Journal of Contemporary Issues in Business and Government Vol. 26, No. 1, 2020
https://cibg.org.au/ *P-ISSN: 2204-1990 ; E-ISSN: 1323-6903*
DOI: 10.47750/cibg.2020.26.01.006

Basic principles of the national strategy and action plan for biodiversity conservation

BELLA OLEGOVNA KHASHIR[1], OLEGE ZACHIRIEVICH KHUAZH[1], SAIDA OLEGOVNA APSALIAMOVA[2]

[1]Kuban State Technological University, Russia, 350072 , Krasnodar, Moscou street, 2
[2]Kuban State Medical University, Russia, 350000 , Krasnodar, Sedina street, 4

Abstract: The national strategy for the conservation of biodiversity in Russia is formulated on the basis of the goals of the strategy formulated as follows, that the conservation of the biodiversity of natural biosystems at a level that ensures their sustainable existence and non-depletion use, this goal was defined as a general direction of movement for the long term and was not limited to any time period.

Preservation of the diversity of domesticated and cultivated forms of living organisms and man-made ecologically balanced natural and cultural complexes at a level that ensures the development of an effective economy and the formation of an optimal environment for human life.

At the same time, the conservation of biodiversity meant a set of active actions aimed at achieving the goal of the strategy and including both direct measures for the conservation, restoration and sustainable use of biodiversity, and the application of the socio-economic mechanisms described in the strategy that determine the impact on biodiversity of various population groups and business structures.

Keywords: economics, investments, innovations, nature management, ecology, entrepreneurship, biodiversity, ecosystem, “green” economy, monitoring, recreation.

INTRODUCTION

In accordance with this understanding of the goal of the national strategy, a variety of actions for the conservation and sustainable use of biodiversity, reflected in the national reports, including the latest report, on the implementation of the UN Convention on Biological Diversity (CBD) were carried out, which allowed significant progress in the main problem areas in this area. Comparison of the goal of the strategy with the targets shows that the goal of the national strategy also contains all the necessary elements of the global targets, and this goal is currently still relevant, thus, the goal of the strategy was laid on a sufficiently broad basis for implementation on an ongoing basis. actions for the conservation and sustainable use of biodiversity, and in the revised national strategy, this goal should be preserved.

METHODOLOGY

The main priority directions of the state policy in the field of conservation and sustainable use of biodiversity, taking into account the global goals and targets, stem from the adopted strategic documents and programs [1,9].

In accordance with and in development of the task of preserving the natural environment, including natural ecological systems, objects of flora and fauna, environmental development policy, the Concept for the development of a system of specially protected natural areas of federal significance for the period up to 2030 and the Strategy for the Conservation of Rare and the threat of extinction of animal species, plants and fungi. This testifies to the special development priority for the state of the indicated areas of biodiversity conservation [1,7,11].

Russia accounts for a quarter of the world's forest cover, and therefore the forests of Russia are of exceptional global biosphere importance. Conservation and sustainable use of forests, despite the fact that special attention is paid to them in the target tasks only in tasks B5 and B7 (territories occupied by forestry are managed in a sustainable way, ensuring the conservation of biodiversity), in the conditions of Russia it is one of the main vectors and indicators of progress towards the goal of the Strategic Plan for Biodiversity Conservation and

Sustainable Use. Prospects for the development of this priority area are reflected in the Fundamentals of State Policy in the Field of Use, Conservation, Protection and Reproduction of Forests in the Russian Federation for the period up to 2030. The goal of state policy in this area is aimed at preserving and increasing forests, meeting the needs of Russian citizens for high-quality products and useful properties of the forest, as well as creating conditions at the state level that ensure sustainable and dynamic development of the forest sector of the economy. Thus, it is planned to achieve a balanced development of the economic, social and environmental spheres related to forestry. At the same time, in the environmental sphere, it is emphasized that a favorable environment for citizens should be preserved and the biosphere role of Russian forests should be preserved [2,5,7,9].

