

Information and Digital Technologies in the Field of Ecology, Environmental Protection and Biological Resources During the Pandemic

Narzullaev Olim Khomamatovich



Abstract: *The article presents suggestions and comments on the development of new legislation based on new definitions, improvement of regulatory legal acts and their analysis related to the use of biological resources for scientific purposes and ensuring biological safety. The author analyzes important issues that further develop the theory of environmental law in the field of protection and use of biological resources. On issues related to the use and protection of biological resources, analytical information will be provided on the establishment and effective functioning of scientific institutions, their legal status, biological threats and biological safety. It is argued that biosecurity is an important branch of national security. The role of the environment, the importance of international regulation of the use of genetically modified organisms (GMOs) and their by-products are studied, and a number of environmental legal recommendations related to the COVID-19 pandemic are proposed. The author analyzes digitalization in the field of ecology, As the system of environmental monitoring is an urgent problem that has not yet been solved in the world. Its functionality consists in the accumulation, systematization and analysis of information: about the state of the environment, the causes of changes in the state, the sources and factors of impact, for which the author offers his suggestions.*

Keywords: *Digitalization, System, Monitoring, Information: Environment, Biodiversity, Biological Resources, Genetics, Biosafety, COVID-19 pans.*

I. INTRODUCTION

In today's globalizing world, despite the emergence in the world community of a common perception of the challenges to global international security and the awareness of the need for specific measures by the subjects of international law to respond to these challenges, the imbalance of forces in maintaining international security continues to worsen, which directly threatens the existence of life on the planet. The maintenance of international security has been considered, is being considered and will continue to be considered as a serious factor influencing the development of international relations in the field of biological threats. Therefore, it is important to study use of biological resources for scientific purposes and ensuring biological safety. International law is a

solid Foundation of the international security system. further development of the theory of environmental law in the field of protection and use of biological resources. On issues related to the use and protection of biological resources, analytical information will be provided on the establishment and effective functioning of scientific institutions, their legal status, biological threats and biological safety. This problem is being discussed today in all countries of the world, since the period of a pandemic, the whole world learned about global problems. So the President of Uzbekistan Shavkat Mirziyoyev, in his speech at the 75th session of the UN General Assembly, proposed to adopt a special resolution of the UN General Assembly on declaring the Aral Sea region a zone of environmental innovations and technologies, and the day of the adoption of this important document - to declare the International Day for the Protection and Restoration of Ecological Systems. Environmental pollution and green energy green concepts are a hot topic today. As we can see, waste recycling and reuse are at the top of the trend for many companies and enterprises. However, this is only part of the whole problem. Topics such as air, control and monitoring of the environmental situation are in great demand. The methodological basis is the dialectical principles of cognition of social reality, which are concretized in a whole range of guidelines and special techniques for studying the material covered by the topic. The dialectical method in the research is complemented by the hermeneutic principle of understanding: the whole is understood on the basis of analysis of separate parts, and part is based on the analysis of the whole.

II. DISCUSSION

Environmental protection, rational use of biological resources and ensuring environmental safety are important social and legal issues. The Red Data Book of the International Union for Conservation of Nature includes 73 species and subspecies of animals. Their future is a global concern. According to the Global Environment Facility, "biodiversity is declining, including the extinction of rare genes, species and ecosystems as a threat. If the current rate of biodiversity loss is maintained, half of the species on the planet will become extinct in less than 100 years as a result of human efforts to degrade, pollute and change natural habitats". In this regard, as a means of providing a scientific basis and mechanisms for the protection and rational use of biological resources, it is important to conduct analytical thinking on this topic.

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Insufficient implementation of environmental protection and rational use of natural resources, ensuring environmental sustainability, biological resources, biotechnology, genetic engineering, state cadaster and monitoring of biodiversity, insufficient funding and assessment mechanisms in the field of biodiversity conservation, special attention is paid to finding scientific solutions to problems related to national legislation and law enforcement practice.

