

# Ecological and legal support for the sustainable development of the Russian Federation

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**Abstract**—The article is devoted to the analysis of the evolution of ideas of sustainable development in the international and Russian legal doctrine and practice. The aim of the work was to study the process of legal consolidation of the concept of sustainable development in the program documents of the United Nations and strategic legal acts of the Russian state. The authors note that the concept of sustainable development is a reflection of a new type of world outlook on ways to ensure the progressive development of humanity in the context of global changes in its habitat - depletion of natural resources, degradation of ecosystems, and climate change. Arguing about sustainable development as a long-term and safe development of civilization, the authors draw attention to the fact that the solution of this problem is impossible without ensuring environmental safety. Moreover, in their opinion, the problem of ensuring environmental safety is the most important problem in the context of achieving socio-natural sustainability in general. At the same time, the very understanding of environmental safety and its provision (including legal) can be transformed from simple actions to protect the environment to complex greening, i.e. ecological reorientation of all human activities. It is in this aspect that both the international community in general and the Russian Federation in particular, are experiencing serious difficulties. Analysis of the current Russian legislation forced the authors to conclude that despite the increase in the total number of environmental and legal norms, their content is far from fully capable of ensuring the environmental safety of the country and, accordingly, the environmental legal mechanism for the transition of Russia to sustainable development. For the Russian environmental legislation is characterized by the presence of technical and legal problems reducing its regulatory and protective potential. Thus, the environmental and legal framework for sustainable development remains an important and unresolved problem of the Russian state.

**Keywords**—sustainable development, environmental safety, legislation, environmental threat, national security, socio-economic development, environment, environmental-legal mechanism of transition to sustainable development, «green» technology.

## I. INTRODUCTION

Human has always sought to make his existence on the planet as comfortable as possible. To this end, he actively used the resource of the surrounding nature, increased industrial production, trying to satisfy ever-increasing material needs, and forgetting that the biosphere has limits of self-regulation, self-restoration, above which it can degrade irreversibly. Over time, the leading role of anthropogenic processes in the series of all biosphere changes became apparent. Another academician V.I. Vernadsky warned about this. He asserted that with the emergence of man and the development of his production activity, the role of the main geological factor of all changes occurring on the Earth's surface began to shift to humanity [1]. The entire history of the relationship between man and nature in the 20th century only confirmed the idea of the great scientist.

However, by changing the environment for his own needs, a person created many risks for himself. At present, as an indisputable fact, it should be recognized that the intensive industrial development and the increasing economic power of modern humanity, contrary to expectations, has become a destructive force threatening civilization. The basis of our existence - the natural environment has largely lost its ability to heal itself, and accordingly - has lost the ability to support civilizational development. In recent decades, we have witnessed the collision of human civilization with nature. This collision takes various forms and to varying degrees affects each of the states. The change in the natural landscape, the problem of hunger, the intensification of the struggle for energy, an unprecedented stratification into the rich and the poor - this

is the result of a deep ecological crisis in which our planet plunged.

Awareness of the global environmental threat, as well as an understanding of the fact that it is impossible to cope with this threat in the framework of environmental activities carried out in individual countries, prompted the international community to revise the previously dominant development paradigms. What was needed was an idea that could lead a modern civilization out of a systemic crisis. One of these ideas was the idea of sustainable development, based on understanding the relationship between global environmental problems and socio-economic development [2].

Sustainable development is a concept reflecting a new type of worldview about ways to ensure the progressive development of humanity, ways of its survival on the planet. As a set of views, ideological attitudes and principles of activity, the concept of sustainable development was the reaction of a certain part of the world community to dramatic changes in the human environment: depletion of natural resources, pollution of ecosystems, climate change, i.e. changes that threaten humanity. Thus, sustainable development a priori implies safe development. The implementation of this concept, and, therefore, ensuring sustainable (safe) development implies a wide range of multidirectional measures, including legal. The need for the latter is explained by the fact that any activity aimed at ensuring sustainable development implies strict regulation due to the very nature of this idea, based on respect for the natural environment that surrounds people.

Due to the fact that sustainable development can be fully implemented only at the global level, since the Earth's biosphere is one and violation of the requirements of sustainable development in one place is fully capable of causing global consequences [3], then legal mechanisms for ensuring sustainable development should assume a global (global) level of implementation. That is, purposeful law-making activities of authorized international organizations (first of all, the UN) to create international legal norms that would be the criteria for relevant activities in all regions of the globe are necessary.