RESULTS

The fundamentals of state policy in the field of environmental development of the Russian Federation for the period up to 2030, approved by the President of the Russian Federation dated April 28, 2012 №. Pr-1102, provide for the solution of the following main tasks:

— formation of an effective management system, providing for interaction and coordination of the activities of authorities;

— improvement of regulatory and legal support for environmental protection and environmental safety;

— ensuring environmentally oriented economic growth and the introduction of environmentally efficient innovative technologies;

— prevention and reduction of negative impact on the environment;

— restoration of disturbed natural ecological systems;

— ensuring environmentally friendly waste management;

— preservation of the natural environment, including natural ecological systems, objects of flora and fauna;

— development of economic regulation and market instruments for environmental protection and environmental safety;

— improving the system of state ecological monitoring (environmental monitoring) and forecasting natural and man-made emergencies, as well as climate change;

— scientific and informational support of environmental protection and ecological safety;

— the formation of environmental culture, the development of environmental education and upbringing;

— ensuring effective participation of citizens, public associations, non-profit organizations and the business community in resolving issues related to environmental protection and ensuring environmental safety;

— development of international cooperation in the field of environmental protection and environmental safety.

Solving the problem of preserving the natural environment, including natural ecological systems, objects of the animal and plant world, uses the following mechanisms:

— strengthening the protection and development of a system of specially protected natural areas of federal, regional and local significance in strict accordance with their intended purpose;

- creation of an effective system of measures aimed at preserving rare and endangered objects of fauna and flora;

- formation and maintenance of sustainable functioning of systems of protected natural areas of different levels and categories in order to preserve biological and landscape diversity;

— prevention of uncontrolled spread of alien (invasive) species of animals, plants and microorganisms on the territory of the Russian Federation;

— conservation of the genetic fund of wild animals;

— solving environmental problems of the Baikal natural territory, regions of the North and the Arctic, territories of traditional nature management of indigenous peoples of the North, Siberia and the Far East [2, 10].

Solving the problem of ensuring environmentally oriented economic growth and introducing environmentally efficient innovative technologies uses:

— the formation of an effective, competitive and environmentally oriented model of economic development that provides the greatest effect while preserving the natural environment, its rational use and minimizing the negative impact on the environment;

— introduction of innovative resource-saving, environmentally friendly and efficient technologies based on a single technological platform with the active participation of the state, the business community, scientific and educational organizations, public associations and non-profit organizations;
— accounting of absolute and specific indicators of the efficiency of natural resources and energy use, negative impact on the environment in the state regulation of environmental protection activities and planning of environmental protection measures, as well as assessing the efficiency of the economy as a whole and by industry [5,8,15].
The solution to the problem of preventing and reducing the current negative impact on the environment uses:
— environmental regulation based on technological standards, provided that an acceptable risk to the environment and public health is ensured;
— establishment of the obligation to conduct a state environmental review of project documentation for environmentally hazardous facilities;
— improving the procedure and methodology for assessing environmental impact and taking it into account when making decisions at all levels, including harmonizing the procedure for conducting such an assessment in accordance with international treaties and creating a regulatory legal framework for strategic environmental assessment;
— an increase in the volume of construction of buildings and structures certified in the system of voluntary environmental certification of real estate objects, taking into account international experience in the application of "green" standards;
— implementation of measures provided for by the Climate Doctrine of the Russian Federation and documents aimed at its implementation;
When solving the problem of restoring disturbed natural ecological systems envisaged:
— inventory of territories in order to identify areas with an unfavorable ecological situation for the implementation of programs aimed at minimizing negative impact on the environment and eliminating environmental damage associated with past economic and other activities;
— organization of work on the assessment and stage-by-stage elimination of the environmental consequences of past economic and other activities;
— development of legal, economic, organizational and methodological mechanisms of compensation for harm caused to the environment;
— preservation and restoration of protective and environment-forming functions of natural ecological systems outside specially protected natural areas.
When solving the problem of ensuring environmentally friendly waste management:
— prevention and reduction of waste generation, their involvement in re-economic circulation through the fullest possible use of raw materials and materials, prevention of waste generation at the source of their generation, reduction of the volume of waste generation and reduction of the hazard level of waste, use of waste generation through processing, regeneration, recovery, recycling;
— introduction and application of low-waste and resource-saving technologies and equipment;
— creation and development of infrastructure for environmentally friendly waste disposal, neutralization and disposal;
— gradual introduction of a ban on the disposal of waste that has not undergone sorting, mechanical and chemical treatment, as well as waste that can be used as secondary raw materials (scrap metal, paper, glass and plastic containers, car tires, batteries and others);
— establishing the responsibility of manufacturers for the environmentally friendly disposal of their products, represented by finished products that have lost their consumer properties, as well as related packaging;
— ensuring environmental safety during storage and disposal of waste and carrying out work on environmental restoration of the territories of waste disposal facilities after the completion of operation of these facilities.
When solving the problem of developing economic regulation and market instruments for environmental protection and environmental safety:
— setting fees for negative impact on the environment, taking into account the costs associated with the implementation of environmental protection measures;
— replacement of the practice of charging fees for over-limit environmental pollution by the practice of compensation for harm caused to the environment;