Particular attention is paid in the Republic of Uzbekistan to ensuring the protection and rational use of biological resources, strengthening their legal framework, introducing effective mechanisms of the institute, raising their awareness of biodiversity and their active involvement in solving environmental problems as well targeted measures are being taken. It is expedient to analyze the legal categories and concepts, relationships related to the use of biological resources for scientific purposes and the legal provision of biological safety, ie in the normative legal documents and legal literature related to biological resources. Biological resources are a set of "natural plants, including forests, wildlife and other living organisms". We assume that biological resources are "genetic resources", "organisms" and their parts, "ecosystems" that are valuable or potentially useful to humanity. In the field of ecological law, the issues of legal protection and rational use of biological resources, genes and species and organisms that are potentially useful for humanity are studied in a special order. It should be noted that there are different approaches to the emergence of the term "biodiversity" in the context of the topic. Brayan Dj. According to Norton, biodiversity is a concept developed to develop the normative science of nature conservation . According to some scholars, the term was first used by G. Bates in 1892. According to another group of scientists , the term "biodiversity" was first used by W. Rosen in 1968 at the national conference "US Strategy for Biodiversity Relations." Biodiversity "Bio" means life, living, living, "diversity", diversity, diversity, change. The American scientist, an expert in evolutionary ecology and biodiversity conservation, is recognized by Daniel Yanzen, a professor at the University of Pennsylvania, as "a biodiversity gene, a population, a whole set of species, and a cluster of manifestations". Professor Peter Broussard recognizes the predominance of inventory-type deficits and describes them as 'standard'. Biodiversity deficits state that "these species diversity, diversity of communities and habitats, species combine, and genetic diversity within species". Ecology studies issues related to biotic and abiotic factors. The term 'bio-' translates the word as 'life', the suffix '-ic' as 'like' and the word as 'quality'. We can therefore understand that biotic describes living factors. Minerals, metals, rocks, subsoil and other resources "non-living" objects "gifted" by nature are abiotic factors . According to UN Coordinator in Uzbekistan Stefan Priesner, biodiversity refers to the diversity of life on Earth - plants, animals, microorganisms and ecosystems that form the basis of their organisms . Biodiversity refers to the abundance and diversity of species and living things, plants and ecosystems that exist in nature. Biodiversity is considered at three levels: genetic diversity, species diversity, and ecosystem diversity. diversity Genetic diversity reflects the genetic information accumulated in the living matter of a land or a particular region. Species diversity reflects the number of species distributed in a particular area and the frequency

of occurrence. Biodiversity is also called diversity. In view of this, it was ratified by the Resolution of the Oliy Majlis of the Republic of Uzbekistan No. 82-I of May 6, 1995 "On accession of the Republic of Uzbekistan to the Convention on Biological Diversity signed in Rio de Janeiro in 1992". In this regard, the concept of "biological diversity" in the Uzbek part of this decision is incorrectly translated. The techniques and concepts used in legal legislation and legislation should be applied in the same way. To date, the normative and legal documents in the field of protection and rational, efficient use of all biological resources adopted on 10.02.2020 are correctly used as "Biological Diversity". In the process of studying this topic, such methods as historical, system-structural, comparative-legal, logical, clear sociological, complex study of scientific sources, induction and deduction, analysis of statistical data were used. Use of biological resources for scientific purposes Biological resources are the most important resource for human life, they are organic raw materials for the production of food, fuel and various products. Biological resources are part of the raw materials of a large bio-industrial complex within the production system, which includes agro-industrial, forestry, fisheries and other complexes. Each of them is related to the use of one or another type of biological resources. Biological resources are a key element of bio ecological infrastructure within natural and social systems. They play an important role in nature protection and public health. The total biodiversity of the Republic of Uzbekistan is more than 27,000 species. Flora (higher plants, fungi, algae) - more than 11 thousand species, including more than 2000 species of fungi. The fauna includes more than 15,000 species, including 11,000 species of arthropods and 4,000 species of mollusks and bacteria. Use of biological resources for scientific purposes in the Law of the Republic of Uzbekistan dated April 16, 2018 "On Forests" (new edition), the Law of the Republic of Uzbekistan dated September 21, 2016 "On protection and use of flora" (new edition), 2016 The Law of the Republic of Uzbekistan "On Protection and Use of Wildlife" of September 19 (new edition), the Law of the Republic of Uzbekistan "On Veterinary Medicine", creating a favorable environment for further development of cultivation and processing of medicinal plants, increasing the export potential of the industry. In accordance with the requirements of the Resolution of the President of the Republic of Uzbekistan dated April 10, 2020 No PQ-470 "On measures for the protection, cultivation, processing and rational use of available resources of medicinal plants growing in the wild" for the integration of science and production processes that is, medicinal and edible plants Quotas for the accumulation of wild species and technical raw materials of wild plants are approved annually by the State Committee for Ecology and Environmental Protection in agreement with the Academy of Sciences of the Republic of Uzbekistan and are implemented in accordance with this procedure. The powers and duties and functions, rights and obligations of scientific institutions in the use of biological resources for scientific purposes should be specified in the above-mentioned special law (laws in the field of plants, animals, forests). This is because these laws have norms that are used on a scientific basis, as a type of use of biological resources.