At the same time, the problem of ensuring the sustainable development of individual territories cannot be neglected, since the overall well-being and stability of the biosphere consists of the prosperous and stable functioning of individual ecosystems. It is no coincidence that the Concept of Transition of the Russian Federation to Sustainable Development states that the transition to sustainable development involves the gradual restoration of natural ecosystems to a level that guarantees the stability of the environment. This can be achieved through the efforts of all humanity, but each country should start moving towards this goal independently [4].

Speaking of sustainable development as a long-term and safe development of civilization, one cannot avoid the issue of ensuring environmental safety. Moreover, this issue is objectively highlighted among the whole complex of problems to be solved in the context of the achievements of socio-natural sustainability. At the same time, the very understanding of environmental safety and its provision

should be transformed from simple actions to protect the environment to a complex greening, that is, an ecological reorientation of all human activity, which was mentioned in 70s. prominent Russian environmental scientist N.F. Reimers.

It is not easy to do: in theory and practice, the inertia of thinking, the lack of ecological culture, by virtue of which concern for the environment is regarded from the standpoint of consumer use [5]. In many ways, this contributes to the uncertainty of the very concept of sustainable development, which has so far not acquired complete forms. As I. Burton said, sustainable development is "an idea that can be formulated in general terms, but cannot be described by precise analytical categories, i.e. analytically, this is a non-working concept"[6].

One way or another, the world community should as soon as possible arrive at a common position on the issue of understanding sustainable development as a goal of intergovernmental activities, as well as ways to achieve this goal. This requires the threat of humanity's slide to an environmental catastrophe, which would mean a catastrophe of civilization.

Our study will focus on the development of views on the concept of sustainable development both in Russia and in the rest of the world, as well as the analysis of the legal framework that allows implementing this concept.

## II. MATERIALS AND METHODS

The study of the authors was based on the general principles of science and objectivity. The material for the analysis was the content of the United Nations (UN) program documents on the problem of sustainable development, strategic (conceptual) legal acts of the Russian state, and doctrinal sources.

As a specific research, methods in this article were used: the method of rationale, formal-legal method, comparative method, method of scientific forecasting.

## III. RESULTS AND DISCUSSION

### 1. The ideological foundations of sustainable development in international doctrine and acts of international organizations

The actualization of environmental protection and rational use of the environment in connection with the global deterioration of the ecological situation on the planet contributed to the creation and development of the international environmental movement, which included representatives of all social sectors of society. The driving idea of this movement was the understanding of the fact that in order to preserve the environment, and therefore to ensure the possibility of the continued existence and progress of humankind, a paradigm shift in civilizational development is necessary.

The progressive part of humanity, having united its efforts under the auspices of a number of international organizations, began to substantiate the need for a transition to new principles of the socio-economic development of society, the basis of which should be priorities of the environment and social development. The formation of a

new concept of the development of society took many years, however; as a result, humanity formulated the idea, which is now called the idea of sustainable development.

According to the authors of this article, the beginning of the folding of the idea of sustainable development should be associated with the name of the Italian businessman and philanthropist Aurelio Peccei, at whose initiative in the late 60s. an international public organization was created, bringing together representatives of large business structures, as well as the elite of the political, cultural and scientific communities. This organization was named the Club of Rome.

The Club of Rome began its work with an analysis of the relationship between society and its natural environment. This organization prepared the reports "The Limits to Growth" [7] and "Mankind at the Turning Point" [8], which caused a heated discussion in the global scientific community and initiated the development of the concepts of sustainability.

Discussion of a global environmental problem has reached the official international level. In 1972, the UN Conference on the Environment was held in Stockholm, where the concept of sustainable development was first discussed. The Stockholm Conference recognized the fact of the degradation of the human environment; designated the presence of a global environmental threat that has arisen to humanity; enshrined (recognized) the human right to a quality environment. The declaration adopted at the end of the Conference established 26 principles for the preservation of the environment. In addition, an Action Plan (109 points) was adopted, for the implementation of which a special UN organization was created - the United Nations Environment Program (UNEP). The Stockholm Conference established World Environment Day - June 5th, which helped draw attention to environmental issues around the world.

