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Legal support of environmental protection in the Arctic region

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Abstract The paper discusses the urgent problem of legal regulation of the Arctic territory. Developing the Arctic zone being under Russian jurisdiction has an considerable significance for effective and sustainable management of natural resources. The most important provisions of the Russian legislation, forming the scientifically-based approaches to economic activities in the Arctic region, are considered. The paper focuses on the key aspects of the legal concepts that are aimed at tackling the acute problems arising in the process of developing the Arctic coastal territories. The authors give attention to providing methods of comprehensive use of all Arctic resources and developing effective legal mechanisms to achieve the formulated economic objectives, with simultaneous creation of the legal basis for preserving the unique natural environment. So it is suggested that legal acts be developed to cover the most topical provisions of the economic activity processes in the afore-mentioned region. This objective can be reached relying on the goals of the state policy of the Russian Federation. Intensifying economic activities call for a more detailed legal regulation of the use of the northern territories, so it seems reasonable to adopt federal legal acts which would consider the specifics of the environment of the Arctic.

1. Introduction

Today the Arctic zone captures a lot of attention due to the fact that this region accumulates enormous natural wealth, which makes many countries interested in using the natural resources of the Arctic territories to meet their economic needs.

The Russian Federation, being the largest country, possesses a vast territory of the above region. Therefore, the problems of efficient and rational economic development of the natural resources of the Arctic directly affect further evolution of Russia over the next few decades.

Very large reserves of hydrocarbon raw materials are concentrated in the northern territories. Now their mining is virtually in infancy, since the harsh natural conditions require massive investment.

Economic trends, observed in the process of human activity in the Arctic, call for a sufficient level of legal support on the part of Russia due to the fact that without clear legal regulation of various aspects of economic activities, society can face acute problems about preserving the fragile environment of the Arctic region.

These issues are important, since the use of the Arctic territories with the best economic effect is largely dependent on conserving the unique ecological systems of the north. Therefore, this country cannot ignore the problems of maintaining the balance in the environmental sphere in case of further and more extensive use of natural resources. Given that according to the state policy of the Russian Federation implemented in the early 21st century, the top priority issues are those related to extracting



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and using oil and gas reserves, which are usually located on the shelves of the northern seas, legal acts governing economic activities must be adopted in close consideration of the environmental safety of the citizens of Russia permanently living in the territories of the Arctic zone.

Moreover, the habitats of many rare species listed in the Red Book are located in the zone of industrial development of the Arctic. This fact directly affects the techniques and methods of economic activities specific for the Arctic coast and water areas of the northern seas at the present moment. The state cannot ignore the issues concerning the unique flora and fauna of the Arctic and its preservation, since our country is an active participant in the international environmental programs according to the conventions that have been ratified by the Russian Federation.

Taking into consideration all the above, we believe that creating an effective mechanism for legal regulation of environmental protection processes in the Arctic region is increasingly important, which is why system approaches should be applied in developing and adopting specific legal acts to cover various aspects of economic activities of different economic entities in a comprehensive way. They should also be harmonized with the issues of ensuring sustainable management of natural resources over vast territories of the Russian Federation's North. Any delay in the law-making processes in our country concerning the use of the Arctic territories and their simultaneous coupling with the ecological state of the environment in such a large territory of Russia, can lead to negative results, which will dramatically reduce the positive economic effects achieved in the use of the richest resources of the Arctic region.

It seems that legal support of the Arctic development lies in the plane of elaborating the regulatory provisions in more detail, so that various aspects of environmental protection of specific territories of the Arctic region can be addressed directly.

2. Methodology

When this subject was studied, a whole lot of legal acts were analyzed. These concern legal regulation of social relations which are establishing in the course of the expanding economic impact that human society makes on the northern regions.

It should be noted that the issues of environmental safety are recognized as exceptionally important in our state. This statement is actually reflected in the text of the Constitution of the Russian Federation. The Constitution explicitly states that the citizens of the country have the right to favorable environment (Article 42), and that everyone must preserve nature and the environment, and take care of the natural resources (Article 58) [1].

