулирование экономического роста и развития региона. Например, снижение налоговых ставок на предприятия в регионе может способствовать привлечению инвестиций и развитию бизнеса. Также, правительство может увеличить государственные расходы на развитие инфраструктуры, образования и здравоохранения в регионе, что



способствует повышению уровня жизни и развитию человеческого капитала.

Однако, важно учитывать особенности каждого региона и его экономики при разработке и реализации фискальной политики. Регионы могут иметь различные потребности, проблемы и потенциалы, которые необходимо учитывать при определении налоговых ставок, распределении государственных расходов и других инструментах фискальной политики.

Более того, важно обеспечить координацию между федеральным и региональными органами власти, чтобы избежать дублирования и противоречий в фискальной политике. Также, следует учитывать макроэкономическую ситуацию и цели национальной экономической политики при разработке фискальной политики на региональном уровне.

В целом, государственная фискальная политика играет важную роль в обеспечении устойчивого развития регионов. Она может быть использована для стимулирования экономического роста, улучшения условий жизни жителей и развития инфраструктуры. Однако, ее эффективность зависит от правильного анализа и понимания особенностей каждого региона и согласованного подхода ко всей стране.

Государственная управа распределительного характера на территории Узбекистана осуществляется путем реализации государственных закупок и социальных трансфертов, проводимых государственными, региональными и местными органами власти. Налоговая система также предусматривает обязательные платежи, которые взимаются со всех уровней территориального управления. Фискальные меры, в свою очередь, оказывают макроэкономическое воздействие на развитие региона, изменяя конечный спрос в нем. Это воздействие одинаково существенно для всех видов государственных расходов и налогов, независимо от их источника.

Для оценки влияния фискальной политики на макроэкономические показатели региона применяется региональный мультипликатор. Учитывая, что данный мультипликатор может отличаться в разных регионах, эффект одинаковых фискальных мер на разные регионы будет различным, приводя к разной степени увеличения производства и занятости.

Да, действительно, переход к рыночному ведению хозяйства может привести к возникновению различных социальных и экономических проблем. Возможно, некоторые отрасли экономики могут стать малорентабельными или нерентабельными с точки зрения частного капитала, но все же необходимы для продолжения воспроизводства национальной экономики.

В такой ситуации региональные органы власти играют важную роль в создании благоприятного климата для инвестиций. Они могут влиять на условия инвестирования, устанавливая оптимальные процентные ставки по кредитам и предоставляя налоговые льготы для стимулирования инвестиций. Например, часть прибыли, которая реинвестируется в



производство, может быть освобождена от налогообложения или облагаться по пониженной ставке налога. Такие меры могут поощрить частный капитал к инвестированию в различные сферы экономики, способствуя росту ВРП, уровню занятости и улучшению качества жизни населения.

Однако, необходимо проводить постоянный анализ экономической и инвестиционной ситуации в регионе, чтобы выявить проблемы, диспропорции и негативные явления, которые могут возникать в результате рыночного ведения хозяйства. Только таким образом можно принимать соответствующие меры для их решения и достижения устойчивого развития региона и страны в целом.

В рамках структурной политики в Узбекистане осуществляется целенаправленное регулирование инвестиций, параллельно с общеэкономическим подходом. В условиях смешанной экономики и достижения устойчивого экономического развития региона, наиболее эффективными являются управленческие механизмы, которые включают правовые и экономические инструменты для управления социально-экономическими объектами и системами.

Стратегическое управление играет значительную роль в развитии региона. В процессе развития различные социально-экономические объекты, включая коммерческие фирмы, органы государственного управления, регионы и государства, развиваются и приобретают новые черты в различных аспектах, таких как технический, экономический, социальный, физиологический, функциональный, эстетический, экологический и другие. Структурная перестройка, которая может отражать новые свойства объекта, часто становится ведущим критерием развития.

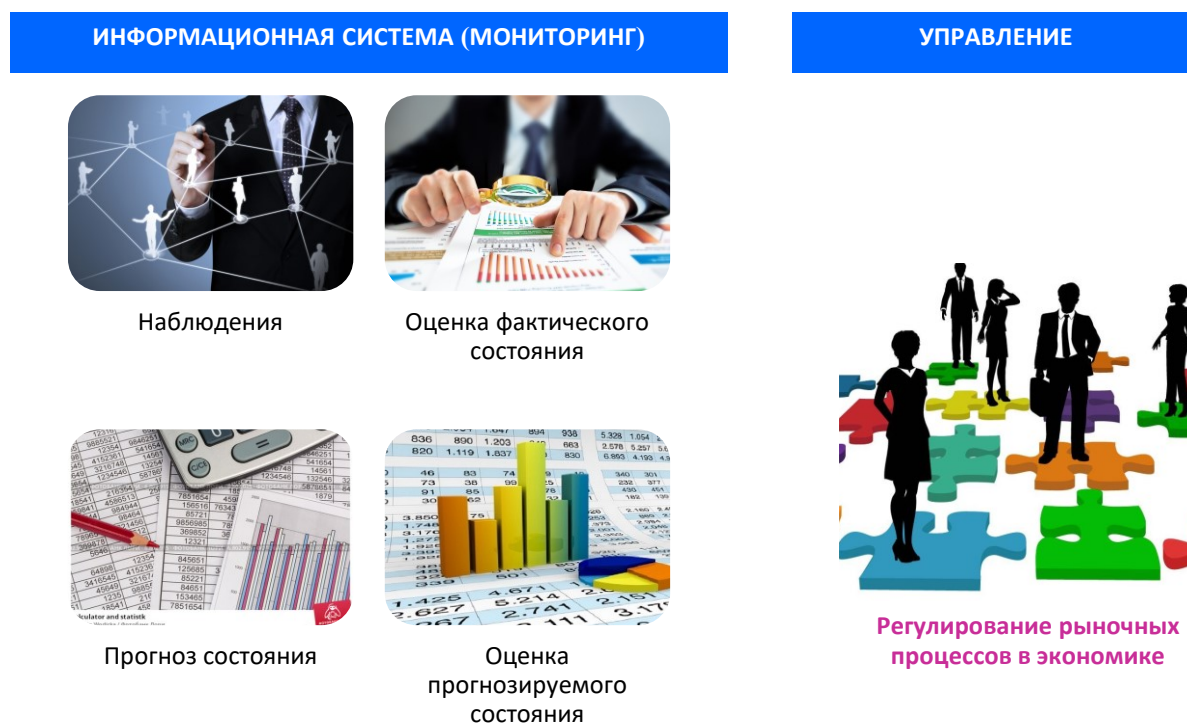
Для обеспечения благоприятного инвестиционного климата и социальной ориентированности бюджетных расходов, необходимы последовательные и планомерные действия, которые формируют государственную политику региона. На федеральном уровне формируются стратегия и идеология развития экономической сферы, а также определяются задачи и механизмы законодательного регулирования. Однако, регионы должны иметь компетенцию в решении региональных задач, и управление развитием социальной и экономической сферами должно быть четко разграничено между Республикой Узбекистан и территорией. Приоритетные направления финансирования, как на федеральном, так и на региональном уровне, должны быть разработаны с учетом общей стратегии развития социальной и экономической сфер, с учетом специфических проблем каждого отдельного региона.

Мониторинг является важным инструментом для управления социально-экономическим развитием региона. Понятие "мониторинг" имеет разное толкование в различных областях научно-практической деятельности. В данном контексте, мониторинг рассматривается как система сбора, обработки, хранения и распространения информации о

социально-экономической системе региона или ее отдельных элементах. Он направлен на информационное обеспечение управления и позволяет оценить состояние объекта в любой момент времени, а также предсказать его развитие.

Видение сути и осуществления мониторинга социально-экономического развития региона может различаться в зависимости от подхода и особенностей исследования. Одни авторы рассматривают мониторинг как системное наблюдение за качественными изменениями в экономике, связанными с переходом из одного состояния в другое. Другие авторы придерживаются более широкого определения, согласно которому мониторинг включает наблюдение, оценку и прогнозирование экономической и социальной обстановки на территории региона.

Таким образом, мониторинг социально-экономического развития региона представляет собой систему, которая позволяет следить за экономической и социальной ситуацией, оценивать ее и делать прогнозы. Он играет важную роль в информационном обеспечении управления и помогает принимать обоснованные решения для достижения устойчивого развития региона.



*Рис.1. Схема функционирования мониторинга*

Задачи мониторинга социально-экономического развития региона, как указано выше, включают:

- Организацию наблюдения и получение достоверной и объективной информации о протекающих на территории социально-экономических

процессах. Это включает сбор и анализ данных, чтобы иметь полное представление о текущем состоянии региона.

○ Оценку и системный анализ полученной информации. Это позволяет выявить тренды, причины и последствия определенных социально-экономических процессов, а также оценить эффективность существующих политик и мероприятий.

○ Обеспечение информацией органов управления, предприятий, учреждений и организаций, независимо от их подчиненности и форм собственности. Это позволяет субъектам управления принимать информированные решения на основе актуальной информации о социально-экономическом развитии региона.

○ Подготовку рекомендаций для преодоления негативных тенденций и поддержания позитивных. Мониторинг помогает выявить проблемные области и предложить конкретные меры для их улучшения.

Главная функция системы мониторинга социально-экономического развития региона заключается в обеспечении соответствующих органов полной, достоверной и своевременной информацией о процессах, происходящих в различных сферах экономики и социальной ситуации. Таким образом, направления совершенствования механизмов управления социально-экономическим развитием региона включают создание условий для сбалансированного развития, разработку инструментария поддержки управленческих решений, совершенствование мониторинга и согласование интересов всех участников процесса устойчивого развития региона.

**Заключение.** В заключение, можно сказать, что мониторинг социально-экономического развития региона играет важную роль в управлении и обеспечении устойчивого развития. Он предоставляет информацию о текущем состоянии региона, анализирует причины и последствия социально-экономических процессов, и предлагает рекомендации для улучшения ситуации.

Организация наблюдения и получение достоверной информации является основой для эффективного мониторинга. Оценка и системный анализ данных позволяют выявить тренды и проблемные области, а также оценить эффективность принимаемых мер и политик.

Мониторинг также обеспечивает информированность органов управления, предприятий и организаций, что позволяет принимать обоснованные решения и разрабатывать стратегии для развития региона. Кроме того, он способствует согласованию интересов всех участников процесса устойчивого развития и обеспечению полной и своевременной информации.

Для совершенствования механизмов управления социально-экономическим развитием региона необходимо создавать условия для сбалансированного развития, разрабатывать комплексный инструментарий поддержки управленческих решений и улучшать систему мониторинга.

Важно также согласовывать интересы всех участников и обеспечивать взаимодействие с окружающей природной средой.

В целом, мониторинг социально-экономического развития региона является неотъемлемой частью управления и способствует достижению устойчивого развития. Он помогает принимать информированные решения, анализировать и оценивать текущую ситуацию и разрабатывать эффективные стратегии для достижения успеха и процветания региона.

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## **ВЛИЯНИЕ СВЕТА НА КВАЗИУРОВЕНЬ ФЕРМИ И ВОЛЬТ-АМПЕРНЫЕ ХАРАКТЕРИСТИКИ ДИОДОВ С P-N ПЕРЕХОДОМ**

*Аннотация. В данной работе изучалось влияние света на характеристики диодов с p-n переходом, а также рассматривалась связь вольт-ампер характеристик диода с p-n переходом с изменением квазиповерхностей Ферми под действием света.*

*Ключевые слова: ЭЮК – электродвижущая сила, ВАХ – вольтамперная характеристика, квазиимпотенциал.*

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## **INFLUENCE OF LIGHT ON THE QUASI-FERMI LEVEL AND VOLTAGE CHARACTERISTICS OF P-N JUNCTION DIODES**

*Abstract. In this work, the influence of light on the characteristics of diodes with a p-n junction was studied, and the connection between the volt-ampere characteristics of a diode with a p-n junction and the change in Fermi quasi-surfaces under the influence of light was considered.*

*Key words: EMC – electromotive force, VAC – current-voltage characteristic, quasi-impotential.*

Определить изменение квазиуровня Ферми из-за увеличения концентрации носителей электрического тока в полупроводниках под действием света можно с помощью следующего выражения:

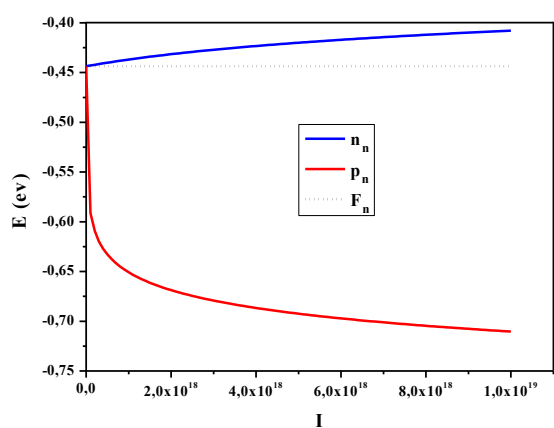
$$F_e = kT_e \ln\left(\frac{n}{N_c}\right) = kT_e \ln\left(\frac{n_0 + I\beta\alpha\tau_e}{N_c}\right) \quad (1)$$

$$F_h = -E_g - kT_h \ln\left(\frac{p}{N_v}\right) = -E_g - kT_h \ln\left(\frac{p_0 + I\beta\alpha\tau_r}{N_v}\right) \quad (2)$$

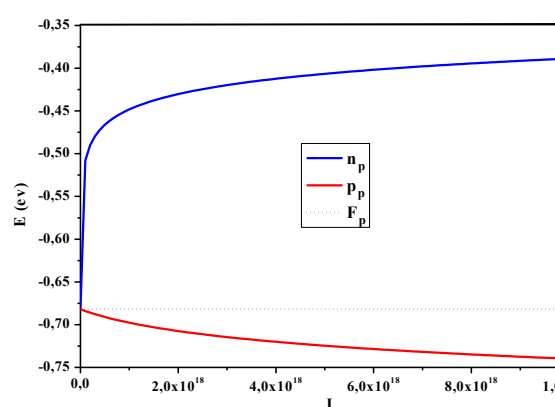
Если мы выберем, чтобы электроны и дырки находились при комнатной температуре, то  $T_e = T_h = T = 300$  К, а если  $I = 0$  для точки, куда свет не падает, то  $F_e = F_h = F$ .

Теперь, используя выражения (1) и (2), изменение квазиуровней Ферми электронов и дырок в n- и p-сферах можно рассчитать, используя следующие численные значения для основных и неосновных носителей заряда Мы установили, что квазиуровни Ферми основного электрона,

несущего заряд в n-поле, переместился вверх, а квазиуровни Ферми неосновных носителей заряда - дырок, перемещаются вниз (рис. 1). В n-поле можно наблюдать большее изменение квазиуровней Ферми неосновных носителей заряда, т. е. дырок, чем квазиуровней Ферми электронов. В р-области квазиуровни Ферми неосновного носителя заряда, т.е. электрона, движется вниз, а квазиуровни Ферми дырок – вверх. В р-области мы наблюдаем большее изменение квазиуровней Ферми неосновных электронов, несущих заряд, чем квазиуровней Ферми дырок, несущих основной заряд. Основная причина этого заключается в том, что концентрация носителей заряда, генерируемых под действием света, близка к концентрации неосновных носителей заряда (рис. 2).



**Рисунок 1. Расщепление уровней Ферми полупроводника n-типа на квазиуровни Ферми под действием света.**



**Рисунок 2. Расщепление уровней Ферми полупроводника p-типа на квазиуровни Ферми под действием света.**

Видно, что квазиуровни Ферми неосновных носителей заряда в p- и n-полях изменяются сильнее, чем квазиуровни Ферми основных носителей тока. Так, под воздействием определенной интенсивности происходит изменение квазиуровней Ферми основных носителей заряда в n-области и неосновных носителей заряда в p-области или, наоборот, от различия квазиуровней Ферми неосновных носителей заряда в n-области и основных в p-области мы можем определить фотоЭДС, т.е. по разности начальной высоты потенциального барьера и высоты образованного потенциального барьера. То есть мы можем найти фотоЭДС  $E = \varphi - \varphi_0$  через высоты потенциального барьера  $\varphi_0 = F_{e0} - F_{p0}$ ,  $\varphi = \Delta F_e - \Delta F_p$  для кремния. Или же мы можем рассчитать, используя выражение (3).

$$E = \pm kT \ln \left( \frac{n_0 + \Delta n}{n} \right) \quad (3)$$



Здесь  $\Delta n$  и  $n$  — концентрации освещенной и неосвещенной сторон полупроводника. Выражение (3) и высота потенциального барьера, сформированная из разницы квазиуровней Ферми выше, предполагали однородные значения фотоЭДС, определяемые из разницы исходной высоты потенциального барьера. Таким образом, мы можем найти фотоЭДС, используя квазиуровни Ферми.

В диодах при отсутствии светового эффекта ЭДС не генерируется, т.е.  $E=0$ . И в правду, когда  $I=0$  и  $U=0$ , диод находится в термодинамическом равновесии. Не будет ЭДС и тока. Как известно, фототок, генерируемый светом в полупроводниках с р-п-переходом, связан с вольт-амперной характеристикой следующим образом.

$$J = J_s \left( e^{\frac{eu}{kT}} - 1 \right) - J_f \quad (4)$$

Здесь  $J_f$  — фототок, возникающий под действием света, и его можно выразить следующим образом.

$$J_f = \frac{e\beta I \alpha}{h\nu} \quad (5)$$

Здесь  $b$  — квантовое поглощение, мы приняли его равным  $b=1$ ,  $I$  — интенсивность света, падающего на единицу поверхности,  $h$  — постоянная Планка,  $\nu$  — частота света,  $\alpha$  — коэффициент поглощения света. Из выражения (5), (4) можно записать следующее.

$$J = J_s \left( e^{\frac{eu}{kT}} - 1 \right) - \frac{e\beta I \alpha}{h\nu} \quad (6)$$

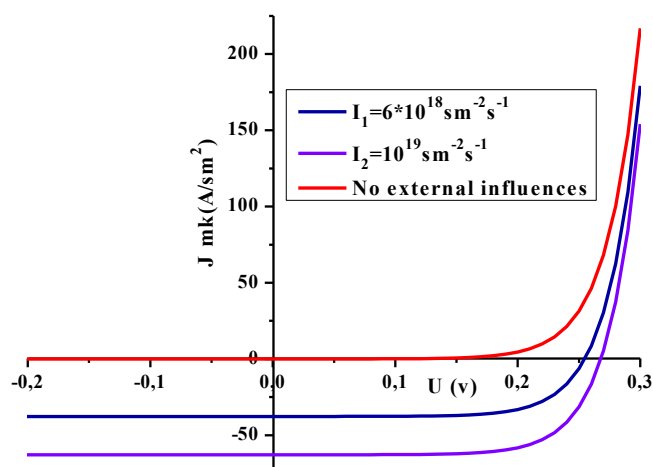
а если заменить числовые значения, то наблюдается перемещение графического положения вольт-амперной характеристики (ВАХ) вниз.

Видно, что разница между графиками показывает сдвиг положения, соответствующего различию квазиуровней Ферми. Это позволяет определять квазипотенциалы электронов и дырок в р-п переходе по светоиндуцированной вольт-амперной характеристике.

Если мы наблюдаем воздействие внешней деформации на полупроводники с р-п переходом одновременно со светом, мы знаем, что энергия поглощенного фотона равна энергии запрещенной зоны  $\hbar\omega = E_g$ , и это красный предел фотоэффекта. Если условие  $\hbar\omega < E_g$ , внутренний фотоэффект не наблюдается. При выполнении условия  $\hbar\omega > E_g$  начинают генерироваться электроны и дырки.

Если ширина полосы не изменяется внешним воздействием, красная пороговая частота не изменится, в противном случае поглощением света можно управлять, изменяя ширину полосы. Например, рассмотрим взаимосвязь между частотой света и коэффициентом поглощения света. Как уже говорилось выше, влияние света на вольт-амперную характеристику полупроводников р-п-перехода определяется с помощью выражения (6). В

этом выражении давление влияет на коэффициент светопоглощения и ток насыщения.



**Рисунок 3. Вольт-амперная характеристика диода с p-n переходом под воздействием различной интенсивности света.**

Именно так описана вольт-амперная характеристика. При этом мы можем наблюдать, что фотоЭДС увеличивается с ростом интенсивности света, а ток насыщения ВАХ снижается. Используем рисунки 1 и 2, или воспользовавшись выражением (3), рассчитаем фотоЭДС с использованием изменения квазиуровней Ферми под действием интенсивности, 0,26 В для интенсивности  $I=6 \cdot 10^{18}$  и 0,27 В ЭДС для интенсивности  $I=10^{19}$ .

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## **ПСИХОЛОГИЯ СПОРТА: СОВРЕМЕННЫЕ ПОДХОДЫ К ТРЕНИРОВКЕ УМА**

*Аннотация. Цель данной статьи заключается в современном подходе к психологии спорта и их работе на тренировке ума в спорте. Исследуются основные принципы психологии спорта, технологические инновации в области тренировки, а также разработаны подходы к психологической подготовке спортсменов. В статье представлены примеры успешной практики и эффект психологии спорта в достижении результатов в различных видах спорта.*

*Ключевые слова: психология спорта, тренировка успеха, ментальная подготовка, виртуальная реальность, психологические тренировки, индивидуальный подход, спортивный подход.*

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## **PSYCHOLOGY OF SPORT: MODERN APPROACHES TO TRAINING THE MIND**

*Annotation. The purpose of this article is the modern approach to the psychology of sport and their work on training the mind in sport. The basic principles of sport psychology, technological innovations in training, and developed approaches to psychological training of athletes are explored. The article presents examples of successful practice and the effect of sport psychology in achieving results in various sports.*

*Keywords: sports psychology, success training, mental training, virtual reality, psychological training, individual approach, sports approach.*

### **Введение:**

В современном спорте достижение выдающихся результатов требует не только физической подготовки, но и умения эффективно управлять своим мышлением и эмоциями. Психология спорта занимает центральное место в обеспечении спортсменов не только техническими навыками, но и ментальной устойчивостью. В этом контексте, данное исследование

направлено на рассмотрение современных подходов к тренировке ума в спорте, с особым вниманием к психологической подготовке.

В последние десятилетия психология спорта приобрела все большее значение, становясь неотъемлемой частью тренировочного процесса. Тренеры и спортсмены осознали, что физическая мощь и техническое мастерство далеко не единственные факторы, влияющие на успех в спорте. Способность контролировать свое мышление, эмоции, и справляться с психологическим давлением стали ключевыми аспектами выдающихся достижений.

Цель данного исследования заключается в изучении современных подходов к психологии спорта и их воздействия на тренировку ума в спорте. Важно понять, какие методы и технологии используются для улучшения ментальной подготовки спортсменов, и какие индивидуальные подходы эффективны в достижении психологической устойчивости.

#### **Методы и исследования:**

Изучение современных подходов к психологии спорта и тренировке ума в спорте требует комплексного методологического подхода. Для достижения этой цели был проведен анализ обширного массива научных статей, посвященных психологии спорта, с целью выявления ключевых тенденций и достижений в данной области. Этот метод позволяет получить обзор текущего состояния исследований и определить пробелы, которые могут быть заполнены данным исследованием.

Анализ научных статей охватывает различные аспекты психологии спорта, включая ментальную подготовку, стрессоустойчивость, мотивацию и другие ключевые аспекты, влияющие на психологическое состояние спортсменов. В ходе этого анализа выделяются основные тенденции и направления развития, что позволяет определить контекст исследования в рамках существующего знания в области психологии спорта.

Дополнительно, были проведены интервью с опытными психологами, работающими с профессиональными спортсменами. Этот метод позволяет получить практический опыт и взгляд специалистов на вопросы, касающиеся тренировки ума в спорте. Опросы охватывают вопросы о применении различных методик и технологий в тренировочном процессе, а также оценку их эффективности. Интервью также выявляют индивидуальные подходы к работе с атлетами, что дает возможность рассмотреть психологическую подготовку в контексте индивидуальных особенностей спортсменов.

Комбинированный подход к методам исследования обеспечивает комплексный взгляд на проблему тренировки ума в спорте. Статистические данные, выделенные из анализа научных статей, обогащаются практическим опытом психологов спорта, а результаты, полученные с использованием виртуальной реальности, придают исследованию конкретный и практический характер. Такой подход позволяет создать

более обоснованные выводы и предоставить целостное представление о современных подходах к тренировке ума в спорте.

### **Результаты оригинального авторского исследования:**

Исследование выявило, что успех в тренировке ума в спорте тесно связан с ясно определенными принципами. Основная роль принадлежит внутренней мотивации, оказывающей существенное влияние на достижение выдающихся результатов. Также подтверждено, что использование современных технологий, включая виртуальную реальность и мобильные приложения, активно способствует улучшению ментальной подготовки.

Важным выводом является необходимость индивидуального подхода. Интервью с психологами спорта выявили, что эффективность методик зависит от их адаптации к индивидуальным особенностям спортсменов.

Инновационные методы, представленные в исследовании, приводят к успешному преодолению психологических барьеров, что подчеркивает их ценность в достижении выдающихся результатов в спорте.

Результаты подчеркивают важность психологии спорта и необходимость адаптации методик под индивидуальные особенности спортсменов. Результаты исследования предоставляют конкретные рекомендации для тренеров, психологов и спортсменов, стремящихся к успешной тренировке ума и достижению максимальных результатов в современном спорте.

### **Заключение**

Исследование современных подходов к тренировке ума в спорте выявило ключевые факторы, влияющие на психологическую подготовку спортсменов. Внутренняя мотивация, приспособленные технологии, и индивидуальный подход оказались определяющими для достижения выдающихся результатов.

Важным выводом является подтверждение, что психология спорта неотъемлемо связана с успехом в современном спорте. Инновационные методы и персонализированный подход предоставляют не только теоретические основы, но и конкретные инструменты для тренеров, психологов и спортсменов.

Основываясь на результатах, данное исследование предоставляет ценные рекомендации для применения в тренировочных программах и повседневной практике, содействуя лучшей подготовке спортсменов и повышению их конкурентоспособности.

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## **МЕТОДОЛОГИЯ РАЗВИТИЯ ЭКОЛОГИЧЕСКОГО ОБРАЗОВАНИЯ В НАЧАЛЬНЫХ КЛАССАХ**

*Аннотация. В данной статье рассматривается важность освоения экологических понятий, раскрывающих содержание и методы всестороннего образования учащихся младших классов, развития экологического образования, совершенствования знаний учащихся о естественном содержании в преподавании естественных наук, естественных наук. науки сознательное усвоение учебного материала путем применения ранее полученных знаний, умений, умений и компетенций в новых ситуациях, знание различных учебных предметов, изучающих проблемы, связанные с взаимоотношениями человека и природы, содержание естественнонаучного образования, использование современных образовательных технологий. описывается с точки зрения согласованности и интеграции.*

*Ключевые слова: Начальный класс, экология, окружающая среда, экологическая культура, экологическая проблема, методика, метод, инструмент, форма, экологическое образование.*

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## **METHODOLOGY FOR THE DEVELOPMENT OF ENVIRONMENTAL EDUCATION IN PRIMARY CLASSES**

*Abstract. In this article, the importance of mastering ecological concepts, which reveal the content and methods of comprehensive education of elementary school students, the development of ecological education, the improvement of students' knowledge of natural content in the teaching of natural sciences, natural sciences conscious assimilation of educational material by applying previously acquired knowledge, skills, skills and competences in new situations, knowledge of various academic subjects that study problems related to the relationship between man and nature, the content of natural sciences education The use of modern educational technologies is described in terms of coherence and integration.*

*Key words: Primary class, ecology, environment, ecological culture, ecological problem, methodology, method, tool, form, ecological education.*

В системе общего среднего образования теоретические основы экологии и знания, умения, квалификации и компетенции, направленные на формирование экологической культуры, даются на основе связности содержания существующих учебных предметов. В рамках начального образования, охраны и охраны водных ресурсов, важности атмосферного воздуха и его защиты, рационального использования земельных ресурсов и подземных ресурсов, охраны флоры и фауны, сбора и утилизации отходов, О Сохранение красивой и уникальной природы Узбекистана, активно участвовать в сохранении природы села (или города), где он проживает, иметь общие знания и опыт о заповедниках и парках Узбекистана, а также о трагедии Аральского моря. Предполагается иметь навыки [1]. Этим и определяется актуальность вопроса экологического воспитания учащихся младших классов.

Ориентация экологических знаний на воспитание культуры личности остается наиболее деликатной педагогической проблемой. Именно поэтому развитие экологических знаний в общеобразовательной школе является весьма актуальной проблемой. Это требует бережного отношения к природе.

Экологическое образование направлено на гармонизацию отношений человека с окружающей средой; осознание себя как части природы, определяющей качество жизни; сформировать ответственность за свое состояние. Это свидетельствует о развивающейся функции экологического образования, направленной на существенное расширение и обогащение кругозора субъекта педагогического воздействия через глубокое понимание обязанностей по охране и охране природной среды, усвоению ее духовных и материальных ценностей.

Охрана природы – сохранение, правильное использование и восстановление природных ресурсов и природной среды, в том числе земель, недр, видового разнообразия флоры и фауны, чистой воды и воздуха на благо нынешнего и будущих поколений. местные, государственные и международные меры. Комплексный подход обеспечивает преподавание предметов во взаимосвязи друг с другом, элементы системы образовательного процесса способствуют инклюзивности для достижения поставленной цели, экологическое воспитание учащихся в образовательной среде базируется на разработанной методике общего образования. обучение в начальной школе. Такой подход позволяет выявить и использовать методы взаимодействия образовательной системы [2, 56].

Одним из факторов, влияющих на развитие экологического образования у студентов, является мотивация студентов к творческому участию в образовательном процессе. По мнению некоторых

исследователей, важное значение имеют самостоятельно приобретаемые понятия, а именно в процессе самостоятельного обучения, то есть самостоятельного мышления, когда учащегося не обучает учитель традиционно, возникает содержание и суть обсуждаемой проблемы. в этом процессе понимается и анализируется, осуществляется рефлексивная деятельность. По нашему мнению, в процессе развития экологического образования мотивация учащихся на творческий эффект служит обеспечению их активности, а творческая деятельность, в свою очередь, является одним из факторов, реализующих взаимодействие [5, 7].

Развитие экологического образования учащихся начальных классов. В ходе урока посредством непрерывного чтения, этикета, уроков природы детям даются сведения об окружающей среде, растениях, животных, а также чистота и порядок – все сущее в природе. постепенно усваивается. Обеспечение экологического воспитания учащихся в ходе урока оказывает большое влияние на их духовно-нравственную зрелость. На этих уроках преподаватели широко используют методы устного изложения, исследования и беседы в экологическом образовании. Также широко используются новые педагогические технологии обучения, позволяющие сделать знания ребенка эффективными и достичь определенных результатов. Образование, которое ребенок получает в школе, занимает важное место в его развитии как личности. Интерес к жизни проявляется у студентов в результате экологического воспитания. В частности, в ходе урока используются различные образцы народного устного творчества, стихи, песни для развития экологического воспитания ребенка.

Если внедрить систему современного инновационного подхода к процессу экологического образования, можно достичь объективно необходимого уровня связи человечества и природы, окружающей среды и космоса, сформировать взаимную гармонию. На наш взгляд, программная система образования, прививающая гуманистические идеи и концепцию жизни в гармонии с природой, что человек является ее частью, сегодня себя не оправдывает. Сохраняется появление заблуждений о природных ресурсах, доминирование подхода неисчерпаемого ресурса, а также тот факт, что стремление подчинить природные элементы воображению человека еще не закончилось, что является основой нарушения экологического баланса и разрушения экосистем.. Для формирования экологического сознания человека необходима полная перестройка взглядов и представлений человека, поскольку принятые им экологические нормы одновременно становятся стандартами его поведения по отношению к природе [3,22].

Проблемы экологического образования И.Н.Зверова, А.Н. Развивается в работах Захлебного, Л.П. Салеевой, Л.А. Сайдаковой и других. Описание форм и методов экологического воспитания мы можем увидеть в работах А. Н. Захлебного, О. И. Дмитриева и других. Экология –

наука о взаимодействии живых организмов и их сообществ друг с другом и с окружающей средой.

Высока также значимость внеклассной деятельности и мероприятий в формировании экологического сознания и культуры учащихся младших классов. Внеклассная деятельность дает возможность расширить, углубить и конкретизировать знания, полученные на занятиях, вызывает интерес к изучению природы, развивает активность и самостоятельность учащихся, экономит время. Внеклассные мероприятия включают в себя различные вечеринки, викторины, викторины, межклассные и межшкольные олимпиады (конкурсы), встречи. В ходе этих мероприятий студентам может быть предоставлено экологическое образование [4, 55].

Внеклассная деятельность по науке является одним из средств всестороннего развития личности школьника. Внеклассная деятельность, связанная с экологическим образованием, должна быть разнообразной по организационной форме, содержанию и методам проведения. Это зависит от состава, возраста, интересов и потребностей учащихся, природной среды школы, времени года, помещений и оборудования. Некоторые виды внеклассной деятельности должны дополнять и улучшать друг друга. Одним из способов формирования экологической культуры у учащихся младших классов является процесс образовательной деятельности вне класса и школы. По этой причине, если сегодняшний учитель любознателен, активен и креативен, нет никаких сомнений в том, что ученики, которых он учит, будут зрелыми и знающими во всех аспектах.

Прежде всего, читатель должен помнить об этом и обратить внимание на содержание мероприятия, исходя из сути темы: «Человек наслаждается даром природы с первых мгновений рождения от матери. То есть впервые он может дышать полным воздухом. Если мать рождает человека, природа растет. Именно поэтому его называют «Мать-природа». Мать-природа заставила нас любить и сострадать. Гибнут многие животные и различные редкие растения. Наше единственное Аральское море находится на грани уничтожения. В наше время нужно бережно относиться к каждому дереву, кусту и траве. Если вышеуказанные мысли могут дойти до сознания ребенка, если он чувствует жалость к разрушению нашей природы, любовь – милосердие, чувство ее защиты – это наше счастье, то есть учителей. В процессе обучения вне аудитории основной задачей учителя должно стать создание у учащихся потребности в чтении общественно-популярной и естественнонаучной литературы [6, 237].

В целях экологического просвещения проводятся внеклассные мероприятия, экскурсии, конкурсы, тематические вечера с показом слайдов и фильмов, различные мероприятия («Праздник птиц»), («Фестиваль цветов»), («Праздник урожая»), Большое значение имеет посадка деревьев, реализация ткашиша и других. Цель их проведения – привлечь как можно больше учащихся к деятельности вне класса, вызвать у них интерес и

желание участвовать в ней, необходимо направить их на налаживание детской активности. Это дает возможность расширить, углубить и конкретизировать знания, полученные в ходе внеклассной и внеклассной деятельности по экологии, вызвать интерес к изучению окружающей среды, развивать активность и самостоятельность учащихся, организовать свободное время. Воспитательное значение этих произведений особенно велико.

Одним словом, экологические знания влияют на поведение учащихся, формируют материальное мировоззрение и культуру труда, развивают интерес к знаниям и навыки самостоятельного наблюдения, воспитывают чувство общности и любовь к природе. Поэтому обеспечение экологического воспитания учащихся в процессе внеклассной деятельности является одним из средств всестороннего развития личности учащегося.

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## **ҚОРАКЎЛЧИЛИК КЛАСТЕРЛАРИНИНГ РИВОЖЛАНИШ ИСТИҚБОЛИ**

*Аннотация. Мақолада қоракўлчилик кластерларининг ривожланиш истиқболи масаласи баён этилган. Қоракўлчилик кластерларида маҳсулотларни тайёрлаш, қайта ишлаш ва сотиш тизимида қўшилган қиймат занжири динамикаси бўйича инновацион фикрлар билдирилган.*

*Калит сўзлар: яйлов, чорвачилик, қоракўлчилик, экотизим, ресурстежамкор ишланма, таназзулик, биохилма-хиллик, математик усуллар, иқтисодий самара.*

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## **PROSPECTS FOR THE DEVELOPMENT OF KARAKUL FARMING CLUSTERS**

*Annotation. The article examines the issue of the prospects for the development of karakul farming clusters. Innovative ideas were presented on the dynamics of the value chain in the system of production, processing and sales of products in karakul farming clusters.*

*Key words: pastures, animal husbandry, astrakhan breeding, ecosystem, resource-saving development, degradation, biodiversity, mathematical methods, economic efficiency.*

Мамлакатимизда қоракўлчилик тармоғини ривожлантириш ва унинг қишлоқ хўжалигидаги ўрнини таъминлаш, қоракўл маҳсулотларини ишлаб чиқариш ҳажмларини ошириш ва уларнинг турларини кўпайтириш асосида кенг кўламли таркибий ўзгартиришларни амалга ошириш, чорвачиликда хусусий мулкнинг устувор аҳамияти ва наслчилик ишларини такомиллаштириш, яйловлардан самарали фойдаланиш, чорвачилик маҳсулотлари ишлаб чиқариш ҳажмларини кўпайтириш ва рақобатдошлигини ошириш, ишлаб чиқарилаётган маҳсулотларни қайта ишлаш ва экспортга йўналтириш масалаларига катта эътибор қаратилди.

Қоракўлчиликни жадал ривожлантиришни таъминлаш, қоракўлчилик кластерларини ташкил қилган ҳолда хом ашёни чуқур қайта ишлашни ташкил этиш, ишлаб чиқарилаётган маҳсулотларни ички ва ташқи бозорларга олиб чиқишни давлат томонидан қўллаб-қувватлаш, жойларда янги иш ўринларини яратиш ва аҳоли даромадларини ошириш мақсадида Ўзбекистон Республикаси Президентининг 2020 йил 2 сентябрдаги “Ўзбекистон Республикасида пиллачилик ва қоракўлчиликни янада ривожлантириш чора-тадбирлари тўғрисида”ги ПФ-6059-сон Фармон ва Ўзбекистон Республикаси Вазирлар Маҳкамасининг 2020 йил 10 ноябрдаги “Ўзбекистон Республикаси пиллачилик ва қоракўлчиликни ривожлантириш қўмитаси фаолиятини ташкил этиш чора-тадбирлари тўғрисида”ги 705-сон қарори қабул қилинди.

Қоракўлчилик кластерининг асосий йўналиши – қоракўл қўйларини интенсив парвариш қилиш, яйловлар ҳосилдорлигини ошириш ва тартибли фойдаланишни йўлга қўйиш ҳисобланади.

Қоракўлчилик кластерларининг самарали фаолият кўрсатишларини таъминлашда энг асосий омил – кластер фаолиятини бугунги ва истикболдаги фаолият йўналишларини, стратегик режаларини, мавжуд ички ва ташқи имкониятларни аниқ ҳамда тўғри белгилаш муҳим рол ўйнайди.

Тадқиқотларимиз натижалари асосида Қашқадарё вилоятида қоракўлчилик кластерининг ривожланиш истикболи SWOT-таҳлили асосида баҳоланди (1-жадвал).

### 1-жадвал

#### Қашқадарё вилоятида қоракўлчилик кластерларининг ривожланиш истикболининг SWOT-таҳлил натижалари<sup>49</sup>

КУЧЛИ ТОМОНЛАРИ (Strengths)	ЗАИФ ТОМОНЛАРИ (Weaknesses)
<ul style="list-style-type: none"> <li>- кластерлар фаолиятини давлат томонидан қўллаб-қувватлаш бўйича ҳуқуқий-меъёрий асослар мавжуд;</li> <li>- тармоқ раҳбарлари томонидан аниқ бизнес-режалар ишлаб чиқилган;</li> <li>- хўжаликлар томонидан тармоқда ислохотлар қўллаб-қувватланади;</li> <li>- кластерлар қоракўлчилик хўжаликларини иқтисодий самарадорлигини мустаҳкамлайди;</li> <li>- етиштирилаётган маҳсулотларга ички бозорда талаб юқори;</li> </ul>	<ul style="list-style-type: none"> <li>- маҳаллий даражада яйлов ерларида ўзбошимчалик билан чорвачилик билан шуғулланаётган аҳоли сонининг кўплиги;</li> <li>- малакали мутахассис кадрларни етишмаслиги;</li> </ul>
ИМКОНИАТЛАР (Opportunities)	ХАТАРЛАР (Threats)
<ul style="list-style-type: none"> <li>- қоракўлчиликка ихтисослашган кластерлар фаолиятига тижорат банклари томонидан кредитлар ажратилиши;</li> <li>- кластерларни ташкил қилиниши ва фаолият кўрсатилишида инновацион технологиялар ва</li> </ul>	<ul style="list-style-type: none"> <li>- сурункали иқлим ўзгариши ва қурғоқчилик йилларини кўп бўлиши;</li> </ul>

<sup>49</sup> Тадқиқот натижалари асосида муаллиф томонидан ишлаб чиқилган.

