

**PROBLEMS OF THE ECOLOGICAL SECURITY SYSTEM**

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**Abstract**

In the article, the concept of ecological safety, its significance, its characteristics, objects, the basic content and essence of the concept of ecological safety system, which ensures the minimum level of negative ecologically dangerous effects on human life and health, are disclosed. The stages of implementation of the concept, the directions of the specified activities, the role and importance of these activities for the life of the population and the economy of our republic are shown. In the implementation of the concept, international experiences, especially scientifically-based recommendations are given. In the article, special attention is paid to the measures implemented to ensure environmental safety in Uzbekistan, the importance of ensuring environmental safety in socio-economic development, especially to the rational use of natural resources, especially water resources, its protection and environmental safety, and the use of scientific achievements in this regard. based opinions are expressed.

**Keywords:** Environmental security, Water and land problems, environmental laws, regulations, standards, biological diversity, environmental degradation, deficiencies in the state management system, resource management.

**Introduction**

The President of Uzbekistan Sh.M. Mirzyoev stated that "problems related to sudden changes in the earth's climate, depletion of water and natural resources are turning into great dangers."

In fact, one of the urgent main tasks of today is to save human life on earth from these ecological dangers. In the implementation of this noble task, it is the rational use of natural resources, the protection of nature within the scope of human intelligence and ability, the protection of natural resources necessary for human life from ecological dangers, and the improvement of the ecological security system in general. All over the world, Humanity is increasing the scope of use of natural resources in every way. Under the influence of human intelligence, scientific and technical progress is developing immeasurably. Along with the positive aspects of this, the natural environment is rapidly being polluted and damaged in an ecologically destructive way. Environmentally dangerous problems do not know national borders and other obstacles. They have acquired global features, and in all countries, especially in our dear Uzbekistan, taking into account the negative characteristics of environmental changes, great attention is being paid to preventing environmental risks and solving these problems on a scientific basis.



After Uzbekistan gained political independence, the unique wealth of nature is paying special attention to the issues of human life, health and future, in order to raise a healthy generation of our people. The health of our people, especially the young generation, and the healthy growth of a person who is a living part of nature in general, depends on the ecologically clean, safe and convenient land, water and air that make up the inanimate part of nature. Therefore, the President of our Republic, Sh. Mirziyoyev, pays special attention to the health of the ecological environment and the problem of the Aral Sea.

Currently, in Uzbekistan, there are more than 50 laws aimed at the rational use of natural resources, protection of our natural resources from any dangers and prevention of environmental hazards, more than 200 normative legal documents necessary to ensure the implementation of these laws, about 20 scientific concepts related to environmental protection, strategic programs, state-wide projects, important complex measures of the state and the public serve to ensure environmental safety.

Article 49 of the new version of the Constitution of Uzbekistan, adopted by public consent on April 30, 2023: Everyone has the right to a comfortable environment.

In order to ensure the environmental rights of citizens and prevent harmful effects on the environment, the state creates conditions for public control in the field of urban development.

In accordance with the principles of sustainable development, the state implements measures to improve, restore and protect the environment, maintain ecological balance.

"The state will take measures to protect and restore the ecological system of the island region, to develop the region socially and economically" - important provisions on environmental safety were introduced. These Constitutional Rules have been included among the most important problems to be solved due to their relevance and necessity for today's and tomorrow's ecological safety society in Uzbekistan. If these problems are solved in a practical way, it will provide an opportunity to determine the condition and quality of life of the current and future generations, as well as the development of our country in all areas.

The Constitution of Uzbekistan states that citizens must protect nature and its resources. The Law of the Republic of Uzbekistan "On Nature Protection" adopted on December 9, 1992 serves to ensure rational use of natural resources, nature protection and ecological safety. In 2018, the "Ecological Education Concept" was adopted in 2018 in order to attract scientists, experts and politicians to the problems of ecology and sanitation, as well as to increase the ecological knowledge of the people, and all possibilities are being used for its implementation. In the following years, international and national scientific conferences dedicated to the rational use of natural resources, nature protection, environmental safety, improvement of the scientific foundations of the Aral Sea, environmental education and training problems are being held, and fundamental scientific research is being given serious attention; as a result, environmental control has been strengthened, and the amount of waste has decreased due to the transition to modern technology and production methods of the "Green Space" and "Green Economy" strategic programs.

#### **Methodology:**

This paper is based on a comprehensive review of existing literature and empirical evidence to identify and analyze the challenges faced by environmental security systems. Through qualitative



analysis, it explores the implications of these problems and explores potential strategies to address them.

### **The Results of the Analysis**

**Decentralized governance:** One of the main challenges facing environmental security systems is the fragmentation of the governance system. Environmental issues often cross political boundaries, making it difficult to implement common policies and regulations. Inadequate coordination between various stakeholders exacerbates this problem, leading to gaps in enforcement and compliance.

**Depletion of resources:** Unsustainable use of natural resources poses a serious threat to environmental security. Deforestation, overfishing and over-mining lead to habitat loss, species extinction and ecosystem disruption. Despite efforts to regulate resource extraction, illegal activities and weak enforcement mechanisms continue to undermine conservation efforts.

**Climate Change:** The increasing impacts of climate change pose a serious challenge to ecological security systems. Rising temperatures, changes in precipitation, and extreme weather events disrupt ecosystems, exacerbate biodiversity loss, and threaten food security. Adapting to these changes requires innovative strategies and decisive government intervention, but progress remains slow due to political inertia and vested interests.

**Lack of public awareness:** A critical barrier to effective environmental security is the lack of public awareness and engagement in environmental security. Many people are not aware of the environmental security requirements regarding the relationship between water and land, the importance of preserving biological diversity and the consequences of environmental degradation. Without widespread support and participation, efforts to protect ecosystems are likely to fail.

The cost of protecting the natural environment is small compared to the costs of damaging it and restoring it. Therefore, it remains one of the main tasks of environmental protection and environmental safety to anticipate ecologically dangerous situations, take appropriate measures. Scientific and technical progress has changed the world we live in beyond recognition. At a time when ecologically dangerous disasters are causing unprecedented disasters in some regions of the world, preventing such natural disasters as much as possible in the conditions of Uzbekistan, and being prepared for emergency situations are among the urgent tasks of today. According to estimates, it is necessary to take measures to reduce the spread of unavoidable ecological risks, to stop the intensity of man-made and negative social consequences. For this, experts in various fields should increase their environmental knowledge and take measures to avoid harming the natural environment with their planned work.

One of the main reasons for the consequences of negative changes in ecology is the violation of the principles of using land, water, and mineral raw materials. It is this principle that forces the national economy to follow a less efficient-extensive path, prevents the widespread introduction of innovative techniques and technologies that save natural resources, and also causes the emergence of approaches that are contrary to the requirements of environmental security, such as the implementation of the plan while harming the ecological systems and the environment. As a result of the extensive development of agriculture in Central Asia, unscientific, spontaneous, disorderly use of land and water, the Aral Sea began to dry up. The ecological system of the lands located near it, the world of animals and plants faced a deep crisis. Hundreds of thousands of hectares of land in our region have been damaged by salinity, and part of it has been occupied by



disease-causing pests and diseased plants. Salts fly from the land in the dry part of the island, they accumulate in the areas where the wind begins to fade, causing the mineralization of rainwater, increasing the salinity of the land, and accelerating the melting of mountain glaciers. According to the information of the Academy of Sciences of Uzbekistan, the salt rising from the Aral Sea falls on permanent glaciers in the south-eastern mountains of the republic and accelerates their melting process. It affects the process of desertification and land degradation.

The above-mentioned information creates a very high level of all-round danger for the health of the population living in the Aral Basin, for its comfortable living, and for the development of the economy. Because it has been determined in science that the productivity of agricultural crops decreases even up to 100% in highly saline lands. It is emphasized that the indicated information is one of the important problems of ensuring ecological safety in a systematic way and is an urgent task before the world community, international organizations, national states that are members of the UN, and peoples of the whole world.

#### **Environmental security system.**

Environmental security is a socio-natural and scientific phenomenon, which is the object of study of various natural, social, legal and other sciences, as it covers a complex set of relations between people and the natural environment.

Environmental security is a social category characteristic of human society and is formed within the framework of social relations. Although the relations that arise in the field of environmental security are complex social relations related to each other, they are regulated by legal norms. Therefore, environmental security has certain legal forms.

First, it is described as the eternal value of human society based on a certain system of guarantees of environmental security of nature and human existence. We are talking about human safety in the process of interaction with the natural environment, dangerous (radioactive, chemical, toxic and other) substances, the use of dangerous or dangerous technologies and processes, the implementation of various effects on the environment, etc. However, environmental security is also related to natural processes (natural forces of nature) that are not controlled by humans.

Secondly, the laws of nature under which environmental objects develop are taken into account when ensuring environmental safety. In addition, all natural objects together create a single ecological system with internal differentiation determined by their natural characteristics of environmental objects.

Thirdly, the provision of environmental safety is guaranteed and controlled by the state, which forms the entire system of special bodies. It arises from the need to achieve a harmonious interaction of nature and society, to maintain ecological balance in the country and its individual regions.

Fourth, legal protection of environmental safety is one of the main principles of environmental laws.

Environmental security can be considered in two ways:

firstly, environmental safety can be considered as a subjective category, in particular, in the process of implementation of the subjective right of citizens to environmental safety through methods of regulation and protection. Citizens' right to environmental security is closely related to the right to use a safe natural environment for life and health. It is in legal science: a) an independent subjective right in the general system of environmental rights; b) uniform understanding of the right of



citizens to a safe environment. The first point of view is the most acceptable. Secondly, as an objective system of legal provision of environmental safety, with its help, environmentally hazardous activities, natural resource use regime, environmental protection and prevention are regulated.

deterioration of the ecological situation and emergence of danger for natural objects and population.

A natural environment is considered safe if its condition meets the criteria, standards and regulations established by law regarding its cleanliness (non-pollution), resource intensity (non-depletion), ecological stability, sanitary requirements, diversity of species and the ability to satisfy the interests of citizens.

It is appropriate to determine the level of environmental security for the following: a) people - the average life expectancy and b) the environment - the degree of proximity to the limit of dynamic stability of ecosystems.

According to the quality indicators, the state of the environment can be expressed at three levels: The first and highest quality level of the state of the natural environment is a clean and safe natural environment. At the same time, various types of pollution of the natural environment are minimal, which does not lead to a change in the normal ecological situation in a given region. There are few such areas, because industrial production technology has not yet reached a high level of environmental cleanliness.

The second level of the state of the natural environment should include a favorable natural environment. Its essence is that the pollution of the natural environment is possible within limits that do not affect human health and in the absence of negative factors (for example, essential oils and odors of substances) arising from the characteristics of a particular industry that negatively affect the human psyche. In the production process, they are harmless to human health, but in some people they cause itching and allergic reactions).

The third level of the state of the natural environment includes a safe natural environment. Unlike the second level, here the existence of a certain area of factors that do not pose a threat to people in the natural environment is allowed.

In this case, its quality is considered as a set of natural and "acquired" properties formed under the influence of anthropogenic activity, meeting the established ecological, sanitary and hygienic standards. Conditions for the development and recovery of living organisms, including human life, are provided.

Environmental security objects are:

- constitutional rights, freedoms and legal interests of people and citizens;
- spiritual, moral and cultural, historical, intellectual values of society, information and natural environment and natural resources;
- constitutional system, sovereignty, territorial integrity and inviolability of the state.

Thus, environmental security objects are vital interests of security subjects: rights, material and moral needs of individuals; natural resources and the natural environment are the material basis of the development of the state and society. A person is not only a subject of relations to ensure environmental security, but also an object that has a negative impact and requires legal protection. The main components of the system of environmental security of the individual and the entire society include: military, economic, social, political, legal, technological, intellectual, informational, demographic, genetic, psychological types of environmental security. At the same



time, there are priority security issues on which the well-being of people, the development of the entire humanity and the population of individual countries and regions primarily depends. What is important is that environmental safety measures that ensure the minimum level of negative effects on human life and health are at the heart of the environmental safety system of the individual and the entire society.

Environmental safety, which ensures the minimum level of negative effects on human life and health. Environmental security, which ensures human life and health, is the provision of an ecological condition, a situation in which no one and nothing can harm, threaten or harm a person, a group of people, the population of a country or a group of countries, the life and health of all mankind. It is very important for human life in general and it is one of the main problems in human ecology in particular.

Solving military environmental security problems occupies a special place in the security system of the individual and the entire society, which is defined as the state's ability to prevent or counter the use of military force or the threat of using it. Armed conflicts and attacks between states cause terrible ecological dangers to nature and people on the territory of any state.

Solving the problems of international environmental security is a policy that ensures the normal functioning of the international community, the reliable protection of the vital interests of each nation and country from external aggression, international terrorism and other forms of armed violence, and their stable development and cooperation in the context of the disruption of international relations and the state of the world. International environmental safety is provided by a set of environmental safety measures covering all spheres of life of human society, all types of activities in it. Observance by all countries and peoples of the principles and norms of international law enshrined in the Charter of the United Nations and other documents, and first of all, taking collective measures to prevent threats to peace and stop acts of aggression, is one of the urgent problems of ensuring environmental security, and it is of particular importance to pay attention to it. First of all, to solve your problems in this regard:

- It is necessary to prevent the use of force or the threat of use of force in any way inconsistent with the goals of the UN;
- it is required to achieve a peaceful settlement of international disputes;
- ensuring the development of friendly relations based on respect for the territorial integrity of all countries, the equality and sovereignty of peoples is important in solving environmental security issues.

Solving the problems of national environmental security is the state, directions and conditions that ensure the activity of the nation (state), in which the problems of protecting its vital interests, survival, free, independent activity and well-being, while preserving its basic values and basic institutions, are solved. Security is possible when a nation (state) is not forced to sacrifice its national interests to avoid war, but is able to protect these interests, if necessary through defensive war.

Environmental security is a component of national security, and it is a state of protection of the natural environment and vital human interests from economic and other activities, natural and man-made emergency situations and possible negative effects of their consequences.

Solving regional ecological security problems is the state of ecological relations within and between national, socio-territorial, religious and other communities in a certain region of the country or a group of countries, which ensures their reliable existence and sustainable development, protection of vital ecological interests of the state. The scope of powers of peoples,



states and their citizens, public institutions and groups belonging to this region, ways to ensure regional security problems are determined by the provisions of Chapter 8 "Regional Agreements" of the UN Charter. They include: peaceful resolution of disputes and disagreements; prevention of conflicts between members of the regional system; organizing collective measures to suppress acts of aggression and eliminate threats to peace and security.

#### **Conclusion:**

It is necessary to emphasize that the measures implemented in solving the problems of the ecological security system must be followed by the systematicity of measures, a comprehensive approach to solving problems, the principles of legality, fairness, scientificity, cooperation, and the priority of ensuring the rights and freedoms of people and citizens.

The challenges facing environmental security systems are multifaceted and interrelated, requiring holistic solutions that address governance gaps, land and water resource management challenges, climate change impacts, and public awareness gaps. . Strengthening international cooperation, improving the regulatory framework, promoting sustainable practices and encouraging public participation are important steps towards creating sustainable environmental security systems. By tackling these challenges together, we can protect our planet's biodiversity and ensure the well-being of future generations.

Solving the problems of ecological security systems requires the joint efforts of government agencies, civil society and the private sector. Only through collaborative action and innovative solutions can we effectively address the complex challenges of environmental degradation and biodiversity loss.

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