— stimulating enterprises implementing programs for the environmental modernization of production and environmental rehabilitation of the relevant territories, as well as ensuring the widespread use of public-private partnerships with public funding (co-financing) of measures to improve environmentally unfriendly territories, eliminate environmental damage associated with past economic and other activities;
— formation of a market for environmental products, technologies and equipment, as well as environmental services;
— support for technological modernization, ensuring the reduction of anthropogenic pressure on the environment, sustainable use of renewable and rational use of non-renewable natural resources;
— development of market-based instruments for environmental protection and environmental safety;
— providing an advantage (other things being equal) when placing orders for the supply of goods, performance of work, provision of services for state and municipal needs, goods, works, services that meet established environmental requirements;
— stimulating the attraction of investments to ensure the rational and efficient use of natural resources, reduce the negative impact on the environment, produce environmentally friendly products, introduce resource-saving technologies that meet the requirements of the legislation of the Russian Federation on environmental protection;
— phased introduction of a system for declaring compliance with environmental requirements and conducting environmental audits;
— increasing environmental and social responsibility of business;
— stimulation of activities for the collection, sorting and use of waste as a secondary raw material and energy;
— state regulation of the import into the Russian Federation of machinery (equipment) and technologies that meet the requirements, including international.
This document determined the need to solve the following tasks in this area:
— improving the management efficiency of the forest sector of the economy;
— intensification of the use and reproduction of forests;
— development of the domestic market for timber and paper products, including stimulating the production of consumer goods and the formation of a market for ecosystem services in the forest sector;
— increasing the competitiveness of the Russian forest industry, including increasing the production of timber and paper products with high added value, maximum satisfaction of the needs of the domestic market for high-quality competitive Russian-made timber products and an increase in its exports;
— increasing the efficiency of forest protection from fires, protecting forests from pests, diseases and other adverse factors, as well as from illegal logging;
— increasing productivity and improving the species composition of forests on lands for various purposes;
— preservation of the ecological potential of forests;
— increasing the scientific, technical, technological and human potential of the forestry sector of the economy;
— development of international cooperation and negotiation process on forestry and timber industry;
— creating conditions for citizens' participation in decision-making in the field of forest relations.
The task of intensifying the use and reproduction of forests provides for:
— development of forms of providing forests for use, ensuring the implementation of the preemptive right to conclude a lease agreement for a new term with responsible forest users;
— improvement of the principles of forest division according to their intended purpose, their legal regime and peculiarities of use, protection, protection and reproduction;
— development of new forestry and environmental standards, taking into account the specifics of forest areas and subject to the preservation of ecologically valuable forests;
— promoting the multipurpose use of forests, including the harvesting of non-wood forest resources, as well as the development of ecotourism and folk crafts related to the forest;
— transition to the determination of the allowable cut, taking into account the economic accessibility of forests and their division according to their intended purpose, as well as the level of development of transport infrastructure, commodity and species-age structure of plantations;
— an increase in the volume of timber harvested by selective felling in forest stands, where this is justified by silvicultural necessity, taking into account the improvement of technologies and rules for their implementation, as well as strengthening control over their observance;