<p>ресурстежамкор асбоб-ускуналарни олиб кирилишида имтиёзларни қўлланилиши;</p> <p>- кластерлар фаолиятини самарали йўлга қўйиш бўйича давлат томонидан муддатли имтиёзлар берилиши;</p> <p>- қорақўлчилик хўжалиklarининг сарф-харажатларини қисман қоплаш мақсадида субсидияларни ажратилиши;</p> <p>- қорақўлчилик кластерлари фаолиятига инвестицияларни жалб қилишни ривожлантириш бўйича имтиёзларни яратилаётганлиги ва бошқалар.</p>	<p>- яйлов ҳудудларида таназзулга учраган ер майдонлари ҳажмининг кўплиги;</p> <p>- сурункали сувсизликни юз бераётганлиги;</p> <p>- аҳоли тасарруфидаги чорва молларини турлари бўйича аниқ сонини белгиланмаганлиги;</p> <p>- яйлов ўсимликларини экиш ва қўриқлаш ишларига тўлиқ амал қилинмаслиги;</p> <p>- турли ресурсларни зарур вақтларда етишмаслиги.</p>
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Республикада қорақўлчилик кластерларини ташкил қилиш янги тузилма – мулкчилик шакли бўлганлиги сабабли ушбу тузилманинг замонавий менежмент - бошқарув тузилмаси, “ишлаб чиқариш, таъминот, хизмат кўрсатиш ва бошқа йўналиш”лардаги айрим муаммолар юзага чиқмоқда.

Қорақўлчиликни ривожлантиришнинг энг асосий омили бўлиб – яйлов ерларининг ҳосилдорлигини ошириш, таназзулликка учраган яйлов ерларини сақлаш, тиклаш ва ҳосилдорлигини ошириш бўйича аниқ агротехнологик тадбирларни амалга оширилиши талаб қилинади.

Истиқболда яйловлар ҳосилдорлигини оширишга қуйидаги омиллар ҳисобга олиниши мақсадга мувофиқ:

1. Яйлов ерларининг барқарор майдонини мавжудлиги;
2. Яйловларни рекультивация қилиш, фитомелиоратив тадбирларни амалга ошириш ва янги турдаги чўл-озуқа экинларини экиш, яйлов алмашлаб фойдаланиш, загон-участка тизимида қўйларни боқилишини йўлга қўйиш ва бошқа тадбирлар ҳисобига табиий яйловлар ҳосилдорлигини ошириш;
3. Яйловлар ҳосилдорлигини илғор хўжалиklar ва яхши ҳолатдаги яйловларнинг ҳосилдорлигига эришиш, яъни ҳар бир гектар яйлов еридан 3 цент. озуқа бирлигида ҳосилдорликка эришиш;
4. Олдиндан суғориладиган, аммо кейинчалик турли объектив-субъектив сабаблар натижасида фойдаланилмасдан қолинган суғориладиган ерларни қорақўлчилик кластерларига ҳам бириктириш ва бу ерларда сув чиқариб, озуқа экинларини етиштиришни йўлга қўйиш;
5. Қорақўлчилик наслчилик масъулияти чекланган жамиятлари балансидаги суғориладиган ерларда чорва моллари учун кучли озуқа экинларини экилишини рағбатлантириш;
6. Харид қилинадиган кучли концентрат озуқаларни ҳақиқий меъёр даражасида таъминланишини, шу жумладан ташқи бозордан импорт йўли орқали харид қилинишини молиявий қўллаб-қувватлаш;

7. Бир йил давомида ҳар бир бош қўй бош сони ҳисобига озуқа сарфини меъёр даражасида – 4,96 ц. озуқа бирлигида белгилаш ва шу миқдорда озуқа жамғарилишига эришиш учун тегишли чора-тадбирларни ишлаб чиқиш.

Юқоридаги тадбирларни илмий ва амалий жиҳатдан асосланган тарзда амалга оширилиши қорақўлчилик хўжаликларида маҳсулот ишлаб чиқаришни барқарор ўсишини таъминлаш, соҳани техник ва технологик жиҳатдан модернизациялаш ва энг асосийси, қорақўлчилик соҳасида меҳнат қилаётган чорвадорлар, мутахассис-ишчиларнинг даромадларини кўпайтириш ҳамда улар яшаётган ҳудудларни ижтимоий-иқтисодий ривожлантиришга муҳим пойдевор ҳисобланади.

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**АМИР ТЕМУРНИНГ САРКАРДАЛИК МАҲОРАТИНИ ҲАРБИЙ  
ХИЗМАТЧИЛАР ЖАНГОВАР РУҲИНИ ОШИРИШДАГИ  
АҲАМИЯТИ**

*Annotatsiya: Maqolada harbiy xizmatchilarni milliy va jangovar ruhini yuksaltirishda buyuk ajdodimiz Amir Temurning vatanparvarligi, sarkadalik maхорати ularni hozirgi kundagi o'rne va ahamiyati to'g'risida fikr va mulohazalar yuritilgan.*

*Kalit so'zlar: qahramonlik, matonat, buyuk sarkarda, o'zaro totuvlik, qudratli, vatanparvarlik, insonparvarlik, milliy ruh, jangovar ruh, g'ayrat-shijoat, shiddatli hujum, harbiy jasorat, adolatli бошқарув, маънавий-ахлоқий фазилат.*

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**THE IMPORTANCE OF AMIR TEMURS GIRLMANSHIP IN  
INCREASING THE MORALE OF MILITARY SERVANTS**

*Abstract. The article outlines thoughts about the patriotism, courage and perseverance of our great ancestor Amir Temur, and their significance in increasing the national and morale of military personnel in modern conditions.*

*Key words: heroism, fortitude, great leader, harmony, mighty, patriotism, humanism, national spirit, fighting spirit, enthusiasm, fierce attack, military valor, fair rule, spiritual and moral virtue.*

Жаҳонда ижтимоий-сиёсий вазиятнинг кескинлашуви, дунёни бўлиб ташлаш ва ҳукмронлик қилишга йўналган мафкуравий курашнинг авж олиши мамлакатларнинг ҳудудий хавфсизлигини таъминлаш учун замонавий ҳарбий технологиялардан фойдалана оладиган маҳоратли ҳарбий хизматчиларни тарбиялашни тақозо этмоқда. Уларнинг жанговар тайёргарлиги, касбий ва ижтимоий масъулиятини оширишда ҳаққоний тарихни, ўзининг жасоратини намоён этган буюк саркардаларнинг ҳарбий маҳорати ва стратегиясини ўрганишга эҳтиёж ошмоқда.

Амир Темур - ўрта асрнинг йирик давлат арбоби, буюк саркарда, кучли, марказлашган давлат асосчиси, илм-фан ва маданият ҳомийси - 1336



йил 7 апрелда Кеш (ҳозирги Шаҳрисабз) шаҳри яқинидаги Хожа Илғор қишлоғи (ҳозирги Яккабоғ тумани)да туғилди. Унинг тўлиқ исми Амир Темур ибн Амир Тарағой ибн Амир Барқул.

XIV асрнинг иккинчи ярми XV аср Ватанимиз тарихида воқеаларга ниҳоятда бой тарихий ижтимоий сабоқ даври ҳисобланади, чунки бу даврда мўғуллар ҳукмронлиги ва феодал тарқоқлик тугатилиб, босқинчиларнинг вайронагарчиликлари ва бир ярим асрлик зулмлари оқибатида иқтисодий, маданий-маърифий турғунлик ҳолатига тушиб қолган мамлакатимиз ўз мустақиллигини қайта тиклашга киришди. Бу минтақада Амир Темур (1336-1405 йиллар) бошчилигида ягона туғ остида марказлашган, кучли ва мустақил давлат ташкил топди. Марказий Осиё халқлари ҳаётида юз берган бу тарихий жараёнда шубҳасиз Соҳибқирон Амир Темурнинг хизматлари буюқдир.

Бу ақлли ва билимли инсон ўз давлатининг куч-қудратини ошириш ва мустаҳкамлаш учун биринчи навбатда ҳарбий ва энг муҳим иқтисодий ислохотлар ўтказди. Бу ислохотлар заминида аввалги давр донишмандларининг ақл-идроки, ғоялари мужассам эди, айниқса, тараққиёт учун ягона давлат, ўзаро тотувлик, ишбилармонларга қулай мулкӣ ва ҳуқуқӣ шароит яратишга, айниқса савдо-сотикни ривожлантиришга алоҳида эътибор берилди.

Тошкент марказидаги от миниб турган Амир Темур ҳайкали нафақат Ўзбекистон халқи, балки ҳар бир сайёҳларнинг тафаккурига ҳам виқор, мардлик, мақсадни кўра билишлик рамзи сифатида таъсир этади. Унинг миллатимиз тарихидаги буюқ хизматлари шундаки, у қадимий ва муқаддас Ватанимизни мўғул босқинчиларидан халос этиб, тарқоқ бўлиб ётган миллатни бирлаштирган, ўзаро жанжалларга барҳам берган. Юртда осойишталик ўрнатган, қисқа фурсат ичида курраи замин тан олган улкан ва қудратли давлатни барпо қилган. Тарихдан маълумки, соҳибқирон Амир Темур, энг аввало, ўз давлатининг сарҳадлар дахлсизлигини таъминлашга ва уни мустаҳкамлашга ҳаракат қилди<sup>50</sup>. Бу борада у ўзидан олдин ўтган Хоразмшоҳларнинг мўғул



<sup>50</sup> Шоҳақимов А.Р. Ҳарбий хизматчиларда милли йруҳни юксалтириш омиллари. Фалсафа фанлари бўйича фалсафа доктори (PhD), илмий даражасини олиш учун ёзилган диссертация. – Тошкент, 2022.



босқинчиларига қарши курашиш ва уларни Ватандан сиқиб чиқариш, Ватанни озод қилиш каби ишларини давом эттирди. Аниқроғи, “бу даврда ўзаро уруш-қирғинлардан боши чиқмаган майда, тарқоқ давлатлар бирлаштирилиб, ягона, қудратли давлат барпо этиб, унинг барча сарҳадларини ҳимоя қилиш, кўриқлаш ва мустаҳкамлаш каби улуғ ғоя ва ишлар амалга оширилди”<sup>51</sup>. Бунда Амир Темурнинг ватанпарварлик ва инсонпарварлик қарашлари унинг бошқарувида устувор бўлгани, бу ёндашув эса, ўз навбатида миллий ва жанговар руҳни юксалтиришда муҳим омил эканлигини айтиб ўтиш жоиз. Амир Темур бутун фаолияти давомида ўзини атоқли ҳарбий ташкилотчи ва буюк саркарда сифатида намоён қилди. У интизомли кўшин тузишга, уни моҳир қўмондонлар билан таъминлашга, жанг чоғида қисмларни санъаткорона бошқаришга, муҳораба такдирини ҳал этувчи жойларга кўмак кучларини ўз вақтида усталик билан йўллашга, олдида турган барча тўсиқлардан хушёрлиги ва тадбиркорлиги боис енгиб ўтган. Душманнинг мудофаасини турли хилдаги усул ва ҳийлалар натижасида яқсон қилишга эришган. “Мамлакатларнинг марказий ва йирик шаҳарларига кўкқисдан кучли зарба бериш, мустаҳкам иншоотларга эга бўлган қалъа, кўрғон ва ҳисорларни узоқ муддат қамал қилиш, ёв кучларини имкони борича кенг кўламда қуршовга олиш, рақибни таъқиб қилиш каби стратегик режаларни кўзлаб иш юритиши соҳибқиронга кўплаб ғалаба олиб келган”<sup>52</sup>.

Маълумки, ҳарбий қўмондонга бериладиган энг холис баҳо – унинг жангларда эришган ғалабасидир. Шу нуқтаи назардан Амир Темур тарихдаги буюк саркардалар орасида алоҳида ажралиб туради. Лекин ҳарбий тарихни махсус мутахассис сифатида ўрганувчилар бошқа янада жиддийроқ мезонларга мурожаат этадилар. Улар олиб борилган ҳар бир жангни геосиёсий замин билан боғлиқ ҳолда у ёки бу ҳарбий юриш нима учун ғалабага олиб келганлигини атрофлича ўрганишга ҳаракат қиладилар. Шу боис, Амир Темур барча давр буюк ҳарбий қўмондонлари орасида муҳим ўрин эгаллайди.

Буюк саркарда сифатида Амир Темур ўз жангчиларини доимо жанговар ҳолатда тутган. Душманини қаттиқ таъқиб қилиб бориш 30 ёшли Амир Темур учун улкан салтанат тузишга имкон беради. У жангга узоқ тайёрланиш орқали тез, шиддатли ҳужум уюштиришни афзал билган. Нотўғри ҳолат, вазиятда мингта жангчи билан тургандан кўра, ўнта жангчи билан тўғри ҳолат, вазиятда турган маъқул, деб ҳисобларди Амир Темур. “У шаҳарни қамал қилганда, шаҳар девори орқасида ҳеч қачон кутилмаган ҳолатга тушиб қолмаган. Кейинчалик Наполеон куч жиҳатдан анча ортиқ бўлган душман билан тўқнашувда ҳимоя учун яшириниш имкониятини

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<sup>51</sup>Темур тузуклари. – Тошкент: Шарк, 2018. 97-бет.

<sup>52</sup>Негматов Б.М. Ўзбекистонда ҳарбий ишлар тарихидан лавҳалар. – Тошкент: Фалсафа ва ҳуқуқ институти, 2010, 22-бет.

ахтаришнинг умумий тамойили «қалъа тақдирига ишониб интилишдир»<sup>53</sup>, деб айтган эди.

Ҳарбий хизматчиларда жанговар руҳни юксалтириш Амир Темурнинг шахсий жасорати таҳсинга сазовордир. Амир Темурнинг жангларда кўрсатган мардлиги унинг дўстлари ва душманлари орасида ҳам катта обрў қозонишига олиб келган. Унинг куч-қудрати ва чидамлилиги ҳам кишини лол қолдиради. У амалга оширган узоқ муддатли ҳарбий юришлар аслида буюк давлатчиликни яратиш ва унинг фаровонлигини таъминлаш мақсади билан йўғрилган. Ҳатто ҳаётининг сўнгги йилларида ҳам Амир Темурда ғайрат-шижоат тўлиб тошганини кўрамиз. Анқарада Боязидга қарши олиб борилган машҳур жангни бошқарганда у 70 ёш атрофида бўлган. “Амир Темур ҳарбий санъат устаси ҳам бўлган. У Тўхтамишни енгиб, Олтин Ўрдани забт этиш учун унчалик ҳам меҳмондўст бўлмаган шимолий чўллар ичкарасига кириб борган”<sup>54</sup>.

Амир Темурнинг ҳарбий жасоратини таҳлил қилиш асосида, биз у ташкил қилган қудратли ва интизомли кўшин жаҳоннинг ўша вақтдаги энг илғор кўшини сифатида кейинчалик буюк саркардалар, ҳарбий мутахассислар, тарихчи олимлар томонидан эътироф этилганлиги ва бир неча асрлардан буён андоза вазифасини бажараётганлигига амин бўламиз. Унинг сипоҳ ҳақидаги таълимоти ҳозир ҳам ўз қимматини йўқотгани йўқ ва уни давлат бошқаруви ҳамда ҳарбий таълим муассасаларида чуқур ўрганиш, амалиётда фойдаланиш мақсадга мувофиқдир.

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<sup>53</sup>Негматов Б.М. Ўзбекистонда ҳарбий ишлар тарихидн лавҳалар. – Тошкент: Фалсафа ва ҳуқуқ институти, 2010, 76-бет.

<sup>54</sup>Негматов Б.М. Ўзбекистонда ҳарбий ишлар тарихидн лавҳалар. – Тошкент: Фалсафа ва ҳуқуқ институти, 2010, 24-бет.

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**КУМКУРГАН ГЕОГРАФИЧЕСКИЙ ЦЕНТР  
СУРХАНДАРЬИНСКОЙ ОБЛАСТИ**

*Аннотация. В данной статье представлены теоретические вопросы постепенного переезда областного административного центра в Кумкурганский район с учетом географического положения Сурхандарьинской области.*

*Ключевые слова: География, население, удобное географическое положение, граница, административное положения.*

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**KUMKURGAN GEOGRAPHICAL CENTER OF SURKHANDARYA  
REGION**

*Abstract. This article presents the theoretical issues of the gradual relocation of the regional administrative center to Kumkurgan district, taking into account the geographical location of Surkhandarya region.*

*Keywords: geography, population, convenient geographical location, border, administrative convenience.*

Среди регионов нашей республики Сурхандарьинская область образована как область после Ташкентской, Ферганской, Хорезмской, Самаркандской, Бухарской областей, а также Андижанской и Наманганской областей. В административном отношении область в себя объединяет 13 сельских районов. Это Ангорский, Бойсунский, Деновский, Джаркурганский, Музработский, Алтинсойский, Сариосинский, Термезский, Узунский, Шерабадский, Шурчинский, Кызырикский, Кумкурганский районы. Кроме того в области имеется 8 городов и 114 сельских поселков. Сельские округа Сурхандарьинской области, такие как Деновский, Сариосийский, Термезский и Шерабадский, были созданы одними из первых (1926 г.) по сравнению с другими районами.

Сурхандарьинская область – располагается в южной части нашей республики, размещение населения на ее территории имеет свои особенности по уровню развития трудовых ресурсов, промышленности и сельского хозяйства. Основная причина этого – региональный климат. По состоянию на 1 января 2021 года численность населения области составляет 2 612 400 человек, из них в северных районах проживает 1 655 280 человек.

Тот факт, что большая часть населения проживает в северных районах, затрудняет участие в различных целях с областным центром (Рисунок 1.).

Город Термез – административный центр региона, расположен в его южной части. С этой точки зрения развитие города Термез на юг и восток невозможно. Тем, что город граничит с Афганистаном с юга, северная и западная части окружены пустыней Каттакум, в республике выделяется город Термез очень жаркой температурой +40+45 в летние месяцы. Из-за неглубокого расположения по сравнению с пригородами циркуляция атмосферы здесь затруднена.



**Рис. 1. Центр Кумкурганского района**

Город Термез является отдаленным для жителей северной части региона. Жители теряют много времени на посещение административных организаций региона (научных и средних специальных учебных заведений, органов власти, больниц, архивов, налоговых, строительных и т. д.).

Учитывая это, наше предложение – перенести областной центр в город Кумкурган. Конечно, для этого понадобятся большие деньги. Например, были перенесены центры Бразилии и Казахстана. Бабуриты 6 раз переносили столицу империи для развития Индии.



Переезд областного центра произойдет не скоро. Для этого необходимо постепенно создавать и перемещать региональные управленческие организации.

Введение железной дороги в город Кумкурган сделало его транспортным узлом. Тот факт, что город Кумкурган расположен рядом с крупнейшим южным Сурханским водохранилищем региона, обеспечивает несколько лучший климат, чем в Термезе. В летние месяцы она ниже Термеза на 50+60, воздух более влажный, дышится легче, жарких ветров нет.

От города Кумкурган до северной окраины района 130 км, от Термеза 225 км, до южной окраины 150 км, до восточной границы 80 км, до западной границы 140 км (Рис. 2).

Поэтому Кумкурганский район является географическим центром региона. Город Кумкурган имеет прекрасную возможность быть обеспеченным питьевой водой, газом и электричеством. Низкий уровень подземных вод позволяет строить строительные объекты и эксплуатировать их в течение длительного времени.



*Рис. 2 Карта Кумкурганского района и центра Термеза*

Даже для сельскохозяйственных культур почвы Кумкургана более плодородны, чем почвы Термеза, а урожайность незасоленных земель высока.

В город Кумкурган можно приехать со всей области и выполнить работу за один день. Доступ к городу Кумкурган и из него в другие регионы нашей Республики относительно хороший.

Например, большинство студентов, обучающихся в Термезском государственном университете, приезжают из Кумкургана и северных районов и раз в неделю уезжают домой. В результате транспортные средства пассажирского транспорта в субботу возят пассажиров только на север, а в воскресенье только на юг, то есть выполняют одностороннюю работу.

В рабочие дни жители севера и запада утром приезжают в Термез, а вечером отправляются домой на север и запад. Если пришедшие люди не закончат свою работу, они потеряют 2-3 дня. Например, в области 66 больниц, из них 22 (то есть 1/3 от общего числа) расположены в городе Термез, а это значит, что каждый третий пациент региона лечится в Термезе..

Благодаря наличию Сурхандарьинского и Шерабадского каналов вокруг города Кумкурган возможно развитие зон отдыха.

Короче говоря, мы считаем, что географически и политически целесообразно в будущем превратить Кумкурганский район в центр Сурхандарьинской области.

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## **ИҚТИСОДИЙ АХБОРОТЛАРНИ КОМПЮТЕРЛАР ЁРДАМИДА ҚАЙТА ИШЛАШ ВА БАЪЗИ ИҚТИСОДИЙ МАСАЛАЛАРНИ MS EXCEL ДАСТУРИ ЁРДАМИДА ЕЧИШ**

*Аннотация. Ушбу илмий публицистик мақолада иқтисодий ахборотлар, иқтисодий масалаларни компьютерлар ёрдамида ечиш босқичлари, иқтисодий масалалар турлари, хусусан иқтисодий масалаларни MS Excel дастури ёрдамида ечиш усуллари ҳақида сўз юритилади.*

*Калит сўзлар: ахборот, ахборот технологиялари, иқтисодий ахборотлар, масалани компьютерда ечиш босқичлари, MS Excel дастури.*

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## **PROCESSING ECONOMIC INFORMATION WITH THE HELP OF COMPUTERS AND SOLVING SOME ECONOMIC PROBLEMS USING MS EXCEL**

*Abstract. This scientific journalistic article talks about economic information, stages of solving economic problems using computers, types of economic problems, in particular, methods of solving economic problems using the MS Excel program.*

*Key words: information, information technologies, economic information, stages of computer problem solving, MS Excel program.*

**Кириш.** Ҳозирги ахборотлашган жамият тараққиётининг муҳим босқичи универсал ахборотлаштиришга ўтиш, иқтисодиётнинг барча соҳалари ва тармоқларида компьютерлаштириш ва ахборот технологияларининг жорий этилиши билан тавсифланади. Янги ахборот технологиялари таъсирида замонавий жамият иқтисодиётида, ишлаб чиқариш ва бошқарув жараёнларида туб ўзгаришлар рўй бермоқда. Шунинг учун ҳам замонавий ахборот технологияларини ўрганиш малакали мутахассис тайёрлашнинг муҳим таркибий қисми ҳисобланади.

Кишилиқ жамиятида узоқ вақт давомида асосий меҳнат объектлари асосий қийматга эга бўлган моддий объектлар эди. Бунда жамият ривожланиши технологик тараққиётдан ажралмас эди. Кўпгина жараёнларни автоматлаштириш меҳнатни енгиллаштириш ва унинг

самарадорлигини оширишга ёрдам берди. Меҳнат жамоаларини шакллантириш жараёнида билим алмашиш зарурати пайдо бўлди. Биринчидан, билимларни узатиш оғзаки равишда – авлоддан-авлодга ўтди. Кейин ёзма тил пайдо бўлди, бу тўпланган билимларни янгича узатишга имкон берди. Босма машиналар, телеграф, радио, телевидение, компьютерларнинг кейинги ихтиролари бу жараёнга янги жиҳатлар ва янги сифат берди. Айтишимиз мумкинки, ахборотлаштириш инсоният жамияти ривожланишининг табиий натижаси бўлди.

Замонавий жамиятда ахборотлаштириш жараёни жадаллик билан содир бўлмоқда, натижада, ахборот учун саноат жамияти, яъни ахборотлашган жамият ҳосил бўлади. Бу жараённинг моҳияти шуки ахборотлаштириш одамларнинг ҳаётини ошириш орқали ўзгартиришдан иборат бўлиб, жаҳон ҳамжамияти томонидан тўпланган билимларни қўллаш самарадорлигини ошириш ва инсон фаолиятнинг турли соҳаларида бошқарув жараёнини такомиллаштиришдан иборат. Ахборотлаштиришдан мақсад айрим фуқароларнинг, уларнинг гуруҳларининг ахборот эҳтиёжларини, компьютерларни кенг жорий этиш ҳисобига корхоналар, ташкилотлар ва алоқа воситалари ёрдамида қондиришдан иборат.

**Таҳлил ва натижалар.** Бошқарув амалиётида компьютерлардан фойдаланиш мумкин бўлмаган муҳим тушунча — бу вазифа. Умуман олганда, вазифа деганда фаолият йўналишини шакллантириш тушунилади, уни амалга ошириш белгиланган мақсадга эришишга имкон беради. Масалан, мақсад қуйидаги талаб бўлиши мумкин: кейинги чоракда рақобатбардошликни ошириш. Бироқ, компьютерлардан фойдаланилганда, бундай формулалар кўрсатилиши керак. Расмий равишда муаммони қуйидагича кўрсатиш мумкин:

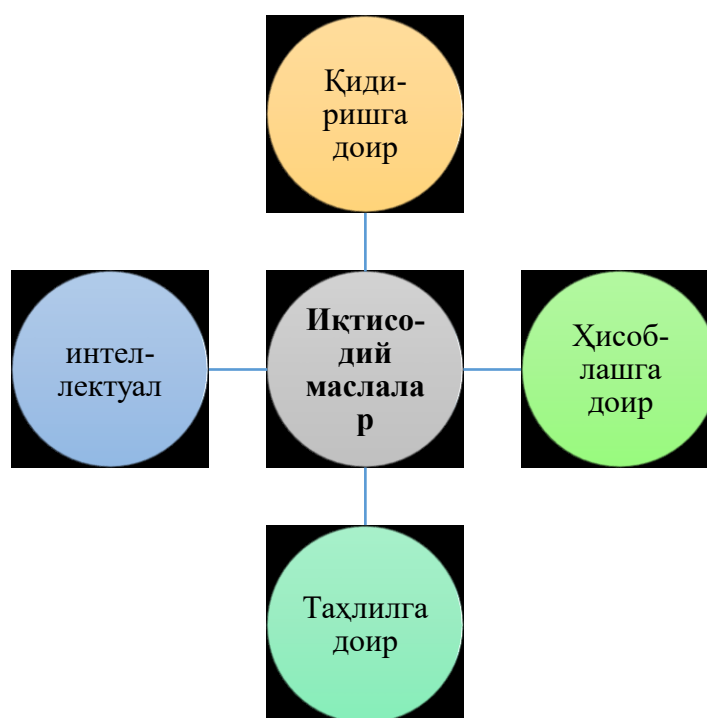
**Масала = Мақсад** (эришиш керак бўлган қиймат) + **Захиралар** (мақсадга эришиш жараёнида ишлатиладиган) + **Операциялар** (муаммони ҳал қилиш учун бажарилиши керак бўлган ҳаракатлар). **Масала=М+З+О.**

Шахсий компьютерлар ёрдамида ечиладиган масалалар икки синфга бўлинади: ахборий масалалар ва ҳисоблаш масалалари.



Ахборот (бошқарув) вазифалари бошқарув функцияларини қўллаб-қувватлаш учун мўлжалланган. Улар дастлабки маълумотларнинг катта ҳажми билан тавсифланади, уларни қайта ишлаш асосан мантиқий операциялар (маълумотларни саралаш, гуруҳлаш, бир жадвалдан иккинчисига ўқиш ва қайта ёзиш) ва киритиш-чиқариш операциялари орқали амалга оширилади. Ҳисоблаш масалалари ҳар хил турдаги тенгламалар (дифференциал, алгебраик, стохастик) ечимларини топиш, оптимал ечимларни излаш, турли объектларнинг ҳаракатини бошқариш ва бошқаларга қаратилган. Бу ерда ҳисоблаш операциялари устунлик қилади ва мантиқий операциялар ҳажми аҳамиятсиз бўлиб ҳисобланади.

Уларни тўрт турга бўлиш мумкин: қидирув, ҳисоб-китоб, аналитик, интеллектуал.



Иқтисодиётда компьютердан фойдаланишнинг дастлабки қисмида қидирув вазифалари аҳамиятсиз ўрин эгаллади. Бироқ электрон ҳужжат айланишининг ривожланиши, махсус ахборот-қидирув тизимлари, шунингдек, глобал ва маҳаллий тармоқларнинг яратилиши билан вазият тубдан ўзгарди. Бугунги кунда электрон архивлар, улкан маълумотлар омборлари, интернет ресурслари мавжуд бўлиб, юқоридаги манбалардан маълумотларга кириш ва сифатли излаш имконини берувчи тегишли воситалар ишлаб чиқилган. Ахборот-қидирув тизимларининг ҳолати сезиларли даражада ошди.

Маълумки, ҳисоблаш муаммолари иқтисодиётда энг кўп учрайди. Бунга бухгалтерия маълумотларини қайта ишлаш вазифалари, шунингдек, оператив ва тартибга солувчи маълумотлар асосида режаларни аниқлаш вазифалари киради. Ушбу муаммоларни ҳал қилиш ҳисоботлар ва

ҳисоботларни (ойлик, чораклик, йиллик) тайёрлаш учун мўлжалланган бўлиб, уларсиз бирон бир корхона ишлай олмайди. Бу ерда иккита муҳим тушунча қўлланилади:

- битим – иқтисодий, молиявий ва ҳар қандай моддий воситада акс эттирилган бошқа фаолият;

- транзакция – фойдаланувчининг ахборотга бўлган эҳтиёжини қондириш жараёнида компьютер ёрдамида маълумотларни қайта ишлаш бўйича операция ёки уларнинг мажмуи.

Ҳисоблаш жараёнлари асосан тўғридан-тўғри вазифалар бўлиб, улар умумлаштирилган (интеграл) иқтисодий кўрсаткичларни ҳисоблаш йўли билан бошқариладиган объектнинг ҳақиқий ҳолатини билдиради.

Таҳлилий вазифалар қарор қабул қилиш учун зарур бўлган маълумотларни олиш учун мўлжалланган. Булар асосан тескари муаммолар — керакли натижага эришиш учун дастлабки шартларни аниқлашни талаб қиладиган муаммолар.

Масалан, тўғридан-тўғри вазифа: ўтган ой учун бухгалтерия кўрсаткичлари асосида корхонанинг рентабеллигини аниқлаш. Тескари муаммо: корхонанинг рентабеллиги базавий ойга нисбатан 3% га ошиши учун кейинги ой учун асосий ҳисоб кўрсаткичлари қандай бўлиши керак?

Интеллектуал вазифалар сунъий интеллект соҳасидаги ютуқлардан фойдаланишга йўналтирилган: билимлар муҳандислиги, эксперт тизимлари, лойқа тўпламлар ва ярим тузилган маълумотларни қайта ишлаш, маълумотларни ақлли қайта ишлаш ва бошқалар. Ушбу синф муаммоларининг характерли хусусиятлари:

- ихтиёрий сўровларни иложи борича табиийга яқин тилда қайта ишлаш қобилияти;

- ноаниқ ва чекланган маълумотлар билан ишлаш, ёмон расмийлаштирилган муаммоларни ҳал қилиш қобилияти;

- аллақачон маълум бўлган ҳолатлар ва тажрибалардан маълумот олиш, шунингдек маълумотлар базаларида сақланган янги маълумотларни олиш қобилияти;

- интеллектуал тизимнинг ўз хулосаларини тушунтириш, шунингдек, ўз ваколатлари чегараларини аниқлаш қобилияти.

Ҳар бир предмет соҳасида (ишлаб чиқариш, банк, савдо, қурилиш, транспорт) тузилган муаммоларни ҳал қилиш учун мақсад чиқиш маълумотларининг тавсифи билан ифодаланади. У бирламчи ҳужжатлар ёки регистрларда мавжуд бўлган дастлабки иқтисодий кўрсаткичларга асосланади. Бунда фан соҳасидаги масалаларни ечиш методикасига таъсир этмайдиган ва фан технологияси мазмунини ўзгартирмайдиган воситалар қўлланилади.

Бошқарув масалаларини ҳал қилишда алгоритм ёки алгоритмлар тўплами катта аҳамиятга эга бўлиб, натижада олинган маълумотларни регистр (баёнот) шаклида олишга ёрдам беради. У бошқарув мақсадларига

эришишни баҳолаш учун зарур ва ўзаро боғлиқ кўрсаткичлар тўпламидан фойдаланган ҳолда бошқариладиган объект ёки жараёни миқдорий жиҳатдан тавсифлаши мумкин. Объектнинг тўлиқ тавсифини олиш учун бутун кўрсаткичлар тизимидан маълумотлар талаб қилинади, чунки битта кўрсаткич фақат битта хусусиятнинг хусусиятларини ўз ичига олиши мумкин. Кўрсаткичлар тизими муаммони шакллантириш билан белгиланадиган прагматик ва семантик баҳолаш асосида яратилади. Шу сабабли, тегишли муаммоларни ҳал қилиш учун бир хил кўрсаткичлар тўпламига бир нечта тизимлар қурилиши мумкин.

Кутилаётган натижа (бошқарув мақсади) директив (траектория мақсади) ёки ижодий мақсад шаклида белгиланиши мумкин, уни амалга ошириш учун мумкин бўлган эчимларнинг муқобил рўйхати мавжуд ва, қоида тариқасида, ёки амалга ошириш учун улардан бири танланади ёки янги ечим таклиф этилади.

Иқтисодий масалани компьютерда ечиш босқичлари:

- 1) ечим излаш ва асослаш, маркетинг тадқиқотлари;
- 2) ечим усулини танлаш, уни шакллантиришни бажариш, тест ишини ишлаб чиқиш;
- 3) муаммони ҳал қилиш дастурини тузиш, ишлаб чиқиш, услубий ҳужжатлар, муаммоларни ҳал қилиш.

Масала: MS Excel дастурида мураккаб фоизда иш ҳақини ҳисоблаш жадвалини тузинг. Бунда даромад солиғи қўйидагича ҳисоблансин:

иш ҳақи 5 минималгача бўлганда 10%;

иш ҳақи 5 дан 10 минималгача бўлганда 16%;

иш ҳақи 10 минималдан ошганда 22%.

	A	B	C	D	E	F	G	H	I	J
1			минимал иш ҳақи		5 минимал гача	5 дан 10 минимал гача	10 минимал дан ортиқ			
2			347000		10%	16%	22%			
3	№	Ф.И.Ш.	Иш ҳақи	Даромад солиғи	Пенсия фонди 1%	Касаба уюшма 2,5%	Жами солиқ	Қўлга олиши	Имзо	
4	1									
5	2									
6	3									
7	...									
8										
9										

Бунда Пенсия фонди, Касаба уюшмаси, Жами солиқ ва Қўлга олиши катакларидаги ҳисоблашлар қийинчилик туғдирмайди. Фақат Даромад солиғи катагига ЕСЛИ функциясидан фойдаланган ҳолда қўйидаги формулани киритамиз:



=ЕСЛИ(C4<5\*\$C\$2;C4\*\$E\$2;ЕСЛИ(C4<10\*\$C\$2;5\*\$C\$2\*\$E\$2+(C4-5\*\$C\$2)\*\$F\$2;5\*\$C\$2\*\$E\$2+5\*\$C\$2\*\$F\$2+(C4-10\*\$C\$2)\*\$G\$2))

**Хулоса ва таклифлар.** IT мухитида хусусан иқтисодий ахборотларни қайта ишлаётганда, одам объектнинг ўзини эмас, балки унинг баъзи умумлаштирилган ахборот моделини сезади. Шунинг учун асосий вазифа самарали интерфейсни таъминлашдир, яъни маълумот инсон идрокига қулай шаклда тақдим этилиши керак.

Интерфейснинг иккита асосий тури мавжуд: менюга асосланган ва буйруқларга асосланган. Меню асосида-ўзаро таъсир қилиш осон, ҳар бир босқичда бажарилиши мумкин бўлган буйруқлар тўплами тақдим этилади, инсон ўзаро таъсир қиладиган тизим ҳақида чуқур билим талаб этилмайди. Буйруқлар асосида эса бажарилганда компьютер билан алоқа тилини билиш талаб қилинади.

Ахборот жараёнлари маълум бир кетма-кетликда ишлаб чиқарилган истеъмолчининг мақсадли ҳаракатларини акс эттиради ва шунинг учун улар ахборот технологияларининг мазмунини ташкил қилади.

Иқтисодий ахборотларни амалий дастурлар ёрдамида, хусусан MS Excel дастури ёрдамида қайта ишлаш фойдаланувчи учун жуда қулай бўлиб, амалий ишлаш жараёнида эгалланадиган маълум бир кўникмаларга эга бўлишни талаб қилади.

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## ТУРИСТЛАРНИ ОПТИМАЛ ЖОЙЛАШТИРИШ БЎЙИЧА ТРАНСПОРТ МАСАЛАСИНИ MS EXCEL ДАСТУРИДА ЕЧИЛИШИ

*Аннотация. Ушбу мақолада иқтисодий масалаларни компьютерлар ёрдамида ечиш, хусусан иқтисодий масалани, яъни туристларни меҳмонхоналарга оптимал жойлаштириш бўйича транспорт масаласининг MS Excel дастури ёрдамида ечиш кўрсатиб ўтилади.*

*Калит сўзлар: ахборот, ахборот технологиялари, иқтисодий ахборотлар, масалани MS Excel дастурида ечиш, “Поиск решений”.*

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## SOLUTION OF TRANSPORT PROBLEM FOR OPTIMAL LOCATION OF TOURISTS IN MS EXCEL PROGRAM

*Abstract. This article presents the solution of economic problems with the help of computers, in particular, the solution of the economic problem, that is, the solution of the transport problem with the help of the MS Excel program, on the optimal placement of tourists in hotels.*

*Key words: information, information technologies, economic information, problem solving in MS Excel program, “Поиск решений”.*

**Кириш.** Иқтисодий масалаларни MS Excel дастурида ёрдамида ечиш жуда қулай ҳисобланади. Бунинг учун масалани шартлари бўйича масалаларни компьютерда ечиш бочқичларини билишимиз, амалда қўллашимиз керак бўлади.

Таҳлил ва натижалар. Дам олиш учун келаётган сайёҳларга хизмат кўрсатадиган фирма уларни 4 та «Регистон», «Шарқ», «Зарафшон» ва «Мароқанд» меҳмонхоналарига жойлаштириши керак. Хонадонларга келиш пунктларидан ташишда транспорт харажатлари 1-жадвалда келтирилган.

1-жадвал

Жўнаш манзили, i		Жойлашиш манзили (меҳмонхоналар), j			
		Регистон	Шарқ	Зарафшон	Мароқанд
		1	2	3	4
Темир йўл вокзали	1	10	0	20	11
Аэропорт	2	12	7	9	20
Улуғбек шоҳбекати	3	0	14	16	18

Кучли рақобат шароитида фирма ўз харажатларини минималлаштириши керак, бунда уларнинг муҳим қисмини айнан транспорт харажатлари ташкил этади. Ҳамма транспорт харажатлари минимал бўлган ва барча сайёҳлар меҳмонхоналарга жойлаштириладиган ва жўнаш манзилдан сайёҳларни ташиш режасини белгилаш талаб этилади.

### *Масаланинг математик модели*

1) Ўзгарувчи қийматлар.  $i$  пунктдан  $j$  меҳмонхонага ташиладиган сайёҳлар сонини  $x_{ij}$  ( $i = 1, 2, 3; j = 1, 2, 3, 4$ ). Бу ўзгарувчи қийматлар, масалани ечиш жараёнида аниқланади. Масалан,  $x_{23}$  – бу аэропортдан (2-пункт) «Зарафшон» меҳмонхонасига ташилиши керак бўлган сайёҳлар сони (3-пункт). Масалада  $3 \times 4 = 12$  ўзгарувчи мавжуд.