Public relations, developing in the field of natural resource management and ecological system maintenance at the level necessary and comfortable for human living, are regulated on the basis of the Federal Law "On Environmental Protection" dated 01.01.2002 N 7-FZ [2]. Another fundamental document has been adopted to stipulate the main directions of the state policy in the field of long term environmental protection. It is called "The fundamentals of the state policy in the field of environmental development of the Russian Federation for the period until 2030" (approved by the President of the Russian Federation 30.04.2012) [3]. The concept contained in this legal act covers the most important aspects of the country's environmental development and combines the interests of sustainable socioeconomic growth of the national economy as well as the issues of environmental safety and preservation of the environment in a condition most favorable to the living of the multinational Russian people.

The federal legal acts stipulate some fundamental approaches the state policy of the Russian Federation relies on in terms of the most rational use and protection of the natural habitat. They include:

- granting the rights of citizens to a healthy environment, - creating optimal living conditions for people on the territory of Russia, - establishing economic, social, and ecological ties between man, society, and government bodies to form a sustainable system of environmental safety, - forming the most rational methods of the best economic and environmental management as a key factor that ensures long-term sustainable use of natural resources for the progressive development of the Russian society, - protecting unique natural complexes to preserve flora and fauna, and insure the diversity of wildlife in the Russian Federation, - strict legal liability in various forms for law violations committed by

government bodies, local governments, officials and legal entities in the field of natural resource management, - priority of environmental measures in planning further development of the territory aimed at stimulating economic activities, - prohibiting economic and other activities, whose consequences are unpredictable for the environment, as well as projects that may lead to the degradation of natural ecological systems, change and (or) destruction of the genetic pool of plants, animals and other organisms, depletion of natural resources and other negative changes in the environment, - direct involvement of citizens and public associations in decision-making related to the formation of favorable environment - full compensation for the damage caused to the environment; - improving the forms of international cooperation of the Russian Federation when developing global measures for environmental protection and environmental safety [4].

When the problems discussed in the present work are analyzed, it should be noted that the environmental issues concerning the Arctic zone are legally regulated by Presidential Decrees and Government Resolutions, which are by-laws determining the main directions of the state policy in this important sphere. In addition, a significant number of special federal programs are being developed in the Russian Federation at present, which, to some point, affect the development of the Northern Territories.

Legal acts adopted by individual subjects of the Russian Federation can become an important tool for tackling the environmental problems in the Arctic region, since, according to the Constitution, this sphere is the subject of joint jurisdiction of the federation and each particular region.

In our opinion, the interconnected combination of these legal levers will make it possible to ensure scientific integrity in addressing the problems of the Arctic. At the same time, there is a fact-based danger of non-uniformity or even imbalance in the development level of individual areas of the Arctic region due to the lack of a comprehensive federal law regulating the most important areas of activity of the state in this area.

3. Results and Discussion

The prime objectives of the Russian Federation's policy concerning environmental conservation in the Arctic zone are as follows. First of all, ensuring that the Russian society's long-term goals are met in terms of environmental development and creation of fairly effective management complexes to maintain the environment at the level necessary for safe living of the population. The system of public administration must be formed consistently to cover the most important aspects of environmental policy and implement them in specific spheres of activity. Comprehensive legal acts must be developed to regulate the main issues concerning environmentally balanced decisions in the field of natural resource management.

Furthermore, there is an objective need for preventing substantial impact on the environment, which can cause degradation of unique ecological systems. In line with this problem are the issues related to industrial waste disposal intended to prevent contamination of natural complexes with hazardous chemical and radioactive materials, which are consequential elements of human economic activities on the earth surface. At the same time, quite a number of questions arise due to the need for preserving flora and fauna, as well as the natural complexes which play a major role in ensuring the diversity of ecological systems surrounding man.

State environmental monitoring provided consistently to predict the results of the negative impact of economic activities on the environment seems to be important. It is essential that scientific information systems should be set up to acquire, in due time, any relevant information on the state of the environment in given regions in a certain period of time. In order to form a sufficiently high ecological culture of the population, close attention should be turned to the development of various forms of education of citizens. Thus will prevent a significant number of law violations in the field of natural resource management.

Legal acts governing relations in the field of careful use of natural resources should envisage creation of a multi-tier state management system that could effectively tackle the problems concerning the use of the environment. So criteria must be developed to measure the effectiveness of government bodies in

the field of environmental protection. To deal with this problem, it is necessary to delimit the subjects of authority of the government bodies in the field of environmental safety.