However, no attention has been paid to the norms that determine the legal status of scientific institutions that develop these norms. It should be noted that the use of biological resources for research purposes is formed on the basis of the opinion of biologists of research organizations and educational institutions on the state of biological resources.

Thus, the use of wildlife for scientific purposes - the Academy of Sciences of the Republic of Uzbekistan will ensure the proper use of science on a scientific basis, and in this regard will coordinate activities in cooperation with the State Committee for Ecology and Environmental Protection.

Scientific institutions have a special place in the study of the scientific basis of biological resources, ie in the definition of biological norms, the requirements for the rational use and protection of biological resources, biological resources, genetics, microbiology, plant chemistry. In recent years, the protection and rational use of biological resources in the institutes of the Academy of Sciences of the Republic of Uzbekistan, the study of these objects has reached a new level. In particular, the Institute of Plant Chemistry named after academician S.Yu. Yunusov, the Institute of Bioorganic Chemistry named after O. Sodiqov, the Institute of Genetics and Experimental Biology of Plants, the Center for Genomics and Bioinformatics, the Institute of Microbiology, the Institute of Plant and Animal Gene Pool, the Institute of Zoology, Immunology and Human Institute of Genomics and others. Separate areas for scientific use have been established [20]. In this regard, it should be noted that it is difficult to imagine the scale of products and services created by biological resources-biotechnologies, which are created on the basis of scientific achievements. "Humans use about 7,000 plants for food, 90 percent of the world's food is made up of 20 species, of which 3 species (wheat, corn, rice) cover half of the world's food needs. Biological resources are also an important source of raw materials for industry and medicine. The following issues should be highlighted in ensuring the quality and safety of food products in the use of biological resources. Including: human activities related to production and consumption, on the one hand, the increase in demand for natural resources, on the other hand, it has led to a deterioration of the environment; international expert studies on food security show that the complex situation in the world and in some parts of the world is a matter of shows serious anxiety and worry. In particular, food production, which is driven by population growth, is lagging behind demand growth. The 21st century began with witnessing a further rise in human intelligence. Mankind has become accustomed to accepting new achievements and successes in science and technology as the norm . International population growth requires meeting the demand for natural resources and agricultural products, ensuring the rational use of natural resources, achieving development through the introduction of innovative technologies and the formation of a regulatory framework for sustainable development. In this regard, the development of the field of genetics at the international level and the implementation of the issues of environmental protection and rational use of natural resources, environmental safety of the population as a result of genetic engineering have a positive impact on the development of ecology and agriculture. These are seen as key factors in achieving the goals. The achievements of genetic engineering are highly valued by the world community. In addition,