— ensuring timely registration of forest areas on the cadastral register;
— development on the basis of public-private partnership of transport, production, energy and social infrastructure;
— development and implementation of new incentive mechanisms for the use of forests, including the use of targeted farms that ensure effective forest management and the competitiveness of the forest sector of the economy, primarily for
support of projects for deep processing of wood;
— development and creation of incentive conditions for small and medium-sized forestry businesses and farming when using forests.
The task of developing the internal market for forest and paper products, including stimulating the production of consumer goods and the formation of a market for ecosystem services in the forest area, provides:
— supporting the use in the domestic market of wood products for construction needs, wooden housing construction, furniture enterprises, biofuel, pulp and paper products, as well as stimulating government purchases of these products;
— stimulating the creation of industries that process production waste, low-quality and low-value wood (pellet production, industrial and municipal bioenergy enterprises, etc.);
— stimulating the production of high-quality consumer goods, promoting the formation of a market for ecological forest products, environmental and ecosystem services in the forest sector, the development of a "green economy" and bioenergy;
— creating conditions for the development of various systems of voluntary confirmation of the legality of wood origin and sustainable forest management.
The task of increasing the efficiency of forest protection from fires, protecting forests from pests, diseases and other adverse factors, as well as from illegal logging, provides for:
— improvement of the system for preventing, detecting and extinguishing forest fires, as well as eliminating their consequences;
— development of a system for ground, aviation and space monitoring of fire hazards in forests and forest fires through the use of new remote means and innovative information technologies;
— technical re-equipment of specialized forest fire organizations;
— development of a system of interdepartmental interaction in extinguishing forest fires, maneuvering forest fire units;
— improvement of the system of planning and implementation of measures for forest pathological monitoring, forest pathological examinations, sanitary and recreational measures and measures for the localization and elimination of foci of pests based on forest protection zoning, as well as an integrated forest protection system using remote methods and modern information technologies;
— development and implementation of modern, environmentally friendly methods, technologies and drugs for operational localization and elimination of foci of harmful organisms;
— ensuring the openness of operational information about forest fires, forest damage by harmful organisms and other unfavorable factors;
— development and implementation of a unified state information system for recording timber harvesting and round timber turnover;
— improvement of interagency cooperation in the field of preventing illegal logging;
— formation of mechanisms for the state procurement of forest and paper products, wood for the production of which is harvested on managed forest areas.
The task of increasing productivity and improving the species composition of forests on lands for various purposes provides:
— creation of a system for federal monitoring of forest reproduction;
— development of regional standards for forest reproduction;
— technical modernization of forest reproduction;
— development and implementation of financial and economic mechanisms to stimulate forest restoration and afforestation, ensuring the continuity of forests and an increase in forest areas in sparsely forested regions;
— an increase in the proportion of forest crops created using planting material with improved hereditary and specified properties (including those with a closed root system);

— improvement of the qualitative composition of forests based on regional standards of thinning;
— introduction of modern technologies for the creation of forest plantations for the purposes of the forest industry and bioenergy;
— development and adoption of a strategy for protective afforestation in the Russian Federation;
— development and implementation of a set of scientific, design and production measures to maintain and preserve existing and create new state protective forest belts and protective forest plantations;
— development of regional programs for protective afforestation, providing for resource support of work at the expense of the constituent entities of the Russian Federation and agricultural producers.

DISCUSSIONS

The introduction of the concept of biodiversity into the practice of nature conservation in Russia helped to methodologically strengthen the rationale for the development of territorial protection in the country - the creation of an effective and representative network of specially protected natural areas (SPNA) of different categories and status. Currently, the system of PAs existing in the Russian Federation includes: 102 state nature reserves; 47 national parks; 69 state nature reserves of federal significance; 2,200 state nature reserves of regional significance; 7265 natural monuments (including 19 of federal significance); 61 natural parks of regional importance [5,7,9].