At the same time, the issues of legal support of natural resource management in the regions of the Russian Federation are becoming urgent in the early 21st century. The state is currently paying a lot of attention to the objectives of priority economic development of the Arctic zone and the problems related to maintaining ecological balance within the vast territories in the North of the Russian Federation.

Special federal programs are implemented to solve these problems. They are carried out by the state represented by the government bodies of the subjects of the Russian Federation. It should be noted that economic activities in the Arctic region of our country are based on the following main principles. Maximum efficiency achieved when mineral resources are extracted from particular deposits reduces the number of newly developed areas of specific regions, and thereby reduces the potential impact of man on the environment when mineral resources are mined, which favorably affects the preservation of unique natural complexes in the North of Russia. Moreover, as for economic operations, the state tends to severely limit the negative impact of various forms of natural resource management on the Arctic environment and, therefore, priority attention should be paid to the development of efficient environmental technologies in the northern territories, which can be based on objectively defined property measures preventing detrimental effect on the natural complexes.

Dealing with the objectives of natural resource management in the Arctic region, it is essential that the natural conditions should be preserved to their utmost for the development of the traditional forms of activity of small indigenous peoples of the North, Siberia and the Far East living in the Arctic zone of the Russian Federation [13].

At the same time, economic activity in the Arctic requires a widespread introduction of innovative technologies to be created by scientific organizations in Russia, since our country has a specific geographical position and occupies a large area of the northern zone of the Earth. One of the areas where the northern wealth can be used is extracting hydrocarbon resources of the shelves and lands of the Arctic zone of the Russian Federation. It involves developing and implementing modern means and technologies for extracting resources, ensuring that the extraction processes with result in cheap oil and gas, as well as creating the conditions necessary for the workers of large industrial and transport complexes to live and work in the extreme environment.

The need for developing energy complexes in the North of the Russian Federation objectively calls for creation of a relevant extensive infrastructure, which will make it possible to quickly and efficiently deliver the extracted hydrocarbon raw materials to the regions of our country remote from the Arctic coast, as well as to foreign countries, especially Europe, suffering from a serious lack of the above resources. For these purposes, the government creates deep-water ports in the coastal areas of the Arctic zone, where the resources extracted can be loaded onto the tanker fleet of the Russian Federation and those of foreign states. This circumstance requires strong legal support of the processes related to transporting oil and gas from the northern regions of our country to remote territories. At the same time, a whole complex of legal acts must be developed to regulate the issues of safe development of specific gas and oil deposits, as well as to ensure the environmentally-friendly transportation process of very large amounts of hydrocarbon resources carried along the sea areas of the Arctic Ocean and the Arctic seas.

An important aspect in the development of the Arctic region is to form a significant number of networks of specially protected natural complexes and water areas located in the seas of the polar belt of the Russian Federation. If this problem is solved, it can significantly improve the condition of many unique natural landscapes in the Arctic zone and provide an integrated approach to combining economic development of natural resources and preserving the fragile ecological balance in the northern territories of our country. Selecting a network of unique land plots opens up an opportunity to dramatically reduce the impact of economic processes related to extracting and processing mineral resources of the Arctic coast and continental shelf of the Arctic Ocean on the natural complexes, which largely precondition the viability of the flora and fauna in the Arctic region. It seems reasonable that any economic activities should be banned completely in these territorial units, and, thus, the unique properties of the natural

complexes will be preserved in the regions of Russia's North. This approach will ensure a dialectic relationship between the processes of economic use of the mineral wealth of the Arctic territories and the implementation of environmental programs both in individual subjects of the Russian Federation and throughout the entire Arctic subregion, which extends to very large areas under the jurisdiction of our country [12].

A considerable impact on the rational combination of economic and environmental approaches in the Arctic zone in the 21st century can be achieved if some territorial environmental programs are adopted and developed by the regions of northern Russia. I.e. there is urgent need to adopt legal acts in some regions of the northern part of the country that would regulate the environmental safety issues affecting the population living in these territories and, at the same time, to create conditions for rapid growth of economic activities. It is no secret that today many regional programs set up in various regions of the Russian Federation in the Arctic zone are quite lopsided, which directly influences further progressive changes in all aspects of living of the population.

Acknowledging this fact, we can assume that the lack of integrity in curing environmental and economic problems related to the development of specific northern regions of our country will not allow us to further ensure a steady increase in the standard of living of the country's citizens permanently dwelling in the Arctic zone. This problem can be addressed only if the legislative and executive government bodies of the subjects of the Russian Federation located in the north of the country fully apply extensive environmental research and development to protect natural complexes located in a given region and at the same time adopt laws and legal acts related to this aspect of living of the population [10]. In addition, regional government bodies should give special attention to the legal aspects regulating economic activities and take into account mandatory introduction of advanced resource-saving and waste-free production technologies. Thus it will be possible to neutralize the harmful effects of the gradually expanding process of using non-renewable resources in the future development of the territorial units located there and prevent environmental pollution caused by economic activities of various enterprises and organizations [5].

It should be noted that, according to the Russian legislation, municipal divisions have the authority to regulate the use of natural resources on their territory. They have the right to stop enterprises and organizations from carrying out economic activities in specific areas, if there is a real threat to the environment. Therefore, any irrational use of natural resources within specific municipal divisions may be suspended at the request of the local government bodies directly representing the everyday interests of the citizens of these municipal divisions. In case of acute conflict situations concerning environmental safety and health threats to the population of municipal territories, local government bodies can, according to the current legislation, initiate referendums, whose results may become a legal obstacle preventing any enterprises or organizations from being involved in economic activities which have significant adverse effects on the environmental safety in a certain area of the region. Therefore, if these legal levers are used competently in resolving controversial situations in the field of natural resource management, it will be possible to set up prerequisites for applying scientifically based techniques and methods for sustainable environmental development and creating favorable conditions for preserving the unique landscape and climate zones in the region.

A significant factor in solving the problems of legal support regulating the use of the northern territories of Russia is to expand consistently the legal framework covering the issues related to the living activities of the small indigenous peoples dwelling in the Far North, Siberia and the Far East. At a first glance, this aspect of the northern regions' development does not have an immense significance, since the number of national ethnic groups is very small compared to the entire population of our country. However, the Constitution of the Russian Federation includes provisions guaranteeing the legal basis for preserving the unique nature of the North as an essential element of further living of various ethnic groups in these areas of Russia, which is directly related to the right of every citizen of our country to favorable environment. The fact that the Northern ethnic groups represent an objective minority cannot prevent us from confronting the problems of preserving the natural complexes in a condition that

ensures normal functioning of the representatives of small indigenous communities involved in the traditional economic activities, largely associated with the unique natural environment [6].

The legislative bodies of the Russian Federation and individual subjects of the country cannot ignore the specific features of culture and living of these small ethnic groups. So a sufficiently large number of legal acts must be further developed and adopted to cover the most important aspects of living of the national minorities in the Arctic zone. In this context, the legislative bodies have ample opportunity to adopt laws both at the federal level, and at the regional level. Moreover, the executive bodies must take into account the interests of the northern peoples when developing a lot of by-laws and legal acts that would take into account the substantial diversity of the activities related to the various aspects of the use of the nature of the Arctic. It is no secret that all the ethnic groups of the North are very different in terms of their national and cultural features. This circumstance reflects the historical, territorial, and climatic differences, manifested in the living of the representatives of the small peoples of the Far North, Siberia and the Far East. Therefore, the Decrees of the Government of the Russian Federation, as well as the rules, regulations, instructions, and orders adopted by the Federal Ministries and Services, and similar structures of the executive bodies in the subjects of the RF must contain clearly and explicitly formulated legal provisions regulating all important aspects of the economic activities of any enterprises and organizations which affect the living of the representatives of indigenous nationalities in the regions of the Arctic zone [11].

The legal framework, which establishes the main approaches to the use of the resources of the Russian Federation's North, is still far from being comprehensive and ubiquitous. It significantly reduces the effectiveness of legal regulation of the territory development in the Arctic region. So, the problem of handling the issues of natural resource management in close connection with the problems of economic development of the Arctic zone is becoming more and more acute.