genetic engineering and its achievements will be the main and primary factor in solving almost all the problems facing humanity in the future, which are becoming more and more difficult to solve, such as hunger, dehydration, pollution of the natural environment, man and his existence, we can say without hesitation. Genetic engineering research is achieving high results, especially in solving the food problem and increasing the crop yields that are closely related to this problem. After all, most of the various agricultural products that fill our markets today are derived from varieties and breeds created on the basis of the achievements of genetic engineering. Today, it is not surprising that there are apples and potatoes that are not eaten by various insects (e.g., worms), and tomatoes, cucumbers, and similar melons that can die from rodents but only benefit if consumed by humans. In recent years, many developed countries have been using the achievements of genetic engineering to meet the demand for agricultural products. Genetic engineering expands human knowledge and acquires new aspects in understanding the laws of nature, solving current problems of ecology and medicine, coordinating and harmonizing various fields of industry and agriculture, finding solutions to many environmental and social problems . Scientific research in the field of genetic engineering plays a key role in the development of various vaccines that prevent any disease, drugs that quickly cure diseases, and the emergence of new foods. This requires environmental safety and not violating the laws of nature. U.S. scientists have cloned a drought-resistant variety of rice by modifying the DNA code in the rice kernel, according to media reports . Individuals conducting such research cannot always guarantee that experiments and practices carried out to achieve a particular new result can have both positive and negative consequences. In particular, it is difficult to predict what dangers to humans in the future will be caused by mutations in plant and animal genes that are not in the same category. In this regard, it is important to organize the rational use of natural resources for scientific purposes and to provide a legal mechanism for this issue. In the literature, the intellectual and creative activity of man is carried out in all areas related to living nature, such as medicine, biology, zoology, selection, genetics, physiology, all objects of living being . It has been noted that whatever is a living being, it may be the object of genetic engineering research. Most CIS countries have adopted legislation regulating this area. For example, the Russian Federation has adopted the Law "On State Regulation of Activities in the Field of Genetic Engineering". Switzerland, New Zealand, Ukraine, Moldova, Armenia, Belarus have created a legal framework in the field of genetic engineering for the protection of the environment and the rational use of wildlife and environmental security. There is a need to adopt the Law of the Republic of Uzbekistan "On Genetic Engineering". In our opinion, the proposed law includes the legal concept of genetic engineering, state regulation of genetic engineering, protection and rational use of natural resources, ensuring environmental safety of the population, the boundaries of environmental and ecological safety in the implementation of these activities. and norms, measures to protect the results of genetic engineering.

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Innovative ideas and projects, which are an important tool of social development, serve to expand the range of goods produced, reduce production costs, the introduction of environmentally friendly technologies. The Law of the Republic of Uzbekistan "On Food Quality and Safety" should be amended and supplemented, taking into account the reforms carried out over the past period, advances in science and technology, the achievements of foreign countries in the field of legislation.

The current version of the law, Article 1, states that "the requirements of this law also apply to perfumes, cosmetics and tobacco products." At this point, as a suggestion, remove the norm in the second part of this article. In our opinion, perfumes, cosmetics and tobacco products are another subject of legislation. That is, it is included in the scope of relations regulated by the Law of the Republic of Uzbekistan dated August 26, 2015 "On sanitary and epidemiological well-being of the population". Relations related to "tobacco products" are also regulated by the Law of the Republic of Uzbekistan dated October 5, 2011 "On Restriction of Distribution and Consumption of Alcohol and Tobacco Products". It is also necessary to ban genetically modified products in baby food. It is necessary to make changes and additions to the Law of the Republic of Uzbekistan "On quality and safety of food products". For example, Article 2 of this Law is entitled Basic Concepts, which should include the concept of genetically modified organisms (GMOs). In particular, genetically modified organisms are genotypes that have been modified using artificial genetic engineering techniques, ie living organisms.

It should be noted that the protection of agricultural plants from pests, diseases and weeds, issues related to foreign **"invasive species"** are regulated by a separate area of law, legislation. Invasive alien species are indeed considered 'laborers of conservation biology' and are widely recognized as a threat to 'endemic biodiversity, both on land and at sea, and for agricultural and food security'. In this regard, the Law of the Republic of Uzbekistan dated August 31, 2000 N 16-II "On protection of agricultural plants from pests, diseases and weeds" contains provisions on the prevention of invasion of foreign invasive species and protection against foreign invasive species, Ministry of Agriculture of the Republic of Uzbekistan, Ministry of Water Resources of the Republic of Uzbekistan, State Committee of Forestry of the Republic of Uzbekistan, powers of these bodies in the field of state phytosanitary control, powers of local authorities in the field of plant protection, participation of the Academy of Sciences in plant protection, citizens norms related to the participation of self-governing bodies, non-governmental non-profit organizations and citizens in ensuring the use of pest, disease and weed protection should be reflected. Biological security is an important branch of national security. The development of new biotechnologies using biological resources will allow the development of highly profitable industries in the economies of many countries around the world. The Cartagena Protocol on Biological Safety of the Convention on Biological Diversity on Plant Genetic Resources for Food and Agriculture, which sets out international obligations to ensure access to national genetic resources and biotechnologies, is of great importance. In this regard, the conservation and sustainable use of biodiversity in our country is one of the priorities of environmental policy. This is due to the fact that natural ecosystems and their use, ie livestock, irrigated

agriculture, forestry, fisheries, recreation, tourism, etc., are directly related to biodiversity. The Cartagena Protocol on Biosafety is an international agreement on the procedure for measures for the safe movement, processing and use of modern biotechnology products across the state border. "To date, 171 of the 198 UN member states and the European Union have acceded to this Protocol as an international organization".