For widespread use by the world community, "sustainable development" was formulated in the World Conservation Strategy, adopted at the 14th General Assembly of the International Union for Conservation of Nature and Natural Resources in 1978 [9]: "... for development to be sustainable, not only its economic aspects, but also social and environmental factors ... «. After the adoption of this Strategy, as well as taking into account the decisions of the Stockholm Conference, we can speak with good reason about state environmental priorities and the real functioning of the environmental movement on a global scale. It should be noted that at that time, the solution of global environmental problems was not directly linked to socio-economic development [10]. Perhaps, the first who most clearly pointed out this relationship, and showed the dependence of "sustainable growth" on the "sustainability of society", was an American environmental analyst L. Brown [11].

A significant milestone in the development of the concept of sustainable development was the report of the World Commission on Environment and Development (WCED) (report of the Gro Harlem Brundtland Commission) - "Our Common Future", published in 1987 [12]. Exactly at this report formulated the definition of sustainable development, which was taken by the UN as the

basis for further law-making activities in this direction. Paragraph 27 of the Report states: "Humanity is capable of giving development a sustainable long-term nature so that it meets the needs of the current generation without depriving future generations of the ability to meet their needs."

According to the authors of this article, all the international community understand the basic contradiction of modern civilization interaction with nature after the Report of the Brundtland Commission. This contradiction lies in the impossibility of the biosphere to satisfy the growing needs of the global community [13]. This led to a rethinking of many well-established provisions on the development of human civilization and to the understanding that the existing concepts of sustainable development, environmental safety, national development strategies should be revised taking into account with the need to move from confrontation and search for the «guilty» to constructive cooperation [14] when "a common interest in matters of global importance can be the result of a shared responsibility for helping and protecting" [15].

The concept of sustainable development was also deeply understood by Russian scientists. Moreover, the view of most of them on this problem was not limited only to the need to protect the environment, but addressed issues of the quality of life and the development of human society itself. So, according to S.A. Ryabkovoy "sustainable development is a new advanced and corrective real model of interaction of people with nature and with each other, a new way of life, thinking and culture. This is a complex systemic process of planning and management of the international community, involving an equal partnership of countries, government, public and business circles, and new legal, moral and ideological guidelines." [16]. According to the academician of RAS N.N. Moiseyev's term "sustainable development" should be interpreted as the development and implementation of a society's strategy towards a state of equilibrium. The future of humanity can only be guaranteed under conditions of a more or less stable circulation of substances (stable biochemical cycles)" [17].

Thus, it is possible to ascertain the most serious attention shown by the world scientific community, as well as the political elite, to the problem of the sustainable development of civilization. As for the real steps to implement this concept, the successes of the international community are not so impressive. Twenty years after the World Conference in Stockholm in Rio de Janeiro, in 1992, the United Nations World Conference on Environment and Development was held, in which heads of state and government of many countries took part. It was made a relentless conclusion that over the entire period the world community did not manage to stop the degradation processes in the Earth's biosphere and restore its habitat. The Conference adopted Agenda 21 - an action program for all countries of the world to ensure sustainable development, taking into account the balance between social justice, economic growth and the solution of environmental problems at the global level. The UN Commission on Sustainable Development was established [18, 19].

In 2002, the World Summit on Sustainable Development was held in Johannesburg (South Africa). At the end of his

work, a Political Declaration was adopted, calling on all countries to work for the benefit of world peace and prosperity, as well as for the protection of the environment. The Plan of Implementation of the World Summit (UN Summit) was developed. Special attention in the context of sustainable development was paid to the reduction of biological diversity, water pollution and the marine environment, air, global climate change. At the same time, the summit participants did not manage to work out universal solutions for these problems [20]. In the aspect of ensuring sustainable development, the attention of countries in this situation was shifted to the regional level of solving this problem. As an example, the Green Growth Regional Initiative proposed by the Republic of Korea [21]. This idea emphasized the greener economic growth of the region. In the same context, the Concept of Transition of the Russian Federation to Sustainable Development should be considered [4].

As a summary of the work done by the international community to implement the decisions of the Earth Summit (Rio de Janeiro, 1992), we can consider the RIO + 20 LLC conference that took place twenty years later. The conference discussed the development of a green economy, as well as the eradication of poverty as a problem of sustainable development. The formal outcome of the Conference was a document entitled "The Future We Want". The heads of 192 states reaffirmed their political commitment to sustainable development. It should be noted a significant increase in the amount of financing for sustainable development projects announced at the international and regional levels. At the same time, it should be stated that there is no visible result of international activities at the global level: many of the problems noted in 1992 at the first conference in Rio and even earlier - in Stockholm, are not only not eliminated, but continue to get worse. At the same time, certain successes achieved at the regional level should be noted, in particular the development of «green» technologies in the Netherlands and Scandinavian countries.

## **2. Ensuring Russia's environmental security as a condition for its transition to sustainable development**

As a new ecosystem approach to human activity, the concept of sustainable development has been recognized not only at the international level, but also at the national level. As for our country, in the context of the transition to sustainable development, the ideas of sustainable development prove to be extremely consonant with the traditions, spirit and mentality of Russia. They can play an important role in consolidating Russian society, in determining state priorities and prospects for socio-economic transformations [4].

However, the transition of our country to sustainable development is not only a planned movement of our society towards the guidelines outlined in strategic documents. It is also a planned change in the entire management and legal process, happening in the state. The state itself has to purposefully and systematically change its functions in the direction of establishing a reasonable balance between society and nature. The establishment of this balance can

ensure the sustainable development of both a separate state and civilization as a whole.

In the processes of transformation of state functions, the role of jurisprudence becomes extremely noticeable. In this case, we should agree with Professor Yu.G.Shpakovsky, who says that "legal and other sciences about the state, having adopted a different principle of research and practical activities, will have to create a completely new image of the state, which, in our opinion, will be the main" protagonist «in the transition of the world community to sustainable (managed) development» [22].

The role of the state, in the first place, is to create guarantees of security in vital areas for society. The environmental sphere is one of these. Accordingly, in the conditions of the need for a transition to sustainable development, ensuring environmental safety is becoming the most important area of state activity. In this sense, the model of the state itself in Russia should change in the direction of increasing its (state) environmental component, and over time, acquire the character of a "socio-natural" state, which can only be called "sustainable".

The Russian Federation in the National Constitutional Organization declared itself a legal and social state. Such a state will have not only the best way to organize social relations and life as much as possible to meet the pressing needs of their citizens, but also take care of providing the same opportunities for the citizens of the future generations. This, in our opinion, is the deep meaning of the concept of sustainable development, which our country accepted at the official level. Hence, the main attention of the Russian state during the transition to sustainable development should be focused on ensuring military, economic, food, information and environmental security, rational use of natural resources and preservation of the environment.

It should be noted that these tasks can be solved only within the framework of the new functions of the state, which in previous years were only declared in the legislation of the most developed countries, but never implemented in practice. In this regard, the adoption of the Concept of Russia's transition to sustainable development is an event of great historical significance for our country [22]. At the same time, within the framework of the existing reality, the main regulatory function during the transition of our country to sustainable environmental development remains with legislation that ensures environmental safety. It is not by chance that the first direction of Russia's transition to sustainable development, indicated in the Concept, is the creation of a legal basis for the transition to sustainable development, including the improvement of existing legislation, which determines, in particular, economic mechanisms for regulating environmental management and environmental protection [4].

In our opinion, one should certainly take positively the fact that in the Russian Federation both at the doctrinal and legislative levels the approach has prevailed, according to which environmental safety is considered as an integral part of national security. This is confirmed by the mention of environmental safety in the list of types of national security, specified in the National Security Strategy of the Russian Federation - the basic legal act defining the national interests

and strategic national priorities of our state [23]. In addition, the Environmental Security Strategy of the Russian Federation for the period up to 2025 explicitly states “the environmental safety of the Russian Federation is an integral part of national security” [24]. As for the scientific community, the majority of Russian scientists have traditionally considered the problem of environmental safety on the assumption that “threats in the environmental field are among the main threats to national security” [25].

However, attention should be paid to the fact that Russian legislation in the field of environmental safety does not contain a formalized definition of this category “environmental safety”, which creates technical and legal difficulties in the process of forming a specialized legal mechanism for environmental protection. Some Russian scientists repeatedly pointed it out [26]. At the same time, the number of legal regulations governing the provision of environmental safety in Russia at the federal and regional levels is steadily increasing. At the same time, for Russian legislation in the field of ensuring environmental safety and sustainable development, a characteristic drawback is the lack of consideration of the climatic and environmental features of a number of regions that are particularly vulnerable to anthropogenic influences [27, 28]. All this speaks of the lack of effectiveness of the ecological-legal mechanism of the transition to sustainable development, and, accordingly, of the low probability of such a transition itself.