Given the prospects for expanding economic activities in the Northern territories of Russia, it is necessary to develop and adopt a federal law which would systematically regulate both the issues of economic development of this region and the problems of preserving the unique natural environment and living conditions of the population. It is also necessary to introduce changes to the legal acts, which currently provide for different aspects of use of natural complexes so that the northern region of the country could develop in the best way possible relying on the scientifically-based methods. In order to create a detailed system of legal acts covering all the essential aspects of the activities of organizations, institutions and population in the Arctic zone, it is necessary to adopt strict state standards that establish clear criteria for assessing the acceptable human intervention in environmental processes, which is very important for maintaining the environmental balance in the vast territories of the Russian North.

Some guidelines should be objectively formulated at the legislative level to ensure fast development of advanced technological methods which can be applied in the northern territories [7]. At the same time, it is necessary to ensure strict compliance with all legal requirements regulating relations between various entities engaged in economic, environmental and scientific activities in the Russian Arctic. For this purpose, effective measures of material nature can be introduced into the regulatory framework, so that bigger administrative and civil liability can be imposed on legal entities and individuals.

All the above measures of legal nature will create favorable conditions for comprehensive and harmonious use of the Arctic region and achieving environmental safety of the living conditions of the population in these areas. They will also provide the necessary opportunities for the subsequent expansion of various types of economic activities in these rich territories of the Russian Federation.

References

- [1] The Constitution of the Russian Federation (ratified by popular vote on 12.12.1993) Available from: http://www.consultant.ru/document/cons_doc_LAW_28399/ [Accessed: 18.02.2019]
- [2] The Federal Law "On environment protection" dated 10.01.2002 N 7-FZ Available from: http://www.consultant.ru/document/cons_doc_LAW_34823/ [Accessed: 02.02.2019]
- [3] The fundamentals of state policy in the field of environmental development of the Russian Federation for the period until 2030" (approved by the RF President on 30.04.2012) Available from:

http://www.consultant.ru/document/cons_doc_LAW the reference legal system "Consultant Plus" [Accessed: 01.02.2019]

[4] The strategy of developing the Arctic zone of the Russian Federation and providing national security for the period until 2020 (approved by the RF President on 20.02.2013) the document presented by the reference legal system "Consultant Plus" Available from: http://www.consultant.ru/document/cons_doc_LAW [Accessed:18.02.2019]

[5] Gladun E F 2015 Environmental protection in the Arctic during the period of industrial development: analyzing the legislation of the Arctic states. *The Bulletin of Tumen State University. Socioeconomic and legal research studies* **13**(3) p 132

[6] Ignatieva I A 2013 Sustainable development of the Arctic zone of the Russian Federation: problems of legal support. *Environmental legislation* **3** p 21

[7] Nikishin V V 2017 Environmental safety in the Russian Arctic: system approach to legal regulation. *Russian law journal* **4**(115) pp 184-190

[8] Kondrashev A A *et al* 2018 Legal regime of the Arctic territories of the Russian Federation and the granting of special rights to indigenous (aboriginal) peoples *Nauch. Yearbook of the Institute of philosophy and law Ural. otd-nia Grew. Acad. sciences'* **18**(1) pp 59-78 doi10.17506 / ryipl.2016.18.1.5978

[9] Avkhadeev B P 2018 *International legal regulation of cooperation of the Russian Federation with neighboring States in the Arctic on the basis of bilateral treaties* DOI: 10.12737/21230

[10] Skufina T P 2016 Regulatory and legal regulation of the development of the Russian North and the Arctic *Fundamental research* -**2** pp 424-428 doi 10.17513 / fr.40761

[11] Korchak E A 2017 State policy in the sphere of living standards in the regions of the North and the Arctic of the Russian Federation *All-Russian economic journal* **47**(10) doi <http://dx.doi.org/10.30680/ECO0131-7652-2017-10-110-123>

[12] Didenko N, Rudenko D and Skripnuk D 2015 Environmental security issues in the Russian Arctic Conf. Proc. of Int. Mult. Sc. GeoConf. *Surveying Geology and Mining Ecology Management* SGEM **3** pp 267-274

[13] Agarkov S, Motina T and Matviishin D The environmental impact caused by developing energy resources in the Arctic region *IOP Conference Series: Earth and Environmental Science* **180**(1) 012007