Adoption of the Protocol is an important step for the international regulation of the use of genetically modified organisms (GMOs) and their by-products, taking into account the tasks of environmental protection. At the same time, it allows minimizing potential risks to the environment and human health. Therefore, it should be noted that the use of modern biotechnology products helps to eliminate potential risks and expand the export range of local products.

It should be noted that the development of biotechnology has significantly changed traditional breeding, during which the genotype of plant and animal breeds changes directly under artificial conditions. Biotechnology allows you to interfere with the genetic apparatus and purposefully modify living organisms, choosing the best from among the artificially created genotypes. Moreover, biotechnology has indeed revealed and demonstrated the special importance of genetic resources, which are a public treasure. Therefore, the state must ensure the conservation of national genetic resources, including cultural biological resources. It is necessary to develop and adopt a national program of national cultural biological resources that will ensure the collection, processing, storage and use of scientific advances in biotechnology, the rapid development of the global bioindustry market using cultural biological resources, as well as international and national legislation. In this regard, it is stated in paragraph 11 of the "Road Map" for the implementation of the concept of environmental protection until 2030, approved by the Decree of the President of the Republic of Uzbekistan dated October 30, 2019 No PF-5863. A draft law "On Biosafety" will be developed. This is stated in the draft program for the development of draft laws in 2020 and their submission to the Legislative Chamber of the OliyMajlis of the Republic of Uzbekistan. The draft law provides for: defining the powers of government agencies in the field of biological safety; strengthening biosafety; control over the import and distribution of foreign species that may cause damage to natural species and agricultural crops; control over the production, preparation, import, sale and distribution of living modified organisms and genetically modified organisms. This law covers the basic concepts related to biological resources, the powers of scientific institutions in matters related to biological resources, the basic principles of public administration, the protection and rational use of biological resources, the powers of non-governmental and non-profit bodies, the functions of local government, fauna and flora facilities, biologically active additives in matters related to food quality and safety, the powers of health authorities in this regard should be further expanded, issues related to the safety of agricultural products should be reflected.

In developing the law, it is expedient for foreign countries to use the experience and legislation of the People's Republic of China, the United States, the Russian Federation, Japan, Korea, and the experience of the Republic of Belarus. Biological resources - COVID-19 pandemic, sudden cessation of daily life, states closing their borders one by one, tightening security measures The COVID-19 coronavirus pandemic has begun to have a positive impact on the environment: China, America and Europe have clean air (the atmosphere is very large emits waste, transport and industry are developed); The muddy canals of Venice were also cleared.

Researches have shown that the virus is recorded as a carrier in almost all diseases in wild animals that are considered wildlife objects (COVID-19 is also transmitted from wild animals). New vaccines are also being tested in animals. Including wild animal bats, rabbits and snakes, and others. SARS, Ebola, swine and bird flu and Covid-19, SARS-CoV-2. MERS viruses (MERS) viruses occur due to the consumption of wild animal products or close contact with animals. In addition to viruses that exist in nature, there are viruses that are created in the laboratory, which is more problematic. Here it is necessary to distinguish one from the other, because it is possible to create new ones by conducting scientific research on a natural resource entrusted to nature. However, the processing of an unnatural (laboratory) created resource on a scientific basis is a very complex matter i.e. if the gene is changed. Tariq Yazarevich, a spokesman for the World Health Organization, noted that the main mode of transmission of coronavirus is "human-to-human transmission," but that patients with coronavirus should be restricted from contact with pets. "All the available evidence shows that this virus is of animal origin. The virus was not created, and no laboratory experiments were performed with it. Most likely its ecological source is bats. However, it is important to determine how the virus is transmitted to humans. We should all focus on facts, not theory", Fadela Chaib said at a briefing in Geneva. Now, as a result of a mutation in the coronavirus, it is passing from person to person. Leading scientists in the fields of medicine, genetics (safe genetic code), biochemistry, immunology and physiology are leading the development of the coronavirus vaccine. We should not be discouraged by the coronavirus and see its positive aspects, one of the factors that makes us happy is the changes that are taking place in this ecology. Perhaps rejoicing that the climate has improved because of the coronavirus is not so true. However, some facts need to be mentioned. First, the great changes in the way of life of mankind have made it possible to determine the extent of human influence on nature. We had to change our attitude towards the environment. Second, in the field of water resources protection, water quality in water basins has significantly improved. Third, in the field of atmospheric air protection, the amount of air pollution has decreased due to the suspension of production facilities, limited number of flights, reduced traffic. "China is one of the largest emitters of CO₂ into the atmosphere, with its share of CO₂ reduced by 25%". Millions of tons of waste have been released into the atmosphere. Fourth, production waste is not being generated as much as before. Instead of suggestions and comments, medical-related waste (too many gauze masks, rubber gloves) due to the COVID-19 pandemic is being removed. The relationship in this regard is not subject to regulation by the

Resolution of the State Committee for Ecology and Environmental Protection dated October 17, 2019 No 12 "On approval of the Instruction on the design and operation of solid waste landfills." In particular, solid waste is waste generated as a result of the life and activities of individuals, as well as the activities of legal entities (food, glass, rubber, solid fuel stoves and boilers).

Waste from the above-mentioned treatment and prevention facilities (too many gauze masks, rubber gloves, protective equipment), biological waste can never be mixed with household waste. Special standards should be developed for the separation of biological waste, waste from treatment and prevention facilities, harmful substances from household waste and their disposal, as well as the implementation of advocacy measures in this regard.

III. CONCLUSION

Thus, the above-mentioned problems of ensuring global international security, objectively facing the international community today, show that the international legal paradigm of global security is changing. If earlier, when talking about global security, only military and political security was meant, today it is also food security, climate security, biological, environmental and space security, energy security, and information security. At the same time, it should be noted that all these subsystems of global security are interconnected and must be supported on the basis of international law. Legal liability for violation of regulations in the field of protection and use of biological resources, with its main purpose and principles, does not differ from liability for violation of other legislation, but has certain specific features. These features include the recovery of damage to biological resources on a tax basis and the application of special penalties in the field of biological resources, ie the suspension, termination and revocation of the right to use biological resources. Liability for violations of the legislation in the field of biological resources has three purposes: first, the application of sanctions against those who violate the rules of use and protection of biological resources (objects of flora and fauna); second, compensation for damage to biological resources; and third, the prevention of violations in the field of protection and use of biological resources.

Suggestions and recommendations related to the improvement of the legislation of the Republic of Uzbekistan. In connection with the adoption of new laws "On protection and use of wildlife" and "On protection and use of flora" Article 21 of the Law of the Republic of Uzbekistan "On protection of nature", ie "Use of wildlife" It is necessary to adapt the issues related to the "conditions" to the requirements of the new law. The Law of the Republic of Uzbekistan "On protection and use of wildlife" should specify what are the basic principles of public administration in the field of protection and use of wildlife in the field of protection and use of wildlife. It is expedient to supplement the Code of the Republic of Uzbekistan on Administrative Liability with Article 941, which establishes the norms "Violation of the norms of use of biological resources." Unfortunately, no separate administrative sanctions have been established for violating the norms of use of bioresources.

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From the point of view of the new legislation adopted in our country and the established practice, it is expedient to add Article 47 of the Law of the Republic of Uzbekistan "On Forests" with the following second part: "Citizens should observe fire safety in forests and take measures to extinguish fires. they must not cut down bushes, cut down, damage forest crops, pollute forests, disturb wildlife habitats, grazing areas and migration routes, as well as comply with other requirements established by forest legislation."

It is expedient to supplement the Criminal Code of the Republic of Uzbekistan with Article 2021, which establishes the norms "Cruel treatment of animals". In order to improve the work in the field of protection and use of biological resources, it is necessary to develop the following normative and legal document. Forest Code, Water Code, Law on Beekeeping, Law on Nature Gardens, Law on Genetic Engineering, Law on Protection and Rational Use of Fish Resources, Law on Hunting and Hunting, Transboundary Law "On Waters", "On the Protection of Biological Resources and Fisheries in Water", "On the Protection of Soil", "Regulations on Improving the Efficiency of Hunting and Breeding of Poultry", "On the Establishment of Nurseries for Medicinal Plants" etc. are included. Digitalization of the ecological system and biological resources is an opportunity to more effectively ensure our constitutional rights to environmental well – being, openness and accessibility of environmental information, as well as transparency of control and supervision activities. The transition of environmental and biological safety to a digital format allows you to properly monitor and evaluate how environmental control is a system of state and public measures aimed at preventing, detecting and suppressing violations of legislation in the field of environmental protection and rational use of natural resources, and improving the effectiveness of environmental protection activities. therefore, the application of the digital format in this area is a priority.

REFERENCES:

1. How important is biodiversity for the future of Uzbekistan? <http://sgp.uz/uz/gef-thematics/biodiversity> Bulletin of the Supreme Council of the Republic of Uzbekistan, 1993, No. 1, Article 38
2. "Genetic resources" - genetically valuable genetic material. Convention on Biological Diversity, Rio de Janeiro, June 5, 1992. <http://www.drze.de>
3. An organism (Lat. - I organize, report the appearance of the body) - a living being that differs from inanimate matter in a number of features. Organism. SES. - M.:Izd. SE. —P.946.
4. Ecological (Ecosystem) - organisms, including human habitat. SES. - M.:Izd. SE. — P.946.
5. Lebedeva N.V, Drozdov N.N., Biodiversity and methods for its assessment. —M.: MGU, 1999— 94 p.
6. Bryan G., Norton. Biodiversity: Its Meaning and Value. —p. 368.
7. Bates G.U. Naturalists on the Amazon River: a story about tropical pictures of nature, about nravox animals, about the lives of Brazilians and Indians and about the adventures of the author in the time of the ego odinnadtsatiletnixstranstviy. - M.: Geografiz, 1958. — P. 430.
8. Adrianov A. V. Contemporary problems of the study of marine biological diversity // Biology of the sea. —T. 2004. — P. 19
9. Tor-Björn Larsson (2001). [Biodiversity evaluation tools for European forests](http://www.blackwell-sydney.com/9780632061781). Wiley-Blackwell. p. 178. ISBN 978-87-16-16434-6. Retrieved 28 June 2011. <https://www.youtube.com/watch?v=b1b3HgWfO3Q>.
10. Fleming, A.J., Wood, D.M, Smith, M. A., Hallwachs, W., and Janzen, D. H. 2018. Revision of the Mesoamerican species of *Calolydella* Townsend (Diptera: Tachinidae) and descriptions of twenty-three new species reared from caterpillars in Area de

- Conservación Guanacaste, northwestern Costa Rica. Biodiversity Data Journal 5.
11. Takacs, 1996, p.46
 12. UN Resident Coordinator in Uzbekistan Stefan Priesner. Celebration of the Biological Diversity Day. <https://www.uz.undp.org>
 13. Resolution of the Oliy Majlis of the Republic of Uzbekistan dated May 6, 1995 Resolution No. 82-I "On accession of the Republic of Uzbekistan to the Convention on Biological Diversity, signed in Rio de Janeiro in 1992". Bulletin of the OliyMajlis of the Republic of Uzbekistan, 1995, No. 6, Article 130
 14. Resolution of the President of the Republic of Uzbekistan No. PP-470 of April 10, 2020 "On measures for the protection, cultivation, processing and rational use of available resources of wild medicinal plants".
 15. 17. 750 species of more than 4.3 thousand plants belonging to the local flora are medicinal, of which 112 species are registered for use in scientific medicine, of which 70 species are actively used in the pharmaceutical industry. National Database of Legislation, April 11, 2020, No. 07/20/4670/0414.
 16. Collection of Legislation of the Republic of Uzbekistan, October 27, 2014, No. 43, Article 530
 17. The Law of the Republic of Uzbekistan "On protection and use of flora" (new edition), the Law "On protection and use of wildlife" (new edition).
 18. Etymological modern encyclopedia of medicinal plants growing in Uzbekistan /A.Usankhodjaev et al. —T., «Yangi asr avlodi», 2018.- 544 p.
 19. Imomov N.F. Legal basis of nanotechnology. —T.: TDYuU, 2015. - B.3.
 20. Collection of Legislation of the Republic of Uzbekistan, September 2, 2015, No. 34, Article 451. Bulletin of the Chambers of the OliyMajlis of the Republic of Uzbekistan, 2011, No. 10, Article 272.

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