2) Ўзгарувчи қийматларга чегара шартлари қўйилган. Албатта, барча ўзгарувчи қийматлар манфий эмас ва бутун сонлар, яъни.

$$x_{ij} \geq 0 \quad (1)$$

$$x_{ij} - \text{бутун сонлар,} \quad (2)$$

$$\text{бунда } i = 1, 2, 3; j = 1, 2, 3, 4.$$

Бундан ташқари, қуйидаги шартлар қониқтирилиши керак. Темир йўл вокзалидан олиб чиқиладиган сайёҳлар сони (1-пункт) 15 га тенг, шунинг учун:

$$x_{11} + x_{12} + x_{13} + x_{14} = 15 \quad (3)$$

Аэропортда ҳам шунга ўхшаш (2-пункт):

$$x_{21} + x_{22} + x_{23} + x_{24} = 25 \quad (4)$$

Улуғбек шоҳбекати учун (3-пункт):

$$x_{31} + x_{32} + x_{33} + x_{34} = 5 \quad (5)$$

Масала шarti бўйича «Регистон» меҳмонхонасида (1 пункт) 5 ўрин брондалган, шунинг учун қуйидагилар:

$$x_{11} + x_{21} + x_{31} = 5 \quad (6)$$

Шунингдек, «Шарқ» меҳмонхонаси учун:

$$x_{12} + x_{22} + x_{32} = 15 \quad (7)$$

«Зарафшон» меҳмонхонаси учун (3 пункт):

$$x_{13} + x_{23} + x_{33} = 15 \quad (8)$$

«Мароқанд» меҳмонхонаси учун:

$$x_{14} + x_{24} + x_{34} = 10 \quad (9)$$

Одатда транспорт масаласи жадвал шаклида тақдим этилади, бунда ўзгарувчи қийматлар ( $x_{ij}$ ) жойлаштирилади, катакнинг ўнг юқори бурчагида эса  $i$  банддан  $j$  ( $c_{ij}$ ) пунктига ташиш қийматлари туради. Жадвалнинг ўнг устунисида ва қуйидаги сатрида чегара шартлар ёзиб олинади (мазкур мисолда – бошланғич пунктлардаги сайёҳлар сони ва меҳмонхоналардаги ўринлар сони). 2-жадвал қуйидаги кўринишга эга:

## Транспорт масаласи ҳолати

Жўнаш манзили, i	Жойлашиш манзили (меҳмонхоналар), j				Жўнаш манзилидаги туристлар сони
	1	2	3	4	
1	10	0	20	11	15
	X <sub>11</sub>	X <sub>12</sub>	X <sub>13</sub>	X <sub>14</sub>	
2	12	7	9	20	25
	X <sub>21</sub>	X <sub>22</sub>	X <sub>23</sub>	X <sub>24</sub>	
3	0	14	16	18	5
	X <sub>31</sub>	X <sub>32</sub>	X <sub>33</sub>	X <sub>34</sub>	
Меҳмонхонадаги ўринлар сони	5	15	15	10	45

3) Мақсад функция. Меҳмонхоналарга сайёҳларни ташиш учун транспорт харажатлари қуйидаги формула бўйича ҳисобланади:

$$z = c_{ij}x_{ij} = 10x_{11} + 0x_{12} + 20x_{13} + \dots + 18x_{34} \quad (10)$$

Тўлиқ транспорт масаласи 2-жадвал кўринишга эга.  $x_{ij}$  ўзгарувчиларининг шундай қийматларини топиш керакки ( $i=1,2,3; j=1,2,3,4$ ) ҳолда (10) формула билан белгиланадиган мақсад функция энг кам қийматга эга бўлади ва барча чегара шартлар (1) — (9) бажарилади.

**Масалани MS Excel дастурида ечилиши**

Юқоридаги шартлар бўйича масала шартлари MS Excel дастурига қуйидагича киритиб олинади:

	A	B	C	D	E	F	G
1							Транспорт харажатларини мақсад функцияси
2	Жўнаш манзиллари	1	2	3	4	туристлар сони	
3	темир йўл вокзал	10	0	20	11	15	0
4	аэропорт	12	7	9	20	25	
5	Улуғбек шоҳбекати	0	14	16	18	5	
6	меҳмонхоналардаги ўринлар сони	5	15	15	10		
7							
8	Жўнаш манзиллари						
9	темир йўл вокзал					0	
10	аэропорт					0	
11	Улуғбек шоҳбекати					0	
12	меҳмонхоналардаги ўринлар сони	0	0	0	0		
13							

2) «Поиск решения» мулоқот дарчасини қуйидагича тўлдирамиз:  
Мақсад функция: G3;

Мақсад функция қиймати: min;

Ҳисобланадиган ячейкалар: B8: E10;

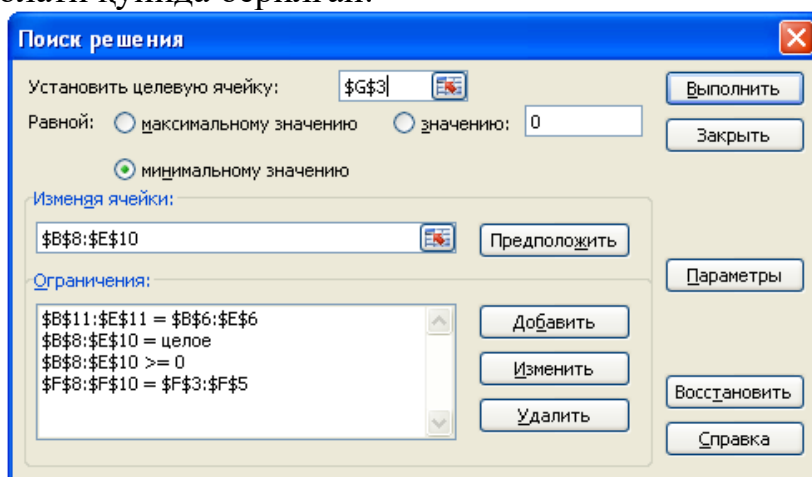
Чегаравий шартлар:

F8: F10 = F3: F5 катаклар учун (3)-(5) формулалар

B11: E11 = B6: E6 катаклар учун (6)-(9) формулалар

B8: E10 >=0 (1) ва B8: E10 – бутун сонлар (2)

«Параметры» бўлимига «Линейная модель» қўйилади. Дарчани тўлдириш ҳолати қўйида берилган:



3) «Поиск решения» орқали биз қўйидаги натижага эга бўламиз:

	A	B	C	D	E	F	G
1							Транспорт
2	Жўнаш манзиллари	1	2	3	4	туристлар сони	харажатларини мақсад функцияси
3	темир йўл вокзал	10	0	20	11	15	<b>315</b>
4	аэропорт	12	7	9	20	25	
5	Улуғбек шоҳбекати	0	14	16	18	5	
6	меҳмонхоналардаги ўринлар сони	5	15	15	10		
7							
8	Жўнаш манзиллари						
9	темир йўл вокзал	0	5	0	10	15	
10	аэропорт	0	10	15	0	25	
11	Улуғбек шоҳбекати	5	0	0	0	5	
12	меҳмонхоналардаги ўринлар сони	5	15	15	10		
13							
14							

Демак, темир йўл вокзалидан Шарқ меҳмонхонасига 5 нафар, Мароқанд меҳмонхонасига 10 нафар, аэропортдан Шарқ меҳмонхонасига 10 нафар, Зарафшон меҳмонхонасига 15 нафар, Улуғбек шоҳбекатидан эса 5



нафар турист Регистон меҳмонхонасига олиб борилиши керак. Шунда транспорт харажатлари минимал  $G3=315$  минг сўм бўлади.

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## **САНОАТ КОРХОНАЛАРИ САМАРАЛИЛИГИНИ ОШИРИШ БЎЙИЧА ИШЛАБ ЧИҚАРИШ ЙЎНАЛИШЛАРИ**

*Аннотация. Ушбу мақолада саноат корхоналарида ишлаб чиқаришнинг иқтисодий самарадорлигини ошириш йўллари ва уларнинг мамлакат иқтисодиётидаги ўрни кўриб чиқилган*

*Калит сўзлар: ишлаб чиқариш, самарадорлик, қайта ишлаш, саноат, ресурс, келажакни кўрсатувчи технологиялар.*

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## **PROMISING DIRECTIONS FOR INCREASING THE EFFICIENCY OF INDUSTRIAL ENTERPRISES**

*Abstract. This article discusses ways to increase the economic efficiency of production at industrial enterprises, their role in the country's economy.*

*Key words: production, efficiency, processing, industry, resources, technologies, future indicators.*

Ривожланаётган бозор иқтисодиёти шароитида давлатнинг иқтисодий стратегияси узоқ вақтга мўлжалланган фундаментал мақсадларни ўртага қўйиш билан бир қаторда бу мақсадларга эришиш воситалари, йўлларини белгилашни ҳам ўз ичига олади. Булар орасида **ишлаб чиқариш самарадорлигини** тўхтовсиз ошириб бориш асосий ўринда туради.

Ўзбекистон давлатининг қудратини мустаҳкамлаш, аҳолининг моддий ва маънавий неъматларга бўлган эҳтиёжларини тўлароқ қондириш, келажакда эса – уларни мўл-кўл яратиш, иқтисодий ва илмий-техника соҳасида энг ривожланган давлатлар қаторидан жой олиш ишлаб чиқариш самарадорлигини оширишга бевосита боғлиқдир.

Маълумки, ишлаб чиқаришни ривожлантиришда икки хил омил: миқдор ва сифат, экстенсив ва интенсив, яъни кенгайтирувчи (узайтирувчи) ва зўр берувчи, кучайтирувчи омиллар ҳаракатда бўлади. Бошқача қилиб айтганда, агар ишлаб чиқариш соҳаси кенгайтирилса, экстенсив суратда кенгайган такрор ишлаб чиқариш бўлади; агар яна ҳам **кўпроқ самара** берадиган ишлаб чиқариш воситалари қўлланиладиган бўлса, интенсив суратда кенгайган такрор ишлаб чиқариш юзага келади. [2]

Ўзбекистон саноатида ана шу икки йўлдан оқилона фойдаланиш натижасида ишлаб чиқаришнинг самарадорлиги босқичма-босқич ўсиб бормоқда.

*Самарадорлик сўзи* - бу энг кўп учрайдиган умумий тушунчалардан бири бўлиб, иқтисодий - ижтимоий тараққиётнинг хилма-хил соҳаларида жуда кенг ишлатилади. Масалан, ижтимоий ишлаб чиқариш самарадорлиги, меҳнат самарадорлиги, ўқиш ва ўқитиш самарадорлиги, даволаш ва даволаниш самарадорлиги, қабул қилинган қонун ва қоидалар ҳамда ечимларнинг самарадорлиги ва ҳоказолар.

Самарадорлик саноат ишлаб чиқариш фаолиятининг “кўзгуси” ҳисобланади. Бу “кўзгу”да ишлаб чиқаришнинг барча натижаларини кўриш мумкин. Маълумки, ҳар бир тармоқ, корхона, қолаверса, ҳар бир шахс ўз ишлаб чиқариш фаолиятида максимум фойда олишга интилади. Унинг учун маълум харажатлар қилади. Ана шу фойда билан харажатлар ўртасидаги фарқ тармоқ ва корхона фаолиятининг “кўзгуси” бўлган самарадорликда кўзга ташланади. Ишлаб чиқаришнинг энг юқори самарадорлиги ишлаб чиқариш харажатларини минимум даражага келтиришдан иборат.

Бозор иқтисодиёти натижалиликни, фойдалиликни тақозо этади. Тартибли бозорга асосланган иқтисодиётда энг кам ресурс сарфлаб кўп натижага эришиш зарур. Маҳсулот ишлаб чиқариш жараёнида 5 турдаги ресурслар тизими ҳаракатда бўлади: а) моддий ресурслар, б) меҳнат ресурслари, в) молиявий ресурслар, г) энергетик ресурслар, д) ахборот ресурслари, яъни инфорацион ресурслар. Мана шу ресурслардан оқилонафойдаланиб, ишлаб чиқаришнинг самарадорлигини ошириш мумкин. Бундай фаолият ишлаб чиқариш самарадорлигини ошириш йўналишида муҳим аҳамият касб этади. [3]

Самарадорлик - бу фойдалилик, натижалиликдир. Маълумки, қандайдир натижа олиш учун меҳнат қилиш, ишлаш, маҳсулот ишлаб чиқариш ёки хизмат кўрсатиш ва маълум миқдорда харажат қилиш керак.

Самарадорликни аниқлаш учун натижани шу натижага эришишга сарфланган харажатларёки ресурсларбилан таққослаш керак. Демак, Самарадорлик ишлаб чиқариш фаолияти натижалари билан уларга эришиш учун сарфланган меҳнат, моддий ва молиявий ресурсларнинг ўзаро нисбатидир.

Иқтисодиётнинг таркибий тузилишини такомиллаштириб бориш, чуқур қайта ишланган, тайёр, қўшилган қиймат ҳиссаси юқори бўлган

маҳсулот ишлаб чиқарувчи тармоқларни жадал ривожлантириш ва уларнинг ЯИМ ҳамда мамлакат экспортидаги улушини кўпайтириш муҳим аҳамиятга эга.

Мамлакатдаги иқтисодий ўсиш омиллари ва манбалари таҳлили кўрсатишича инқирозга қадар бўлган даврда иқтисодий фаолликни юқори суръатлари асосан экспорт салоҳиятини ривожлантиришни жадаллаштириш, иқтисодиётга йўналтирилган инвестицияларнинг миқёси, иқтисодиёт таркибини тизимли ва босқичма-босқич янгиланиши ҳисобига эришилган. Иқтисодий ўсишни иқтисодиётни эркинлашувини чуқурлашуви ва миқёсини кенгайтириши, валюта бозорини барқарорлашуви, кичик бизнес ва хусусий тадбиркорлик секторини жадал суръатларда ривожланиши таъминлади.

Мустақиллик йилларида хом-ашё ресурсларини чуқурроқ қайта ишлаш, юқори қўшилган қийматли товарлар улушининг ортишига қаратилган таркибий сиёсатни амалга ошириш натижасида мамлакат ялпи ички маҳсулот таркибида қишлоқ хўжалиги улушининг пасайиши ва саноат, хизмат кўрсатиш соҳаларининг улушини ортиши кузатилмоқда.

Жаҳон амалиёти ва мамлакатимизда амалга оширилаётган иқтисодий ислохотларнинг натижаларига кўра макроиқтисодий барқарорлик даражаси билан барқарор иқтисодий ўсишни таъминлаш ўртасида бевосита боғлиқлик мавжуд. Масалан, инфляцияни юқори даражаси иқтисодиётни инвестициялашни мавжуд манбаларини сўндиради, ишлаб чиқаришни модернизация қилиш суръатларига салбий таъсир кўрсатади. Кейинги йилларда инфляцияни жиловлаш, самарали бюджет-солиқ сиёсатини олиб бориш, солиқ юкини камайтириш, давлат бюджети харажатларини янада оптималлаштириш, банк тизими барқарорлигини мустаҳкамлаш, банкларнинг кредитлаш салоҳиятини ошириш, иқтисодиётни модернизация қилиш ва таркибий ўзгаришларни амалга оширишга жалб қилинаётган инвестициялар (жумладан, хорижий инвестициялар) ҳажмини кўпайтириш, экспорт ҳажмини ошириш ва уни диверсификациялаш борасидаги чоратадбирлар, макроиқтисодий барқарорликни таъминлашга ва барқарор иқтисодий ўсишга эришиш учун хизмат қилади. Мамлакатдаги макроиқтисодий кўрсаткичларни таҳлили уни барқарорлигини ортиб бораётганлигини кўрсатмоқда.

Саноат иқтисодиёт тармоқларини ишлаб чиқариш воситалари, меҳнат қуроллари билан таъминлайди. Миллий иқтисодиёт, фан, маориф, маданият, соғлиқни сақлаш, спорт, туризм ва бошқа соҳалар ривожини саноатнинг тараққиёт даражасига боғлиқ. Ишлаб чиқариш кучлари ва муносабатлари тараққиётда саноатнинг тарихий роли бекиёсдир. Шу сабабли унинг ривожини ва самарадорлигини қанчалик юқори бўлса, давлатнинг мавқеи шунчалик кучли бўлади ва аҳоли турмуш даражасини янада яхшиланган боради.

Саноат жамиятнинг етакчи кучи бўлган ишчилар синфини ўзида бирлаштиради. Саноат ривожини туфайли унда банд бўлган ходимларнинг сони кўпаяди, уларнинг билим ва илми, маҳорати ортади, кадрлар салоҳияти юқори даражага кўтарилади. Саноат асосан 3 турга бўлинади: оғир саноат, енгил саноат ва озиқ-овқат саноати.

Меҳнатни ижтимоий ташкил қилишнинг энг олий тури, концентрациянинг юқори даражаси ва шу асосда ижтимоий ишлаб чиқаришни уюштиришнинг илғор усуллари - ихтисослаштириш, кооперативлаштириш ва комбинатлаштириш, кўплаб ишлаб чиқариш ва узлуксиз поток системаси ёрдами билан ташкил этиш саноат соҳасида ҳукмронлик қилади.

Барча мамлакатларнинг сиёсий, иқтисодий ва ташкилий интилишлари, уларнинг хўжалик жиҳатдан ҳамкорлиги саноат соҳасида ҳам ўз ифодасини топади. Давлатларнинг табиий, меҳнат ресурсларидан, илм-фан ва техниканинг барча ютуқларидан фойдаланиш имкониятларининг кенгайишида саноатнинг аҳамияти салмоқлидир.

Саноатнинг вужудга келиши ва ривожланиши меҳнат тақсимотини ўсиши, ишлаб чиқаришни дифференциялаш ва интенсификациялаштириш билан ҳамбарчарс боғлиқ.

Ҳозирги замон йирик саноати бир бири билан ҳамбарчарс боғлиқ бўлган кўпгина тармоқлар ва ишлаб чиқаришлардан ташкил топади. Бугунги кунда республика саноатида 175 тармоқ, 1500 га яқин йирик ва ўрта саноат корхоналари мавжуд.[5]

Умуман олганда, тармоқлар бўйича ишлаб чиқариш таркибида оғир саноат (ёнилғи-энергетика мажмуаси, машинасозлик, металлургия) салмоғининг ошиши енгил саноат улуши ҳисобига бўлмоқда. Натижада, муваққил иқтисодга хос бўлган даражага яқинлашиш юз бермоқда ва собиқ иттифоқ мамлакатларида қайта ихтисослашувдан пайдо бўлаётган етишмовчилик ва тобаликнинг олдини олиш таъминланмоқда.

Бу кўрсаткичларнинг барчаси, аввало, экспорт таркибида юқори қўшимча қийматга эга бўлган рақобатдош тайёр маҳсулот улушининг изчил ошиши, биринчи навбатда, иқтисодиётимизнинг ўсиб бораётган салоҳияти ва имкониятларидан далолат беради. Мамлакатимизда фаол инвестиция сиёсати олиб борилиши натижасида ҳисобот даврида ўнлаб замонавий корхоналар ишга туширилди. Жумладан, “Женерал Моторс Павертрейн Ўзбекистон” қўшма корхонасида юқори технологиялар асосида автомобиль двигателлари ишлаб чиқариш йўлга қўйилди. Шунингдек, автомобиль генератори ва компрессорлари ишлаб чиқариш бўйича қувватлар барпо этилди, энергияни тежайдиган лампалар ишлаб чиқариш бўйича учта лойиҳа амалга оширилди.

Шулар қаторида “Зенит электроникс” қўшма корхонасида “Самсунг” кир ювиш машиналари ишлаб чиқариш ўзлаштирилди. Айни пайтда

маиший газ плиталари, кондиционерлар, электр пылесослар ва бир қанча бошқа маҳсулотлар ишлаб чиқариш йўлга қўйилди.

“Муборак газни қайта ишлаш заводи” унитар шўъба корхонасида суюлтирилган газ ишлаб чиқариш ҳажмини кўпайтириш мақсадида пропан-бутан аралашмаси қурилмасининг биринчи навбатини, Самарқанд вилоятида “МАН” юк ташиш машиналари ишлаб чиқариш бўйича янги мажмуанинг дилерлик марказини бунёд этиш ишлари якунига етказилди.

Навоий шаҳридаги эркин индустриал-иқтисодий зона муваффақиятли фаолият юрита бошлади, унинг ҳудудида янги ташкил этилган корхоналарда спидометрлар, автомобиллар учун ўтказгичлар, компрессорлар, рақамли телевизион тюнерлар, энергияни тежайдиган лампалар, ёритиш ускуналари, диодли лампалар, модемлар, полиэтилен ва полипропилен қувурлар, косметика воситалари ҳамда тиббиёт маҳсулотлари ишлаб чиқариш йўлга қўйилди.

Саноат соҳасида ажойиб ютуқлар билан бирга бир қатор камчиликлар ва ҳал этилмаган муаммолар мавжуд. XXI асрда бу муаммоларнинг ечимини топиш учун Ўзбекистонда барча имкониятлар, яъни жуда катта моддий, меҳнат, молиявий ва интеллектуал ресурслар мавжуд. Ана шу ресурслардан оқилона фойдаланиш асосида Ўзбекистоннинг жуда қудратли ва самамарали саноатини янада юқори даражага кўтариш мумкин.

Юқоридаги натижаларга иқтисодиётда модернизация қилиш ва таркибий ўзгартиришлар жараёнини жадаллаштирмасдан, уни муҳим тармоқларини техник ва технологик жиҳатдан янгиламасдан эришиб бўлмайди.

Хулоса ўрнида таъкидлаш мумкинки, иқтисодиётни модернизация қилиш, саноат тизимининг истиқболини белгилаш, мамлакат иқтисодиётини янгилаш, фан сиғимкорлиги юқори бўлган устувор соҳаларни ривожлантириш асосида мамлакат иқтисодиётини инновацион ривожлантириш йўлига ўтказиш, мамлакат миллий иқтисодиётининг рақобатдошлигини ошириш ва аҳолининг ўсиб, ўзгариб бораётган эҳтиёжларини тўлароқ қондириш ҳисобланади.

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## **ВЫРАЩИВАНИЕ САЖЕНЦА ВИНОГРАДА РАЗНЫМИ СПОСОБАМИ**

*Аннотация. Площадь виноградников в нашей республике составляет 148 тысяч гектаров, и 60% виноградников на «вертикальной шпалере» не поднялись до показателей. Он не взошел на престол, сокращение виноградников, изменение почвы и климата в регионах, изучение корней и виноградников на научной основе, текущие задачи дня – продвижение экологически чистые, полезные и привлекательные продукты питания. На мировом рынке наряду с бессемянными сортами винограда возрос спрос и внимание к чистым сортам для красного вина. В целях выращивания и экспорта винограда и виноградной продукции, закладки новых виноградников в Узбекистане, их благоустройства. Эта рекомендация основана на многолетнем опыте ученых и специалистов в области виноградарства. Несомненно, данная рекомендация предназначена для фермеров и крестьянских хозяйств, занимающихся виноградарством. Сад служит важным ориентиром в работе помещиков.*

*Ключевые слова: виноградарство в Узбекистане, экологический продукт, экспорт.*

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## **GROWING GRAPES SEEDLINGS IN DIFFERENT WAYS**

*Annotation. The area of vineyards in our republic is 148,000 hectares and 60% of the vineyards in the “vertical trellis” have not risen to the rates. He did not ascend to the throne, the reduction of vineyards, soil and climate changes in regions, studying the roots and vineyards on a scientific basis, the current tasks of the day are advancement. environmentally friendly, healthy and attractive food in the world market along with in addition to seedless grape varieties, the demand and attention for pure varieties for red wine has increased. For the purpose of growing and exporting grapes and grape products, establishing new vineyards in Uzbekistan, improvement. This recommendation is based on many years of experience of scientists and specialists in the field of viticulture. Undoubtedly, this recommendation is intended for farmers and peasant farms involved in viticulture. The garden serves as an important reference point in the work of landowners.*

*Key words: viticulture in Uzbekistan, ecological product, export.*

**Введение.** №ПК-4549 от 11 декабря 2019 года «О мерах по дальнейшему развитию садоводства и тепличного хозяйства в Республике Узбекистан», добавлено в области дальнейшего развития плодоовощного и виноградарства «О дополнительных мерах по созданию цепочка добавленной стоимости», №ПК-4709 от 11 мая 2020 года «О дополнительного меры по специализации территорий республики для производства сельскохозяйственной продукции» постановление занимает важное место в развитии отрасли. Виноград полон витаминами как А, С, П, ПП, В1, В2, В6, В12. По мнению учёных, витамины относящийся к группе В, аминокислоты и микроэлементы больше сконцентрированы в поздних сортах винограда. Лечебные свойства винограда известны с древних времен, и его используют в медицине при различных заболеваниях (туберкулез, анемия, импотенция, заболевания желудочно-кишечного тракта, мочевыводящих путей, болезни сердца и др.) широко применяется при лечении угощение виноградом научно обоснованное новое направление ампелотерапия (греч. Ампелос – виноград, терапия – лечение) широко используется в медицине.

**Распространения винограда.** В Узбекистане насчитывается 10 виноградарских зон, основные из которых расположены в Самарканде, Ташкенте, Бухаре, Ферганской, Андижанской, Кашкадаринской и Сурхандаринской областях. Там же находятся и крупнейшие винзаводы. Узбекистан входит в число крупных производителей винограда в мире, а на пространстве СНГ по объемам выращиваемого винограда уверенно занимает лидирующую позицию. По данным ФАО по площадям виноградников Узбекистан в 2016-17 годах занимал 18 место в мире, а по валовым объемам собранного винограда в 2017 году занимал 17 место в мире. Кроме того Постановлением Президента от 05.02.2019 доведение общей площади виноградников винных сортов, пригодных для промышленной переработки, до 29 тыс га. путем создания новых виноградников на площади 23,4 тыс. га, урожай с которых позволит полностью загрузит текущие производственные мощности винодельческой отрасли.

**Рентабельность виноградарства.** Затраты на закладку 1 гектара виноградника около 8-9 млн. сум. (без установки шпалер). Первый урожай с посевной площади можно получить через 4-5 лет. Затраты производства выращивания винного сорта винограда на 1 гектаре (урожайность 100 ц\га) – 16 млн. сум. Продажная цена 1 тонны винограда – 2.0 млн. сум. Себестоимость 1 тонны винограда около – 1,6 млн. сум. Рентабельность – 27%.

#### **Экспортный потенциал в расширении:**

1. Для диверсификации географии экспорта винограда свежего и сушеного, винодельческой продукции Узбекистану необходимо осваивать рынки стран Восточной Азии (Китай, Южная Корея), Ближнего Востока

(ОАЕ, Саудовская Аравия в отношении свежего винограда), Европы (Германия, Нидерланды, Великобритания, Польша).

2. *Снижению барьеров для отечественной продукции на внешних рынках* будут способствовать переговоры с соответствующими странами по снижению не тарифных барьеров, существующих в отношении узбекской продукции на экспортных рынках. К примеру, так как Узбекистан не являясь членом ВТО. То на импорт товаров из Узбекистана на китайский рынок не распространяется преференциальный режим, в связи с чем на импорт вина действует таможенная пошлина в размере 180%. Необходимо также продолжить работу по формированию «зеленых коридоров» для плодоовощной продукции.

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**РОЛЬ СТУДЕНТОВ КАК НЕПОСРЕДСТВЕННЫХ УЧАСТНИКОВ  
ОБУЧЕНИЯ И ПОЗНАВАТЕЛЬНОЙ ДЕЯТЕЛЬНОСТИ,  
АНАЛИЗИРУЮЩИХ СОДЕРЖАНИЕ ПОСТАВЛЕННОЙ ЗАДАЧИ С  
ПРИЛОЖЕНИЕМ К ИЗУЧАЕМОМУ ПРЕДМЕТУ**

*Аннотация. Статья посвящена преподаванию математики в процессе подготовки высококвалифицированных научных работников, ныне студентов, которые становятся непосредственными участниками обучения и познавательной деятельности, анализирующие содержание задачи применительно к изучаемому предмету и проводящие сравнительную оценку его роли и функции.*

*Ключевые слова: математические понятия, таблица "ЗХУ", "Инсерт", пассивные учащиеся, обычный образовательный процесс, математические рассуждения, деятельность, анализ, содержание предмета.*

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**THE ROLE OF STUDENTS AS DIRECT PARTICIPANTS IN  
LEARNING AND COGNITIVE ACTIVITY, ANALYZING THE  
CONTENT OF THE TASK IN APPLICATION TO THE SUBJECT  
STUDIED**

*Abstract. The article is dedicated to the teaching of math in the process of training of highly qualified researchers, now students, who become direct participants in learning and cognitive activity, analyzing the content of the problem in relation to the subject being studied and conducting a comparative assessment of its role and function.*

*Key words: math concepts, "KnWknL" table, "Insert chart", passive students, regular educational process, math reasoning, activities, analyze, content of the subject.*

**Введение.** За последние годы, в нашей стране всё больше внедряются методы международного оценивания успеваемости учащихся.

Стимулированы ряд инноваций, направленных на улучшение и поддержание качества систем образования [1]. Эти инновации включают постоянный мониторинг образовательных результатов на системном

уровне, регулярную отчетность по образованию и увеличение финансирования образовательных исследований. Цели и задачи математического образования в высших учебных заведениях заключаются в том, чтобы соответствовать поставленным задачам образовательных направлений и специальностей. В частности, обучение математике в процессе подготовки высококвалифицированных профессионалов своего дела, которые активно участвуют в развитии математики как научной области, подготовка преподавателей, способных предоставить математические знания подрастающему поколению в соответствии с современными требованиями, преподавание математических наук в процессе подготовки специалистов в нематематических и математических специальностях, с подготовкой преподавателей, которые могут предоставить математические знания растущему молодому поколению.

**Методы.** Известно, что программа по математике позволяет преподавателям понимать и применять математические доказательства, правила и формулы, применять их к практическим вопросам своей области, выявлять различные проблемы, типы проблем, решать математические задачи рационально; логическая последовательность, решение различных проблемных вопросов, оценивание каждого метода, основные методы доказательства математических рассуждений (аналитических, синтетических, дедуктивных, индуктивных).

Математическая подготовка студентов, основанная на математических знаниях, навыках и компетентности формируется в процессе самостоятельного обучения с использованием проблемных методов, направленных на обучение студентов чтению лекций по математике, проведению практических занятий и развитию творческих способностей.

Под математической подготовкой студента понимается то, что каждый студент владеет правилами математики, законами, а также то, что они свободны и независимы от других предметов [1].

Во время лекций, а чаще всего во время практических занятий, студенты решают различные профессионально-ориентированные и технические задачи. При этом они уделяют особое внимание научным и практическим аспектам поставленной задачи, их взаимосвязи, внешним и внутренним закономерностям, возможностям моделирования, поиску и проверке алгоритма решения задачи. Этот процесс происходит на глазах у студентов, они становятся непосредственными участниками обучения и познавательной деятельности, анализируют содержание задачи применительно к изучаемому предмету и проводят сравнительную оценку его роли и функций. Все это дает студенту возможность получить математические знания для будущей профессиональной деятельности и уделить особое внимание исследованиям, которые обеспечивают основу



для развития навыков использования математического оборудования при решении профессиональных задач.

**Результаты.** В процессе адаптации студентов к процессу преподавания и обучения в высших учебных заведениях необходимо обучать их требованиям самостоятельного обучения, которые отличаются от требований, предъявляемых в школах, колледжах или лицеях. То есть учащиеся должны воспринимать теоретические знания с точки зрения преподавателя для самостоятельного изучения. В то же время желательно начать с развития своих навыков письма [2].

Первоначально учащихся просят заполнить таблицу в качестве домашнего задания, которое может не потребоваться им каждый раз для заполнения таблицы, когда они разделены на четыре группы. Например, на лекционном занятии понятие концепции, которое студенты только что написали, теорема может быть использовано для размещения четырех одинаковых знаков выше. Эти задания помогают учащимся внимательно вчитываться в информацию в процессе ознакомления с любым текстом. Вот почему мы называем эту технику «Работа над техникой вставки текста» или метод «Инсерт».

В результате проведения таких методов студент развивает в себе такие навыки как, находить быстро и правильно необходимые ответы на поставленные вопросы или найти оптимальное решение поставленной задачи, развивает в себе такие качества как внимательность, скорость, наблюдательность, анализ, критический подход и т.д.

**Обсуждение.** В методике преподавания математики и педагогической литературе большинство учащихся просят кратко ответить на вопрос по предмету, подготавливая их к новому предмету, привязать его к новой теме, с акцентом на математические понятия и формулы. Главным субъектом этого процесса является учитель. Чтобы избежать этой ситуации, основной предлагаемый метод - «Мозговой штурм», позволяющий превратить педагогов в субъекты процесса обучения [3].

Если мы хотим сосредоточиться на подготовке первого этапа обучения, независимо от предмета или практического занятия - ознакомлении с различными педагогическими источниками, а также подготовке студентов к процессу усвоения новой информации, такой как анкетирование, «Кластер», «Мозговой штурм», «Блиц-опрос». Насколько эффективны эти методы?

Мы пришли к такому выводу: когда мы используем эти методы на наших лекциях и практических занятиях, студенты, которые все лучше и лучше разбираются в математике во время вопросов и ответов, «Мозгового штурма», «Блиц-опроса» - активно вовлечены в этот процесс. На самом деле, эти студенты отличаются своей способностью вовремя выполнять домашние задания, готовиться к лекциям и практическим занятиям, и мы более мотивированы пойти на «Обратную связь» со студентами. Хотя цель



состоит в том, чтобы побудить каждого студента, особенно пассивных студентов, сосредоточиться на математических концепциях, законах и сути эссе, мы часто пытаемся подготовить студентов к новой теме, некоторые из них (в их собственном интервью с преподавателями, в форме вопросов и ответов).

Чтобы справиться с этим конфликтом, мы начали использовать методы и приёмы, которые побуждают каждого студента мыслить математическими понятиями, законами и алгоритмами, и, самое главное, общаться с другими студентами, отвечать на вопросы и поощрять студентов к участию в этом процессе. Например, рассмотрим метод «ЗХУ», т.е. таблицу «Знаю, хочу знать, узнаю». Сначала необходимо дать студентам представление об этих понятиях в колонках «Я знаю», «Я хочу знать» и «Я узнаю». В начале занятия, будет ли оно лекционным или практическим, студенты разделили концепцию (понятие) в три колонки до и после введения новой темы [4].

Учащиеся запоминают эти понятия, их определения, некоторые правила, утверждения в процессе комментирования каждого математического понятия. Возможно, не все учащиеся смогут отразить исходную ситуацию на основе своих собственных знаний. Мы взяли под контроль реалистичное определение математических знаний, попросив некоторых студентов определить понятие "знание" на основе заполненных таблиц.

После обучения студентов заполнению этой таблицы мы удалили столбец из первой колонки - основные понятия. После ознакомления студентов с новой темой и планом им было предложено сформулировать список концепций, необходимых для развития предмета, и заполнить таблицу «ЗХУ».

В конце занятия студенты смогли собрать в едино количество новых математических понятий, которые они усвоили после повторного заполнения таблицы. Кроме того, различия в начале и конце обучения послужили основой для того, чтобы учитель сделал соответствующие выводы [5].

**Выводы.** Для обеспечения успешного внедрения инноваций важно вовлечь заинтересованные стороны на различных уровнях системы в интерактивный процесс реформирования таким образом, чтобы они вносили необходимые коррективы, участвовали в необходимых процессах обучения и брали на себя ответственность за процесс реформ по мере возникновения чувства сопричастности. Поскольку одна из основных концепций раздела служит ключевым элементом его содержания, она может быть использована как инструмент для взаимодействия с другими ведомственными концепциями и содействия достижению общих педагогических целей [6].

Мало что известно о том, как университеты и преподаватели реагируют на отзывы об успеваемости своих студентов при оценке образования или на отчеты инспекторов контроля качества знаний [7]. Кроме того, остается неясным, в какой форме лучше всего предоставлять эту обратную связь, чтобы стимулировать намеченные процессы развития обучения. Обратная связь, предоставляемая в контексте систем подотчетности, может иметь целый ряд негативных побочных эффектов [8].

Одним из результатов повышения ясности, обеспечиваемого мониторингом образования и отчетностью об образовании, является то, что все более информированная общественность в настоящее время требует улучшений в системе образования и доказательств эффективности [8].

**Пожелания.** Как и проиллюстрировано в этом примере, результаты систем образования должны оцениваться с нормативной точки зрения, основанной на определенных целях и задачах. В дополнение к аспектам превосходства и равенства важно включить цели, касающиеся воспитания независимо мыслящих и добросовестных граждан, способных ответственно участвовать в демократических процессах плюралистического общества. Такие аспекты очень трудно измерить в контексте образовательного мониторинга и отчетности об образовании, и важно будет обеспечить, чтобы они не терялись из виду по мере разработки и внедрения новых моделей управления [6].

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## **САХАРНЫЙ ДИАБЕТ: ВОПРОСЫ РАСПРОСТРАНЁННОСТИ У НАСЕЛЕНИЯ АНДИЖАНСКОЙ ОБЛАСТИ (ПО ДАННЫМ СТАТИСТИЧЕСКОГО АНАЛИЗА С 2018-2022 ГГ.)**

*Аннотация. За последнее десятилетие распространённость диабета приобрело пандемический характер. По медико-социальной значимости, СД 2 типа занимает 3-е место после сердечно-сосудистых и онкологических заболеваний. Было доказано, что СД 2 типа и ХСН взаимно ухудшают течение и прогноз друг друга. ретроспективный анализ заболеваемости СД 2 типа населения Андижанской области в разрезе районов за последние 5 лет по данным управления областным медицинским объединением. Наличие ХСН отягощает течение СД, что обуславливает необходимость повторных госпитализаций, поэтому изучение распространённости, прогноза и тактики лечения ХСН у больных СД 2 типа является серьёзной проблемой*

*Материалы и методы исследования: для проведения ретроспективного исследования использована деперсонифицированная база 5-летних данных лечебных учреждений Андижана по обращаемости. Также анализу подвергли статистические данные по распространённости, заболеваемости СД 2 типа и смертности от его осложнений за 2018-2022 гг.*

*Результаты: уровни показателей колебались в пределах от 351,5 на 100 тыс населения до 1465,7 на 100 тыс. населения. В целом отмечается рост показателей из года в год, что указывает на актуальность изучения данной проблемы в Андижанской области*

*Ключевые слова: сахарный диабет, хроническая сердечная недостаточность, Covid-19*

*Yusupova Sh.K.  
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**DIABETES MELLITUS: PREVALENCE ISSUES AMONG THE  
POPULATION OF ANDIJAN REGION (ACCORDING TO  
STATISTICAL ANALYSIS FROM 2018-2022)**

*Abstract. Over the past decade, the prevalence of diabetes has become pandemic. In terms of medical and social significance, type 2 diabetes occupies the 3rd place after cardiovascular and oncological diseases. It has been proven that type 2 diabetes and CHF mutually worsen each other's course and prognosis. a retrospective analysis of the incidence of type 2 diabetes in the population of Andijan region in the context of districts over the past 5 years according to the management of the regional medical association. The presence of CHF aggravates the course of diabetes, which necessitates repeated hospitalizations, therefore, the study of the prevalence, prognosis and tactics of treatment of CHF in patients with type 2 diabetes is a serious problem*

*Materials and methods of research: to conduct a retrospective study, a depersonalized database of 5-year data of medical institutions of Andijan on circulation was used. Statistical data on the prevalence, incidence of type 2 diabetes and mortality from its complications for 2018-2022 were also analyzed.*

*Results. The levels of indicators ranged from 351.5 per 100 thousand populations to 1465.7 per 100 thousand populations. In general, there is an increase in indicators from year to year, which indicates the relevance of studying this problem in the Andijan region*

*Keywords: diabetes mellitus, chronic heart failure, Covid-19.*

Во всем мире 537 миллионов человек (в возрасте 20-79 лет), то есть примерно 1 из 10 человек, живут с диабетом. По оценкам, к 2030 году это число вырастет до 643 миллионов, а к 2045 году-до 783 миллионов. Диабет стал причиной 6,7 миллиона смертей в 2021 году. Это означает, что 1 человек умирает от этой болезни каждые 5 секунд. Более 3 из каждых 4 взрослых с диабетом живут в странах с низким и средним уровнем дохода.