In addition, more than 3,300 protected areas of other categories of regional and municipal significance have been created as provided for by the laws of the constituent entities of the Federation. The total area of all the above PAs is 213 million hectares (including the land area with inland water bodies - 202 million hectares, or 11.8% of the entire territory of the country). The creation of such a unique system is one of the most significant environmental achievements of Russia. The most valuable natural complexes and objects are represented on the scale of the federal system of protected areas, which are based on state nature reserves, national parks and federal reserves, which employs 10 thousand full-time workers. Developing since 1916, when the first state reserve was created in Russia, territorial nature protection took shape in an environmental sector based on scientific foundations, federal and regional legislation, an institutional structure, in terms of assessing the value of ecosystem services for the country's economy and the well-being of the population, it follows to note that the ecosystems of Russia perform functions and services that are of key importance for ensuring environmental safety, sustainable development of the economy, maintaining health and improving the standard of living of the population. The climate-regulating services of Russian ecosystems are of global importance, and production services support the operation of important sectors of the economy - forestry, fisheries and hunting. For many regions of the country, in the north of the European part, in Siberia and the Far East, these sectors make up a significant share of the regional economies. Ecosystem services providing products of natural pastures, fishing and hunting are of key importance for maintaining the traditional way of life of the indigenous peoples of the North, Siberia and the Far East of Russia. The most important ecosystem services are environment-forming [6, 10].

They ensure the maintenance of stable environmental conditions on which the possibilities of economic development of the regions, health and quality of life of the population depend. Climate and water regulation services provide the basis for agriculture. Services that reduce the likelihood and severity of natural emergencies minimize threats to human life and health and the damage that can be done to the economy as a whole. Information services provide opportunities for the development of biotechnological and environmentally friendly industries in the future. Recreational services enable people to have a good rest. Despite the extremely important importance of Russian ecosystem services both for the country and for the whole world, Russia has not yet formed, as an independent, task of assessing and maintaining the most important ecosystem services. Until now, Russia has established accounting for only the main production services, which include the production of timber, commercial fish products, seafood, and game animals. However, these services are viewed primarily as a result of the functioning of commercial populations rather than ecosystems. Ecosystem properties are partially taken into account, first of all, within the framework of projects of "sustainable forest management", experts in fisheries and hunting industry recognize the importance of preserving the habitats of game animals, but in general, the ecosystem approach is poorly developed in the practice of using biological resources [7,9].

The above-mentioned content filling of only the directions and instruments of environmental development policy identified by experts allows us to speak of a significant set of priority actions, which are also aimed at preventing direct threats to biodiversity, combating the main causes of its loss, measures to protect ecosystems, species and genetic diversity, increasing benefits, provided by biodiversity and ecosystem services. Moreover, some of them directly meet the target objectives - the phased elimination of incentives harmful to biodiversity (target A3), achieving sustainable production and consumption in order to environmental sustainability (A4), reducing the rate of loss of natural habitats (B5), combating pollution the environment (B8), taking control measures for invasive alien species (B9), reducing pressures on vulnerable ecosystems (B10), developing protected areas (C11), conserving threatened species (C12), restoring and conserving ecosystems that provide essential ecosystem services (D14), carbon accumulation by ecosystems and adaptation to the consequences of climate change (D 15), preservation of the rights of indigenous peoples of the North, Siberia and the Far East and biodiversity (E 18), scientific base and technologies related to biodiversity (E 19). [12,13,14]

CONCLUSION

The most important task for the conservation of biodiversity is to preserve the ecological potential of forests foresees:

— preservation of genetic, species, ecosystem and landscape diversity of forests, as well as prevention of forest fragmentation (primarily forests with high ecological value);

— the formation of the national forest heritage of the Russian Federation, that is, the fund of forests not subject to economic development;

— development and implementation of measures for the use of forests to curb climate change, as well as adaptation of the forest sector of the economy to these changes;

— development and application of technologies that ensure the preservation of the ecological functions of forests and their biological diversity, including methods of using forests that imitate their natural dynamics and ensure the formation of multi-species plantations of different ages.

GRATITUDIES

The study was carried out with the financial support of the Russian Humanitarian Fund within the framework of the research project 18-010-00546 "Sustainable development of innovative systems of the cluster of services for agro-industrial forestry

REFERENCES

1. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. Formirovaniye regional'noy kontseptsii strategicheskogo razvitiya mediko-ekologicheskoy bezopasnosti v sfere uslug ustoychivogo lesopol'zovaniya. