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**ASPECTS OF THE ENVIRONMENTAL POLICY OF UZBEKISTAN IN
 THE CONDITIONS OF THE ENVIRONMENTAL CRISIS IN THE SOUTH
 ARAL SEA REGION**

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ABSTRACT

This article discusses aspects of Uzbekistan's environmental policy in the context of the environmental crisis in the South Aral Sea region. This document was adopted in order to further ensure a favorable state of the environment and the rational use of natural resources, the introduction of environmental foundations of sustainable development in the economic sector. The organization of work and control over the implementation of the Program is entrusted to the State Committee of the Republic of Uzbekistan for Nature Protection.

KEYWORDS: *Environmental Policy, Context, Environmental Crisis, South Aral Sea, Document, Favorable State, Environment, Natural Resources, Environmental Foundations, Sustainable Development, Economic Sector, State Committee, Nature Protection.*

INTRODUCTION

At present, the purposeful policy of any state to maintain ecological balance in the biosphere is ecological safety, which contributes to the creation of favorable living conditions for the population and their interaction with the natural environment. The system of environmental safety of the state presupposes the presence of certain protective mechanisms of a person against environmental threats caused by natural factors - natural elements and human intervention in the natural environment, leading to an imbalance in the ecological system [16].

At the Global International Forum "Johannesburg-2002" the Development Program for the XXI century was presented as a vector for active action of all countries in the field of environmental protection. The approved Program in world practice is a document aimed at ensuring environmentally safe sustainable development, taking into account the satisfaction of the needs

of the present and ensuring the interests of future generations. In an official UN document, the integral concept of “sustainable development” is proposed, which combines the main problems of preserving and restoring the natural environment and ensuring a decent life for all generations [26].

The main findings and results

An environmental assessment mechanism and, in a broader sense, an integrated analysis of the state, impact and protection of the environment, as well as the use of natural resources in the Republic of Uzbekistan.

The environmental safety policy of the Republic of Uzbekistan is carried out on the basis of the Constitution, documents of the Legislation of the Republic of Uzbekistan, the principles of the Declarations on the Environment and Sustainable Development, taking into account the obligations assumed arising from international conventions and agreements, as well as the legislative experience of foreign states [26,27].

Currently, in Uzbekistan, including the Republic of Karakalpakstan, continuous activities are carried out in the field of environmental protection, rational use of natural resources, improvement of sanitary and environmental conditions.

In accordance with the current regulatory and legal documents, the economic mechanism of environmental protection of the Republic of Karakalpakstan includes both incentive elements (positive motivation) and instruments of coercion (negative motivation), with the latter clearly prevailing. Some of the economic management instruments provided for by legislation are still not applied or are applied on an extremely limited scale.

The basis of the ecological and socio-economic mechanisms of environmental protection in the Republic of Karakalpakstan is made up of economic sanctions for environmental offenses.

Over the years of independence, Uzbekistan, including Karakalpakstan, has practically re-examined the legal framework of environmental legislation, which is fundamentally different from the previous one. Instead of the administrative-command principle of environmental management, a transition is made to ecologically-economically sound methods of rational environmental management.

The problem of the Aral Sea began to form in the 60s of the XX century. Intensive development of new lands, development of irrigated agriculture, construction of collector and irrigation systems throughout Central Asia, continued growth in water demand for domestic and industrial consumption, as well as systematically repeated dry years, created the conditions for one of the largest global environmental disasters in recent history - the drying up of one of the most beautiful bodies of water in the past on our planet [15, 18, 20].

The progressive process of desertification and soil degradation in the Aral Sea region is accompanied by the loss of land resources, deterioration of the quality of natural pastures and hayfields, where there is an active salinization of lands. In many territories, a large accumulation of salts has occurred in the soil and groundwater, which negatively affects the cultivation of various agricultural crops [13, 23].

In 1992, the Law of the Republic of Uzbekistan “On Nature Protection” was adopted, which established the legal, economic and organizational foundations for preserving the conditions of the natural environment, rational use of natural resources. The purpose of this Law is to ensure a balanced harmonious development of relations between man and nature, to protect ecological systems, natural complexes and individual objects, to guarantee the rights of citizens to a favorable environment [1].

In October 1995, Uzbekistan joined the Convention on Biological Diversity and began to develop the National Strategy for the Conservation of Biological Diversity (NSCBD) [11] (1998). The Republic of Uzbekistan at a high official level declared its intention to protect and use biological resources of the environment without damage. However, the modern structure and management of protected natural areas have not undergone fundamental changes since 1990. Further development and improvement of the network is constrained by the lack of funds. Since the signing of the NSCBD on the conservation of biological diversity [28] (Resolution of the Cabinet of Ministers of the Republic of Uzbekistan № 139 dated April 1, 1998), the development and improvement of the network of protected areas is the country’s top priority in the field of biological diversity conservation [3, 11].

The Cabinet of Ministers of the Republic of Uzbekistan adopted a Resolution dated May 27, 2013 “On the Program of Action for Environmental Protection of the Republic of Uzbekistan for 2013 -2017”. This document was adopted in order to further ensure a favorable state of the environment and the rational use of natural resources, the introduction of environmental foundations of sustainable development in the economic sector [6, 7]. The organization of work and control over the implementation of the Program is entrusted to the State Committee of the Republic of Uzbekistan for Nature Protection.

This Program has been prepared on the basis of the National Action Plan for Environmental Protection of the Republic of Uzbekistan (NPEP) and is aimed at implementing environmental measures in terms of environmental support of economic reforms in Uzbekistan and creating conditions for socio-economic development and achieving the goals of sustainable development of the country. Based on the provisions of the new Program, the environmental policy of the republic is aimed at implementing the transition from the protection of individual elements of nature to the universal protection of ecological systems, guaranteeing optimal parameters of the human environment and harmonizing the relationship with the mechanisms of development of economic sectors according to the principles of “green economy” [4, 5, 21].

This Program provides:

- rational and comprehensive use of natural resources, including water, land, mineral and biological resources;
- phased reduction of air pollution, water and land resources through the introduction of environmentally friendly technologies and improvement of technological processes in production;
- improving the mechanism for monitoring the natural environment for regular assessment and forecasting of its socio-ecological state;

- implementation of a set of measures to restore and improve the ecological state in the ecological disaster zone - the Aral Sea region and in other ecologically unfavorable territories of the country;
- providing the population with clean drinking water and improving the system of sewerage networks and treatment facilities in large cities and towns;
- development of scientific and technical potential and the use of achievements of science and technology in the field of environmental protection;
- development and expansion of the network of protected natural areas;
- improvement of environmental legislation and the regulatory and methodological base in the field of environmental protection, environmental education and education for sustainable development, as well as the promotion of environmental knowledge;
- further development of regional and international cooperation in solving environmental problems [3, 10. 12].

One of the results of the environmental policy of the Republic of Uzbekistan is the stabilization of ecosystems and the improvement of the quality of the environment in areas with an increased risk to human health. Measures are being actively carried out to rehabilitate the consequences of the Aral Sea crisis, the ecological situation in the Aral Sea region - construction of small local reservoirs, drinking water supply lines is underway.

At the national level in Uzbekistan, the National Commission for Sustainable Development (NCSD) has been operating since 1997, which was then transformed into a working group under the coordination of the Government of the Republic of Uzbekistan. In 1998, experts from the ministries and departments of Uzbekistan developed the Concept of Sustainable Development of the Republic of Uzbekistan, approved by the NCSD.

On June 28, 2012 in the city of Nukus, Republic of Karakalpakstan, an introductory meeting and presentation of a new UN initiative in Uzbekistan - the Joint Program "Ensuring the livelihoods of the population affected by the Aral Sea crisis". The event was attended by national partners, representatives of regional and district authorities, representatives of communities and the media. The participants of the meeting discussed the main directions of the Program's activities and offered their recommendations for its successful implementation. The Aral Sea, located in the heart of Central Asia and formerly the fourth largest lake in the world, has become shallow and today is 30% of its former size. Such environmental changes in the region adversely affect the economy, social sphere and livelihoods of the population.

In the past, several initiatives have been successfully implemented in the region by the United Nations Development Program and the World Bank in close cooperation with the Government of the Republic of Uzbekistan. However, the living standards of the population of the most remote regions, such as Muynak, Shumanai and Kanlykul, need further improvement. During his visit to the Aral Sea region, UN Secretary General Ban Ki-moon emphasized the negative impact this crisis has on the human security of the population and called it "one of the worst environmental disasters in the world". In particular, it was decided to launch a Joint UN Program aimed at improving the well-being of the population through creating additional sources of income, improving the health care system, and developing infrastructure, by combining the efforts of 5

UN agencies in the Republic of Uzbekistan including the United Nations Development Program (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), the United Nations Population Fund (UNFPA) and UN Volunteers (UNV). The UN Joint Program was developed in close cooperation with the Government of the Republic of Uzbekistan and is aimed at improving the well-being of the most vulnerable segments of the population in the region.

The program envisages providing support to local communities in improving their access to basic socially significant infrastructure, including access to clean water and gas through the development and implementation of community development plans. The program will assist in creating new sources of income for entrepreneurs and farmers through the introduction of advanced agricultural and pasture management practices, as well as planting new types of crops and trees. In addition, the Program will support women's and youth entrepreneurship through the development of local handicrafts and tourism areas.

It should be noted that the Joint Program is aimed at improving the human security of the population, which implies the creation of an effective management system, improved income, health care and environmental safety, for sustainable livelihoods and dignity of people. In this regard, to promote the concept of human security in all areas of the Joint Program, the UN Trust Fund for Human Security provided funds in the amount of US \$ 3.8 million.

Today, it is quite obvious that a complex of environmental, socio-economic and demographic problems has arisen in the Aral Sea region, which in origin and level of consequences are of an international, global nature.

This understanding was also confirmed in the 2005 UN Report on Human Development in Central Asia, which noted that the depletion of the Aral Sea has not only regional but also global significance [22, 23].

In order to stabilize the ecological state in the South Aral Sea zone, the Government of the Republic of Uzbekistan is taking measures, including to attract investments to restore the water infrastructure of the region and create conditions for the economic activity of the Aral Sea population [10]. The "Drainage project of Uzbekistan. Project for diverting drainage from South Karakalpakstan" with the participation of the World Bank in the amount of 75 million dollars US, which contributes to the improvement of the reclamation state of the lands of Karakalpakstan on an area of 100 thousand hectares and direct drainage water to the reservoirs of the Aral region.

The IFAS Agency is carrying out a number of projects in the Aral Sea area for the restoration of wetlands. One of them is the IFAS / GEF / World Bank Project "Water Resources and Environment Management", within the framework of which activities for the restoration of Lake Sudochoye were carried out in the amount of about 3 million US dollars.

The project "Creation of local reservoirs in the Amu Darya delta" is a continuation of the work begun on Lake Sudochoye. As a result of the project, the water area of the delta lakes reached 150 thousand hectares. Expansion of the water table of local reservoirs up to 230 thousand hectares is planned.

With the attraction of GEF / UNDP grant funds, projects are being implemented to restore forests in the Amu Darya delta, as well as to strengthen the sands on the drained bottom of the Aral Sea. Social and economic problems are also being addressed within the framework of these projects.

Rehabilitation of the water infrastructure in the Amu Darya delta is already yielding results. So, for example, the fish catch in 2009 amounted to about 1200 tons, the fodder base of animal husbandry was strengthened, favorable conditions for the breeding of fur-bearing animals, marsh and waterfowl were created, the area of forest-tugai thickets increased [21].

In order to improve the ecological state in the Aral Sea zone, over the past 20 years, forest plantations have been carried out on an area of about 740 thousand hectares, incl. on the drained bottom of the Aral Sea 610 thousand hectares. For forest plantations, salt-tolerant crops are mainly used, which fix moving sands and significantly reduces salt-dust transfer [25].

Currently, a number of projects are being initiated for a total amount of US \$ 372 million, aimed at increasing water availability and improving the reclamation state of the lands of the Southern Aral Sea region. For the implementation of projects and programs aimed at the environmental improvement of the Aral Sea zone in Uzbekistan, over 1 billion US dollars have been spent in the last 10 years alone, including about 265 million dollars due to foreign loans, technical assistance and grants.

The success of the measures implemented by Uzbekistan entirely depends on the sustainable provision of water resources to the Southern Aral Sea region, which in turn depends on the water management policy of the countries located in the upper reaches of the Amu Darya transboundary river basin, the main source of water supply to the Aral Sea in general, and South Aral Sea region in particular [15].

In order to prevent further deepening of the ecological crisis, as well as to improve the existing ecological situation in the Aral Sea basin, by the decision of the Heads of the five states of Central Asia, the International Fund for Saving the Aral Sea (IFAS) was established in 1993 with the Executive Committee in Almaty (Kazakhstan).

The main tasks and goals of the IFAS activities are:

- financing and lending of joint interstate environmental and scientific-practical programs and projects aimed at saving the Aral Sea and improving the environmental situation in areas affected by the Aral disaster, as well as solving common social and environmental problems of the region;
- financing of joint fundamental and applied research, scientific and technical developments to restore ecological balance, rational use of natural resources and environmental protection;
- mobilization of funds for joint measures to protect the air basin, water and land resources, flora and fauna, etc.

The main directions of the IFAS activities to improve the ecological and socio-economic situation in the Aral Sea basin were determined by programs of specific actions approved by the Heads of State of Central Asia: ASBAM-1 (1994-99), ASBAM-2 (2003-10), ASBAM-3 (2011-15). The objectives of these programs included the creation of artificially watered landscape ecosystems on the territory of the Amu Darya and Syrdarya deltas and adjacent areas of the

drained bottom of the Aral Sea, the development and implementation of programs to provide clean drinking water, improve the health of the population, implement programs to combat natural disasters, and contribute to solving social programs of the region, combating desertification, development of wetlands and other.

According to a number of researchers, environmentally sustainable development is development in which the well-being of people is ensured by the preservation of sources of raw materials and the environment. The level of emissions should not exceed the assimilation capacity of nature, and the use of non-renewable resources should correspond to their reimbursement by replacing them with renewable components, as several approaches to environmental problems have been identified:

1. Inertial, which assumes “development as usual”, but more efficient, with continued growth and pollution control. Economic growth pays for pollution and technological development.
2. Technological transformation, in which technological development ensures a more complete development of resources and their conservation, as well as tight control of pollution.
3. Social transformation, implying a rapid awareness of the threats associated with the destruction of the environment, a breakthrough to a new worldview and a new system of values based on global collective action; transition from quantitative growth to qualitative development.

Recently, environmental management has been based on the Green Economy Concept. According to UNEP expert estimates, the “green economy” is interpreted as an economy that increases the well-being of people and ensures social justice and at the same time significantly reduces environmental risks and environmental degradation.

For the development of the Republic of Karakalpakstan on the principles of “green economy” it is necessary to implement a number of measures. The most important is the transition from environmental to environmental and economic management: if the first approach is associated with the formulation of tasks, including restrictions and framework conditions for their implementation, then environmental and economic management allows you to choose the most effective ways to solve them.

Taking into account the new conditions and historical realities of the state of nature, the problem of the evolution of the ecological environment interacts with the security of Uzbekistan, including Karakalpakstan. The approach to the practical implementation of this task determines the development strategy of the state. In these scientific developments, the role of state structures in the management of the ecological sphere is analyzed, the issues of increasing the efficiency of state management of the interaction of the “man-nature” system are raised [16, 17].

CONCLUSION

The existing ecological crisis in the South Aral Sea region testifies to the inextricable relationship of metamorphisms in nature and society. In this regard, a dilemma arises: will a repetition of this situation occur or whether there have been similar developments in the processes. In any case, in the presence of links between society and nature in the past, the existing relationships of the “society-nature” system will also help to achieve socio-ecological stability in the present and in the future. Until now, studies of the history of the development of human civilization and the history of nature in the Aral Sea region were in parallel development,

independently of each other, such interrelationships of ecological processes in nature and in society were sometimes ignored.

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