To the above should be added the lack of legal and economic incentives for the development of green technologies in our country, as well as the insufficient conceptual interrelation of the fundamental strategic documents in the field of sustainable development and environmental safety and sectorial legislation in this area. In addition, Russian environmental legislation is consistent with the strategy of sustainable development and the strategy of «green» growth to a greater extent only declarative. Such a state of affairs raises the question of ensuring environmental safety in Russia, and accordingly deprives the country of one of the main conditions for its sustainable development in the present and the future.

#### IV. CONCLUSION

A study conducted by the authors led to the following conclusions:

- Awareness of the impending environmental threat of a global scale prompted the international community (in the face of scientists, famous politicians, some representatives of big business) to rethink traditional views on the ways of the socio-economic development of humanity. It became obvious that the economic capacity of the biosphere, within which industrial development was carried out, approached its limit, followed by irreversible environmental degradation and the death of civilization. The concept of sustainable development has become a new paradigm for the development of human society, which represents a new type of world outlook on ways to preserve and progressively develop civilization;

- Currently, the concept of sustainable development has received international recognition at both the doctrinal and the official political level. Exactly

This concept is taken as the basis of the UN in the formulation of common development programs for all countries. Following the recommendations and principles set forth in the UN program documents, the Russian Federation considered it necessary and possible to make a consistent transition to sustainable development in order to meet the needs of present and future generations of people. To this end, in 1996 in Russia at the state level, the Concept of transition of the Russian Federation to sustainable development was approved. At the same time, the authors of this study state that, at both the international and national levels, the implementation of the objectives of the program documents on sustainable development faces serious difficulties. In addition to political disagreements, economic difficulties, low level of development of environmental technologies, a significant obstacle to the transition of states to sustainable development is the imperfection of environmental protection (environmental) legislation; created, as a rule, in the framework of the old - consumer attitude to the environment;

- with regard to the Russian Federation, despite the increase in the general array of environmental legislation, in its content it is far from fully in line with the idea and principles of sustainable development and, in the opinion of the authors of the article, is not able to adequately ensure the environmental safety of the country. For the Russian environmental legislation is characterized by the presence of technical and legal problems that impede the implementation of its regulatory potential. All this makes it unlikely that Russia will take the path of sustainable development in the near future.

#### ACKNOWLEDGMENTS

We express gratitude to the Pskov State University, which organized the holding of the international scientific-practical conference «Business cooperation as a resource for sustainable economic development and investment attraction» and provided an opportunity to take part.

Many thanks to Kulachinskaya Anastasia Yuryevna for the timely and full provision of all the necessary information.

We hope for further cooperation.

#### REFERENCES

- [1] Vernadsky V.I. The Beginning and Eternity of Life / Compiler, opening speech, comments. M.S. Bastrakova, I.I. Mochalova, V.S. Neapolitanskaya. Moscow: Sov. Russia, 1989. 704 p.
- [2] Turchenko O.G. Sustainable development and safety: correlation. Sciences of Europe. Juridical Sciences. 2017. No. 19 (19). pp.29-35.
- [3] Ugolnitsky G.A. Hierarchical management of sustainable development. Moscow: Fizmatlit, 2010. 336 p.
- [4] Presidential Decree of April 1, 1996 No. 440 “On the Concept of the Transition of the Russian Federation to Sustainable Development”. Russian Newspaper. No. 67. 1996.
- [5] Schepetkina I.V. On the issue of environmental safety management and rational use of natural resources. Problems of the modern economy. 2014. №22-1. Pp.131-135.
- [6] Burton I. Global warming and areas of stability. Global changes and regional interrelations. Moscow: Igan USSR, 1992.

- [7] The Limits to Growth: Report on the Predicament of Mankind / Meadows D.L. [et.al.]. New York : Universe Books. 1972.
- [8] Mesarovic M. and President E. Mankind at the Turning Point, New York, 1974.
- [9] Caring for the Earth. Sustainability strategy. Summary. IUCN / UNEP / WWF. Gland, Switzerland, 1991. p. 24.
- [10] Perelet R.A. Transition to the era of sustainable development. Russia in the outside world: 2003 (Analytical Yearbook). Moscow: Publishing house. MNEPU, 2003. Pp.10-30.
- [11] Brown L. Building a sustainable society. New York; London: Norton, 1981. 433 p.
- [12] Brundtland G. H. Our Common Future. Report 1987. Oxford: Oxford University, 1987. Chapter 2, P.37. [Electronic resource]. URL: <http://www.un-documents.net/ocf-02.htm#I>, <http://www.un-documents.net/wced-ocf.htm>, [http://conspect.nl/pdf/Our\\_Common\\_Future-Brundtland\\_Report\\_1987.pdf](http://conspect.nl/pdf/Our_Common_Future-Brundtland_Report_1987.pdf)
- [13] Lisin V.S., Yusfin Yu.S. Resource and environmental problems of the XXI century and metallurgy. Moscow: High School. 1998. 447 p.
- [14] Stephens T. International courts and environmental protection. New York: Cambridge University Press, 2009. 399 p.
- [15] Scholtz W. Collective (Environmental) Security: International Law. URL: <http://yielaw.oxfordjournals.org/content/19/1/135.full.pdf>.
- [16] Kuznetsov O.L., Ryabkova S.A. The emergence and main problems of the entry of the concept of "sustainable development" into modern science. Mater. int. scientific Congress «Global Studies - 2009: ways out of the global crisis and the model of the new world order.» Moscow.: MAKS Press, 2009. Vol. 1. P. 79-82.
- [17] Moiseev N.N. To be or not to be ... to humanity? Moscow: Ulyanovsk House of Press, 1999. 288 p.
- [18] Bobylev S.N., Zaharov V.M. «Green» economy and modernization. Ecological - economic foundations of sustainable development. Bulletin of the Institute of Sustainable Development of the Public Chamber of the Russian Federation «On the way to the sustainable development of Russia». 2012. № 60. // [http://www.ecopolicy.ru/upload/File/Bulletins/B\\_60.Pdf](http://www.ecopolicy.ru/upload/File/Bulletins/B_60.Pdf)
- [19] Agenda 21. Declaration adopted by the United Nations Conference on Environment and Development. Rio de Janeiro, June 3-14, 1992 // <http://docs.cntd.ru/document/901894820>.
- [20] Johannesburg Declaration on Sustainable Development (Johannesburg, South Africa, August 26 - September 4, 2002) URL: // [https://www.un.org/ru/documents/decl\\_conv/declarations/decl\\_wssd.shtml](https://www.un.org/ru/documents/decl_conv/declarations/decl_wssd.shtml)
- [21] Green growth and sustainable development <https://www.oecd.org/greengrowth/>
- [22] Shpakovsky Yu.G. Sustainable development is a new paradigm for the preservation of civilization. Bulletin of the University O.E. Kutafina. 2016. №1 (17). P.38-63.
- [23] Presidential Decree of December 31, 2015 No. 683 "On the Strategy of the National Security of the Russian Federation" // Collected Legislation of the Russian Federation. 01/04/2016. Number 1 (Part II). Art. 212.
- [24] Decree of the President of the Russian Federation of April 19, 2017 No. 176 "On the Strategy of Environmental Security of the Russian Federation for the Period up to 2025" // Meeting of the Legislation of the Russian Federation. 04.24.2017. № 17. Art. 2546.
- [25] Kuznetsov, A.P., International Law Enforcement of Russia's National Security in the Caspian Region. Author. dis. ... Cand. legal sciences. Moscow, 2007. p. 25.
- [26] Vorontsov A.L., Vorontsova E.V. Ensuring environmental safety as a global and national problem. 17 International Multidisciplinary Scientific GeoConference. Conference Proceedings Volume 17. Energy and Clean Technologies. Issue 43. Education and Accreditation in Geosciences. Environmental Legislation, Multilateral Relations and Funding Opportunities. Bulgaria, Albena. 2017. Pp.373-379.
- [27] Vorontsov A., Vorontsova E., Drozdenko Yu. Organizational-legal and technological aspects of ensuring environmental safety of mining enterprises: perspective analysis in the context of the general enhancement of environmental problem: E3S Web of Conferences The Second International Innovative Mining Symposium. 2017.
- [28] Vorontsov A., Vorontsova E., Drozdenko Yu. Legal Support of Environmental Safety as a Reaction of the Russian State to Environmental Threats: E3S Web of Conferences The Second International Innovative Mining Symposium. 2018.