В Юго-Восточной Азии 1 из 11 взрослых (90 миллионов) живет с диабетом. Более 50% людей с диабетом не диагностированы. В 2021 году было зарегистрировано 747 000 случаев смерти от диабета.

В Европе - 61 млн. человек страдают сахарным диабетом. Примерно у 1/3 (36%) взрослых, живущих с диабетом, диагноз выставлен. В 2021 году от диабета умерло 1,1 миллиона человек. [1]

В Российской Федерации, как и во всех странах мира, наблюдается значительный рост распространенности СД. По данным Федерального реестра СД, в РФ по состоянию на 01.01.2022 г. в диспансерах состояло более 4 млн. человек, то есть 3,34% населения, из которых 92,3% страдали сахарным диабетом 2 типа. Результаты

масштабного эпидемиологического исследования России (NATION) подтверждают, что только 54% случаев диабета 2 типа были диагностированы. Таким образом, реальное число больных сахарным диабетом в РФ составляет не менее 10 млн. человек (около 7% населения) [2].

За последнее десятилетие распространенность диабета приобрело пандемический характер, и это не обошло стороной Узбекистан, как и все страны. В период с 2009 по 2018 год число пациентов увеличилось с 117 240 до 230 610, и 8/10 пациентов не были диагностированы. [3]. По данным МДФ в Узбекистана за 2019 год, число пациентов с СД составило 1 121 700, из которых только 277 926 находились под диспансерным наблюдением. [4]. В 2020 году в Узбекистане от диабета умерло 6 205 человек, что составляет 3,84% от всех смертей [World Health Organization 2020]. В настоящее время (по состоянию на 02.04.2022) в Узбекистане диабетом страдают 6,3% взрослого населения или 1 351 800 человек. [5].

По медико-социальной значимости, СД 2 типа занимает 3-е место после сердечно-сосудистых и онкологических заболеваний. Было доказано, что СД 2 типа и ХСН взаимно ухудшают течение и прогноз друг друга. Так, повышенное содержание в крови глюкозы ухудшает как метаболизм в тканях миокарда, так и функционально-структурное состояние сердца. При этом, ХСН усугубляет течение СД 2 типа, вызывая патогенетические сдвиги, способствующие увеличению, и так высокого уровня глюкозы. [6].

Целью исследования – изучить распространенность сахарного диабета 2 типа у населения Андижанской области и частоту встречаемости ХСН у больных сахарным диабетом 2 типа в зависимости от функционального состояния левого желудочка по данным ретроспективного исследования.

Материалы и методы исследования: для проведения ретроспективного исследования использована деперсонифицированная база 5-летних данных лечебных учреждений Андижана по обращаемости.

В исследуемую когорту вошли все пациенты (сплошная выборка) с диагнозом СД 2-го типа и ХСН в возрасте от 30 лет и старше, получившие лечение в областном эндокринологическом диспансере и многопрофильных стационарах Андижанской области в течении 2018-2022 гг., были использованы методы клинического анализа и статистической обработки.

Также анализу подвергли статистические данные по распространённости, заболеваемости СД 2 типа и смертности от его осложнений за 2018-2022 гг.

Были рассчитаны показатели распространенности СД 2 типа с ХСН (общее число больных, зарегистрированных на конец года, рассчитанное на 100 тыс. населения), заболеваемость СД 2 типа с ХСН в исследуемой группе (число больных, впервые зарегистрированные за календарный год,



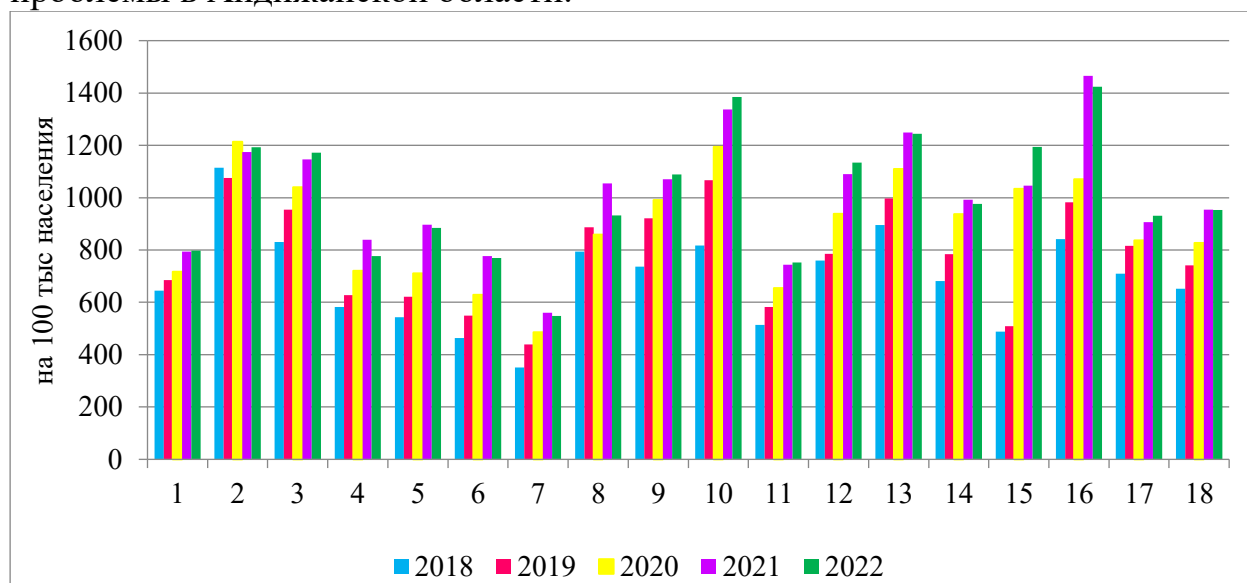
рассчитанное на 100 тыс. населения), смертность больных СД 2 типа с ХСН (число умерших от СД 2 типа с ХСН в отчетном году на 100 тыс. населения).

Результаты и обсуждения:

2356 больных с СД 2 составили группу ретроспективного наблюдения за 5 летний период. При этом, 854 больных имели СД2+ХСН, кроме того, имелась тенденция к повышению числа наблюдений из года в год как СД2, так и ХСН. Все пациенты были распределены в зависимости от состояния ФВ ЛЖ на 3 группы: с сФВ, с промФВ и с нФВ.

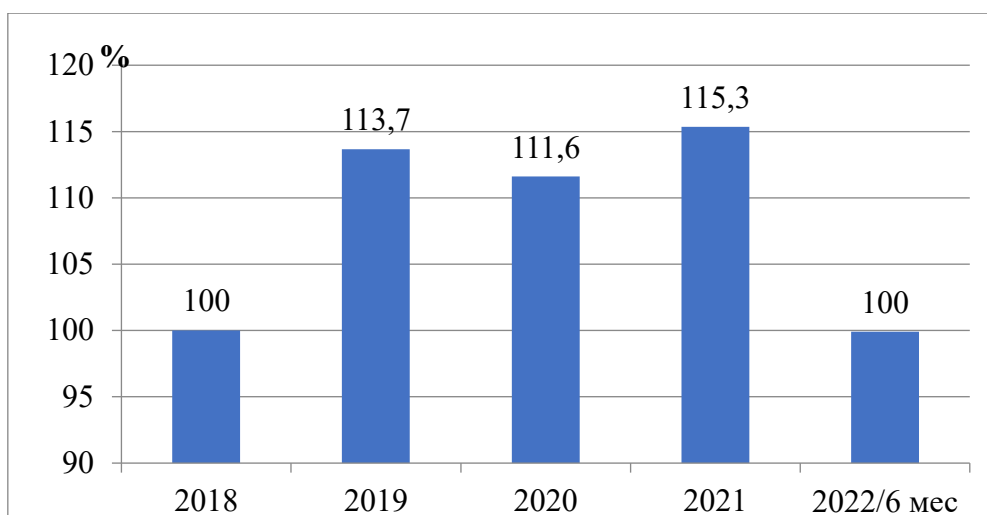
Общая заболеваемость СД2 типа достигла масштабов пандемии. Нами проведен ретроспективный анализ заболеваемости СД 2 типа населения Андижанской области в разрезе районов за последние 5 лет по данным управления областным медицинским объединением.

На рисунке 1 представлены показатели общей заболеваемости СД 2 типа населения Андижанской области (рис.1), которые показывают значительные различия уровней не только по районам области, но и по годам. Уровни показателей колебались в пределах от 351,5 на 100 тыс населения до 1465,7 на 100 тыс. населения. В целом отмечается рост показателей из года в год, что указывает на актуальность изучения данной проблемы в Андижанской области.



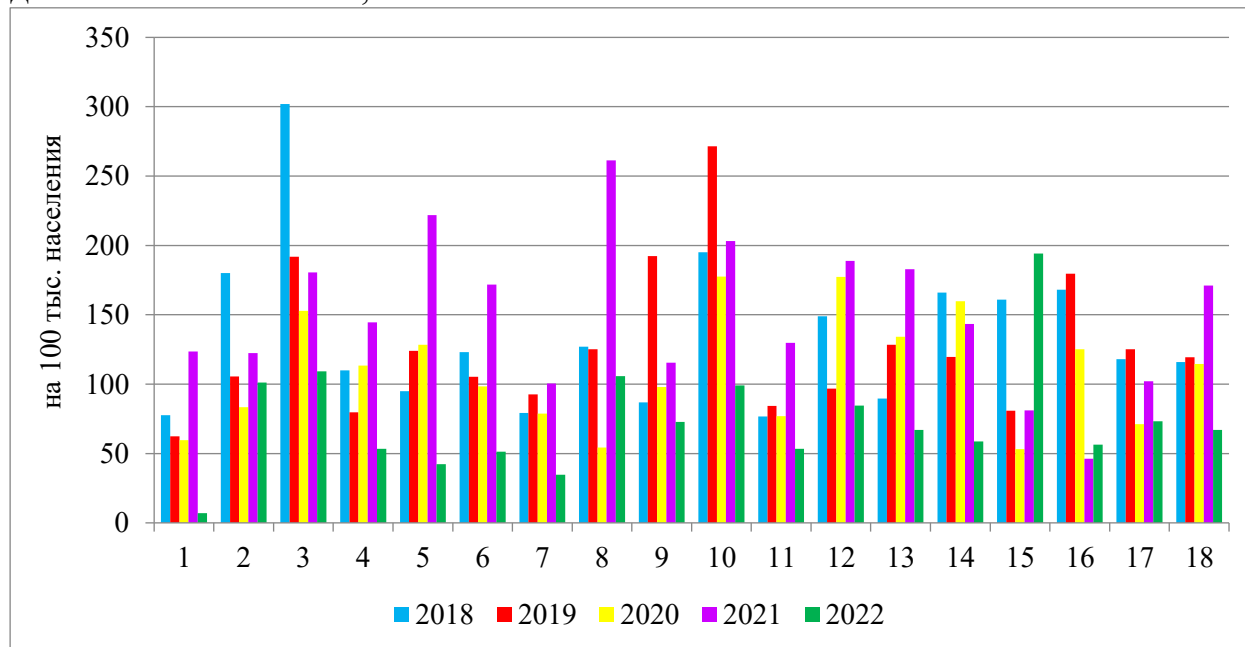
**Рис. 1. Показатели общей заболеваемости СД 2 типа по районам Андижанской области.**

Анализ динамики показателей по годам по области в целом (рис. 2.) указывает на стабильную тенденцию роста как районных, так и областных показателей за период с 2018 по 2022 годы. Показатель общей заболеваемости СД по Андижанской области увеличился с 651,9 на 100 тыс. населения в 2018 г. до 953 на 100 тыс. населения за 6 месяцев 2022 г. По области темп прироста показателей распространенности СД 2 типа за пять лет составил 46%.



**Рис. 2. Показатели темпа роста заболеваемости СД 2 типа по Андижанской области за период 2018-2022 гг.**

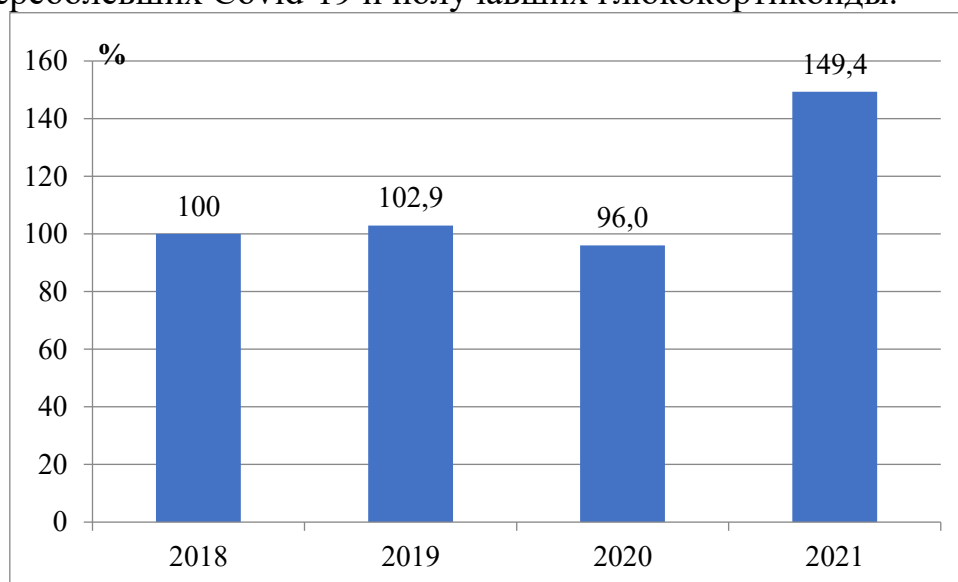
За анализируемый пятилетний период отмечается широкая вариабельность показателей первичной заболеваемости СД 2 типа в районах Андижанской области (рис. 3.). Уровни показателей значительно колебались не только в разрезе районов области, но и по годам. Диапазон колебаний был существенный от минимального 34,8 на 100 тыс. населения до наибольшего – 271,5 на 100 тыс. населения.



**Рис. 3. Показатели первичной заболеваемости СД 2 типа по районам Андижанской области.**

Сравнительный анализ темпа роста показателей первичной заболеваемости СД 2 типа по Андижанской области показал, что по годам

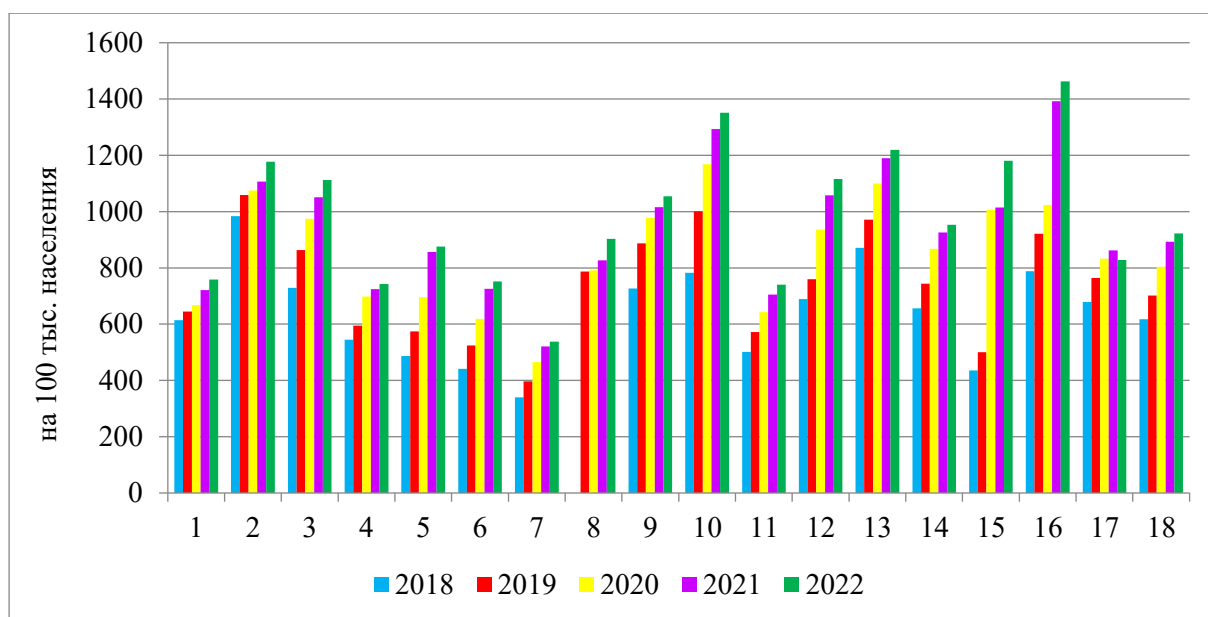
рост показателей был не значительный за исключением 2021 года, когда прирост составил 49,4% (рис. 4.). В целом за четыре года прирост составил 48,0%. Незначительный рост показателей в 2019 и 2020 годах можно объяснить пандемией Covid-19, когда силы органов здравоохранения были направлены преимущественно на эту проблему, а население находилось в условиях самоизоляции. Соответственно в 2021 г. отмечался выраженный рост выявляемости СД 2 типа, возможно, связанный с регистрацией случаев СД у переболевших Covid-19 и получавших глюкокортикоиды.



**Рис. 4. Показатели темпа роста первичной заболеваемости СД 2 типа по Андижанской области за период 2018-2022 гг.**

Диспансеризация при СД является обязательным условием ведения этой категории больных. Показатели охвата диспансерным учетом в принципе соответствовали картине распространенности (рис. 1) и заболеваемости (рис.2). Разнообразие уровней показателей было схоже с предыдущими характеристиками, однако, во всех районах четко прослеживалась закономерность неуклонного роста показателей диспансеризации из года в год (рис.3). В половине сельских районов области обращает внимание достоверный рост показателей в 2021 и 2022 годах относительно предыдущих лет.

Сочетание СД 2 типа и ХСН является часто встречающимся синдромом. Эпидемиологические исследования свидетельствуют о том, что от 12 до 40% больных СД 2 типа страдают ХСН. Риск развития ХСН у больных диабетом в 2,5 раза выше, чем у больных без диабета. Относительный риск развития сердечной недостаточности при СД 2 типа превышает относительный риск появления ХСН при гипертензии, ожирении, гиподинамии, курении и клапанных пороках [7].



**Рис. 6. Показатели диспансерного учета больных СД 2 типа в разрезе районов Андижанской области.**

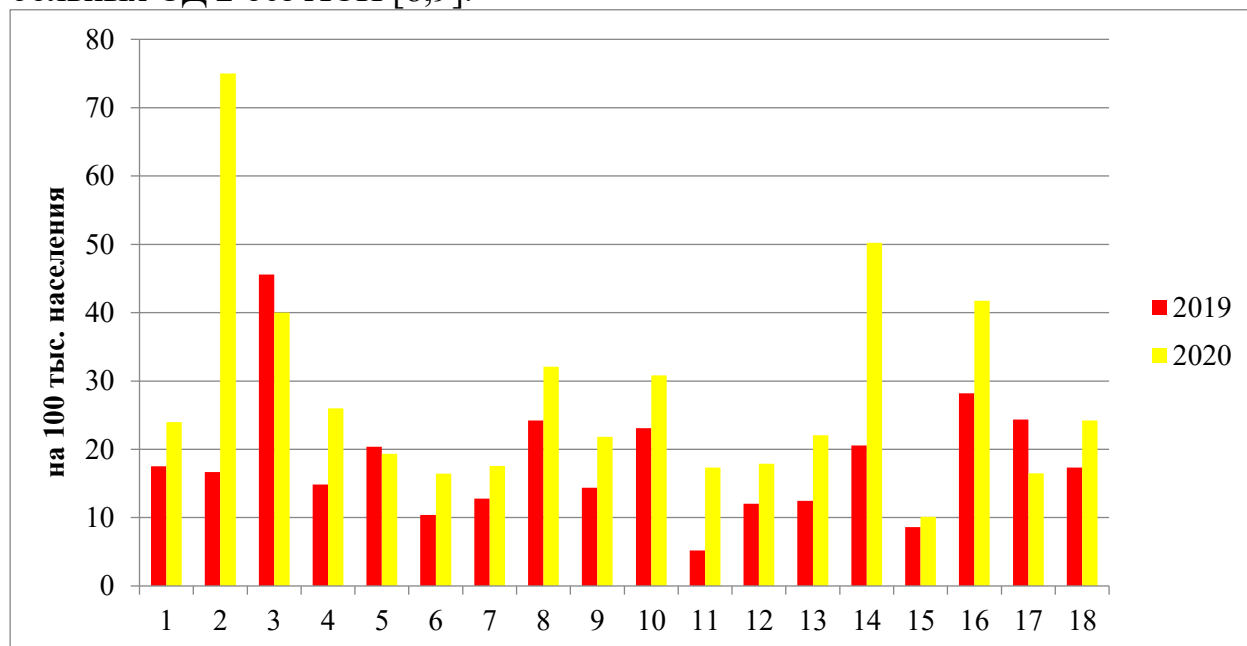
Так как в официальной статистике данных о сочетании СД 2 типа с ХСН не имеется, нами были проанализированы 2356 медицинских карт стационарных и амбулаторных больных СД 2 типа за 2018-2022 гг. Нами получены данные, что 36,2% больных имели сопутствующую ХСН с различной степенью дисфункции ЛЖ.

Возраст больных является одним из факторов риска развития как СД 2 типа, так и ХСН. В нашем ретроспективном исследовании средний возраст больных составил  $64,0 \pm 6,4$  года. Средний возраст больных СД 2 типа был незначительно ниже ( $61,5 \pm 7,3$  лет) относительно больных, имевших сочетание СД 2 типа с ХСН ( $65,2 \pm 9,2$  года).

В когорте больных СД 2 типа, ассоциированного с ХСН преобладали женщины - 62%. У женщин риск развития ХСН при наличии СД был в три раза выше, чем у мужчин ( $RR=1,6$  – у женщин против  $RR=0,5$  - у мужчин).

Наличие ХСН отягощает течение СД, что обуславливает необходимость повторных госпитализаций, поэтому изучение распространенности, прогноза и тактики лечения ХСН у больных СД 2 типа является серьезной проблемой. Показатель госпитализированной заболеваемости СД 2 типа по анализу историй болезней составил 28%. Однако, среди больных СД 2 типа с сопутствующей ХСН этот показатель составил 72,0%. Таким образом, наличие ХСН не только существенно отягощает течение диабета, но и увеличивает потребность в стационарной помощи. Частота госпитализации и длительность лечения по поводу декомпенсации ХСН у больных СД 2 значительно выше, чем у больных с нормальным углеводным обменом, что подтверждено крупномасштабными исследованиями BEST, RESOLVD. Стационарная помощь этой категории

больных нужна не только для получения комплексного лечения, но в большей степени в связи с тяжестью течения заболевания и повышением риска смерти. Так по результатам популяционных и клинических исследований риск смерти больных ХСН увеличивается в 1,29-3,19 раза при наличии СД 2 типа. По данным исследования DIABHYCAR, смертность больных СД 2 типа при наличии ХСН оказалась в 12 раз выше, чем у больных СД 2 без ХСН [8,9].



**Рис. 7. Показатели смертности от СД 2 типа по районам Андижанской области за 2019 и 2020 гг.**

По данным, представленным на рисунке 7., можно заключить, что большинство показателей смертности колебались в пределах до 20 на 100 тыс. населения. Значительно меньшая часть показателей превышала этот уровень, и совсем мало превышали – значительно. Основной причиной смерти этих больных были сердечно-сосудистые осложнения.

Таким образом, проведенный анализ демонстрирует важность динамической оценки эпидемиологических характеристик и мониторинга клинических данных о пациентах с СД для улучшения качества оказания диабетологической помощи населению.

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## **ПОВЫШЕНИЕ ПОЛИТИЧЕСКОГО СОЗНАНИЯ МОЛОДЁЖИ УЗБЕКИСТАНА: КЛЮЧ К ОБЩЕСТВЕННОМУ РАЗВИТИЮ**

*Аннотация. В статье раскрываются основные факторы, определяющие важность повышения уровня политического сознания среди молодежи. Кроме этого, отмечается, что развитие политического сознания среди молодежи является неотъемлемой частью формирования устойчивой и прогрессивной страны. Именно поэтому необходимо продолжать инвестировать усилия в образование, информирование и активизацию молодежи, чтобы создать осознанных, критически мыслящих и активных граждан, готовых к участию в формировании будущего своей страны.*

*Ключевые слова: политическое сознание, образовательные программы, молодёжь, выборы, гражданская позиция, реформы, медиаграмотность, подкасты и видеоконтент.*

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## **RAISING THE POLITICAL CONSCIOUSNESS OF THE YOUTH OF UZBEKISTAN: THE KEY TO SOCIAL DEVELOPMENT**

*Abstract. The article reveals the main factors that determine the importance of raising political consciousness among young people. In addition, it is noted that the development of political consciousness among young people is an integral part of the formation of a sustainable and progressive country. That is why it is necessary to continue to invest efforts in education, awareness and activation of youth to create informed, critically thinking and active citizens who are ready to participate in shaping the future of their country.*

*Keywords: political consciousness, educational programs, youth, elections, citizenship, reforms, media literacy, podcasts and video content.*

Молодёжь, как будущее нации, играет решающую роль в формировании политической жизни страны. В Узбекистане, так же как и во

многих других странах, актуальным вопросом является повышение уровня политического сознания среди молодёжи. Это означает не только обучение основам политики, но и развитие критического мышления, активной гражданской позиции и участия в общественной жизни.

Выступая на торжественной церемонии вступления в должность Президента Республики Узбекистан, на совместном заседании палат Олий Мажлиса Президент Шавкат Мирзиёев чётко отметил: «Мы неуклонно и решительно продолжим государственную молодёжную политику. И не только продолжим, но и поднимем ее на еще более высокий уровень в соответствии с требованиями сегодняшнего дня. Мы мобилизуем все силы и возможности нашего государства и общества для того, чтобы наша молодёжь обладала самостоятельным мышлением, высоким интеллектуальным и духовным потенциалом, ни в одной сфере не уступала бы сверстникам из других стран, была счастлива и уверена в своем будущем» [2, С. 40].

Учёные неоднократно обращались к изучению политического сознания в развитых (Э.Я. Баталов, Ф.М. Бурлацкий, Г.И. Вайнштейн, К.С. Гаджиев, Ю.А. Замошкин и др.) и развивающихся странах (Б.С. Ерасов), изучали проблемы взаимодействия идеологии, информации и массового (в том числе политического) сознания (П.С. Гуревич) [3, 4, 5, 6, 7, 8, 9, 10].

За годы независимости в Узбекистане произошла кардинальная трансформация массового сознания, особенно сознания молодёжи Узбекистана. Если в социальной среде населения к молодежи относятся люди с 14 до 30 лет включительно [1], то сегодняшняя молодежь является поколением, сформировавшимся за годы независимости.

На наш взгляд, существует несколько факторов, определяющих важность поднятия политического сознания среди молодежи:

1. **Образование:** включение курсов по политике и обществознанию в учебные программы университетов способствует осознанию основных принципов государственного устройства, системы прав и свобод граждан. Доступ к образованию играет критическую роль в формировании информированной молодежной аудитории.

2. **Медиа и информационная грамотность:** умение различать информацию от дезинформации, критически мыслить и анализировать политические события является важной частью политического образования. Способность анализировать информацию из различных источников помогает молодежи формировать обоснованные взгляды на политические процессы.

3. **Участие в общественной жизни:** активное участие в обсуждениях, дебатах, и общественно-политических мероприятиях (например, Молодежный парламент) дает молодежи возможность высказывать свои мнения и приобретать опыт взаимодействия с другими членами общества.

4. Поддержка государства и общества: государственные программы, направленные на развитие политического образования молодежи, играют важную роль. Поддержка центров молодежи, образовательных программ и инициатив, направленных на стимулирование активности в общественной жизни, способствует повышению уровня политической осведомленности.

Узбекистан имеет огромный потенциал в развитии молодежной политической культуры. Интеграция современных методов обучения, использование информационных технологий, создание возможностей для обмена мнениями и опытом, а также поддержка и стимулирование активности молодежи в общественной жизни – важные шаги в обеспечении более информированного, активного и ответственного гражданского общества.

Развитие политического сознания среди молодежи является неотъемлемой частью формирования устойчивой и прогрессивной страны. Именно поэтому необходимо продолжать инвестировать усилия в образование, информирование и активизацию молодежи, чтобы создать осознанных, критически мыслящих и активных граждан, готовых к участию в формировании будущего своей страны.

На пути к повышению политического сознания молодежи в Узбекистане, реализация специальных программ и инициатив играет ключевую роль. Например, можно использовать следующие меры:

1. Создание центров и платформ для обсуждений: формирование центров молодежи и платформ для обсуждения политических тем, где молодые люди могут делиться мнениями, участвовать в дебатах, обсуждать актуальные проблемы и находить совместные решения.

2. Молодежные тренинги: организация молодежных семинаров и тренингов, нацеленных на развитие навыков коммуникации, лидерства, принятия решений и развития общественной активности.

3. Использование современных технологий: вовлечение молодежи через социальные медиа, создание онлайн-платформ для обмена информацией и идей, а также цифровые образовательные ресурсы для повышения уровня информированности.

4. Содействие общественным организациям: поддержка и содействие деятельности общественных организаций, активно занимающихся просвещением и стимулированием молодежи к участию в политической жизни.

5. Мотивация к участию в выборах и гражданской деятельности: объяснение важности участия в выборах, акциях и других формах гражданской активности, чтобы молодежь понимала, что их голос имеет значение и может повлиять на развитие страны.

Успешная реализация подобных программ и инициатив может способствовать формированию более информированной, ответственной и активной молодежной аудитории, способной принимать обоснованные

решения в политической сфере и участвовать в общественной жизни страны.

Развитие инновационных подходов в повышении политического сознания молодежи является важным фактором. Технологии играют ключевую роль в современном мире и могут быть использованы для привлечения молодежи к политике и общественной жизни. Например:

1. Мобильные приложения: создание образовательных мобильных приложений, которые предоставляют доступ к информации о политике, истории, гражданских правах и обязанностях. Это может сделать процесс обучения более интересным и доступным.

2. Подкасты и видеоконтент: развитие подкастов, видеоуроков и интерактивного контента для социальных сетей, обсуждающих политические вопросы и стимулирующих обмен мнениями среди молодежи.

3. Виртуальная реальность и интерактивные платформы: использование технологий виртуальной реальности для создания интерактивных симуляций политических событий, позволяющих молодежи погружаться в ситуации и принимать решения, оценивая их последствия.

4. Геймификация обучения: использование элементов геймификации для обучения политическим процессам, что сделает процесс обучения увлекательным и мотивирующим.

Повышение политического сознания молодежи Узбекистана не только стимулирует развитие общества, но и создает основу для стабильного политического будущего страны. Образование, информирование, участие и поддержка со стороны государства и общества – вот ключевые компоненты, которые необходимо объединить для успешного формирования политической активности среди молодежи. Подобные усилия помогут создать поколение молодых граждан, готовых активно участвовать в формировании будущего Узбекистана.

В конечном итоге, повышение политического сознания молодежи в Узбекистане требует комплексного подхода. Образование, активное участие, поддержка и инновационные методы могут совместно способствовать формированию осознанных, ответственных и активных граждан. Важно помнить, что разнообразие подходов и уважение к мнениям и идеям молодежи являются фундаментальными в создании политически осведомленного общества, способного к прогрессу и развитию.

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## СПЕЦИАЛИЗИРОВАННОЕ МАШИННОЕ ОБУЧЕНИЕ ДЛЯ РАДИОЧАСТОТ

*Аннотация. на протяжении многих лет подходы машинного обучения успешно применяются для решения многочисленных задач по обнаружению и классификации — от обработки изображений до разделения голоса и распознавания текста. Однако только недавно подобные методы стали применяться для обработки радиочастотных (РЧ) сигналов и электромагнитной обстановки (ЭМЭ).*

*Ключевые слова: машинное обучение, радиочастоты, радиоволны, спуфинг, мультисенсорные распределенные системы.*

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## SPECIALIZED MACHINE LEARNING FOR RADIO FREQUENCIES

*Abstract. Over the years, machine learning approaches have been successfully applied to solve numerous detection and classification problems - from image processing to voice separation and text recognition. However, only recently have similar techniques been applied to radio frequency (RF) signal processing and the electromagnetic environment (EME).*

*Keywords: machine learning, radio frequencies, radio waves, spoofing, multi-sensor distributed systems.*

Разработка новых технологий для автоматизированной обработки и анализа радиочастотных данных в режиме реального времени требует специальных знаний, которые охватывают множество организаций и дисциплин [1]. Эта специальная группа по интересам нацелена на создание сообщества машинного обучения (ML) для исследователей радиочастот и проведение серии тематических семинаров, посвященных приложениям и проблемам в этой области.

Стремление к распределенной обработке в режиме реального времени на периферии с меньшим участием человека подталкивает решения к использованию встроенного аппаратного и программного обеспечения. Гибридные вычислительные архитектуры и программно-определяемые



радиостанции для приложений машинного обучения быстро развивают области технологий от встроенного управления до автономности и искусственного интеллекта (ИИ) [2]. Тесная связь между аппаратным и программным обеспечением в радиочастотной области и использование специализированных ускорителей глубокого обучения должны быть использованы для удовлетворения будущих требований к поиску и передаче данных, а также соображений SWAP [3]. Для обнаружения сигнала желательно скорректировать количество вложенной энергии, чтобы сделать его пропорциональным уровню интереса к конкретному сигналу, и мы будем стремиться как можно раньше определить, представляет ли сигнал интерес. Многоцелевые радиочастотные датчики с возможностью машинного обучения с использованием встроенного аппаратного и программного обеспечения будут использоваться для обнаружения радиочастотных сигналов, включая Wi-Fi, Bluetooth и сотовую связь, чтобы использовать на порядок больше скорости по сравнению с традиционными методами [4].

В случае нескольких датчиков мы будем стремиться контролировать и адаптировать энергопотребление, параметры и точность каждого датчика, чтобы оптимизировать использование доступной мощности. Появятся возможности для совместного проектирования датчиков, предварительной обработки и нейронных сетей. Мы начинаем видеть, как фреймворки, предназначенные для генерации эффективных ускорителей нейронных сетей, выполняют автоматический перенос архитектур машинного обучения на FPGA. Это имеет множество применений, в частности, для улучшения ситуационной осведомленности [5]. Начинают изучаться стратегии раннего выхода из логического вывода на разных этапах сетевой архитектуры. Внутрисетевые вычисления используются для разгрузки стандартных приложений на сетевые устройства с целью увеличения пропускной способности за счет обработки данных по мере их прохождения по сети. Внутрисетевая обработка данных на беспроводных сенсорных узлах может использоваться для сбора данных в нескольких распределенных источниках и их агрегирования на пути к конечному пункту назначения [6,7]. Существует большой потенциал использования машинного обучения для агрегации данных, оптимизации и распределения ресурсов. Динамическая адаптация аппаратного обеспечения уже позволяет обновлять спутники на орбите и частично перенастраивать их. Автономные беспилотные транспортные средства потребуют автоматического обновления алгоритмов встроенного оборудования в соответствии с изменениями в окружающей среде, кроссплатформенными модификациями и технологическими достижениями, часто на устаревшем оборудовании.

Разработка эффективных решений машинного обучения на небольших платформах требует сокращения моделей, динамического сжатия, компактных представлений и дистилляции знаний с

использованием таких методов, как отсечение сетей, повышение производительности в режимах с более низкой точностью, уменьшение размерности и представления разреженных слоев [8,9]. Мы должны хорошо понимать, когда решения СОТ подходят для использования по назначению, а когда нам требуется специализированное оборудование. Существует ряд вариантов того, какую обработку следует выполнять в аппаратном обеспечении, что делать в программном обеспечении, где выполнять вычисления на периферии, а когда возвращаться в облако. Ответы на некоторые из этих вопросов во многих случаях тесно связаны с требованиями к безопасности и анонимизации данных [10,11].

Машинное обучение для радиочастот охватывает широкий диапазон масштабов с точки зрения расстояний, частот и областей применения. Небольшие пассивные системы используются для мониторинга здоровья, а в мире COVID и за его пределами беспроводные технологии Интернета вещей доминируют в нашей повседневной домашней жизни. Специалисты по радиотехнической разведке, радиоэлектронной борьбе и связи все чаще сталкиваются с необходимостью разработки новых подходов к автоматизации обнаружения, классификации и идентификации сигналов, от аналитики городского масштаба до перехвата сигналов в более крупном масштабе на бортовых платформах для ситуационной осведомленности [12,13]. В масштабе наблюдения Земли используется Интерферометрический радар с синтезированной апертурой (InSAR) для автоматического извлечения признаков разницы фаз между спутниками. Он используется для обнаружения землетрясений, мониторинга оседания и отслеживания потоков льда для мониторинга последствий изменения климата. Все эти процессы охватывают диапазон частот от колебаний в масштабе атома до размеров футбольного поля [14,15,16]. Наша способность успешно разворачивать алгоритмы машинного обучения в таком широком диапазоне масштабов зависит от нашей способности успешно адаптировать решения к конкретным предметным приложениям.

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## **МЕТОДЫ ПРОВЕДЕНИЯ АНАЛИЗА ПОКАЗАТЕЛЕЙ БУХГАЛТЕРСКОЙ ОТЧЕТНОСТИ**

*Аннотация. В данной статье автором рассматриваются методы проведения анализа показателей бухгалтерской отчетности на предприятиях. Раскрывается цель анализа показателей бухгалтерской отчетности, его задачи, а также этапы его проведения. Представлен авторский алгоритм проведения анализа показателей бухгалтерской отчетности предприятия.*

*Ключевые слова: бухгалтерская отчетность, методы анализа, цель анализа, задачи анализа, этапы проведения анализа.*

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## **METHODS OF ANALYSIS OF ACCOUNTING INDICATORS**

*Annotation. In this article, the author discusses the methods of analyzing the indicators of accounting statements at enterprises. The purpose of the analysis of accounting indicators, its tasks, as well as the stages of its implementation are disclosed. The author's algorithm for analyzing the indicators of the accounting statements of the enterprise is presented.*

*Keywords: accounting statements, methods of analysis, purpose of analysis, tasks of analysis, stages of analysis.*

Важнейшим этапом при реализации процесса осуществления деятельности предприятия – это проведение анализа показателей бухгалтерской отчетности. Анализ показателей бухгалтерской отчетности предприятия позволяет определить наиболее рациональные способы использования ресурсов и сформировать структуру средств предприятия. Кроме того, финансовый анализ может выступать в качестве инструмента прогнозирования отдельных показателей предприятия и финансовой деятельности в целом.

Целью анализа показателей бухгалтерской отчетности является своевременное выявление и устранение упущений и недостатков при реализации финансовой деятельности и нахождение резервов для улучшения финансово-экономического состояния предприятия и показателей его платежеспособности.

Основные этапы проведения анализа показателей бухгалтерской отчетности предприятия по мнению различных авторов представлены в таблице 1.

Таблица 1 – Этапы проведения анализа показателей бухгалтерской отчетности предприятия

Автор	Этапы
Зонова А.В.	1. Анализ динамики и структуры баланса и Отчета о финансовых результатах
	2. Анализ влияния учетной политики на показатели баланса и Отчета
	3. Анализ платежеспособности и ликвидности
	4. Анализ рентабельности
Савицкая Г.В.	1. Анализ состава и динамики статей баланса
	2. Анализ финансовых результатов
	3. Анализ ценовой политики и факторный анализ уровня среднереализационных цен
	4. Анализ активов и обязательств
	5. Анализ рентабельности предприятия
	6. Анализ использования прибыли
Селезнева Н.Н. и Ионова А.Ф.	1. Анализ активов и обязательств
	2. Анализ платежеспособности и ликвидности
	3. Перечисление экономических факторов
	4. Анализ финансовых результатов
	6. Анализ финансовой устойчивости
	7. Анализ оборачиваемости активов (деловой активности)
	7. Анализ оборачиваемости активов (деловой активности)
Танашева О. Г.	1. Горизонтальный (ретроспективный, продольный, временной) анализ
	2. Вертикальный (глубинный, структурный) анализ
	3. Анализ формирования финансовых результатов и их изменения в динамике
	4. Анализ активов и обязательств
	5. Анализ платежеспособности и ликвидности
	6. Анализ финансовой устойчивости
	7. Анализ показателей рентабельности
	8. Анализ оборачиваемости активов (деловой активности)

Основными задачами анализа показателей бухгалтерской отчетности предприятия являются:

- определить показатели, характеризующие финансовое положение предприятия по их видам за отчетный период и сравнить их с данными за предшествующий год и бизнес-планом;

- определить динамику за ряд лет показателей, рассчитать темп роста и прироста;



- определить и рассчитать факторы, оказавшие влияние на показатели; проанализировать основные факторы, повлиявшие на них;
- разработать конкретные рекомендации по повышению финансовых показателей, эффективному использованию ресурсов предприятия.

Ключевыми источниками информации для анализа Источниками информации для анализа показателей бухгалтерской отчетности предприятия являются данные, представленные в бухгалтерской отчетности: «Бухгалтерский баланс»; «Отчет о финансовых результатах»; «Приложение к бухгалтерскому балансу и отчету о прибылях и убытках», – и в статистической отчетности: форма № 11 «Сведения о наличии и движении основных средств и других нефинансовых активах». При анализе также используются данные бизнес-плана, аналитического и синтетического бухгалтерского учета.

Изучив алгоритмы анализа показателей бухгалтерской отчетности предприятия авторов, представленных в таблице 1, выведем свой алгоритм анализа и обозначим его на рисунке.

Анализ начинается со сравнения фактических показателей бухгалтерской отчетности предприятия за анализируемый период с данными прошлого года.

В процессе горизонтального анализа показателей бухгалтерской отчетности предприятия отслеживаются изменения каждого показателя за отчетный период по сравнению с базисным периодом. Данный анализ заключается в построении одной или нескольких таблиц, в которых абсолютные показатели дополняются относительными темпами роста или снижения.

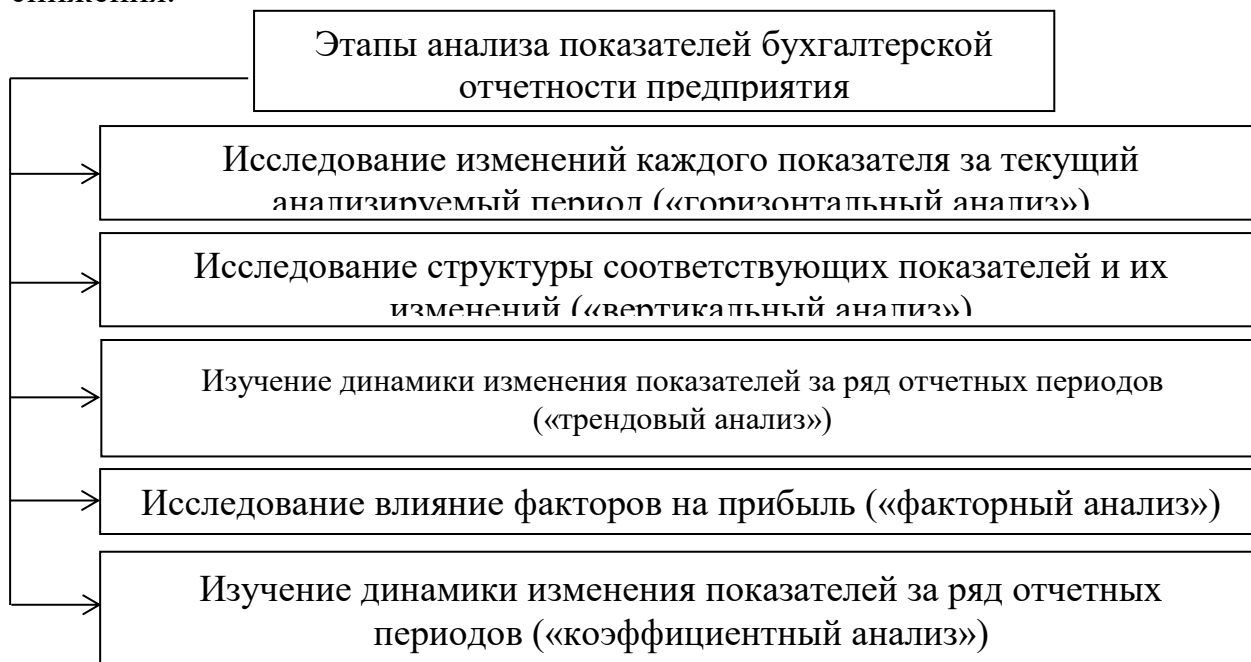


Рисунок – Алгоритм проведения анализа показателей бухгалтерской отчетности предприятия



Цель данного анализа состоит в том, чтобы выявить абсолютные и относительные изменения величин различных показателей за определенный период времени и дать оценку этим изменениям. Данный анализ позволяет изучить динамику показателей. Вариантом горизонтального анализа является трендовый анализ, при котором каждая позиция отчетности сравнивается с рядом предыдущих периодов и определяется тренд, то есть основная тенденция динамики соответствующего показателя.

Цель вертикального анализа – расчет удельного веса отдельных показателей в общем итоге и оценке этих изменений.

Следующим направлением анализа является факторный анализ, с помощью которого определяется влияние отдельных факторов на показатели бухгалтерской отчетности. Также факторный анализ позволяет выявить причины изменений показателей, а значит разработать соответствующие рекомендации.

Методика анализа бухгалтерской отчетности на предприятиях включает сопоставление полученных результатов со стандартами, нормативами, критериями и принятие соответствующих корректирующих действий. Методика анализа бухгалтерской отчетности в казенных учреждениях должна быть конкретизирована и иметь ссылку на полученные результаты.

В бухгалтерской отчетности раскрывается система показателей, характеризующих деятельность предприятия. Также по ее данным можно судить о: соблюдении требований законодательства; финансовым состоянием и эффективным исполнением материальных и финансовых ресурсов; правильным ведением бухгалтерского учета и отчетности.

Показатели, используемые для проведения анализа показателей бухгалтерской отчетности предприятия представлены в таблице 2.

Таблица 2 – Показатели, используемые для проведения анализа показателей бухгалтерской отчетности предприятия

Виды анализа	Показатель	Формула для расчета
<b>Горизонтальный анализ</b>		
Ретроспективный, продольный, временной	Показатель изменения абсолютных значений  Темп роста, % Относительное изменение, %	$\Delta = B_0 - B_6$ (1) где $B_0$ – сумма за отчетный период; $B_6$ – сумма балансового периода $\Delta\% = B_0 / B_6 \times 100\%$ (2) $\Delta = (B_0 / B_6) \times 100\% - 100\%$ (3)
<b>Вертикальный анализ</b>		
Глубинный, структурный	Удельный вес статей Бухгалтерского баланса и Отчета о финансовых результатах в структуре доходов и расходов	$\%Ст = B_0 / Б \times 100\%$ (4) где $\%Ст$ – процент в структуре баланса; $B_0$ – выручка за отчетный год; $Б$ – итог баланса
<b>Факторный анализ</b>		
Факторный анализ	Показатель изменения	$\Delta\Pi = (\Pi_1 \times K_1) - (\Pi_0 \times K_1)$ (5)

прибыли от продаж	прибыли от изменения цен на реализуемую продукцию	
	Показатель изменения прибыли от изменения объема реализации	$\Delta\Pi_2 = \Pi_0 \times (КС - 1) \quad (6)$
	Показатель изменения прибыли от изменения в структуре продукции	$\Delta\Pi_3 = \Pi_0 \times (КВ - КС)(7)$
Анализ затрат по статьям себестоимости	Показатель изменения затрат	$C = МЗ + АО + Р_0 + (Огсс + Омс + ООСИ + ОКРК + ЗДР) \quad (8)$
Факторный анализ чистой прибыли	Показатель изменения прибыли в себестоимости продукции	$\Delta\Pi_4 = C_{1,0} - C_1(9)$
	Показатель изменения прибыли себестоимости за счет структурных сдвигов	$\Delta\Pi_5 = C_0 \times КВ - C_{1,0} \quad (10)$
	Общее изменение прибыли под воздействием факторов	$\Delta\Pi = \Delta\Pi_1 + \Delta\Pi_2 + \Delta\Pi_3 + \Delta\Pi_4 + \Delta\Pi_5 \quad (11)$
<b>Коэффициентный анализ</b>		
Анализ ликвидности	Коэффициент абсолютной ликвидности	$K_{ал} = \frac{(ДС + КФ)}{(КК + КЗ + ПО)} \quad (12)$ где ДС – денежные средства; КФ – краткосрочные финансовые вложения; КК – краткосрочные кредиты и займы; КЗ – кредиторская задолженность; ПО – прочие краткосрочные обязательства.
	Коэффициент срочной ликвидности	$K_{сл} = \frac{(ДС + КФ + ДЗ)}{(КК + КЗ + ПО)} \quad (13)$ где ДЗ – дебиторская задолженность.
	Коэффициент текущей ликвидности	$K_{тл} = \frac{(ДС + КФ + ДЗ + ПА + МЗ)}{(КК + КЗ + ПО)} \quad (14)$ где ПА – прочие оборотные активы; МЗ – материальные запасы.
Анализ платежеспособности	Коэффициент общей ликвидности (платежеспособности)	$K_{оп} = \frac{СК}{(КК + КЗ + ПО + ДО)} \quad (15)$ где СК – собственный капитал; ДО – долгосрочные обязательства.

Анализ показателей финансовой устойчивости	Коэффициент соотношения заемных и собственных средств	$y_1 = \frac{\text{стр}1400 + \text{стр}1500}{\text{стр}1300} \quad (16)$
	Коэффициент финансовой независимости (автономии)	$y_2 = \frac{\text{стр}1300}{\text{стр}1700} \quad (17)$

Сведения о результатах мероприятий внутреннего контроля детализируются по видам внутреннего контроля (предварительный, текущий и последующий) и представляют собой принимаемые на предприятии меры по повышению эффективности его деятельности (организация и документирование санкционирования тех или иных затрат руководителем предприятия, работа внутри проверочных комиссий и т.п.).

Предварительный анализ – оценка, который осуществляется до совершения финансово-хозяйственных операций, связанных с расходованием материальных и денежных средств, с целью предупреждения возможных финансовых и других нарушений. Текущий анализ – анализ, осуществляемый непосредственно в ходе проведения работ или во время выполнения операций. Последующий анализ – анализ, который проводится после совершения финансово-хозяйственных операций. По результатам последующего контроля определяются состояние финансово-хозяйственной деятельности.

Анализ бухгалтерской отчетности предприятия включает в себя следующие этапы: анализ финансовой отчетности; анализ показателей бухгалтерского баланса; анализ отчета о финансовых результатах.

Итак, основная цель проведения анализа бухгалтерской отчетности является своевременное выявление и устранение упущений и недостатков при реализации финансовой деятельности, по которым можно привести план контрольных мероприятий на последующий год, и перечислить мероприятия по устранению нарушений по предыдущему году.

Таким образом, анализ показателей бухгалтерской отчетности предприятия следует проводить, соблюдая логику движения от общего к частному и далее к определению влияния частного на общее. Иначе говоря, сначала анализируются обобщающие показатели бухгалтерской отчетности предприятия в их динамике, затем изучается их структура, определяется изменение в анализируемом периоде по отношению к базисному периоду или к бизнес-плану; выявляются факторы, действие которых привело к изменениям, показатели, с помощью которых можно дать количественную оценку влияния факторов на изменение показателей. На следующем этапе осуществляется детальный анализ показателей бухгалтерской отчетности предприятия на основе углубленного изучения частных показателей и выявления резервов роста прибыли.

Система показателей бухгалтерской отчетности предприятия включает в себя абсолютные и относительные показатели эффективности

хозяйствования, к которым относятся показатели рентабельности. Результаты анализа показателей бухгалтерской отчетности предприятия используются для принятия экономических решений, направленных на эффективное использование ресурсов, выбор наилучшего варианта инвестиций, обоснование перспектив развития предприятия.

Подводя итоги, можно констатировать, что анализ форм бухгалтерской отчетности заключается в изучении бухгалтерских отчетов и документов, а также подготовке выводов, формируемых на основе изученной отчетности. Целью анализа показателей бухгалтерской отчетности является своевременное выявление и устранение упущений и недостатков при реализации финансовой деятельности, по которым можно привести план контрольных мероприятий на последующий год, и перечислить мероприятия по устранению нарушений по предыдущему году. Для получения наиболее достоверной оценки действующего финансового положения предприятия и определения дальнейшего его развития применяется вертикальный, горизонтальный, факторный, трендовый и коэффициентный анализ бухгалтерской (финансовой) отчетности. Анализ показателей бухгалтерской отчетности следует проводить, соблюдая логику движения от общего к частному и далее к определению влияния частного на общее. Анализ бухгалтерской отчетности дает возможность руководству получить всестороннее представление об экономическом, финансовом и имущественном положении.

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## SUBJECT OF THE CRIME: MONEY LAUNDERING

*Abstract. The article delves into the fundamental notion of money laundering, which is universally acknowledged by the international community, including the United Nations, as one of the most pervasive and perilous transnational crimes worldwide.*

*Keywords: crime, criminal liability, proceeds of crime, money laundering, legalization, punishment.*

### **Introduction**

The legitimization of illicit gains stands as one of the prevalent and high-risk transnational criminal activities. As per expert assessments, the proceeds stemming from diverse criminal undertakings within the domain of legitimizing illicit gains have accounted for roughly 2 to 5% of the overall global gross product in recent years. This translates to an economic magnitude ranging from 1 to 3 trillion US dollars.

This significant financial volume underscores the immense scale of money laundering activities on a global scale. It emphasizes the necessity for concerted international efforts to combat this issue effectively, given its substantial impact not only on the financial systems but also on the social and economic well-being of countries across the world<sup>55</sup>.

The nation's economic security and stability face potential jeopardy due to the repercussions of these adverse elements.

Presently, the escalating public peril posed by the legitimization of criminally acquired proceeds elicits widespread apprehension across the global community of nations. As the world's financial system becomes increasingly interlinked through globalization, the imperative emerges for international coordination among countries to combat the legitimization of criminally acquired proceeds effectively. In light of these circumstances, Uzbekistan cannot afford to remain detached from this issue.

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<sup>55</sup> Course of criminal law of the Republic of Uzbekistan. Special part. T.1 Uzbekistan, 2016.

The negative factors at play here could undermine the economic foundation and stability of a country. The growing global concern regarding the legalization of illegally obtained funds highlights the need for international cooperation to counter this issue effectively. In this era of interconnected financial systems, Uzbekistan, like other nations, must actively engage in addressing these challenges to preserve its own economic well-being.

In the realm of criminal law, the individual responsible for committing a crime and meeting the age requirements stipulated by the legal system is regarded as the subject of the offense. If any of these essential criteria are missing, it implies the absence of the crime's perpetrator and consequently negates the existence of the crime itself.

The examination uncovers noteworthy fluctuations in the occurrence of money laundering offenses and the accompanying figures related to the extent of income legalization during the observation period. Nevertheless, there is a distinct trend towards decreasing criminal activities in recent years, with a reduction of over 50% in the number of reported offenses.

Furthermore, Uzbekistan reportedly grapples with a substantial shadow economy, with approximations proposing that it constitutes around 50% of the total economy. This significant share of the shadow economy implies a substantial GDP loss, which could reach as high as 16-17 billion US dollars, according to these estimations.

### **Materials and methods**

The research within this paper was conducted using a diverse array of general scientific methods. Historical analysis was employed to trace the evolution of money laundering as a transnational crime. A comparative legal approach was applied to assess how different countries address the issue. Furthermore, logical methods such as analysis and synthesis were utilized to delve deep into the subject, allowing for a comprehensive examination of the trends and factors surrounding money laundering.

These methods collectively provided a rigorous framework for understanding the intricacies of money laundering as a global problem. The historical analysis illuminated the roots and transformations of this crime, shedding light on its ever-changing nature. The comparative legal approach facilitated a cross-jurisdictional assessment, enabling a nuanced examination of diverse legal systems and their responses to money laundering.

In addition, the logical methods, including in-depth analysis and synthesis, allowed for the synthesis of information and data from various sources. This comprehensive approach not only deepened the understanding of money laundering but also uncovered insights into trends and countermeasures.

By embracing this multifaceted methodology, this paper provides a thorough and insightful exploration of money laundering, serving as a valuable resource for researchers, policymakers, and anyone interested in addressing this significant transnational issue.



## **Research results and discussion**

Money laundering crimes encompass a wide array of subjects across various jurisdictions, involving individuals, entities, and organizations engaged in the complex process of concealing the illicit origins of unlawfully acquired funds. Although specific criteria for identifying these subjects may vary, several universally acknowledged categories are typically recognized:

**Individuals:** Across most countries, individuals who knowingly participate in money laundering activities are considered subjects of this crime. This classification generally includes those who willfully aid in the movement or transformation of illicit funds, often through intricate financial transactions or arrangements.

**Financial Institutions:** Many nations place stringent obligations on financial institutions, such as banks, to deter and report money laundering endeavors. These institutions are entrusted with the responsibility of conducting thorough due diligence on their clientele, reporting transactions that raise suspicion, and establishing robust anti-money laundering (AML) programs.

**Designated Non-Financial Businesses and Professions (DNFBPs):** Some countries extend AML obligations beyond financial entities to encompass designated non-financial businesses and professions. This category can encompass diverse sectors like real estate, casinos, legal and accounting services, and trust and company service providers. Individuals and entities operating within these sectors may be subject to money laundering regulations and related obligations.

**Corporate Entities:** In select jurisdictions, corporate entities can be held accountable for money laundering offenses. This includes companies or organizations that actively facilitate or reap benefits from money laundering activities, whether directly or indirectly.

The inclusion of these subjects is vital in addressing the multidimensional nature of money laundering, ensuring a comprehensive approach to combat this global predicament effectively. By targeting individuals, financial institutions, non-financial businesses, and corporate entities, legal systems aim to create a robust deterrent against this intricate and harmful transnational crime.

Indeed, the specific definitions and criteria for identifying the subjects of money laundering crimes can exhibit notable disparities among different jurisdictions. Every country maintains its distinct legal framework, regulations, and interpretations concerning the categorization of individuals, entities, or organizations subject to these offenses. This divergence in approaches and definitions reflects the complex and multifaceted nature of money laundering, which transcends borders and necessitates tailored responses to address its various manifestations effectively. Hence, a thorough understanding of the local legal context and jurisdiction-specific definitions is imperative for accurately determining who falls under the purview of money laundering laws in a particular region.

Pavlov V. G. posits that the subject of a crime is a legal term that defines the legal attributes of the individual who has committed the offense. It is delineated solely by the elements (individuality, age, sanity) required for the imposition of criminal responsibility upon the person who engaged in a socially harmful act. However, these elements represent only a fraction of the characteristics encompassing the individual involved in the criminal act<sup>56</sup>.

In the theory of criminal law, the subjects of crime are traditionally classified into the following types.

General subject - having all the characteristics specified in the Article 17 of the Criminal Code of the Republic of Uzbekistan.

A special subject of a crime is a person who, along with the general characteristics of the subject (reaching the age of criminal responsibility and sanity) also meets additional special features specified in the disposition of the articles of the Special Part of the Criminal Code, which are subject to mandatory establishment when qualifying and limiting the circle of persons who may be liable under this article<sup>57</sup>. A special subject must be defined by criminal law<sup>58</sup>.

According to the viewpoints expressed by local scholars like R. Kabulov, A. A. Otajonov, and I. A. Sattiev, in cases where a crime involves both a general subject and a special subject, the special subject is considered the perpetrator, while the general subject assumes the role of an organizer, instigator, or accomplice based on their actions<sup>59</sup>.

After a comprehensive analysis of the corpus delicti related to the legalization of proceeds from criminal activities, it can be reasonably concluded that the Criminal Code of the Republic of Uzbekistan does not specifically designate a unique subject for this offense. Therefore, it implies that money laundering can be committed by any mentally competent individual who has reached the age of 16. In the domestic legal scholarship, there is a consensus regarding the interpretation of both the general and specific elements outlined in Article 243 of the Criminal Code of the Republic of Uzbekistan.

According to Professor N.A. Lopashenko, the term "subject of self-laundering" refers to "an individual who has reached the age of 16 and has acquired money or property through criminal means, with the specific intention of giving a legitimate appearance to the ownership, use, and disposal of the criminal proceeds or other assets. If such intention is not established, the crime is not committed."

The term "subject of money laundering" typically encompasses individuals who knowingly and consistently involve themselves in the concealment of the source of unlawfully acquired funds or other assets. These individuals can take

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<sup>56</sup> Pavlov V.G. The subject of the crime. - St. Petersburg: Publishing House "Legal Center Press", 2001. - P. 270.

<sup>57</sup> Rustambaev M.H. Course of criminal law of the Republic of Uzbekistan. Special part. T.2: Uzbekistan, 2016.

<sup>58</sup> Abdurasulova K. A Jinoyatning maxsus su'bekti. O'quv qo'llanma [Special Subject of the Crime] Manual- T.: TSUL, 2005. - B. 110

<sup>59</sup> Jinoyatlarni kvalifikatsiya qilish [Qualification of crimes]: a textbook for higher education institutions of the Ministry of Internal Affairs / R. Kabulov, A.A. Otajonov, I.A. Sattiev end others. T.-2012.- p.87

various forms, including financial intermediaries, lawyers, accountants, banks, asset management firms, or other entities providing services related to financial transactions. Money laundering subjects actively partake in establishing intricate schemes and mechanisms designed to legitimately convert illegal assets while obstructing the tracing of their origins.

The subject of the crime is a competent individual who has reached the age of sixteen and has not participated (in any form of complicity) in the commission of a crime resulting in the acquisition of monetary funds or other property. This may include employees of financial institutions, professional participants in the securities market, companies involved in real estate transactions, etc.

### **Conclusions**

The state's policy in the realm of money laundering prevention is founded upon the international legal commitments of the Republic of Uzbekistan and the imperative of safeguarding the seamless operation of the national economic system. International legal guidelines for tackling money laundering present typical strategies for addressing this concern, while considering both the general principles of countering this phenomenon, which are universal to every state, and the requirements for shielding against transnational criminal activities. While adhering to international norms, the state must also factor in the intricacies of their implementation within the framework of the national legal framework and under specific socio-economic circumstances. These multifaceted factors delineate the path to resolving this intricate challenge, entailing a delicate equilibrium between upholding international standards and accounting for national interests.

Studies of the theory, legislative and law enforcement practice allow us to conclude that, despite the high degree of public danger of money laundering, the practice of applying the Article 243 of the Criminal Code of the Republic of Uzbekistan still does not meet the real scale of this crime.

The Law of the Republic of Uzbekistan 660-II "On countering the legalization of revenue received from criminal activities, the financing of terrorism and the financing of the proliferation of weapons of mass destruction" of 26.08.2004 shall be further improved, taking into account the requirements of international law, in particular, the Recommendations of the Financial Action Task Force on Money Laundering (FATF). For instance, it should include issues related to virtual assets, financial investigations, and others.

Considering all the aspects discussed above, it can be inferred that the challenges related to combatting money laundering are of such significant magnitude that they warrant more extensive examination in the context of additional research endeavors.

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## **МАЛОЕ ПРЕДПРИНИМАТЕЛЬСТВО: ПОНЯТИЕ И КРИТЕРИИ**

*Аннотация. В статье исследовано понятие малого предпринимательства. Затронуты вопросы правового регулирования малого предпринимательства в российской Федерации. Уделено внимание изучению критериев, установленных для определения субъектов малого предпринимательства.*

*Ключевые слова: малое предпринимательство, субъекты малого предпринимательства, критерии субъектов малого предпринимательства.*

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## **SMALL ENTREPRENEURSHIP: CONCEPT AND CRITERIA**

*Abstract. The article explores the concept of small business. Issues of legal regulation of small businesses in the Russian Federation are touched upon. Attention is paid to the study of the criteria established for identifying small businesses.*

*Key words: small business, small business entities, criteria for small business entities.*

В настоящее время влияние малого предпринимательства на развитие экономики страны существенно возрастает. Способность оперативно адаптироваться к быстроменяющимся условиям позволяет ему гибко реагировать на потребительские запросы, осваивать инновационные процессы.

Несмотря на многовековую историю развития малого предпринимательства, до сих пор среди научного сообщества ведутся дискуссии о его понятии.

Так, Н.А. Струкова и М.С. Полякова малый бизнес определяют как деятельность физических или юридических лиц, направленную на получение прибыли посредством продажи товаров и услуг [4].

Н.А. Аппалонова и Л.Р. Бердина считают, что «малое предпринимательство представляет собой хозяйственную деятельность,

которая ведется самостоятельно на свой страх и риск с целью получения прибыли» [1, с. 79].

И.В. Полянская отмечает, что малое предпринимательство – это предпринимательская деятельность физического или юридического лица, связанная с высоким повышенным риском, ключевой целью которой является извлечение прибыли путем производства и продажи товаров, предоставления услуг, а также соответствующая критериям отнесения к субъектам малого предпринимательства [3].

Одним из важных нормативных документов, определяющих понятие предпринимательской деятельности является Гражданский кодекс Российской Федерации. Согласно ст. 2 Гражданского кодекса Российской Федерации «предпринимательской является самостоятельная, осуществляемая на свой риск деятельность, направленная на систематическое получение прибыли от пользования имуществом, продажи товаров, выполнения работ или оказания услуг» [2].

Федеральный закон от 24.07.2007 г. 209-ФЗ «О развитии малого и среднего предпринимательства в Российской Федерации» к субъектам малого и среднего предпринимательства относит юридических лиц и индивидуальных предпринимателей, которые отнесены в соответствии с условиями, закрепленными законом, к малым, в том числе к микропредприятиям, и средним предприятиям, сведения о которых внесены в единый реестр субъектов малого и среднего предпринимательства [5].

По нашему мнению, малое предпринимательство представляет одно лицо или объединение лиц, которые соответствуют критериям отнесения к данной категории субъектов, реализующих предпринимательскую деятельность в соответствии с законодательством для получения максимальной прибыли при оптимальных затратах.

Правовое регулирование предпринимательской деятельности развивалось на протяжении долгих лет. Тем не менее в настоящее время существуют отдельные дискуссионные вопросы, требующие дальнейшего совершенствования законодательства в области нормативного регулирования деятельности малого предпринимательства. Следует отметить, что малый бизнес в большей степени подвержен влиянию факторов макро- и микросреды и нуждается в поддержке со стороны государства. В настоящее время действуют различные программы, способствующие совершенствованию малого предпринимательства. Однако стремительно меняющиеся условия провоцируют необходимость разработки и принятия новых программ, соответствующих потребностям развития малого предпринимательства на текущем этапе развития экономики.

Критерии для отнесения к субъектам малого предпринимательства установлены в ст. 4 Федерального закона от 24.07.2007 г. 209-ФЗ [5]. Данные критерии можно объединить в группы (рисунок 1).



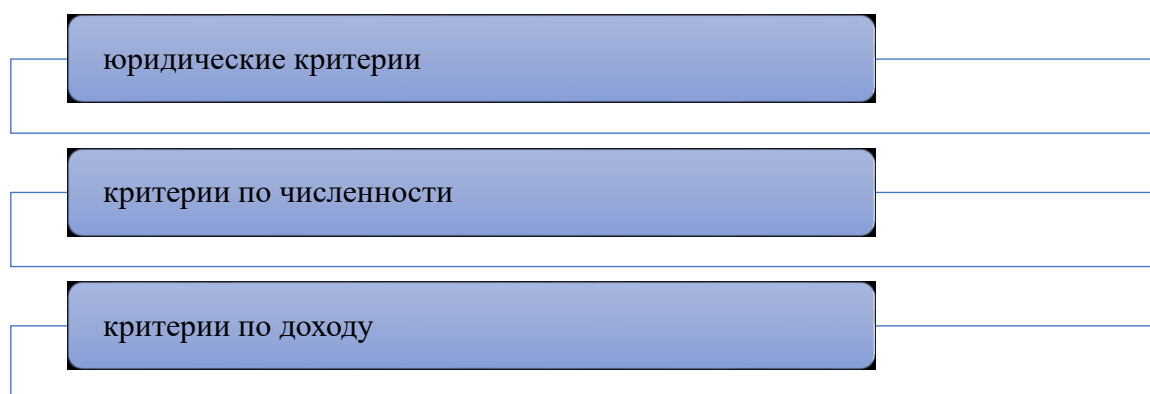


Рисунок 1 – Критерии для отнесения к субъектам малого предпринимательства

На основании ст. 4 Федерального закона от 24.07.2007 г. 209-ФЗ к субъектам малого и среднего предпринимательства относятся зарегистрированные в установленном порядке: хозяйственные общества, хозяйственные товарищества, хозяйственные партнерства, производственные кооперативы, потребительские кооперативы, крестьянские (фермерские) хозяйства и индивидуальные предприниматели [5].

В случае, когда хозяйственное общество или хозяйственное товарищество соответствует одному из юридических критериев, следует проверить их соответствие критериям по численности и доходу. Для индивидуальных предпринимателей, производственных, потребительских кооперативов, крестьянских (фермерских) хозяйств являются важными только критерии по численности и доходу.

Для определения критерия по численности в расчет берется среднесписочная численность работников за предшествующий календарный год хозяйственных обществ, хозяйственных товариществ, хозяйственных партнерств, соответствующих одному из требований юридических критериев, указанных в п. 1 ст. 4 Федерального закона от 24.07.2007 г. 209-ФЗ, производственных кооперативов, потребительских кооперативов, крестьянских (фермерских) хозяйств, индивидуальных предпринимателей, которая не должна превышать следующие предельные значения среднесписочной численности работников для каждой категории субъектов малого и среднего предпринимательства [5]:

– до 100 человек для малых предприятий (среди малых предприятий выделяются микропредприятия – до 15 человек);

– от 100-250 человек для средних предприятий, если иное не установлено Федеральным законом от 24.07.2007 г. 209-ФЗ.

Доход хозяйственных обществ, хозяйственных товариществ, хозяйственных партнерств, производственных кооперативов, потребительских кооперативов, крестьянских (фермерских) хозяйств и индивидуальных предпринимателей, который получен от ведения

предпринимательской деятельности за предшествующий календарный год, определяемый в порядке, установленном законодательством Российской Федерации о налогах и сборах, суммируется по всем осуществляемым видам деятельности и применяется по всем налоговым режимам, не должен превышать предельные значения, установленные Правительством Российской Федерации для каждой категории субъектов малого и среднего предпринимательства [5].

Таким образом, малое предпринимательство занимает важное место в экономике страны. Несмотря на сложившееся правовое регулирование данной сферы, существуют необходимость в его совершенствовании и поддержке субъектов малого бизнеса.

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**ОГРАНИЧЕНИЯ КОНСТИТУЦИОННЫХ ПРАВ ГРАЖДАН,  
СВЯЗАННЫЕ С ПОСТУПЛЕНИЕМ НА ГОСУДАРСТВЕННУЮ  
ГРАЖДАНСКОЮ СЛУЖБУ РОССИЙСКОЙ ФЕДЕРАЦИИ И ЕЁ  
ПРОХОЖДЕНИЕМ**

*Аннотация. В статье исследуются конституционные права граждан, связанные с поступлением на государственную гражданскую службу РФ и их ограничения.*

*Ключевые слова: конституционное право, государственная гражданская служба.*

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**LIMITATIONS OF THE CONSTITUTIONAL RIGHTS OF CITIZENS  
RELATED TO ADMISSION TO THE STATE CIVIL SERVICE OF THE  
RUSSIAN FEDERATION AND ITS PASSAGE**

*Abstract. The article examines the constitutional rights of citizens related to entry into the state civil service of the Russian Federation and their limitations.*

*Key words: constitutional law, state civil service.*

Конституция Российской Федерации высшей ценноу в государстве признает права и свободы человека и гражданина. Конституция РФ определяет основы правового положения личности, учитывая концепцию естественных и неотчуждаемых прав и свобод. Государство обязано признавать права и свободы человека и гражданина и оберегать их всеми возможными средствами [11].

В то же время установление прав и свобод человека как высшей ценности в государстве вовсе не означает, что такие права и свободы являются неограниченными и что человек может освобождаться от ответственности перед другими людьми, так как реализация прав и свобод всегда в рамках общественной жизни сталкивается с индивидуальными и публичными интересами.

Для того чтобы власть не выходила за пределы установленных Конституцией России прав и свобод человека и гражданина, санкционируются некоторые ограничения прав личности, которые, тем не менее, должны быть четко сконструированы и конкретизированы в рамках действующего законодательства, должно быть указано в каких целях допускается такое ограничение прав и свобод и при каких конкретных обстоятельствах они могут ограничиваться, в какой степени и форме [3, с.34].

Как известно в соответствии с ч. 3 ст. 55 Конституции РФ права и свободы могут ограничиваться федеральным законодательством, но лишь в той мере и в том объеме, которые необходимы для защиты конституционного строя России, нравственности, здоровья и законных интересов. Тем самым ограничения прав и свобод могут быть установлены исключительно для достижения целей общесоциального характера, в том числе и для целей обеспечения безопасности от внутренних и внешних угроз [11].

Федеральное законодательство сегодня предусматривает определенные ограничения прав и свобод в отношении государственных гражданских служащих. Конституционный суд Российской Федерации по этому вопросу отмечает, что профессиональная и служебная деятельность таких субъектов имеет свою специфику, ввиду чего федеральный законодатель имеет право установить особые правила в их отношении, в том числе и некоторые ограничения, которые обусловлены статусом данных лиц в государстве.

В Федеральном законе «О системе государственной службы Российской Федерации», закреплено, что правовое положение государственного гражданского служащего, в том числе и субъекта РФ, предусматривает определенные ограничения, а также их отдельные обязанности и правила деятельности. Сегодня законодатель привел достаточно полный перечень таких ограничений, однако следует сказать, что в случае введения каких-либо новых ограничений будет вставать вопрос об их допустимости и конституционности [23].

Основной проблемой установления ограничений в отношении рассматриваемой категории субъектов является определение пределов их свободы, сегодня в полной мере нельзя говорить о том, что установленные в отношении рассматриваемой категории лиц пределы, в полной мере способствуют эффективности их деятельности и позволяют снижать коррупционные риски. К проблеме следует отнести и незначительное число исследований в этой сфере. Чаще всего под исследования в целом, попадают права и свободы человека, безотносительно к тому является он или нет гражданским служащим, деятельность которых урегулирована отдельными законодательными актами, что предполагает необходимость исследования ограничений, устанавливаемых в их отношении для выявления их

обоснованности и внесения предложений, которые могут действительно повысить эффективность их деятельности, что и указывает на актуальность темы представленного исследования [15, с. 351].

В научной литературе ограничения прав рассматривают с точки зрения пределов их действия, то есть установления определенных границ. Так, есть точка зрения, что ограничения прав – это установление определенных границ, в пределах которых субъекту разрешается действовать, тем самым ограничиваются пределы действия субъекта в определенных рамках [13, с.102].

Однако есть мнение, что пределы ограничения и само понятие ограничений следует между собой разграничить. Так, Е.В. Гончаров пишет, что довольно сложно бывает разграничить ограничение прав и границы осуществления предоставляемых прав [4, с. 25]. Необходимо считать, что говорить необходимо как раз о пределах осуществления права, а не об ограничениях. В частности, конституционное право гражданина на предпринимательскую деятельность не предполагает права реализовать некачественную продукцию, такие действия как раз и являются выходом субъекта за рамки пределов права, что не является ограничением.

Есть точка зрения, что пределами ограничения конституционного права необходимо признавать совокупность сложившихся в обществе критериев и ориентиров, которыми указывают на границы пользования гражданами, предоставленными им конституционными правами, то есть имеем дело тут с границами поведения лица в обществе. Ограничение же прав граждан является определенным изъятием существующего правомочия субъекта для целей общего блага [2, с. 50].

Необходимо поддержать позицию, которая высказывалась и ранее многими учеными, так как ограничения прав и пределы такого ограничения принципиально между собой отличаются самой сутью данных категорий [1, с. 11].

Ограничение является внешним запретом, его установить может только государство для конституционно значимых целей, тем самым ограничение – это нормативное сужение круга возможностей субъекта, особенно того, который действует в сфере публичной власти, что в целом необходимо для соблюдения баланса интересов. Пределы же или границы такого ограничения обуславливаются действительным содержанием права в сложившихся в определенный момент времени условиях. Такие пределы содержит ряд положений Конституции РФ, и они по своей природе будут отличаться от ограничения основных прав [6, с. 137].

Любое нарушение пределов права является выходом субъекта за рамки нормального содержания самого права, когда субъект пользуется предоставляемыми ему правами недобросовестно.

Само понятие ограничения права довольно тесно связано с юридическими обязанностями. Например, по законодательству

налогоплательщик не имеет права распоряжаться по своему усмотрению той частью своего имущества, которая в виде денежной суммы должна быть внесена в бюджет в качестве налога, а субъект несет обязанность периодически перечислять налоговые платежи в государственный бюджет [7, с. 47].

Если в широком смысле рассмотреть ограничение прав, то действительно между ограничениями и обязанностями будет заметна непосредственная связь. Обязанность субъекта воздерживаться от определенных видов своего поведения, является, с другой стороны, обязанностью совершать позитивные действия, то есть обязанный субъект должен поступаться определенным объемом своих прав.

Очень часто ограничение прав связывают с юридической ответственностью, так как, например, любое наказание будет являться ограничением прав субъекта, например, лишение гражданина свободы ограничивает его личную свободу, предоставленную ему Конституцией РФ, кроме того ограничивается его право на свободное передвижение.

Тем самым само понимание юридической ответственности предполагает ограничение тех либо иных прав, например, ограничение по военной службе или лишение специального права и пр.

В рамках административного права также отмечается, что применение в отношении субъекта любой меры административной ответственности является ограничением его конституционных прав, однако такие ограничения могут иметь место исключительно в случаях, прямо установленных Конституцией РФ.

В словаре русского языка понятие ограничение, означает ставить в какие-то рамки, ограничение права действия. Ограничение, по сути, является гранью удержания кого-либо в определенных рамках, правило, ограничивающее право, действие по стеснению определенными условиями или лимитирование сферы деятельности [9, с. 91].

Тем самым если исходить из таких понятий, то не только ответственность или обязанность могут рассматриваться как ограничение. К примеру, законодатель может устанавливать определенные условия использования того либо иного права, к примеру, в нашем случае, это будет максимально возможный возраст, который дает субъекту право поступить на службу или требование владения государственным языком. Если обращаться к широкому подходу, то это будет ограничение конституционных прав граждан. В связи с этим в литературе предлагается разграничивать ограничение прав и свобод и регулирование прав и свобод. Регулирование является объективной неизбежностью [10, с. 107].

В ст. 17 Закона о государственной гражданской службе, установлены запреты, многие из которых являются как раз ограничением прав и свобод в конституционном понимании данного термина [14, с. 100].



В частности, к ограничениям, которые являются пределами конституционных прав, следует отнести:

- отказ пройти процедуру оформления доступа к государственной тайне;

- предоставление сведений либо документов, которые не соответствуют действительности и, по сути, являются подложными;

- непредставление гражданином сведений о своем материальном положении или предоставление таких сведений, но не соответствующих действительности, в том числе и об обязательствах, носящих имущественный характер;

- утрата доверия.

Отдельные ограничения следует рассматривать как условия реализации, а именно:

- выход из гражданства РФ.

И только все остальные условия действительно будут в классическом понимании этого слова ограничениями конституционного права граждан на равный доступ к службе в государственных органах.

Применительно к теме исследования мы рассмотрим только те ограничения, которые могут быть прямо связаны с рассматриваемыми нами ограничениями, которые ограничивают конституционные права человека и гражданина.

Подобного рода ограничений с определенной долей условности, по нашему мнению, можно выделить семь, а именно [8, с. 260]:

- признание недееспособным или ограниченно дееспособным;

- осуждение к наказанию, что исключает возможность исполнять свои обязанности по службе, по приговору, который вступил в законную силу;

- наличие у лица заболевания, которое препятствует ему проходить службу;

- близкое родство либо свойство, что приведет к тому, что родственники будут находиться в подчинении друг у друга;

- вступление гражданина в отношения с иным государством, посредством принятия его гражданства;

- наличие у гражданина гражданства иностранного государства;

- признание факта, что лицо не прошло в установленном законодательством порядке военной службы, и при этом гражданин не имел для этого никаких оснований, предусмотренных законом.

Очевидным фактом есть то, что большая часть ограничений, в том числе и установленных в отношении государственных гражданских служащих, тем либо иным образом затрагивают экономические права и свободы граждан. Связано это, по нашему мнению, с необходимостью осуществлять противодействие коррупции в рядах государственных

служащих и не допускать использование такими лицами своего положения по службе [2, с. 50].

Что касается личных прав, то человек приобретает таковые, как только рождается. Если кто-либо начинает ограничивать данные права, то это прямо затрагивает конкретно взятую личность.

Тем самым сегодня можно со всей ответственностью сказать, что на государственном уровне нет четкого и однозначного указания на то, как именно необходимо понимать ограничения конституционного права в области регулирования государственной гражданской службы.

Таким образом, могут быть сформулированы следующие выводы:

Определено, что понятие ограничение конституционных прав граждан может быть узким и широким. В узком смысле мы будем иметь дело со специальными правовыми средствами, которые существенным образом могут сужать круг правомочий субъекта, для обеспечения определенной конституционной ценности.

В широком понимании ограничение не следует рассматривать самостоятельной целью, тут мы будем иметь дело с результатом правового регулирования, что направлено на выполнение иных задач. Тут законодатель сознательно не сужает конституционные права, такое сужение тут будет являться побочным результатом правового регулирования. К примеру, квалификационные требования в отношении должности государственной гражданской службы являются не ограничением доступа к службе, а преследуют цель обеспечить профессиональный кадровый состав.

Определено, что в рамках законодательства о государственной гражданской службе законодатель не в полной мере понимает разницу между ограничениями и запретами, а это прямо ведет к тому, что реальные ограничения конституционных прав граждан помещены в статью, где установлены запреты, в то время как в статье об ограничениях по государственной гражданской службе, некоторые из них не являются ограничениями конституционных прав, это будет ограничение свободы труда или неисполнением обязанности, но не ограничение конституционных прав в прямом понимании этого слова.

Следовательно, следует сказать, что на уровне законов нет четко установленного понимания ограничения конституционных прав человека и гражданина в области прохождения и поступления их на гражданскую службу в государственные органы.

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## **КОНСТИТУЦИОННОЕ ПРАВО НА СОЦИАЛЬНОЕ ОБЕСПЕЧЕНИЕ ГРАЖДАН КАК ЭЛЕМЕНТ СОЦИАЛЬНОЙ ПОЛИТИКИ ГОСУДАРСТВА**

*Аннотация. В статье исследуется конституционное право граждан на социальное обеспечение как элемент социальной политики государства.*

*Ключевые слова: конституционное право, социальная политика, социальное обеспечение.*

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## **CONSTITUTIONAL RIGHT TO SOCIAL SECURITY OF CITIZENS AS AN ELEMENT OF THE STATE SOCIAL POLICY**

*Abstract. The article examines the constitutional right of citizens to social security as an element of the state's social policy.*

*Key words: constitutional law, social policy, social security.*

Основными сферами в структуре общественной жизни выделяют, как уже было отмечено, экономическую, политическую, социальную и духовную.

«Определённые направления политического руководства обществом, является регулирование социальных процессов и отношений, путём воздействия на них государства (целенаправленная государственная политика), т. е. государственная политика, что соответствует основным формам общественной жизни. В научной литературе встречается характеристика её как в широком, так и узком смысле.

Социальная политика в широком смысле заключается в охвате всех в совокупности отношений между классами, слоями и социальными группами, народами и нациями, и их отношения к государству и обществу, которые направлены на сохранения и преобразование существующей социально-классовой структуры. С точки зрения узкого смысла социальная политика отражает отношение между классами, малыми и большими социальными группами по поводу их роли и места в обществе, путём

удовлетворения их жизненно важных потребностей, таких как: в социальном обеспечении, в труде, в образовании и других» [5, с. 26].

Социальная политика РФ охватывает широкий круг вопросов, связанных со здравоохранением, физической культурой, пенсиями, социальными выплатами, образованием, трудом и другими важными для государства объектами жизни граждан.

Социальная политика непосредственно в целом влияет на жизнь всех граждан страны. В ст. 7 Конституции РФ отражено то, что РФ является социальным государством, политика которого направлена на создание условий, обеспечивающие достойную жизнь и свободное развитие человека.

«Социальное государство - это своего рода система государственного регулирования общественных отношений, при которой материальные блага распределяются (перераспределяются) в соответствии с принципом социальной справедливости, целях обеспечения каждому достойного уровня жизни и минимальных возможностей для самореализации, правовые устранения социальных противоречий и конфликтов, помощи нуждающимся.

Рассмотрим на примере, понятия «социального государства», закреплённого в Конституции РФ, и что законодатель вкладывает в данное понятие. Понятие «социальное государство» впервые было употреблено в Конституции РФ 1993 г. и для российского законодательства является новым» [4, с. 84].

Оно предусматривает обязанность государства проводить определённую социальную политику, нести ответственность за достойный уровень жизни каждого. Смысл данной обязанности сводится на следующем обязывающем положении государства: каждый человек вправе рассчитывать на такой уровень жизни, который позволит ему не только существовать, но и формировать и проявлять себя как личность, и принимать непосредственное участие в реализации (производстве) материальных благ.

«В свою очередь, нельзя говорить о том, что обязанность государства оказывать социальные услуги может означать замену государственным попечительством экономической свободы и активности, предпринимательской и хозяйственной инициативы всего общества. Обратим внимание, что речь идёт о создании благоприятных правовых возможностей, организационных условий граждан, которые собственными усилиями достигали материального достатка своей семьи.

Часть 1 ст. 7 Конституции РФ определяет принцип социального государства и как политический, предусматривая, что РФ - государство, политика которого направлена на создание определённых условий жизненной обеспеченности его граждан. В соответствии с этим, пункте "е" ст. 71 Конституции РФ относит к ведению РФ установление основ



федеральной политики и федеральные программы в области социального развития. Пункты "е" и "ж" ст. 72 Конституции РФ указывают нам, что в совместном ведении РФ, и её субъектов находится ряд общих вопросов связанные с разными сферами жизни, включая социальное обеспечение» [4, с. 33].

В ч. 2 ст. 7 Конституции РФ закреплены основные направления социальной политики государства, которые одновременно могут считаться и наиболее значимыми социальными гарантиями.

К ним относятся:

- «государственная поддержка семьи, материнства, отцовства и детства;
- назначение пенсий инвалидами другим нетрудоспособным лицам;
- создание системы социальных служб занятости, призванных принимать действенные меры по трудоустройству лиц, не имеющих постоянной работы и выплачивать им в соответствии с действующим законодательством пособия по безработице;
- выплата государственных пенсий и социальных пособий;
- охрана здоровья и труда людей;
- установление гарантированного минимального размера оплаты труда» [3, с. 39].

Перечень социальных гарантий, является открытым, т. е. он может быть дополнен и расширен федеральным законом, поскольку сама ст. 7 Конституции РФ предусматривает, что кроме перечисленных гарантий могут быть установлены и иные гарантии социальной защиты.

Более подробно социальные гарантии определены в ст. 37 - 43 главы второй Конституции РФ «Права и свободы человека и гражданина». Эти статьи не только дают развёрнутую характеристику социальных прав, но и существенно дополняют перечень гарантий, которые содержатся в ч. 2 ст. 7 Конституции РФ, к ним можно отнести право на жилище, право на отдых, право на благоприятную окружающую среду, право на образование и другие.

На сегодняшний день реализация данных направлений развития социального государства остаётся одними их важнейших. Данные направления и перспективы их реализации были озвучены Президентом РФ в процессе инаугурации. Также они нашли своё закрепление в Указе Президента РФ № 597 «О мероприятиях по реализации государственной социальной политики» от 7 мая 2012 г. Ежегодные публичные отчёты на федеральном уровне и субъектов РФ позволяют отслеживать динамику развития социальной политики, прогнозировать её перспективы.

«Социальное обеспечение является важнейшим структурным элементом системы социальной политики и направлением национальной стратегии и государственного регулирования социально-экономического развития страны. Эта стратегия находит своё выражение:

– в широкомасштабном использовании бюджетного механизма как в целях финансирования социальных программ, перераспределения средств между различными по доходу, возрасту, трудоспособности, наличию иждивенцев группами населения, так и для стимулирования социальной ответственности негосударственных структур, а также каждого гражданина за самостоятельного обеспечение себя и своей семьи;

– в определении приоритетов социальной политики и основных социальных нормативов, механизмов их реализации;

– в проведении социально-экономической политики, направленной на повышение конкурентоспособности экономически активного населения на рынке труда, на создание условий для их самостоятельного обеспечения и уменьшения зависимости от государственной помощи;

– в постоянном совершенствовании организационно-административных инструментов государственного регулирования сферы социального обеспечения» [1, с. 45].

Изучение правового массива субъектов РФ позволяет сделать вывод, что несмотря на то, что уровень социальных гарантий для граждан, социально незащищенных, должен быть одинаков на всей территории России, - для этого нет единообразной регламентации содержательного наполнения услуг социальной сферы, предоставляемых в разных субъектах РФ, что не дает возможности для реализации конституционных принципов равенства.

Модель разграничения полномочий, существующая сегодня, - предмет для полемики. Следовало бы понимать под регулированием прав человека и гражданина согласно п. «в» ст. 71 Конституции РФ: определение содержания права. А к совместному ведению нужно отнести предметы, не имеющие отношения к регулированию этих прав на социальное обеспечение.

Следует считать конституционные полномочия по установлению мер социальной защиты ведением только Федерации, а полномочия по предоставлению этих мер - предметом совместного ведения. Согласно указанной логике, если федеральным законодательством будут определяться категории граждан, которым государственная помощь и поддержка необходимы, то установление также необходимо и на федеральном уровне минимального перечня мер социальной поддержки. А, как раз, дополнительные меры к ней могли бы определять субъекты РФ.

В настоящее время Федерация владеет инструментом, позволяющим перераспределять с федерального на уровень регионов ответственность за качество жизни людей, а появление указанных выше стандартов решило бы этот вопрос, также упразднив существующую ныне практику бланкетных норм. Установление для всей территории России единых федеральных стандартов должно быть исключительными полномочиями Федерации, что стало бы гарантом единообразной социальной политики страны.

Конституция РФ не дает конкретного определения перечней предметов ведения субъектов РФ, в ст. 73 утверждается лишь остаточный принцип полномочий регионов [2].

Согласно п. 1 ст. 26.1 Федерального закона «Об общих принципах организации законодательных (представительных) и исполнительных органов государственной власти субъектов Российской Федерации» № 184-ФЗ полномочия, реализуемые органами государственной власти субъекта РФ по предметам ведения субъектов РФ, устанавливаются конституцией (уставом), законами и принимаемыми согласно им иными нормативно-правовыми актами субъекта РФ.

Т.е., федеральное законодательство не может определять полномочия органов государственной власти субъектов РФ. Но, например, ст. 8 Федерального закона «Об основах социального обслуживания граждан в Российской Федерации» от 28.12.2013 г. № 442-ФЗ, закрепляет в области социального обслуживания полномочия органов государственной власти субъектов РФ, хотя это предмет собственного ведения субъекта РФ.

Итак, по предметам ведения субъектов РФ данные полномочия органов государственной власти субъектов РФ трактуются федеральным центром в качестве области совместного ведения. В общем, при осуществлении права на социальное обеспечение область собственного ведения субъектов РФ следует характеризовать в качестве остаточной, но не исключительной, т.к. сегодня трудно назвать хоть какую-то группу отношений в обществе совершенно не урегулированных на уровне Федерации и потому всецело находящуюся в ведении ее субъектов.

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**NEVROLOGIK AMALIYOTDA VESTIBULOPATIYA: DIFFERENSIAL  
TASHXISNI OPTIMALLASHTIRISH VA ULARNI DAVOLASH  
USULLARI**

*Annotatsiya. Ushbu tadqiqot ishi vertebrobazilyar yetishmovchilikning ahamiyatliligini aniqlashni, uning qiyosiy tashxisi, prognozi va tashhislashning zamonaviy aspektlarini rivojlantirishni o‘z ichiga oladi.*

*Kalit so‘zlar: vertebrobazilyar havza, vertigo.*

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**VESTIBULOPATHY IN NEVROLOGICAL PRACTICE:  
OPTIMIZATION OF DIFFERENTIAL DIAGNOSIS AND METODS OF  
THEIR TREATMENT**

*Abstract. This research work include relevant information about determining the prevalence, improve the differential diagnosis, prognosis and modern aspects of the diagnosis of vertebrobasilar insufficiency.*

*Key words: vertebrobasilar pool, vertigo.*

Surunkali miya ishemiyasini (SCI) erta tashxislash va davolash zamonaviy nevrologiyaning dolzarb muammolaridan biridir. Miyadagi o'tkir qon aylanishi buzilishining ko'rinishlaridan biri vestibulyar bosh aylanishi bo'lishi mumkin.

Vestibulyar vertigo bilan og'rigan bemorlarning prognozi va davolash taktikasi butunlay uning sababiga bog'liq. O'tkir serebrovaskulyar buzilish holatida, hatto nevrologik kasalliklarning tez regressiyasi bo'lsa ham, takroriy insult, miokard infarkti va boshqa yurak-qon tomir kasalliklari ehtimoli yuqori.

Surunkali miya ishemiyasi, vertebrobazilyar yetishmovchilik tashxisi bilan nevrologiya bo'limiga yotqizilgan bemorlar orasida vestibulyar vertigoning tarqalishi, vestibulyar vertigoning differensial diagnostikasi, uning prognozi va davolash masalalari to'liq tushunilmagan ko'rinadi, bu tadqiqotning dolzarbligini belgilaydi.

Tadqiqot maqsadi: Vertebrobazilyar yetishmovchilikning tarqalishini aniqlash, differensial diagnostikasini, prognozini va diagnostikasining zamonaviy jihatlarini yaxshilash.

Materiallar va tadqiqot usullari:

Hech qanday shubha yo'qki, o'tkir vestibulyar vertigo faqat insultning vertebrobazilar lokalizatsiyasida paydo bo'ladi. Bizning tadqiqotimizda vertebrobasilar tizimida qon tomirlari bo'lgan 128 bemor bor edi. Ushbu guruhda vestibulyar bosh aylanishi 21 bemorda kuzatilgan, shuning uchun uning chastotasi (16,4%) insultli bemorlarning butun guruhiga qaraganda sezilarli darajada yuqori edi.

Vertebrobazilar tizimida insult bilan og'rigan va vestibulyar vertigo bilan og'rigan 21 bemor orasida 68 yoshdan 91 yoshgacha bo'lgan 10 erkak va 11 ayol (o'rtacha yoshi -  $74,6 \pm 5,2$  yil) bor edi.

O'tkir vestibulyar vertigo bilan og'rigan 93 bemorni tekshirish somatik, nevrologik va otonevrologik holatni o'rganishni o'z ichiga oladi. Barcha bemorlar klinik qon tekshiruvi, umumiy siydik tahlili, biokimyoviy qon testi, koagulogramma, elektrokardiografiya, ko'krak qafasi rentgenogrammasi, bosh va bo'yin asosiy arteriyalarining dupleks ultratovush tekshiruvi, fundus tekshiruvidan o'tkazildi.

O'tkir serebrovaskulyar bilan og'rigan bemorlar va periferik vestibulyar apparati shikastlangan, klinik ma'lumotlarga ko'ra, insult ehtimolini istisno qilib bo'lmaydigan bemorlar, boshning kompyuter yoki magnit-rezonans tomografiyasidan (KT yoki MRI) o'tkazilgan. Shuningdek, karotid, vertebral va o'qimrovosti arteriyalarni dupleks skanerlash amalga oshirildi. Yaxshi paroksizmal pozitsion vertigoga shubha qilingan bemorlarda Dix-Hallpike testi o'tkazildi.

Tadqiqot natijalari: Ushbu bemorlarning klinik belgilari tahlili shuni ko'rsatdiki, ularning aksariyatida (19 bemor) miya sopi va (yoki) serebellumning shikastlanishini ko'rsatadigan nevrologik alomatlar mavjud.

Bemorlarning 73,9 foizida miyacha ataksiya, oyoq-qo'llarning markaziy parezlari - 84,8% bemorlarda, okulomotor buzilishlar - 41,3% bemorlarda, bulbar sindromi - 34,8% bemorlarda, o'tkazuvchanlik sezgirligining buzilishi - 45,6% bemorlarda (jadval )

Jadval

Vestibulyar vertigo bilan namoyon bo'lgan o'tkir serebrovaskulyar avariyalı 21 bemorda asosiy nevrologik sindromlar

Nevrologik sindrom	Bemorlar soni	%
Miyacha ataksiyasi	16	73,9
Markaziy gemiparez yoki monoparez	18	84,8
Gemigipesteziya	10	45,6
Ko'z harakati buzilishi	9	41,3
Bulbar sindrom	7	34,8
Alohida vestibulyar bosh aylanishi	1	4,3
Hammasi	21	100

Shu bilan birga, ishemik insult bilan og'rigan ikkita bemorda miya o'zagi va (yoki) miyachaning shikastlanish belgilari yo'q edi, ularda faqat o'tkir vestibulyar vertigo va gorizontaal nistagmus (izolyatsiya qilingan vestibulyar vertigo) mavjud edi. Ushbu bemorlarda, klinik ma'lumotlarga ko'ra, dastlab periferik vestibulopatiya taxmin qilingan, ammo keyinchalik bir bemorda yuz sohasidagi hissiy buzilishlar rivojlangan, boshqa bemorda esa bosh aylanishining pasayishi bilan sezilarli statik ataksiya saqlanib qolgan. Boshning MRTda birinchi holatda uzunchoq miyada va miyachada, ikkinchi holatda - miyachada ishemik infarkt mavjudligi aniqlandi.

Umuman olganda, izolyatsiya qilingan vestibulyar bosh aylanishi, vertebrobazilar tizimidagi insultli barcha bemorlarning atigi 0,7 foizida kuzatilgan. Vestibulyar vertigo vertebrobazilar tizimda insult bilan og'rigan 2 bemorda va periferik vestibulopatiya bilan og'rigan bemorlarda sodir bo'lgan; izolyatsiya qilingan vestibulyar vertigo bilan insultning chastotasi 1,2% ni tashkil etdi. Olingan ma'lumotlar boshqa mualliflarning (Brandt T., 2000, 2002, Caplan L.R., 1998, 2004) natijalariga mos keladi, ular izolyatsiya qilingan vestibulyar vertigo insultning nisbatan kam uchraydigan alomati ekanligini ta'kidlaydilar.



Agar bemorda uch haftadan ortiq davom etadigan yoki takrorlanadigan vestibulyar vertigo bo'lsa, lekin miya o'zagi va miyachaning shikastlanish belgilari bo'lmasa, vestibulyar vertigo sababi sifatida serebrovaskulyar kasalliklarni istisno qilish uchun barcha asoslar mavjud (Caplan L.R., 1998), 2014).

Vestibulyar vertigoni boshdan kechirgan insultli bemorlar ilgari bunday xurujlarga duch kelmagan. Bemorlarning ko'pchiligida (21 tadan 18 tasi) gorizonttal yoki gorizonttal-aylanuvchi nistagmus, ikkita bemorda vertikal nistagmus bor edi. Bemorlarning yarmidan ko'pida (21 tadan 10 tasida) bosh aylanishi intensivligi o'rtacha bo'lib, ko'ngil aynishi va qayt qilish kuzatilmaydi. Bosh aylanishi odatda kasallikning boshlanishidan ikki yoki uch kundan keyin pasaydi, ammo nistagmus vertigo yo'qolganidan keyin ham davom etdi. Eshitish qobiliyatining yo'qolishi va/yoki tinnitus bemorlarning faqat bir qismida (17%) kuzatilgan.

Kasalxonada bo'lish vaqtida vestibulyar vertigo bilan kasallangan 21 insultli bemordan 7 nafari vafot etdi. (Beyinchada yoki ko'prikda qon ketishi bo'lgan 3 bemordan 1 nafari, ishemik insultli 18 bemordan 5 tasi). Omon qolgan bemorlarning ko'pchiligi nevrologik alomatlarining sezilarli darajada regressiyasini boshdan kechirdi va kasalxonadan chiqish vaqtida bosh aylanishi ularni sezilarli darajada bezovta qilmadi.

Shunday qilib, o'tkir serebrovaskulyar buzilish va vestibulyar vertigo bilan og'rigan bemorlarda ko'p hollarda miya o'zagi yoki miyachaning shikastlanishiga xos bo'lgan boshqa nevrologik kasalliklar kuzatiladi, bu esa vestibulyar yo'llarning shikastlanishining markaziy lokalizatsiyasini aniqlashga imkon beradi. Juda kamdan-kam hollarda insult bilan og'rigan bemorlarda izolyatsiya qilingan vestibulyar bosh aylanishi kuzatiladi. Hayotlarida birinchi marta vestibulyar vertigo bilan kasallangan barcha bemorlarni nevrologiya bo'limiga yotqizish tavsiya etiladi, chunki faqat dinamik kuzatuv va zarur instrumental tadqiqotlar (boshning MRT) insult mavjudligini istisno qilishi yoki aniqlashi mumkin.

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# ЗДРАВООХРАНИЕ В ОБЩЕСТВЕ

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## **BOLALARDABUYRAKLAR FAOLIYATINIKESKIN BUZILISHLIGIDASHOSHILINCHYORDAM**

*Dolzarbli. Muammoni dolzabligi o'tkir buyrak faoliyatini keskin buzilish buyrakni o'tkir etishmovchiligi(O'BE) ko'rinishida namoyon bo'lib, O'BE bilan og'riqan bemorlarda poliorgan disfunktsiyasining mavjudligi, holatni og'irligi va o'lim holatlarini yuqoriligi bo'lib qolmoqda.*

*Kalit so'zlar: buyrak etishmovchiligi, bolalar, davolash.*

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## **EMERGENCY ASSISTANCE IN CHILDREN WITH ACUTE KIDNEY FAILURE**

*Relevance. The severity of the problem is manifested in the form of acute kidney failure (AKF), with AKF the presence of polyorgan dysfunction in sick patients, the severity of the condition and the high mortality rate remain.*

*Keywords: kidney failure, children, treatment.*

Buyrak faoliyatini keskin buzilish buyraklarni o'tkir etishmovchiligi(O'BE) ko'rinishida.

Bolalarda o'tkir buyrak etishmovchiligini (O'BE) intensiv davolash pediatriya amaliyotining eng dolzarb muammolaridan biri bo'lib qolmoqda. Bolalikda o'tkir respiratorli infeksiyalar bilan kasallanish 0,8 mingga 3,0 dan 100 gacha, kasallar orasida esa yosh bolalar ustunlik qiladi. Kasalxonaga yotqizilgan bolalarning umumiy soni orasida buyrakni ajratish funksiyasi buzilgan bemorlar taxminan 5% ni tashkil qiladi [1]. O'tkir buyrak etishmovchiligining eng noqulay kursi hayotning birinchi yilidagi bolalarda kuzatiladi, ularning omon qolish darajasi 50% dan oshmaydi. Har qanday patologik jarayonga O'BE qo'shilishligi yoki poliorgan etishmovchiligi rivojlanishiga yoki o'lim keskin o'sishiga olib keladi, deb ta'kidlash lozim. O'tkir buyrak etishmovchiligini davolashda etiopatogenetik tarzda keltirib chiqargan xacticalikni yaxshilashga qaratiladi. Medikamentoz davoni klinik kechish bosqichi, og'irlik darajasi va asoratlariga qaralaniladi. Boshlang'ich bosqichda etiologic va moddalar almashinuvuni va

qon aylanishini yaxshilashlarga e'tibor beriladi. Og'ir holatlarda mikrotomirlarning endotelial qoplamasining shikastlanishi, albuminning hujayradan tashqari suyuqlikka chiqishi bilan yo'qotilishiga olib kelad, bu esa qon tomir o'tkazuvchanligining keskin oshishi interstitsial shishga, bu o'z navbatida renal ishemiyani va gipovolemiyani kuchaytiradi [4]. Odatda, buyrak qon oqimining avtoregulyasiyasi qon bosimining 80 mm.s.u.dan pasayishi bilan buziladi. Qon bosimini fiziologik darajada yoki undan past darajada turishi, bu holatda buyrak qon oqimining tiklanishiga olib kelmasligi mumkin [2, 7]. Buyrak perfuziyasini belgilovchi asosiy omillar yurak zarb hajmi, arterial bosim va tomir ichidagi qon hajmlaridir. [3, 7]. Ma'lumki, buyrak disfunktsiyasini rivojlanishi yurak zarb hajmining keskin pasayishi bilan o'zini namoyon qila boshlaydi. Bu holatni bartaraf etilmasa organik zararlanishlarga sabab bo'ladi. Agar gipotenziya past zarb hajm sindromi bilan birga kelgan bo'lsa, unda uni tuzatish uchun mantiqiy tanlov qat'iy inotrop ta'sirga ega dorilar (adrenalin, dopamin yoki dobutaminning "b-dozalari"). Agar aksincha, gipotenziya yuqori yurak zarb hajmi bilan birlashtirilsa, buyrak perfuziyasining etarli bosimini tiklash uchun vazopressorlardan (norepinefrin, fenilefrin, dopaminning "a-dozalari") foydalanish kerak [1]. Ba'zi patologik sharoitlar (endotoksemiya, sepsis) ular renovaskulyar qarshilikning oshishiga olib keladi, bu umumiy buyrak qon oqimining normal darajasini saqlab turish uchun buyrak perfuziyasi bosimini yuqori darajada ushlab turish uchun zarurdir [1, 7]. Kompleks davolash gemodinamik va suv-elektrolitlar buzilishliklarini tuzatishni ta'minlaydi. Bemorlarga tomir ichiga suyuqliklarni quyishliklar mobaynida davolash samaradorligini nazorati maqsadida tana vazni va gipervolemiyaga olib kelmaslik uchun markaziy venoz bosimni qayd qilib boorish kerak bo'ladi. Klinik kuzatuvda ob'ektiv holatlardan teri va shilliq qavatlarni rangi, okulyar tonus, qorin terisining turgori, katta liqildoqni holati, arterial bosim, yurak urishi, shok indeksi kabilarni nazorati olib borilishi zarurdir [1, 8].

**Suv buzilishliklarini tuzatish.** Volemik buzilishlar bosqichida kristalloidlarni qo'llash va diuretiklarni tomir ichiga yuborish bilan infuzion terapiya O'BE ni poliurik fazaga o'tkazishi va dializdan qochishi yoki hech bo'lmaganda suv muvozanatini normallashtirishni ta'minlashi mumkin. Tomir ichidagi hajmni tiklash va gemodinamikani barqarorlashtirish birinchi soat davomida kristalloidlarni (0,9% natriy xlorid eritmasi yoki Ringera-laktata eritmasi) va / yoki kolloid eritmalarini (gidroksietilkraxmal) 10 ml/kg dozada tomir ichiga yuborish bilan boshlanadi. Infuzion vositalarning tarkibi klinik holat (anemiya, gipoproteinemiya, giponatremiya va boshqalar) bilan belgilanishi kerak. Belgilangan hajmdagi eritmalar kiritilgandan keyin gipotenziya davom etsa, infuziyani 10 ml/kg dozada takrorlanadi. Onkotik plazma bosimini ushlab turish uchun kristalloidlarni kolloidlar bilan 3:1 nisbatda (belgilangan hajmlarda) birgalikda qo'llash tavsiya etiladi. Arterial bosim past bo'lmasa torasemidni in'ektsiyasini 3-5 mg/kg dozada qo'llash mumkin. Dopaminning diuretik furosemid bilan birikmasining samaradorligi bir qator tadqiqotchilar tomonidan

tasdiqlangan [2, 4]. Diuretik va vazoaktiv moddalarning kombinatsiyasi buyrak etishmovchiligining dastlabki davrida ushbu dorilarni qo'llashda kursni yaxshilashi va o'tkir buyrak etishmovchiligining davomiyligini qisqartirishi mumkin. Ammo dopaminning nojo'ya ta'sirlari hatto 2-3mg/kg/soat tezlikda qo'llanilganda ham kuzatilishi mumkin[1, 6, 7]. Infuzion suyuqliklarni suyuqlikka ehtiyoj bo'lmaganida yoki holat turg'un holatga keltirilganda faqat ko'zga ko'rinmas suyuqlik yo'qotishlaridayo'qotishlarni to'ldirish maqsadida foydalaniladi[5]. Bemorlarni davo kuzatuv mobaynida ionlarni balansini nazorat qilish muhimdir. Giponatremiya tufayli plazma gipotonikligi bilan birlashganda hujayra ichidagi va hujayradan tashqari bo'shliq (shu jumladan qon-miya to'sig'i) o'rtasida osmotik gradient paydo bo'ladi, bu hujayralar ichidagi suvning harakatlanishiga olib keladi. Giponatremiyani tuzatish tezligi bemorning ahvoriga qarab belgilanadi. Nevrologik alomatlar rivojlanishi bilan og'ir giponatremiyada (zardobdagi natriy darajasi 120 mmol/l dan kam) 50% dan ortiq hollarda halokatli natija kuzatiladi[4]. Hujayra ichidagi bo'shliqdan suyuqlikning tez harakatlanishi tufayli intratserebral qon ketishi rivojlanishi mumkin. Bunday asorat 20 soat ichida zardobdagi natriy darajasining 24 mmol/l yoki undan ko'p ko'tarilishi bilan yuzaga kelishi mumkin [6, 8]. Shuning uchun 3% natriy xlorid eritmasining dozasi shunday hisoblanganki, uni qo'llashdan keyin qon zardobida natriyning ko'payishi 5 mmol/l dan oshmaydi. Kaliyning zardobdagi miqdori o'tkir buyrak etishmovchiligini barch klinik kechish bosqichlarida, ayniqsa oligoanirik bosqichida letal holatlarga sababi yuzasidan korrektsiya qilishni choralarini talab qiladi. Kaliyning zardobdagi miqdori ortish darajasiga qarab, medikamentoz-dori vositalari yordamida (kaltsiy; glyukoza) yoki gemodializ yoli bilan korrektsiya qilish uchun asos bo'lishi mumkin[3, 6]. Kaliyning zardobdagi miqdori o'tkir buyrak etishmovchiligini 3- poliurik klinik kechish bosqichida esa giperkalemiya kuzatilish holatlarida, kaliy preparatlari yoki, kaliy saqlovchi infuzion dori vositalarini qo'llash bilan me'yorga keltiriladi.

O'tkir buyrak etishmovchiligida qon bosimi ko'tarilish holatlarida koptokchalar filtratsiyasi tezligiga, umumiy holatiga va asoratlari rivojlanganligiga qarab, dori vositalardan kalsiy antagonistlaridan(yurak urish soniga qarab, mn: amlodipin); va diastolik qon bosimining yuqori darajasi bilan (100 mm.s.u.), yoshga bog'liq dozalarda  $\beta$ -blokatorlarni qo'shish tavsiya etiladi (masalan, labetalol 1-3 mg/k/soat); angiotenzinga aylantiruvchi ferment ingibitorlari (kaptopril, kapoten, enalapril va boshqalar- kuniga 1-6 mg/kg dozada, apressin (0,1-0,5 mg/kg), alfa-blokerlar (kardura, prazosin). Qon bosimini ehtiyotkorlik bilan kamaytirish, uning darajasida keskin tebranishlardan qochish kerak. Qon bosimini pasaytirish uchun tavsiya etilgan chegara boshlang'ich darajadan 25% ni tashkil qiladi[3, 9]. Buyrak funksiyasining buzilishining muqarrar oqibati vodorod ionlarining saqlanishi, kislotali birikmalarning to'planishi, anionlarning yo'qolishi natijasida yuzaga keladigan metabolik atsidozdir. Aniq atsidoz miokard kontraktilligini kamayishiga, yurak aritmiyasi va qo'zg'aluvchanlikni buzilishiga(qorincha fibrilliyasigacha) va

umumiy periferik qon tomir qarshiligining pasayishiga olib keladi, bu gipovolemiya mavjud bo'lganda gipotenziya rivojlanishi mumkin. Agar nafas olish kompensatsiyasi mexanizmlari saqlanib qolsa yoki bemor giperventiliya rejimida o'pkani sun'iy ventilyasiyasida bo'lsa, metabolik atsidozni tuzatish uchun kuniga 1 kg tana vazniga 1-3mekv (61–183 mg/sutka) miqdorida natriy bikarbonat eritmasini kiritish odatda etarli bo'ladi. Rivojlanish variantidan va O'BE sababidan qat'iy nazar, uning patogenezida asosiy o'rinni ishemiya, bakterial endotoksin, sitokinlar, oksidlovchi zararga tegishli. Shunga asoslanib, o'tkir buyrak etishmovchiligini patogenetik davolashning asosiy maqsadlari mikrotsirkulyasiyani normallashtirish va buyrak to'qimalarining ishemiyasini yo'q qilish organizmni tabiiy detoksikasiya qilish jarayonlarini rag'batlantirish, uremik toksinlar va sitokinlar ishlab chiqarishni cheklash va ularning organlar va to'qimalarga zararli ta'sirini oldini olish, organizmni sun'iy detoksikasiya qilishdir. Qonning reologik xususiyatlarini yaxshilash, giperkoagulyasiya sindromini bartaraf etish, mikrosirkulyasiya to'shagining bloklanishi va glomerulyar filtrning o'tkazuvchanligini buzish uchun antikoagulyantlardan (geparin, fraxiparin, fragmin) foydalanish tavsiya etiladi. Ularni kiritishning optimal usuli infuzomat orqali titrlashdir. Ushbu dorilarni tayinlash uchun ko'rsatmalar faqat giperkoagulyasiya sindromi bilan kechadigan holatlar bilan cheklanishi kerak. Geparinning dozasi soatiga 10-30 TB/kg (uzluksiz titrlash), past molekulyar og'irlikdagi geparinlar-bolyus shaklida 30-40 ME/kg, keyin soatiga 10-15 ME tezlikda infuziya [3, 5]. Kortikosteroidlarni qisqa kurslarda immunitet jarayoni mavjud bo'lganda, ulardan foydalanish uchun mavjud kontrendikatsiyalarni hisobga olgan holda buyurish kerak. Antioksidant himoya darajasining pasayishi va bemorlarda erkin radikal oksidlanishining yuqori faolligi o'tkir buyrak etishmovchiligi bilan antioksidantlarni qo'llash orqali tuzatiladi: kuniga 1000 mg/m<sup>2</sup> gacha bo'lgan dozada tokoferol; yuqori dozalarda askorbin kislotasi (kuniga 20 mg/kg gacha). U tokoferol bilan birlashtirilishi kerak, chunki uning etishmasligi bilan u kuchaytirishga qodir temir va mis ionlari ishtirokida erkin yog' kislotalarining peroksidlanishi. Metabolik alkaloz hodisalarida askorbin kislotadan eng to'g'ri foydalanish [7, 8].

### **Xulosalar**

O'tkir buyrak etishmovchiligidagi patologik jarayonning ko'p organli tabiati asosiy kasallikni o'z vaqtida tashxislash va davolash muhimligini ko'rsatadi, bu esa buyraklarning chiqarish funksiyasining buzilishiga olib keladi. Bundan tashqari, O'BE geterogenligi bilan ajralib turadi, ya'ni klinik kursning individual xususiyatlariga ega, bu esa uni davolash bo'yicha har bir bemor uchun maqbul bo'lgan umumiy tavsiyalarni ishlab chiqishga imkon bermaydi. Davolash natijalarini yaxshilash usullaridan biri sifatida terapevtik taktikani aniqlashga individual yondashuv va kasallikning har bir bosqichida diagnostika va terapevtik standartlarga qat'iy rioya qilish kerak, bu esa o'tkir buyrak shikastlanishining og'ir shakllari sonining kamayishiga olib kelishi mumkin.



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## **TUG'RUQDA VAKUUM EKSTRAKSIYASINI QO'LLASH**

*Annatsiya. Ushbu maqolada tug'ruqda vakuum ekstraksiyasini qo'llash imkoniyatlari yoritilgan. Shuningdek, vakuumli ekstraksiya shartli ravishda ikki bosqichga bo'linadi. Tushilish fazasi kosani qo'yishdan bosh tos bo'shlig'iga tushgunga qadar davom etadi va vakuum ekstraktori chashka qinning kirish qismida ko'rinadi. Bundan tashqari, tug'ruqda vakuum ekstraksiyasini qo'llash imkoniyatlari o'rgangan olimlarning ilmiy-nazariy ishlari o'rganildi.*

*Kalit so'zlar: tug'ruqda vakuum ekstraksiyasi, vakuumli ekstraktor, tos bo'shlig'i, ekstraktor chashka, fleksiya nuqta.*

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## **USE OF VACUUM EXTRACTION IN CHILDBIRTH**

*Abstract. This article describes the possibilities of using vacuum extraction in childbirth. Also, vacuum extraction is conditionally divided into two stages. The descent phase continues from cup placement until the head descends into the pelvis and the vacuum extractor cup is visible at the entrance to the vagina. In addition, scientific-theoretical works of scientists who studied the possibilities of applying vacuum extraction in childbirth were studied.*

*Key words: vacuum extraction in labor, vacuum extractor, pelvic cavity, extractor cup, flexion point.*

Vakuimli ekstraktor kosasini to'g'ri qo'llash bilan homila boshiga shikast yetkazish foizi minimaldir. Chashkaning to'g'ri joylashishi bu fleksiya nuqtasi ustidagi sagittal tikuvga nisbatan median joylashuvidir. Chashkani qo'llaganingizdan so'ng, taxminan 0,2 kg/sm<sup>2</sup> bo'lgan vakuum hosil qiling, so'ngra ko'rsatkich barmog'ingizni chashkaning chetiga olib boring, ayolning to'qimalari tiqilib qolmaganligini tekshiring. Har bir narsa to'g'ri bajarilgan bo'lsa, siz 0,8 kg / sm<sup>2</sup> gacha bo'lgan vakuumni yaratishingiz kerak. Barcha tekshiruvlar va kerakli bosimni yaratgandan so'ng, tortishning boshlanishi 1-2 daqiqadan ko'proq vaqtga kechiktirilmasligi kerak, chunki. homilaning boshida shish paydo bo'ladi. Qattiq va yumshoq stakanlarda qirrasini ichkariga egilgan, shuning uchun tashqi chetidagi diametr ichki qismga qaraganda kattaroqdir, bu esa bosh shishi paydo bo'lishi uchun zarur shart-sharoitlarni yaratadi. Chashkaning tashqi va ichki qismi o'rtasidagi bosim farqi uning sirpanishini oldini oladi, shuningdek, samarali chashka diametrini 5 dan 6 sm gacha oshirishga olib keladi. Chashkani olib tashlash uchun zarur bo'lgan tortish kuchi uning diametriga va vakuum darajasiga

bog'liq. Tortishish kuchini hisoblash mumkin, faqat kuchning chashka tekisligiga perpendikulyar bo'lishi kerakligini hisobga olish kerak.

Tortish kuchi - bu chashka ichida hosil bo'lgan vakuumga nisbatan mumkin bo'lgan maksimal kuch, agar tortish uning yuzasiga to'g'ri burchak ostida bo'lsa. Vakuumli ekstraktor chashka tomonidan ushlangan to'qimalarning qo'shimcha tortish kuchi ham mavjud. Ba'zilar maksimal 760 mmHg bosimdan foydalanadilar. Chunki bu daraja to'liq vakuumga yaqin. Kuchni hisoblashda perpendikulyar tortishishlardan kelib chiqadi va siljish ta'sirini istisno qiladi. Ushbu shartni bajarishga imkon beradigan oddiy qoida mavjud - surish yo'nalishi vakuum ekstraktori kosasining atrofini proektsiyalash maydonidan tashqariga chiqmasligi kerak. Chashka yuzasiga ma'lum bir burchak ostida amalga oshirilgan tortishishlar kuch vektoriga muvofiq tuzatiladi. Amalda, tortishish bemorning qisqarishi va urinishlari bilan bir vaqtda amalga oshirilishi kerak. Traktsiya bir qo'l bilan amalga oshiriladi, uning ko'rsatkich va o'rta barmoqlari ekstraktorning ustunida yotadi, ikkinchi qo'lning bosh barmog'i kosaning tashqi yuzasiga, ko'rsatkich barmog'i esa bosh suyagining yonidagi suyaklarga qo'yiladi. Shu tariqa J. Berd "salbiy tortish" deb atagan klinik vaziyatning rivojlanishini nazorat qilish mumkin: xomilalik boshning yumshoq to'qimalari harakatlanadi, bosh suyagining suyaklari esa bir joyda qoladi. Takroriy samarasiz tortish bosimning pasayishiga olib keladi, natijada intrakranial gematoma va boshning yumshoq to'qimalarining gematomasi xavfi ortadi. Bosh barmog'i kosaning sirpanishini, ko'rsatkich barmog'i esa tortish natijasida bosh suyagi suyaklarining tug'ilish kanaliga nisbatan harakatini boshqara oladi. Shunday qilib, vakuumli ekstraksiya ikkala qo'l bilan amalga oshiriladi - chashka chap qo'lning bosh barmog'i bilan bosh suyagi yuzasiga bosiladi, boshning tushirilishi ko'rsatkich barmog'i bilan boshqariladi, tortish esa tekisligiga perpendikulyar ravishda amalga oshiriladi. o'ng qo'l bilan stakan. Ushbu harakatlar mankenda bajarilishi kerak. Ba'zi vakuumli ekstraktorlar, xususan, keng qo'llaniladigan OmniCup, tortish kuchi ko'rsatkichiga ega.

Klinik tadqiqotlar ma'lumotlariga ko'ra, ko'p tug'ruqlar < 9 kg tortish kuchi yordamida amalga oshirilgan, ammo ba'zida \* 14 kg gacha talab qilinadi. Qattiq chashkalarining afzalliklari shundaki, ularning sirpanish ehtimoli kamroq, shuningdek, ularni orqa oksiput ko'rinishida yoki boshning kengaytirilgan holatida va sagittal tikuvning ko'ndalang holatida qo'llash imkoniyati mavjud. Yumshoq chashkalarining kamchiliklari, birinchi navbatda, ko'pchilik ekstansor taqdimotlarida chashka fleksiya nuqtasiga joylashtirilishiga to'sqinlik qiladigan markaziy tayoqning mavjudligi; ikkinchidan, chap qo'lning barmoqlari bilan vakuumli ekstraksiyani nazorat qilish jarayoni qattiq chashkalarga qaraganda qiyinroq. Biroq, yumshoq chashka bilan vakuumli ekstraksiyada siz chap qo'lingizning barmoqlarini chashka atrofiga qo'yishingiz va jarayonni xuddi shu printsiplarga muvofiq boshqarishingiz mumkin. Xomilaning boshini egilgan yo'nalishda tortish bilan aylantirishga urinmang.

Chashkani tortish vaqtida to'g'ri qo'llash bilan homila boshining mustaqil aylanishi sodir bo'ladi. Agar homila boshi vakuum ekstraktsiyasi bilan perineumga tushsa va keyin tortish samarasi kamaygan bo'lsa, homila boshi va sakrum orasidagi bo'shliqni paypaslash kerak. A. Vakka homila qalami uning boshi va onaning sakrumi orasida bo'lishi holatlarini tasvirlab berdi va bu holatni "qalamning siqilishi" deb atadi, bu esa boshning tug'ilish vaqtini uzaytirishi mumkin. Bunday holatda, qo'lni bu bo'shliqqa kiritish kerak va xomilalik bilagini siqib, orqa tutqichning tug'ilishini osonlashtiradi. Agar chashka vakuumli ekstraktsiya paytida sirpanib ketsa, vaziyatni diqqat bilan baholash kerak. Agar homilaning vakuumli ekstraktsiyasi hali ham mumkin va zarur bo'lsa, chashka yana qo'llaniladi va tortishish tiklanadi. Agar aylanish sodir bo'lgan bo'lsa va bosh perineum darajasiga tushib qolgan bo'lsa, tug'ilish akusherlik forsepslarini qo'llash orqali yakunlanishi mumkin. Bunday qaror ehtiyotkorlik bilan baholashni talab qiladi, chunki xomilalik shikastlanish xavfi juda yuqori.

Vakuimli ekstraktsiya shartli ravishda ikki bosqichga bo'linadi. Tushilish fazasi kosani qo'yishdan bosh tos bo'shlig'iga tushgunga qadar davom etadi va vakuum ekstraktori chashka qinning kirish qismida ko'rinadi. Ejeksiyon fazasi vaginaning kirish qismida kosa to'liq ko'rinib turgan paytdan boshlab, bosh tug'ilgunga qadar davom etadi. Bir siqilish paytidagi tortish bir qultum deb hisoblanadi. Uch marta tortishdan keyin homila boshi tug'ilishi yoki hech bo'lmaganda kosa to'liq ko'rinadigan nuqtaga tushishi kutiladi, shuning uchun vaginal tug'ish haqiqatan ham mumkin va xavfsizdir. Ba'zan boshni yumshoq etkazib berish uchun ikki-to'rtta tortish kerak. Shuning uchun, uchta qisqarish paytida uchta tortish boshni aylantirish va tushirish uchun etarli bo'lishi kerak, keyin boshni xavfsiz atravmatik etkazib berish uchun yana bir nechta tortish kerak. Shunday qilib, aksariyat hollarda kubokni qo'llashdan boshning tug'ilishigacha 20 daqiqa o'tadi. Bosh tug'ilgandan keyin kubokdagi bosim tenglashadi va u chiqariladi. Vakuum ekstraktsiyasi bilan tug'ilgan barcha bolalar subgaleal gematomaga shubha qilishlari va tug'ilgandan keyin tekshirilishi kerak. Postpartum davrda tug'ruqdan keyingi oqibatlar va yuzaga kelishi mumkin bo'lgan asoratlar bemorga akusherlik forsepslari yoki vakuum ekstraktori qo'llash orqali tushuntirilishi kerak. Bundan tashqari, unga keyingi tug'ilishlarda 80% dan ortiq ehtimollik bilan operativ yordam kerak bo'lmasligini aytishingiz kerak. Xomilaning vakuum ekstraktsiyasi - bu yetkazib berish operatsiyasi bo'lib, unda homila vakuum ekstraktori yordamida tabiiy tug'ilish kanali orqali sun'iy ravishda chiqariladi. Tabiiy tug'ilish kanali orqali homilani olish uchun vakuum kuchidan foydalanishga birinchi urinishlar o'tgan asrning o'rtalarida qilingan. Simpson tomonidan "aerotraktor" ixtirosi 1849 yilga to'g'ri keladi. Vakuumli ekstraktorning birinchi zamonaviy modeli 1954 yilda Yugoslaviya akusheri Finderle tomonidan ishlab chiqilgan.

Biroq, 1956 yilda taklif qilingan Malstrom vakuumli ekstraktori dizayni eng keng tarqalgan edi. Xuddi shu yili mahalliy akusherlar K. V. Chachava va P. D. Vashakidze tomonidan ixtiro qilingan model taklif qilindi.

Qurilmaning ishlash printsiplari stakanlarning ichki yuzasi va homilaning boshi o'rtasida salbiy bosim hosil qilishdir. Vakuimli ekstraktsiya uchun apparatning asosiy elementlari quyidagilardir: muhrlangan bufer idishi va unga tegishli bosim o'lchagich, salbiy bosim hosil qilish uchun qo'lda assimilyatsiya qilish, aplikatorlar to'plami (Maelstrom modelida - 4 dan 7 gacha bo'lgan metall stakanlar to'plami). diametri 15 dan 80 mm gacha, E.V.Chachava va P.D.Vashakidzeda - rezina qopqoq). Zamonaviy akusherlikda homilaning vakuumli ekstraktsiyasi homilaga salbiy ta'sir ko'rsatishi sababli juda cheklangan qo'llaniladi. Vakuimli ekstraktsiya faqat boshqa etkazib berish operatsiyalarini bajarish uchun shartlar mavjud bo'lmagan hollarda qo'llaniladi. Akusherlik forsepplarini qo'llash operatsiyasidan farqli o'laroq, homilaning vakuumli ekstraktsiyasi xomilaning boshi tomonidan tortilishi paytida ayolning tug'ruqda faol ishtirok etishini talab qiladi, shuning uchun ko'rsatmalar ro'yxati juda cheklangan. Ko'rsatkichlar homilaning vakuum ekstraktsiyasi uchun: Mehnat faoliyatining zaifligi, samarasiz konservativ terapiya bilan; Homila gipoksiyasining boshlanishi.

Qo'llash mumkin bo'lmagan holatlar homilaning vakuum ekstraktsiyasi operatsiyasiga: "O'chirish" urinishlarini talab qiladigan kasalliklar (preeklampsiyaning og'ir shakllari, dekompensatsiyalangan yurak nuqsonlari, yuqori miyopi, gipertenziya), chunki homilaning vakuum ekstraktsiyasi paytida tug'ruq paytida ayolning faol mehnat faoliyati talab qilinadi; Xomilaning boshi va onaning tos suyagi kattaligi o'rtasidagi nomuvofiqlik; xomilalik boshning ekstansor ko'rinishi; Xomilaning erta tug'ilishi (36 haftadan kam). Oxirgi ikkita kontrendikatsiyalar vakuum ekstraktorining jismoniy harakatining o'ziga xos xususiyati bilan bog'liq, shuning uchun chashkalarini erta tug'ilgan chaqaloqning boshiga yoki fontanel zonasiga qo'yish jiddiy asoratlar bilan to'la. sharoitlar Xomilaning vakuumli ekstraktsiyasi operatsiyasini bajarish uchun quyidagilarni e'tiborga oling:

1. Tirik homila;
2. Bachadon bo'ynining to'liq ochilishi;
3. Qog'onoq pufagining yo'qligi;
4. Onaning tos suyagi va homila boshi kattaligining mos kelishi;
5. Xomilaning boshi kichik chanoq bo'shliqda bo'lishi kerak - kichik tos suyagining kirish qismida katta segment bilan tos suyagi;
6. Oksipital kiritish.

**Texnika Xomilaning vakuumli ekstraktsiyasi quyidagi nuqtalardan iborat:**

1. Chashkani kiritish va uni boshga qo'yish. Vakuum ekstraktorining kosasi ikki usulda kiritilishi mumkin: qo'l nazorati ostida yoki ko'rish nazorati ostida (ko'zgular yordamida). Ko'pincha amalda qo'l nazorati ostida chashka kiritiladi. Buning uchun o'ng qo'l bilan chap qo'l yo'riqnomasi nazorati ostida, chashka tos suyagining to'g'ridan-to'g'ri o'lchamida yon yuzasi bilan vaginaga



kiritiladi. Keyin u aylantiriladi va ishchi sirt homilaning boshiga, iloji boricha kichik fontanelga yaqin bosiladi.

2. Salbiy bosim hosil qiling. Chashka qurilmaga biriktiriladi va 3-4 daqiqada 0,7-0,8 amt (500 mm Hg) gacha bo'lgan salbiy bosim hosil bo'ladi.

3. Xomila boshini tortish. Traktsiyalar tug'ilish biomexanizmiga mos keladigan yo'nalishdagi urinishlar bilan sinxron ravishda amalga oshiriladi. Urinishlar orasidagi pauzalarda tortishish hosil bo'lmaydi. Sinov tortishini bajarish majburiydir.

4. Chashkani olib tashlash. Parietal tuberkulyarlarning vulvar halqasini kesib o'tayotganda, kosa apparatdagi muhrni buzish orqali chiqariladi, shundan so'ng bosh qo'lda usullar bilan chiqariladi. Murakkabliklar. Eng tez-tez uchraydigan asorat - bu homila boshidan kosaning siljishi bo'lib, bu qurilmada qochqin bo'lganda paydo bo'ladi. Kefalogematomalar tez-tez homila boshida paydo bo'ladi, miya belgilari kuzatiladi.

Uning qo'llanilishi kamroq tajriba va ko'nikmalarni talab qiladi, degan fikr bor. Bu qisman to'g'ri, ammo bu bayonotda potentsial xavf mavjud. "Ekstraktorni qo'ying va yoqing" yondashuvi keng tarqalgan bo'lib, uning tarafdorlari xomilalik ekstraksiya tug'ruq kuchlari sustligi uchun oson va xavfsiz usul va akusherlik qisqichlarini qo'llashdan kamroq xavfli deb hisoblashadi. Operatsiyadan oldingi tayyorgarlik va ikkala jarrohlik aralashuvi uchun talab qilinadigan shartlar bir xil. Akusherlik qisqichlarini qo'llash bilan solishtirganda, vakuum ekstraksiyasi bilan onaning qin va perineumga shikast etkazish xavfi kamroq bo'ladi. Bundan tashqari, vakuum ekstraksiyasi uchun akusherlik qisqichlarini (epidural yoki o'murtqa behushlik) qo'llash kabi behushlikka ehtiyoj yo'q, pudental blokada etarli. Vakuumli ekstraktorlarning juda ko'p turlari mavjud, ammo ularning barchasi ikkita tubdan farqli guruhga bo'lingan - yumshoq va qattiq chashkalar bilan. Dastlab, qattiq chashkalar metallan qilingan (Malmström vakuum ekstraktori va Berdning modifikatsiyasi). Biroz vaqt o'tgach, qattiq plastik chashkalar ishlab chiqarila boshlandi. 1970-yillarda Qattiq chashkalarda uchraydigan xomilaning bosh suyagi shikastlanishining oldini olish uchun yumshoqroq chashkalar ishlab chiqilgan. Ulardan birinchisi Kobayashining silikon chashkalari edi. O'shandan beri elastik chashkalarning ko'p turlari ishlab chiqilgan. Ularni qo'llash bilan bosh suyagining yuzaki zararlanish ulushi odatda past bo'ladi, ammo qattiq chashkalardan foydalanish bilan muvaffaqiyatli tug'ilgan tug'ilish foizi yuqori bo'ladi. Ikkala turdagi chashkalarni qo'yish tamoyillari bir xil.

Asosiy va eng muhim nuqta - kichik liqildoqdan 3 sm oldinda joylashgan fleksiyan nuqtasini aniqlash. Agar tortishish bu nuqtaga vakuum ekstraktorni qo'llash orqali boshlangan bo'lsa, bosh egilib, eng kichik o'lchamdagi - kichik obli (9,5 sm) bilan tug'ilish kanalidan o'tadi. Ko'pchilik vakuumli ekstraktorlar 5 yoki 6 sm diametrli chashka diametriga ega. Shunday qilib, agar chashka uning qirrasini kichik fontanelning chetida joylashgan bo'lsa, unda uning o'rtasi egilish nuqtasidan to'liq yuqori bo'ladi. Chashkaning to'g'ri joylashishini aniqlashning



yana bir usuli - uning old tomoni va katta fontanel orasidagi masofani o'lchash. Katta fontanelning chetidan egilish nuqtasigacha bo'lgan masofa taxminan 6 sm ni tashkil qiladi. Demak, agar vakuum ekstraktorining kosasi to'g'ri qo'llanilsa, uning old qirrasini va katta fontanel orasidagi masofa taxminan 3 sm (kengligi) bo'lishi kerak. ikki barmoqdan).

Bundan tashqari, fleksiyni amalga oshirayotganda, asinklitizmdan qochish kerak, uning mavjudligi boshning hajmini oshiradi, u bilan tug'ilish kanali orqali o'tadi. Agar vakuum ekstraktori chashka qo'llanganda sagittal tikuv chashka markazidan o'tmasa, bu holatda tortish asenklik kiritishga olib keladi. Vakuumli ekstraktor idishini qo'llashning to'rtta mumkin bo'lgan varianti mavjud:

1. medial fleksiyon - bosh eng kichik o'lchamlarda (kichik oblik va biparietal) tug'ilish kanalidan o'tadi;
2. medial ekstansor - bosh to'g'ri o'lchamdagi tug'ilish kanalidan o'tadi;
3. paramedial fleksiyon - bosh katta paramedial o'lchamdagi tug'ilish kanalidan o'tadi;
4. paramedial ekstansor, unda eng yomon pozitsiya yaratilgan - to'g'ridan-to'g'ri va paramedial o'lchamlarning kombinatsiyasi.

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## **ПРИМЕНЕНИЕ РЕТРОГРАДНЫХ ЭНДОСКОПИЧЕСКИХ ВМЕШАТЕЛЬСТВ ПРИ КОРАЛЛОВИДНОМ НЕФРОЛИТИАЗЕ И КАМНЯХ ПОЧЕК**

*Аннотация. Крупные и коралловидные камни почек представляют собой особую форму мочекаменной болезни, лечение которой сопряжено с наличием специфических рисков, особенностей выполнения вмешательств и течения послеоперационного периода. Перкутанная нефролитолапаксия прочно зарекомендовала себя в качестве стандартного метода лечения у этой категории пациентов, обеспечивая клиническую эффективность в 73-91% случаев. Однако сама технология выполнения перкутанного доступа в чашечно-лоханочную систему несет в себе потенциальный риск развития жизненно-опасных осложнений, таких как кровотечение (3-10%), повреждение соседних органов (1-3%), плевральной полости (4-8%).*

*Ключевые слова. Эндоурология, камни в почках, коралловидный нефролитиаз, нефролитолапаксия, диагностика, лечение.*

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## **USE OF RETROGRADE ENDOSCOPIC INTERVENTIONS FOR CORAL NEPHROLITHIASIS AND KIDNEY STONES**

*Annotation. Large and coral-shaped kidney stones are a special form of urolithiasis, the treatment of which is associated with specific risks, peculiarities of interventions and the course of the postoperative period. Percutaneous nephrolitholapaxy has firmly established itself as a standard treatment method in this category of patients, providing clinical effectiveness in 73-91% of cases. However, the technology itself for performing percutaneous access to the collecting system carries a potential risk of developing life-threatening complications, such as bleeding (3-10%), damage to neighboring organs (1-3%), pleural cavity (4-8%).*

*Keywords. Endourology, kidney stones, coral nephrolithiasis, nephrolitholapaxy, diagnosis, treatment.*

**Актуальность.** Активное развитие современных технологий обеспечения эндоурологических вмешательств (мочеточниковых кожухов, фиброуретеропиелоскопов, высокоэнергетических гольмиевых лазеров и

др.) в течение последних лет позволило применить ретроградный доступ для удаления крупных камней почек. Несомненным преимуществом подобного подхода является использование естественных мочевых путей, лежащее в духе современного тренда малоинвазивной транслюминальной эндоскопической хирургии.

**Методы исследования.** Методика выполнения ретроградных интратенальных вмешательств заключается в трансуретральном проведении гибкого мочеточникового кожуха максимально возможного размера по струне-проводнику в лоханку почки после предварительной уретеропиелоскопии. Установленный кожух обеспечивает постоянный доступ для проведения эндоскопического инструмента в чашечно-лоханочную систему и манипуляций с камнем. При этом многочисленные пассажи и экстракция фрагментов конкремента осуществляются без риска травматизации слизистой оболочки мочеточника. Дополнительным преимуществом работы с мочеточниковым кожухом является обеспечение постоянного оттока ирригационной жидкости по его просвету помимо инструмента.

**Результаты исследования.** В НИИ урологии ретроградные интратенальные вмешательства при крупных (более 2 см) и коралловидных камнях почек выполняются уже в течение полутора лет. За этот период оперативное лечение по этой технологии было выполнено 34 пациентам. Средний размер одиночных крупных конкрементов в серии из 20 пациентов составлял 3,4 см (2,0-5,5 см). В 4 случаях отмечались множественные камни почки. Средняя продолжительность операции составила 78 минут. Вмешательство завершалось установкой внутреннего стента. В течение месяца проводилась литокинетическая терапия, направленная на эвакуацию резидуальных фрагментов. По завершению этого периода выполнялось стандартное для этой категории больных контрольное обследование. По его результатам в 77% случаев клинически значимые фрагменты отсутствовали. У 23% пациентов были отмечены клинически значимые резидуальные фрагменты конкрементов, потребовавшие проведения 6 сеансов дистанционной литотрипсии. Этот момент принципиально важен в виду того, что расположение кожуха в мочеточнике ниже сегмента не позволяет ирригационной жидкости из лоханки эффективно дренироваться по его просвету. В то же время действие торсионных сил приводит к образованию угла и натяжению мочеточника в области контакта проксимального конца кожуха и слизистой мочеточника, что чревато повреждением последней фрагментами конкремента при выполнении литоэкстракции. Некоторые сложности с правильным позиционированием кожуха возникают у мужчин. Это обусловлено большей длиной мужской уретры. Используемый в настоящее время набор длин кожухов имеет шаг в 10 см и начинается с 35 см. Именно этот размер кожуха является наиболее удобным в клинической практике ввиду того, что идеально соотносится с размером наиболее часто

используемых полужестких уретеропиелоскопов, длина которых составляет 43 см.

Клинически эффективной ретроградная интраренальная хирургия оказалась и в лечении коралловидного нефролитиаза. Оперативные вмешательства трансуретральным доступом в нашей клинике были выполнены 14 пациентам с этой формой МКБ. Средний размер конкрементов составил 4.6 (3.5-6.8) см. Продолжительность операции была в среднем 102 минуты. Отсутствие клинически значимых фрагментов отмечено нами у 57% пациентов. В 28% случаев потребовалось проведение 8 сеансов ДЛТ. У 14 % пациентов была успешно выполнена фибропиелокаликотрипсия и литоэкстракция. У 2 пациентов мужского пола первоначально установить мочеточниковый кожух не удалось ввиду клинической узости мочеточника. Дренирование внутренним стентом в течение недели обеспечило успех этой манипуляции при повторном вмешательстве. Единственным осложнением, как и в предыдущей группе пациентов, было обострение хронического пиелонефрита, отмеченное в 21% случаев.

Наш опыт применения ретроградной интраренальной хирургии при крупных и коралловидных камнях почки показывает сравнимую с традиционной перкутанной нефролитолапаксией клиническую эффективность. При этом трансуретральные вмешательства у этой группы пациентов обладают существенными преимуществами. Прежде всего, практически отсутствует риск возникновения клинически значимого кровотечения и повреждения соседних органов. Трансуретральные вмешательства безусловно безопаснее. Минимально-инвазивная природа этой технологии подчеркивается хорошей общей переносимостью пациентами. Так при отсутствии данных за обострение воспалительного процесса в почке пациенты уже на следующий день могут покинуть стационар. Хорошая переносимость в послеоперационном периоде также поддерживает выбор в их пользу. Этот фактор может оказаться решающим при интраоперационном ухудшении эндоскопической видимости или наличии других технических сложностей для проведения эффективной литотрипсии. Вместо продолжения операции в этих условиях, сопряженных с возрастанием риска развития осложнений всегда имеется возможность прекратить вмешательство и вернуться к его выполнению по прошествии некоторого времени.

**Вывод.** Анализируя опыт применения трансуретральных операций при крупных и коралловидных камнях почек мы выделили ряд факторов, определяющих клиническую эффективность метода. Так, лучшие результаты были получены нами у женщин, что объясняется анатомическими особенностями, благоприятствующими в большинстве случаев более легкой и правильной установке мочеточникового кожуха. Успешность его позиционирования в области ЛМС также стала ключевым фактором эффективности всего вмешательства. Плотность камня в меньшей

степени оказывает влияние на результаты вмешательства, однако мы отметили, что при значении этого показателя менее 1000 НУ, фрагментация лазером проходит существенно быстрее. Важным фактором на наш взгляд является особенность пространственного взаимоотношения оси мочеточника и ЧЛС, ее коаксиальность. Совпадение этих осей при проведении кобальта предоставляет возможность максимальной экспозиции камня при работе уретроскопом, облегчая тем самым его разрушение и выведение. В целом мы считаем технологию ретроградной интратеренальной хирургии наиболее инновационным и перспективным направлением в малоинвазивном лечении сложных форм нефролитиаза.

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## **ТРАНСФОРМАЦИЯ ФАРМАЦЕВТИЧЕСКОЙ ОТРАСЛИ В УСЛОВИЯХ ЦИФРОВОЙ ЭКОНОМИКИ**

*Аннотация. В статье рассматривается, как цифровые инновации проникают в различные области фармацевтического сектора, включая исследование и разработку новых лекарств, клинические испытания, производство, маркетинг и реализацию фармацевтической продукции. Также отмечается, что цифровизация позволяет улучшить эффективность и качество работы в фармацевтической отрасли, повысить доступность медицинской помощи и улучшить взаимодействие между пациентами, врачами и аптеками. Помимо этого, освещаются проблемы, которые возникают в процессе трансформации фармацевтической отрасли в условиях цифровизации.*

*Ключевые слова: цифровые технологии, фармацевтическая отрасль, экономика, цифровизация, фармацевтическая компания.*

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## **TRANSFORMATION OF THE PHARMACEUTICAL INDUSTRY IN THE DIGITAL ECONOMY**

*Annotation. The article examines how digital innovations are penetrating into various areas of the pharmaceutical sector, including research and development of new drugs, clinical trials, production, marketing trade of pharmaceutical products. It is also noted that digitalization makes it possible to improve the efficiency and quality of work in the pharmaceutical industry, increase the availability of medical care and improve interaction between patients, doctors and pharmacies. In addition, the problems that arise in the process of transformation of the pharmaceutical industry in the context of digitalization are highlighted.*

*Keywords: digital technologies, pharmaceutical industry, economy, digitalization, pharmaceutical company.*

**Введение.** Использование современных технологий стало неотъемлемой частью жизни человека. Фармацевтическая индустрия не осталась в стороне и также активно стала внедрять цифровые технологии в свою деятельность, что существенно изменило работу в производстве, распределении, маркетинге, исследовании и разработке лекарств, регулирование и работу этой отрасли в целом. Безопасна ли цифровизация фармацевтической деятельности и к чему она может привести? В этой статье рассматриваются основные аспекты и проблемы цифровизации в фармацевтической отрасли.

**Цель исследования:** изучить основные направления и проблемы трансформации фармацевтической отрасли в условиях цифровых технологий.

**Материалы и методы исследования:** применялся контент-анализ соответствующих публикаций, а также официальная информация из открытых интернет-источников.

### **Результаты исследования**

В условиях цифровой экономики фармацевтический рынок претерпевает значительную трансформацию. Технологический прогресс и цифровые инновации имеют глубокое влияние на каждый аспект этой отрасли. Далее мы рассмотрим некоторые аспекты в этой статье:

#### *1. Персонализированная медицина*

Цифровая экономика способствует развитию персонализированной медицины - направление, где стратегии лечения, диагностики и профилактики заболеваний адаптируются под особенности каждого пациента. Индивидуальные различия, например, генетические или возрастные, оказывают влияние не только на протекание заболеваний, но и непосредственно на характер всасывания и метаболизма лекарственных средств в организме. Привлечение знаний таких наук, как молекулярная медицина, геномика, постгеномная биология, а также использование медицинской аналитики и технологий искусственного интеллекта позволяет определить оптимальные методы лечения и осуществить подбор дозировки лекарственного средства индивидуально для каждого пациента.

#### *2. Безопасность данных и киберзащита*

Цифровая трансформация, помимо перспектив для развития фармацевтического рынка, так же привела к возникновению новых угроз в сфере кибербезопасности. Фармацевтические компании должны уделять повышенное внимание защите конфиденциальности медицинских данных и укреплению киберзащиты своих цифровых систем, чтобы предотвратить утечку данных. Несмотря на постоянно растущую сложность кибератак, для обеспечения сохранности данных, необходимо регулярно осуществлять их резервное копирование и проверять возможность восстановления данных.

#### *3. Цифровизация производства и логистики.*

Внедрение новых технологий и цифровых решений в производственные процессы и логистику фармацевтической отрасли позволяет повысить эффективность и точность. Так у компании InStock Technologies есть комплексное решение со специальным функционалом для фармацевтической промышленности. Решение включает систему InStock Production для управления всей производственной логистикой предприятия, систему управление складом сырья, готовой продукции, модуль для взаимодействия с МДЛП, в соответствии с требованиями обязательной маркировки лекарств. [1]

#### *4. Развитие цифровых платформ.*

Фармацевтические компании все больше используют цифровые платформы для улучшения взаимодействия с пациентами, врачами и

другими заинтересованными сторонами. Это может быть в виде мобильных приложений для пациентов, платформ для онлайн-консультаций и назначений, а также платформ для сбора и анализа медицинских данных. Например, нужда в получении доступной медицинской помощи и заботе о своем здоровье привела к созданию медицинских приложений, позволяющих следить за своим самочувствием. Институт прикладного анализа данных «Делойт» провел исследование, в результате которого выяснилось, что 52% опрошенных заинтересованы в общении с фармацевтическими компаниями через социальные сети. [3]

#### *5. Использование данных и аналитики*

В условиях цифровой экономики фармацевтические компании сталкиваются с огромными объемами данных. Использование аналитических инструментов и алгоритмов машинного обучения позволяет компаниям получать ценную информацию из этих данных. Растущая роль искусственного интеллекта в испытаниях лекарств на людях меняет этот процесс, поскольку он позволяет фармацевтическим компаниям эффективно выявлять кандидатов на испытания путем сканирования обширных медицинских данных. [2]

Инструмент искусственного интеллекта Amgen, Atomic, идентифицирует и ранжирует клиники и врачей на основе их прошлых результатов в наборе участников исследований, что потенциально сокращает период регистрации для промежуточных исследований вдвое. [2] Это может помочь в оптимизации процессов разработки и клинических испытаний, а также более точном понимании потребностей пациентов.

Фармацевтический рынок в период цифровизации столкнулся с рядом проблем и препятствий:

#### *1. Защита данных пациентов*

В связи с увеличением объема цифровых данных и их передачей по различным компьютерным и сетевым системам, защита персональных данных стала важным фактором. Фармацевтические компании должны строго соблюдать законы и нормативные акты, регулирующие защиту данных, чтобы предотвратить возможные утечки или злоупотребление информацией.

#### *2. Требованиями потребителей в цифровую эпоху*

Поиск информации о лекарственных средствах, сравнение цен и отзывов — все это стало доступно с помощью онлайн-платформ и мобильных приложений. Фармацевтическим компаниям необходимо адаптироваться к этим изменениям и поставить в центр своего внимания потребителей, предлагая им удобные и эффективные решения.

#### *3. Появление новых игроков на рынке*

С развитием технологий появляются новые участники фармацевтического рынка, такие как стартапы и технологические компании. Они привносят инновации в отрасль и могут вызвать

конкуренцию для традиционных фармацевтических компаний. Чтобы оставаться конкурентоспособными, компании должны быть готовы к сотрудничеству и интеграции с новыми игроками.

#### *4. Государственное регулирование цифровых технологий в области фармации*

Учитывая особенности отрасли, которая имеет высокий уровень регулирования, необходимо разрабатывать правила и стандарты для эффективного использования цифровых технологий. Важно обеспечить безопасность и этичность внедрения новых технологий, а также обеспечить соответствие процессов и продукции международным стандартам и регуляторным требованиям.

**Заключение:** В завершении статьи можно подчеркнуть, что цифровая экономика привносит ряд значительных правок в фармацевтическую отрасль. Компании, успешно приспособившиеся к этим изменениям и интегрирующие цифровые инновации в свою деятельность, смогут повысить эффективность и конкурентоспособность, а также улучшить взаимодействие с пациентами и предоставляемые им услуги.

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## **АНАЛИЗ ПРОДОЛЖИТЕЛЬНОСТИ ИСКУССТВЕННОЙ ВЕНТИЛЯЦИИ ЛЕГКИХ У НОВОРОЖДЕННЫХ С МИКРОАСПИРАЦИЕЙ ЖЕЛУДОЧНОГО СОДЕРЖИМОГО**

*Аннотация. У 276 детей, находящихся на искусственной вентиляции легких (ИВЛ) в неонатальном периоде, проводилось исследование трахеобронхиального аспирата (ТБА) с выделением пепсина и определением его активности по величине экстинкции. Выявлено нарастание количества детей с микроаспирацией желудочного содержимого и увеличение значений экстинкции в период с 3 по 14 дни исследования, что соответствовало 5-17 дням жизни. Установлено, что у детей, рожденных в 37-35 недель гестации, имело место нарастание экстинкции к 10-14 дням исследования (12-17 дни жизни) с последующим снижением активности пепсина к 21 дню исследования (23-24 дня жизни), тогда как пациенты, рожденные в сроке гестации 34 недели и менее, характеризовались прогрессирующим течением микроаспирации с максимальными значениями экстинкции в возрасте 24-28 дней жизни. Нарастание активности пепсина сопровождалось увеличением продолжительности ИВЛ и последующей кислородотерапии, что повышало риск развития хронической бронхолегочной патологии.*

*Ключевые слова: микроаспирация, трахеобронхиальный аспират, экстинкция, искусственная вентиляция легких.*

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## **ANALYSIS OF DURATION OF ARTIFICIAL PULMONARY VENTILATION AT NEWBORNS WITH MICRO -ASPIRATION OF GASTRIC CONTENTS**

*Abstract. 276 children who are on artificial pulmonary ventilation (APV) in neonatal period were analyzed for tracheobronchial aspirate (TBA) with allocation of pepsin and determination of its activity in extinction. We identify increase of number of children with microaspiration of gastric contents and increase in values of an extinction during the period from 3 to 14 days of research that corresponded to 5-17 days of life. It is established that at the children born in 37-35 weeks of a gestation, extinction increase from 10 to 14 days of research (12-17 days of life) with the subsequent decrease in activity of pepsin by 21 day*



*of research (23-24 days of life) whereas the patients born in term of a gestation of 34 weeks and less, were characterized by the progressing course of microaspiration with the maximum values of an extinction at the age of 24-28 days of life. Increase of activity of pepsin was accompanied by increase in duration of APV and the subsequent kislородoterapiya that increased risk of development of chronic pulmonary pathology.*

*Keywords: microaspiration, tracheobronchial aspirate, extinction, artificial pulmonary ventilation.*

**Выводы:** Совершенствование перинатальной медицины привело к повышению выживаемости детей с крайне неблагоприятным течением антенатального и интранатального периодов, в том числе рожденных преждевременно. Наиболее распространенной патологией в нозологической структуре неонатального периода является патология бронхолегочной системы, в этиопатогенезе которой, помимо структурно функциональной незрелости, инфекционных, гипоксических и травматических факторов, важную роль играют оксидантный стресс и ИВЛ [1,2,3,4,5,7,8]. Учитывая взаимосвязь всех систем органов и полиэтиологичность пульмонологической патологии у новорожденных детей, целесообразным является изучение характера влияния коморбидных состояний на структурно функциональное становление системы органов дыхания в постнатальном онтогенезе. Бронхолегочная патология, сочетающаяся с микроаспирацией желудочного содержимого, протекает на фоне гиперплазии эпителиоцитов, продуцирующих эндотелин-1 (в высоких концентрациях обладающий сосудосуживающим действием), NO синтазу (фермент, при участии которого вырабатывается ингибиторный нейротрансмиттер неадренергической-нехоленергической природы NO, вызывающий релаксацию нижнего пищеводного сфинктера), а также снижения уровня кальретицина и мелатонина, повышающих тонус сфинктерного аппарата пищевода. Выброс биологически активных веществ на фоне повреждающего действия компонентов желудочного содержимого, дисбаланс в регуляторном звене эзофагогастральной зоны в виде уменьшения экспрессии эпителиоцитов пищевода, продуцирующих кальретицин, эпителиоцитов желудка, продуцирующих мелатонин, и повышения количества эпителиоцитов пищевода, продуцирующих NO-синтазу и эндотелин-1, приводят к дальнейшему прогрессированию гастроинтестинальных дисфункций [4,9]. В результате имеет место пролонгация и нарастание выраженности гастроэзофагеальной регургитации и микроаспирации рефлюктата с увеличением структурных, и, соответственно, функциональных изменений в бронхолегочной системе [2,]. Таким образом, взаимодействие бронхолегочной и функциональной гастроинтестинальной патологии осуществляется по типу взаимного отягощения, основанном на взаимосвязи патофизиологических механизмов,



совокупное действие которых приводит к увеличению продолжительности искусственной вентиляции легких и последующей кислородотерапии с потребностью в высоких концентрациях кислорода.

**Цель исследования:** Определить продолжительность респираторной терапии в зависимости от выраженности микроаспирации желудочного содержимого у детей в неонатальном периоде. Материалы и методы исследования В исследование включено 276 детей в возрасте от 1 дня до 4 месяцев жизни, находившихся на искусственной вентиляции легких в неонатальном периоде и имевших микроаспирацию желудочного содержимого. Диагностика микроаспирации желудочного содержимого проводилась посредством выделения пепсина в ТБА гельфильтрацией на сефадексах, с определением активности пепсина по величине экстинкции [6]. ТБА собирали на 1,3,10,14 и 21 дни исследования, что соответствовало, через интубационную трубку в ходе санации верхних дыхательных путей новорожденного через 2 часа после кормления. Первую группу составили 44 ребенка с экстинкцией в ТБА от 0,3 до 0,8:23 доношенных ребенка (подгруппа 1А) и 21 ребенок, рожденный преждевременно (подгруппа 1В) в 35-37 недель гестации. Вторая группа включала 185 детей с экстинкцией в ТБА от 0,8 до 1,2:77 доношенных детей (подгруппа 2А) и 108 недоношенных (подгруппа 2В) со сроками гестации при рождении 34-32 недели (56 детей) и 31-29 недель (52 ребенка). В третью группу вошли 47 младенцев с экстинкцией в ТБА от 1,2 до 1,7, родившихся преждевременно со сроком гестации менее 29 недель. Результаты исследования и их обсуждение Согласно полученным данным, в 1 и 3 дни исследования микроаспирация с выявлением пепсина в ТБА имела место у 38,6 % детей 1 группы. При этом основное количество детей с положительной реакцией на пепсин в ТБА приходилось на подгруппу 1В (27,3 % из 38,6 %). В период с 10 по 14 дни исследования микроаспирация желудочного содержимого верифицировалась у всех детей в 1 группе. У длительно вентилирующихся пациентов на 21 день исследования отмечено некоторое снижение количества случаев микроаспирации, достоверно более выраженное в подгруппе 1В, что, очевидно, было связано с повышением зрелости антиаспирационных механизмов, восстановлением адекватной функциональной активности желудочно-кишечного тракта, что привело к улучшению гастроинтестинальной моторики, снижению выраженности и уменьшению количества случаев микроаспирации. У пациентов 2 группы выделение пепсина в ТБА в 1 день исследования имело место в 49,1 % случаев с последующим нарастанием количества пациентов с положительной реакцией на пепсин до 100,0 % в период с 3 до 10 день исследования в подгруппе 2А и в период с 1 до 3 день исследования в подгруппе 2В. К 21 дню был отмечен регресс количества случаев микроаспирации, менее выраженный в сравнении с показателями в 1 группе. Пациенты 3 группы отличались наиболее ранней положительной

реакцией на пепсин в ТБА. В 1-й день исследования клинически значимая активность пепсина в ТБА была зафиксирована у 68,1 % детей. На 3 день исследования 100,0 % пациентов 3 группы имели микроаспирацию желудочного содержимого, при этом регресса количества пациентов с положительной реакцией на пепсин в ТБА к концу первого месяца жизни (характерного для недоношенных детей 1 и 2 групп) в данной группе отмечено не было, что связано с выраженной гестационной незрелостью и неблагоприятным антенатальным фоном, приводящим к более медленным темпам становления функциональной активности желудочно-кишечного тракта и антирефлюксных механизмов. Активность пепсина в ТБА нарастала по мере снижения гестационного возраста на момент рождения с максимальными показателями у детей, рожденных в сроке гестации менее 29 недель (экстинкция 1,2-1,7). В подгруппах 1А, 1В и 2А отмечено волнообразное изменение активности пепсина в ТБА с нарастанием значений экстинкции, а следовательно, и выраженности микроаспирации к 10-14 дням исследования (что соответствует 12-17 дням жизни) с последующим снижением к 21 дню исследования (23-24 дня жизни). В подгруппе 2В и 3 группе микроаспирация желудочного содержимого имела прогрессирующий характер с максимальными значениями экстинкции на 21 день исследования. Полученные данные согласуются с результатами проведенных ранее исследований, выявивших нарастание дисфункций верхних отделов желудочно-кишечного тракта на 3-4 неделе жизни у детей, рожденных преждевременно, в частности в связи с созреванием НПС на фоне нарушения его функциональной активности (табл. 1).

Таблица 1. Динамика значений экстинкции у пациентов с микроаспирацией в 1,3,10,14 и 21 дни исследования.

	Дни исследования				
	1	3	10	14	21
1А	0,325 ± 0,018	0,361 ± 0,012	0,483 ± 0,031	0,451 ± 0,011	0,427 ± 0,009
1В	0,394 ± 0,027	0,419 ± 0,015	0,539 ± 0,024	0,516 ± 0,014	0,431 ± 0,015
2А	0,852 ± 0,027	0,893 ± 0,016	0,932 ± 0,012	0,995 ± 0,028	0,942 ± 0,007
2В	0,931 ± 0,044	0,985 ± 0,014	1,036 ± 0,028	1,117 ± 0,015	1,133 ± 0,012
3 группа	1,263 ± 0,027	1,275 ± 0,031	1,517 ± 0,046	1,592 ± 0,018	1,647 ± 0,022

Анализ длительности ИВЛ и продолжительности последующей кислородотерапии показал, что нарастание значений экстинкции в ТБА сопровождалось увеличением продолжительности ИВЛ ( $p=0,0028$ ) и кислородотерапии ( $p=0,00047$ ) (табл. 2).

Таблица 2. Зависимость длительности ИВЛ и последующей кислородотерапии от уровня экстинкции.

	Экстинкция (M ± n)		
	0,712 ± 0,385	1,014 ± 0,403	1,492 ± 0,237
Продолжительность ИВЛ, дни (M ± n)	19,62 ± 7,35	29,41 ± 9,17	40,26 ± 11,53
Продолжительность кислородотерапии, дни (M ± n)	39,26 ± 12,41	65,38 ± 11,64	94,26 ± 12,57

**Вывод:** Таким образом, отмечено нарастание количества случаев и выраженности микроаспирации желудочного содержимого по мере снижения срока гестации. Увеличение значений экстинкции в ТБА сопровождалось более продолжительными ИВЛ и кислородотерапией, на основании чего можно предположить наличие взаимосвязи междуактивностью пепсина в ТБА и длительностью респираторной терапии, реализующейся на фоне морфофункциональных особенностей, определяемых сроком гестации.

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## **ПЛАСТИКИ ГАСТРОШИЗИСА С ОБЩЕЙ АНЕСТЕЗИЕЙ И БЕЗ НЕЕ. СРАВНИТЕЛЬНЫЙ АНАЛИЗ**

*Аннотация. Результаты лечения гастрошизиса без общей анестезии противоречивы, а опубликованные выводы различаются без сравнительных исследований.*

*Цель: Целью данного исследования было представить сравнительное исследование, оценивающее результаты после пластики гастрошизиса с общей анестезией и без нее.*

*Методы. Было проведено амбиспективное нерандомизированное исследование группы из 51 новорожденного, родившегося с гастрошизисом в период с август 2015 г. по декабрь 2022 г. 24 новорожденным (1 группа) была проведена традиционная репозиция под общей анестезией, а у 27 (2 группа) дополнительная минимальная интервенционная репозиция прошла без общей анестезии.*

*Результаты: Группы были сопоставимы по гестационному возрасту, массе тела при рождении и качеству потрошеной кишки. Статистическая значимость ( $P < .05$ ) наблюдалась между группами 1 и 2 в отношении возраста уменьшения гастрошизиса ( $5,6 \pm 2,5$  и  $3 \pm 1$  часов) и времени, необходимого для завершения уменьшения гастрошизиса ( $58,1 \pm 15$  и  $49 \pm 14$  минут). Никакой статистической значимости ( $P < 0,05$ ) не наблюдалось в отношении начала кормления ( $10,4 \pm 3,6$  и  $10,9 \pm 4,1$  дней), продолжительности полного парентерального питания ( $21,5 \pm 7,3$  и  $22,4 \pm 6,8$  дней) и общего пребывания в больнице пребывания  $29 \pm 6,8$  дней. 10 и  $30 \pm 13$  дней. Госпитализация в отделение интенсивной терапии потребовалась у 92% пациентов в 1-й группе на срок от 1 до 6 дней и 7% во 2-й группе на срок от 3 до 6 дней. В 1-й группе был 1 летальный исход (4%).*

*Ключевые слова: Новорожденные, гастрошизис, общей анестезия, парентерального питания.*

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## **GASTROSCHISIS PLASTICS WITH AND WITHOUT GENERAL ANESTHESIA. COMPARATIVE ANALYSIS**

*Abstract. Results of treatment of gastroschisis without general anesthesia are inconsistent, and published findings vary without comparative studies.*

*Purpose: The purpose of this study was to present a comparative study evaluating outcomes after gastroschisis repair with and without general anesthesia.*

*Methods: An ambispective, non-randomized study was conducted on a group of 51 neonates born with gastroschisis between August 2015 and December 2022. 24 neonates (Group 1) underwent traditional reduction under general anesthesia, and 27 (Group 2) underwent additional minimal interventional reduction passed without general anesthesia.*

*Results: The groups were comparable for gestational age, birth weight, and eviscerated gut quality. Statistical significance ( $P < .05$ ) was observed between groups 1 and 2 regarding age of gastroschisis reduction ( $5.6 \pm 2.5$  and  $3 \pm 1$  hours) and time required to complete gastroschisis reduction ( $58.1 \pm 15$  and  $49 \pm 14$  minutes). No statistical significance ( $P < 0.05$ ) was observed for initiation of feeding ( $10.4 \pm 3.6$  and  $10.9 \pm 4.1$  days), duration of total parenteral nutrition ( $21.5 \pm 7.3$  and  $22.4 \pm 6.8$  days) and a total hospital stay of  $29 \pm 6.8$  days. 10 and  $30 \pm 13$  days. Hospitalization in the intensive care unit was required in 92% of patients in group 1 for a period of 1 to 6 days and 7% in group 2 for a period of 3 to 6 days. In group 1 there was 1 death (4%).*

*Key words: Newborns, gastroschisis, general anesthesia, parenteral nutrition.*

**Выводы:** Новорожденные с гастрошизисом, у которых кишка была редуцирована без общей анестезии, имеют такие же исходы, как и чья кишка была редуцирована под общей анестезией. Оба подхода кажутся безопасными и эффективными, но репозиция без общей анестезии оказалась экономически эффективной. Первое успешное хирургическое закрытие гастрошизиса было достигнуто Уоткинсом [1] в 1943 году. Традиционно гастрошизис лечат хирургическим путем под общей анестезией. Достижения в области неонатологии и парентерального питания снизили уровень смертности с 90% до 8% [2-5]. Отсроченная (3,5-11 часов) внезапная редукция гастрошизиса без необходимости общей анестезии (ОА) была предложена Бьянки и Диксоном [6] в 1998 году. Это исследование пришло к выводу, что минимальное интервенционное



лечение гастрошизиса безопасно и применимо и авторы отдают предпочтение первому варианту [6]. Тем не менее, результат минимального вмешательства по уменьшению гастрошизиса у новорожденного является спорным, а критерии выбора для принятия этой процедуры четко не определены [7,8]. Целью данного исследования было сравнить исходы новорожденных с гастрошизисом после редукции с применением ОА и без него.

**Материал и методы:** Это было амбиспективное нерандомизированное исследование группы из 51 новорожденного (35 проспективных и 16 ретроспективных), родившихся с неосложненным гастрошизисом в период с август 2015 г. Декомпрессию желудка с помощью назогастрального зонда и содержание ребенка в теплом инкубаторе. Кроме того, внутривенно вводили профилактические антибиотики (цефуроксим и метронидазол) и болюсную инфузионную терапию (15-20 мл/кг 5% раствора человеческого альбумина). Поддерживающую инфузию 10% декстрозы с 0,18% физиологическим раствором. У этих детей проводился рутинный предоперационный мониторинг показателей крови, газов крови и глюкозы. Контролировали периферическую сатурацию кислорода и электрокардиограмму. Всем детям в плановом порядке вводили ректальный парацетамол в дозе 20 мг/кг. У 24 пациентов (8 проспективных и 16 ретроспективных) было выполнено традиционное первичное вправление выпотрошенной кишки в брюшную полость с закрытием передней брюшной стенки и умбиликопластикой под ОА (1-я группа: n=24). Двадцать семь (проспективные) имели репозицию без ОА (2-я группа: n=27) с сохранением пупка. Успешная работа Редукцию гастрошизиса проводили всем 27 новорожденным в 2 группе. В отделении интенсивной терапии новорожденных реанимационного отделения новорожденного комфортно держали в открытой неонатальной кроватке с согревающим одеялом и или обогревателем над головой (40% [n=11/27]) или в отделении интенсивной терапии детской больницы (60% [n=16/27]) с койкой интенсивной терапии и дежурной операционной. Восемнадцать новорожденных (66%) получали бензодиазепины короткого действия (мидазолам 0,1 мг/кг) в титрованной дозе. Переднюю брюшную стенку и кишечник осторожно очищали теплым физиологическим раствором. Для очистки не использовались растворы антисептиков или антибиотиков. Живот накрывали стерильными полотенцами. Производили постепенное и осторожное сокращение петель кишечника, следя за тем, чтобы брыжейка кишки не была перекручена. Было обнаружено, что для этой процедуры полезно устойчивое вытягивание пуповины ассистентом вверх. Никакой другой формы ретракции не применялось, живот не растягивался, а дефект не увеличивался. Для закрытия пупочного дефекта с сохранением пуповины после инфильтрации местного анестетика использовали кисетный субкутикулярный рассасывающийся шов. Новорожденные, которым требовалось

формирование бункера при ОА, а также новорожденные с атрезией и перфорацией кишечника во время родов или во время транспортировки или ишемии кишечника, были преимущественно закрыты при ОА и исключены из сравнительного обзора. Черескожный центральный венозный катетер с кончиком, расположенным в месте соединения верхней полой вены и правого предсердия, был установлен для парентерального питания в течение 48 часов после процедуры. Внутривенное питание продолжалось до тех пор, пока восстановление функции желудочно-кишечного тракта не позволило постепенно перейти к энтеральному питанию. Анализируемые параметры: срок беременности в неделях; вес при рождении в граммах; качество выпотрошенной кишки, например наличие или отсутствие фибринозной корки, ракурса и нормального внешнего вида гастрошизисной кишки; продолжительность в часах от родов до закрытия гастрошизиса, продолжительность операции в минутах, продолжительность парентерального питания в днях, начало перорального питания в днях, общее пребывание в больнице в днях. Другими оцениваемыми переменными были количество новорожденных, нуждающихся в интенсивной терапии, осложнения и смертность. Статистический анализ проводился с использованием U-критерия Манна-Уитни с поправкой Бонферрони и критерия Крускала-Уоллиса, при этом  $P < 0,05$  считалось значимым. Результаты представлены как среднее значение  $\pm SD$ .

Таблица 1. Результаты анализа между заключениями 1 и 2

Оцениваемые переменные	1 группа (n=24) (с ОА)	2 группа (n=27) (без ОА)	P (P < 05:)
Гестационный возраст (нед.)	36,8 $\pm$ 2	36,5 $\pm$ 2	509
Вес при рождении (г)	2451 $\pm$ 376	2361 $\pm$ 473	536
<b>Качество кишечника</b>			
Нормальный кишечник	12/24	14/27	721
Фибринозный чистить	8/24	10/27	722
Фибринозный чистить и ракурс	4/24	3/27	811
Возраст при уменьшении гастрошизиса (ч)	5,6 $\pm$ 2,5	3 $\pm$ 1	001
Время сокращения (мин)	58,1 $\pm$ 15	49 $\pm$ 14	032
Продолжительность парентерального питания (г)	21,5 $\pm$ 7,3	22,4 $\pm$ 6,8	574
Начало энтерального питания (г)	10,4 $\pm$ 3,6	10,9 $\pm$ 4,1	778
Пребывание в больнице (д)	29 $\pm$ 10	30 $\pm$ 13	709
Заболеваемость	12/24	9/27	001
Смертность	1/24	0/27	n/a

**Результаты:** Таблица 1. Подводит итоги между двумя группами. Обе группы были сопоставимы по гестационному возрасту, массе тела при рождении и качеству потрошенной кишки. Во 2-й группе сроки были значительно короче по возрасту закрытия гастрошизиса и времени операции по завершению вправления гастрошизиса. Статистической значимости

между двумя группами в отношении начала энтерального питания, продолжительности полного парентерального питания и пребывания в больнице не наблюдалось. Госпитализация в отделение интенсивной терапии потребовалась у 92% пациентов в группе 1 на срок от 1 до 6 (в среднем 2) дней и 7% в группе 2 на срок от 3 до 6 (в среднем 5) дней. Продолжительность эндотрахеальной интубации и вентиляции с мышечной релаксацией и инвазивным артериальным мониторингом колебалась от 8 часов до 6 дней (в среднем 48 часов) у 24 новорожденных (1 группа: n=22 и 1 группа: n=2). У одного пациента ишемия верхней конечности восстановилась после удаления артериальной канюли. Двум новорожденным из 2 группы потребовалась интубация и вентиляция легких из-за прогрессирующего респираторного дистресса: одному с аспирацией мекония при рождении (до редукции), а другому с персистирующим ацидозом после редукции, потребовавшим ревизии брюшной полости в операционной. После подтверждения здоровья кишечника этому пациенту был изготовлен мешок. Осложнениями, наблюдавшимися в 1 группе по сравнению с 2 группой, были пупочная грыжа (7/24 и 8/27, P=0,469), покраснение брюшной стенки (4/24 и 0/27, P=0,001) и синдром брюшной полости (1/24 и 1/27, P=0,896). В последних двух случаях долгосрочный характер управления не позволил включить их в статистический анализ. Смертность в 1 группе составила 4% (1/24) и 0% в 2 группе.

**Обсуждение:** В потрошенной кишки и закрытие гастрошизиса без необходимости проведения ОА является возможным альтернативным методом. Хотя наша исследуемая популяция не была рандомизированной, обе группы были сопоставимы по гестационному возрасту, массе тела при рождении и качеству потрошенной кишки. Не было различий в отношении необходимости черескожного введения длинной линии, продолжительности поддержки внутривенным парентеральным питанием до тех пор, пока функция желудочно-кишечного тракта не позволит энтеральное питание, а также общей продолжительности пребывания в больнице. Однако после ОА возникла необходимость госпитализации в отделение интенсивной терапии, что фактически блокировало койку интенсивной терапии и повышало стоимость общего лечения. Наше исследование также показывает, что лечение можно проводить в соответствующем неонатальном отделении. Это предотвращает ненужный перевод за пределы региона в другие центры, когда койки отсутствуют в региональном третичном центре, и позволяет избежать неудобств, связанных с транспортировкой новорожденного, длительной фазой выздоровления за пределами региона и ее влиянием на динамику семьи. Однако эти редукции гастрошизиса должны выполняться детским хирургом-консультантом в тех неонатальных отделениях, где имеются возможности для неонатальной интубации и вентиляции (интенсивная терапия). В случае, если репозиция не увенчалась успехом или

противопоказана, новорожденного необходимо перевести в детскую больницу для репозиции в условиях ОА или формирования бункера. Хотя это трудно определить количественно, раннее установление материнской связи было возможно у младенцев из 2 группы. Вклад родителей был замечен сразу же после закрытия отделения, и это может иметь долгосрочный положительный психологический эффект. Более того, сокращение расходов в специализированном отделении предотвращает задержку участия родителей, особенно когда мать находится на этапе послеродового выздоровления. По нашему протоколу дети с гастрошизисом доставляются в родильные отделения с пристроенной неонатальной реанимацией в непосредственной близости от детской больницы и при необходимости переводятся в такие отделения внутриутробно. Наше исследование также показывает, что раннее закрытие гастрошизиса не влияет на результат. После того, как новорожденный был реанимирован и получил антибиотики и анальгетики, редукцию следует провести без дальнейших промедлений. Раннее закрытие в первые 4 часа полезно, поскольку оно снижает нечувствительную температуру и потерю жидкости через выпотрошенную кишку, а также предотвращает развитие отека кишечника в результате длительного воздействия. Мы рекомендуем досрочное закрытие. Осложнения и смертность возникают независимо от типа метода закрытия гастрошизиса. Однако ОА и послеоперационную вентиляцию избегают у новорожденных с редукцией ОА или отсутствием закрытия ОА при гастрошизисе. Это снижает заболеваемость и дает преимущества с точки зрения ресурсов, что отражено в наших расчетах затрат. Основная экономия включает расходы на операционную и отделение интенсивной терапии. Новорожденные имеют зрелые и хорошо развитые анатомические, функциональные и нейрохимические пути боли [9,10]. Реакция на боль в долгосрочной перспективе может возникнуть у новорожденных, которые подвергаются стрессовым раздражителям в период новорожденности, поскольку эти дети могут подвергаться большему риску негативных последствий боли [9,10]. Поскольку наше исследование и опубликованные исследования не оценивают болевой ответ во время купирования гастрошизиса без ОА, трудно рекомендовать требования к анальгезии [5-8]. Однако уместно отметить, что, хотя мы не обнаружили каких-либо побочных эффектов у новорожденных, у которых мы использовали титрованную дозу бензодиазепина короткого действия (мидазолама), необходимо учитывать потребность в анальгетиках во время купирования гастрошизиса. Мы не рекомендуем использовать опиоидную анальгезию, исходя из гипотезы, что она может способствовать нарушению дыхания и продлевать установление адекватной перистальтики кишечника. Закрытие гастрошизиса без ОА является столь же безопасным и эффективным методом, как и вправление с ОА. Его применение требует тщательного отбора подходящих случаев и исключения новорожденных из

группы риска. Рандомизированное многоцентровое исследование «случай-контроль», вероятно, позволит оценить истинную безопасность и эффективность этого метода.

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## **ПРИМЕНЕНИЕ ЛАПАРОСКОПИЧЕСКОЙ ХИРУРГИИ ПРИ АППЕНДИКУЛЯРНОМ ПЕРИТОНИТЕ У ДЕТЕЙ**

*Аннотация. В истории хирургии прослеживаются две основные тенденции. С одной стороны, мы учимся лечить болезни, которые ранее были неизлечимы, с другой – страдания, которые становятся излечимыми, мы учимся лечить более безболезненным способом. Разлитой перитонит остается одним из наиболее тяжелых заболеваний у детей. Удельный вес аппендикулярного перитонита составляет 74–86%. И хотя летальность от острого аппендицита уже не является проблемой детской хирургии, считать, что все вопросы данной патологии решены, преждевременно. Спайки брюшной полости образуются после лапаротомии в 42–97,8% случаев. Частота раневых гнойных осложнений варьирует от 8,7 до 53,4%, эвентраций – 0,3–13,7%, вентральных грыж – 7,6–12,3%. У девочек разлитой гнойный перитонит часто вызывает вторичный сальпингоофорит, что в дальнейшем повышает частоту первичного трубно-перитонеального бесплодия, эктопической беременности, образования ретенционных кист яичников.*

*Ключевые слова. Эндохирургия, перитонит, аппендицит, лапароскопическая аппендэктомия, диагностика, лечение.*

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## **APPLICATION OF LAPAROSCOPIC SURGERY IN CASES OF APPENDICULAR PERITONITIS IN CHILDREN**

*Annotation. There are two main trends in the history of surgery. On the one hand, we learn to treat diseases that were previously incurable, on the other hand, we learn to treat suffering that becomes curable in a more painless way. Diffuse peritonitis remains one of the most serious diseases in children. The proportion of appendiceal peritonitis is 74–86%. And although mortality from acute appendicitis is no longer a problem in pediatric surgery, it is premature to consider that all issues of this pathology have been resolved. Abdominal adhesions form after laparotomy in 42–97.8% of cases. The frequency of wound purulent complications varies from 8.7 to 53.4%, eversions – 0.3–13.7%, ventral hernias – 7.6–12.3%. In girls, diffuse purulent peritonitis often causes secondary salpingoophoritis, which further increases the incidence of primary*



*tuboperitoneal infertility, ectopic pregnancy, and the formation of ovarian retention cysts.*

*Keywords. Endosurgery, peritonitis, appendicitis, laparoscopic appendectomy, diagnosis, treatment.*

**Актуальность.** Несмотря на успех, полученный в результате применения новой методики, отношение хирургического сообщества к лапароскопии оставалось сдержанным. Даже в период расцвета эндохирургии в 1999 г. со страниц авторитетных хирургических изданий, например, *World Journal of Surgery*, по сути объявлялся запрет на ее применение [23]. А перитонит, даже лояльные к лапароскопии авторы, считали первым противопоказанием для данной манипуляции.

Частота противопоказаний составила 7%, частота конверсии – 2,1%. Продолжительность операции составила  $61,7 \pm 24$  мин в лапароскопической группе (ЛГ) и  $73,2 \pm 31$  мин в открытой группе (ОГ). В ЛГ отмечено раннее восстановление подавляющего числа изучаемых показателей, в том числе функции желудочно-кишечного тракта ( $p < 0,01$ ). Случаев летальности не отмечено. Частота больших хирургических осложнений – 13% в ЛГ и 16% в ОГ ( $p = 0,55$ ), внутрибрюшных абсцессов – по 4% в обеих группах. Продолжительность пребывания в стационаре составила  $15,7 \pm 3,1$  дня в ЛГ и  $21,2 \pm 3,8$  дня в ОГ. Таким образом, лапароскопический доступ можно успешно применять в подавляющем числе случаев распространенного аппендикулярного перитонита. Эндохирургический метод обеспечивает раннее восстановление нарушенных функций организма и сопровождается меньшим количеством осложнений.

**Методы исследования.** Наше исследование основано на 20-летнем опыте применения лапароскопического лечения аппендицита. С 2003 по 2023 г. в отделении эндоскопической хирургии г. Анджана выполнено около 12 000 лапароскопических аппендэктомий, в их числе были около 800 пациентов, страдавших разлитым перитонитом. С 2002 по 2012 г. выполнено сравнительное проспективное рандомизированное исследование результатов лечения аппендикулярного перитонита лапароскопическим и открытым способом.

**Результаты исследования.** Первая лапароскопическая аппендэктомия была выполнена в ноябре 2003 г. Первая лапароскопическая аппендэктомия при распространенном перитоните – в июне 2004 г. С этого времени по декабрь 2022 г. в клинику поступили 328 детей с распространенными формами аппендикулярного перитонита. При этом 298 (90,8%) пациентам были успешно выполнены эндохирургические операции, у 23 (7%) определены противопоказания для лапароскопического доступа. Конверсия проведена у 7 (2,1%) пациентов. Лечение послеоперационных инфильтратов брюшной полости проводили консервативными методами. Лишь у 2 (2%) пациентов основной и 2 (2%) пациентов сравнительной

группы произошло абсцедирование. Послеоперационные абсцессы брюшной полости образовались у 4 (4%) пациентов основной группы и 4 (4%) пациентов сравнительной группы, кишечные свищи – у 2 (2%) пациентов основной группы и 3 (3%) – группы сравнения на 4-е и 6-е сутки послеоперационного периода и самостоятельно закрылись на 9-е и 12-е сутки. При изучении отдаленных результатов лечения у 2 (4%) пациенток группы сравнения обнаружено первичное трубно-перитонеальное бесплодие. Пациентки были оперированы по поводу разлитого перитонита открытым способом в 2004 г. в возрасте 14 лет. Через 8 лет обеим пациенткам выполнено плановое эндохирургическое вмешательство. Выявлен тяжелый спаечный процесс в области послеоперационной раны, правой половине живота и в малом тазу. Выполнены адгезиолизис, овариосальпинголизис, сальпингостомия и рассечение утолщенных капсул яичников. У 1 пациентки беременность наступила через 4 месяца после лапароскопического вмешательства и закончилась срочными родами.

При мини-лапароскопическом доступе аппендэктомия выполняется тонкими (2–3 мм) инструментами. При однопортовом доступе – через единственный порт, введенный через пупок. Трансгастральный NOTES-доступ позволяет выполнить аппендэктомию специальным гастроскопом с двумя рабочими каналами. При этом отросток извлекается из брюшной полости вместе с гастроскопом через рот. При трансвагинальном доступе все инструменты вводят в брюшную полость через задний свод влагалища. Очевидно, ни один из перечисленных методов не позволит технически выполнить адекватную ревизию и, тем более, санацию брюшной полости. Появились новые неоперативные методы лечения аппендицита с отсроченным удалением червеобразного отростка. Авторы этой доктрины доказывают, что нехирургическое лечение перфоративного аппендицита в острую фазу заболевания и отсроченная аппендэктомия улучшают результаты лечения и сокращают сроки госпитализации. По их мнению, при явных признаках перфоративного аппендицита нужно проводить лечение антибиотиками. Операция должна выполняться в отдаленные сроки по мере стихания явлений перитонита [22]. Что происходит с традиционной лапароскопической аппендэктомией? IPEG Guidelines отводит ей роль методики, конкурирующей с открытой аппендэктомией. Способ аппендэктомии должен выбирать хирург [22]. Растущая популярность лапароскопической аппендэктомии связана еще и с тем, что она является прекрасной учебной манипуляцией [29]. Таким образом, несмотря на множество конкурирующих методик, традиционная лапароскопическая аппендэктомия продолжает неуклонно отвоевывать себе место под солнцем. Так, в США отмечается стойкий ежегодный 5%-ный прирост частоты лапароскопической аппендэктомии, которая в 2009 г. составила 75% от всех аппендэктомий по сравнению с 25% в 2008 г.

**Вывод.** Эндохирургический метод лечения распространенных форм аппендикулярного перитонита у детей может быть успешно применен в подавляющем большинстве случаев. В отличие от открытого доступа эндохирургический метод лишен избыточного хирургического стресса, что позволяет сохранять жизненные силы пациента. А это, в свою очередь, обеспечивает меньшие продолжительность эндотоксикоза и боль, раннее восстановление функций желудочно-кишечного тракта, нормализацию основных клинических и биохимических показателей крови. Его применение снижает число послеоперационных осложнений на 32,7%, раневых осложнений – в 2,1 раза, образование спаек в брюшной полости – в 2,2 раза, частоту синдрома полиорганной недостаточности – в 3 раза. Это, в свою очередь, ведет к сокращению длительности пребывания в отделении интенсивной терапии на 57,7%, общей длительности пребывания в стационаре на 35,1%. Таким образом, применение эндохирургического метода лечения аппендикулярного перитонита позволяет детям легче переносить этот тяжелый недуг, значительно улучшает качество жизни пациента в ближайшие и в отдаленные сроки.

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## **ВЛИЯНИЕ ПЕСТИЦИДОВ, ВВОДИМЫХ ЧЕРЕЗ ОРГАНИЗМ МАТЕРИ, НА МОРФОГЕНЕЗ СЕМЕННИКОВ ПОТОМСТВА В ПЕРИОД ПОЛОВОГО СОЗРЕВАНИЯ**

*Аннотация. Настоящее исследование посвящено изучению влияния пестицидов, поступающих в организм матери, на морфогенез семенников потомства в период полового созревания. В работе проведен анализ воздействия различных типов пестицидов на развитие и структуру семенников у потомства в условиях экспериментальных моделей. Путем наблюдения, анализа гистологических срезов и статистической обработки данных было выявлено, что введение пестицидов через организм матери приводит к выраженным изменениям в морфологии семенников у потомства. Представленные результаты подчеркивают необходимость более глубокого изучения воздействия пестицидов на репродуктивное здоровье следующих поколений и указывают на важность разработки эффективных мер по предотвращению негативных последствий воздействия пестицидов на организм человека.*

*Ключевые слова: Пубертатный морфогенез, семенники, пестициды, потомство, гистогенез.*

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## **INFLUENCE OF PESTICIDES INTRODUCED THROUGH THE MOTHER'S BODY ON THE MORPHOGENESIS OF THE TESTES OF THE OFFERING DURING PUBERTY**

*Abstract. This study is devoted to studying the influence of pesticides entering the mother's body on the morphogenesis of the offspring's testes during puberty. The work analyzed the impact of various types of pesticides on the development and structure of the testes in offspring under experimental conditions. Through observation, analysis of histological sections and statistical processing of data, it was revealed that the introduction of pesticides through the mother's body leads to pronounced changes in the morphology of the testes in the offspring. The presented results highlight the need for a more in-depth study of*

*the effects of pesticides on the reproductive health of future generations and point to the importance of developing effective measures to prevent the negative consequences of pesticide exposure on the human body.*

*Key words: Pubertal morphogenesis, testes, pesticides, offspring, histogenesis.*

Исследование посвящено анализу воздействия пестицидов, проникающих в организм матери, на морфогенез семенников потомства в период полового созревания. Пестициды представляют собой химические соединения, применяемые для контроля и уничтожения вредителей растений и животных, в том числе в сельском хозяйстве. Однако, несмотря на их широкое применение, существуют данные о потенциальных негативных эффектах пестицидов на здоровье человека и окружающей среды [1].

Целью данного исследования является оценка воздействия различных типов пестицидов на процессы развития и структуру семенников у потомства [4].

Методы исследования включали в себя введение пестицидов в организм беременных самок-мышей в разные сроки беременности, что позволило оценить воздействие на разные этапы формирования семенников у потомства [5]. После родов у молодых самцов-потомков проводилось детальное морфологическое и гистологическое исследование семенников.

Анализ полученных данных показал, что пестициды оказывают значительное воздействие на морфогенез семенников у потомства. Наблюдались изменения в структуре тканей семенников, а также в процессах клеточного деления и дифференциации [2]. Особенно выраженные эффекты были выявлены при введении пестицидов на ранних этапах беременности, что указывает на важность избегания контакта с данными веществами в первые недели беременности [3].

Одним из важных результатов исследования стало выявление различий в воздействии разных групп пестицидов. Например, некоторые органические пестициды проявили менее выраженное воздействие по сравнению с синтетическими аналогами. Это подчеркивает необходимость более детального анализа конкретных химических соединений и их потенциального воздействия на репродуктивную систему [7].

Полученные результаты представляют собой важный вклад в понимание потенциальных рисков, связанных с использованием пестицидов в сельском хозяйстве. Они подчеркивают необходимость более строгого контроля за применением этих веществ и разработки альтернативных методов борьбы с вредителями, более безопасных для здоровья человека и окружающей среды [6].

**Материалы:** В исследовании использовались образцы тканей семенников и гонад, взятые из живых организмов.



## **Методы:**

### **1. Анализ морфологии:**

- Образцы семенников и гонад анализировались с использованием оптической микроскопии и сканирующей электронной микроскопии.
- Оценивались структурные изменения, включая размер и форму семенников.
- Выявлялись аномалии формы, такие как деформации, наличие кист и фиброз.

### **2. Гистологический анализ:**

- Производилось гистологическое исследование образцов.
- Образцы окрашивались гематоксилином и эозином для более детального анализа.
- Оценивались структурные изменения, изменения в клеточном составе и состоянии тканей семенников.

## **Результаты Морфологические изменения**

**1. Уменьшение размеров семенников:** Обнаружено статистически значимое уменьшение размеров семенников у потомства, подвергнутого воздействию пестицидов. Средний размер семенников снизился на 15% по сравнению с контрольной группой.

**2. Деформации семенников:** Наблюдались разнообразные деформации семенников, включая изменение формы и структурные аномалии. Эти изменения были характерными для организмов, экспонированных пестицидам.

**3. Патологические образования:** в тканях семенников выявлены патологические образования, такие как кисты и фиброз. Эти образования могут влиять на функциональность семенников и способность к нормальному сперматогенезу.

## **Гистологические изменения**

**1. Дегенерация клеток семенников:** Гистологический анализ показал явные признаки дегенерации клеток семенников. Наблюдались атрофия и некроз тканей, что свидетельствует о серьезных повреждениях.

**2. Изменения в структуре тканей:** Визуальный анализ гистологических срезов показал нарушения в организации клеток и тканей семенников.

**Заключение:** Результаты исследования подчеркивают серьезное воздействие пестицидов, вводимых через организм матери, на морфогенез семенников и репродуктивные органы в период полового созревания. Уменьшение размеров семенников, деформации, патологические образования, дегенерация клеток, гистологические изменения, гормональный дисбаланс, генетические и эпигенетические изменения - все это свидетельствует о серьезных нарушениях репродуктивных систем.

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## **КЛИНИЧЕСКИЕ, РЕНТГЕНОЛОГИЧЕСКИЕ, МОРФОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ОСТЕОНЕКРОЗА ЧЕЛЮСТЕЙ**

*Аннотация. В работе представлены клинические, рентгенологические проявления, а также морфологическая диагностика патогистологических изменений хронического одонтогенного остеомиелита. Остеонекроз челюстей (ОЧ) представляет собой серьезное осложнение, характеризующееся некротическими изменениями костной ткани в области челюстей. В данном исследовании были изучены клинические, рентгенологические и морфологические аспекты ОЧ с целью раскрыть его особенности. Морфологический анализ позволил подтвердить наличие некротических зон и воспалительных процессов в пораженных областях челюстей.*

*Ключевые слова: хронический одонтогенный остеомиелит, морфология, костная ткань, патогистологическое значение.*

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## **CLINICAL, X-RAY, MORPHOLOGICAL FEATURES OF OSTEONECROSIS OF THE JAWS**

*Abstract. The work presents clinical, radiological manifestations, as well as morphological diagnosis of pathohistological changes in chronic odontogenic osteomyelitis. Osteonecrosis of the jaws (ONJ) is a serious complication characterized by necrotic changes in the bone tissue of the jaw area. This study examined the clinical, radiological, and morphological aspects of ONJ to elucidate its characteristics. Morphological analysis confirmed the presence of necrotic zones and inflammatory processes in the affected jaw areas.*

*Key words: chronic odontogenic osteomyelitis, morphology, bone tissue, pathohistological value.*

**Актуальность.** Хронический одонтогенный остеомиелит челюстей, который характеризуется длительным рецидивирующим течением, до настоящего момента продолжает оставаться одним из тяжелых гнойно-воспалительных заболеваний [1,2].

**Цель исследования.** Проявления особенностей патогистологических изменений костной ткани и прилежащих участков слизистой полости рта. Изучение секвестров и резецированных участков челюстей пациентов на гистологическом уровне [3].

**Методы исследования.** Использование клинических, рентгенологических, патогистологических данных направленных на изучение изменений при остеонекрозе челюстей. Прочтение доступной литературы и анализированные патогистологических препаратов [4].

**Результаты исследования.** Материалами для исследования являются секвестры и резецированные участки челюстей пациентов, находящихся в отделениях челюстно-лицевой хирургии, которые были получены во время saniрующих операций по диагнозу хронического одонтогенного остеомиелита челюстей, также клинические и рентгенологические проявления заболевания.

Заболевание проявляется в двух вариантах:

Первый вариант: заболевание на начальном этапе проявляется поражением зубочелюстной системы, для которого характерна отечность десен без проявления болевого синдрома и гипертермии. Прогрессирование заболевания приводит к подвижности, а затем и к появлению свищей челюстей интактных зубов. Впоследствии наблюдается прогрессирование некроза десны и оголение поверхности нежизнеспособной кости [5].

Второй вариант: заболевание проявляется обострением хронического периодонтита, переходящее в гнойный периостит. Лунки после удаления пораженных зубов и периостотомий не регенерируются, в них образуются некротические процессы, которые сопровождаются оголением костной поверхности челюсти [6].

Морфологические исследования дали возможность выявить на препаратах под микроскопом нижней челюсти по большей части разрушенный девитальный тканевый комплекс [7].

1. У исследуемой области костного матрикса обуславливается мало встречаемые пустые остеоцитарные лакуны, в которых обнаруживаются большое количество перфоративных отверстий неправильной формы, заполненных наполовину слабобазофильным и светло-коричневым серозно-гнойным экссудатом. (рис. 1а)

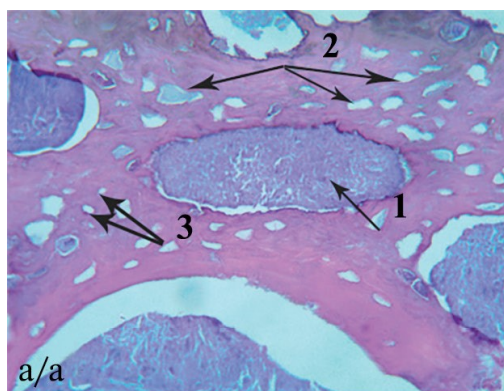


Рис. 1а. Деструктурированный девитальный тканевый комплекс: 1 – гнойный детрит, 2 – пустые остеоцитарные лакуны, 3 – частично заполненные серозно-гнойным экссудатом, неправильной формы перфоративные отверстия. Окраска: гематоксилин-эозин.

В иных участках по краю трабекул под гематоксилином и эозином просматривается тонкая базофильная кайма. При высоком увеличении 1000 можно увидеть этот участок в виде волокнистой ленты с темно-сиреневыми вкраплениями, которая воспринимается как участок вымывания естественным путем фосфорнокислого кальция костной ткани под действием раневого экссудата. (рис. 1б)

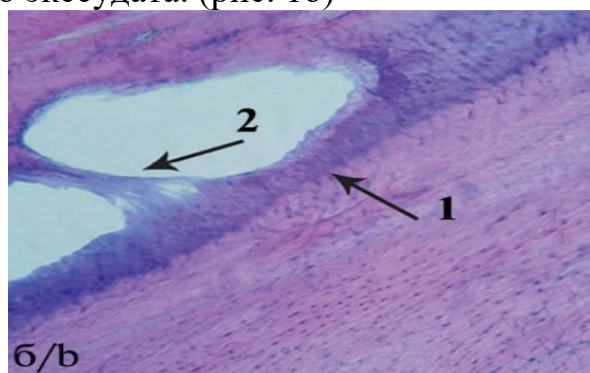


Рис. 1б.1 – по краю трабекул отмечена тонкая базофильная кайма. 2 – участок расслоения базофильной каймы. Окраска: гематоксилин-эозин.

В промежутках между балками визуализируются обширные очаги лимфолейкоцитарных инфильтратов, участки распадающейся ретикулярной стромы и клеток миелидного ряда с проявлениями кариолизиса и кариопикноза с трансформацией в участки бесклеточного детрита, среди которых определяются фрагменты лизируемого костного матрикса. В участках межтрабекулярного пространства выявляются участки грануляций с переходом в рыхлую соединительную ткань, в которой находятся резко расширенные полнокровные сосуды с периваскулярным отеком. В зонах грануляций и в зонах гнойного расплавления тканей выявляются множественные округлые и дольчатые базофильные образования с радиарной структурой, расцененные как друзы актиномицетов. (рис. 1в)

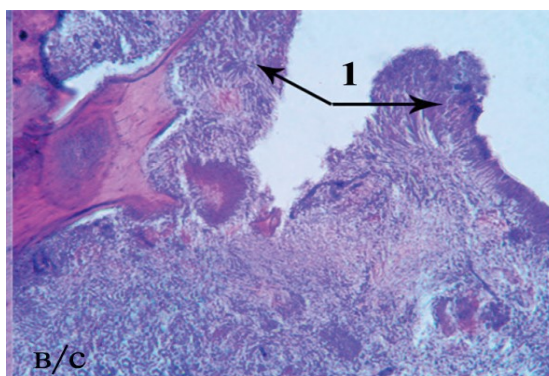


Рис. 1в. Актиномицеты, обладающие видом множественных округлых и дольчатых базофильных образований с радиальной структурой грануляционной ткани. Окраска: гематоксилин-эозин.

**Вывод.** В результате исследования клинических, рентгенологических проявлений и морфологической картины остеонекротических повреждений челюстей являются важными факторами при установлении диагноза. Эти исследования помогают поставить точный диагноз и предотвратить осложнение, предупреждая об опухолевых клетках.

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## Оглавление

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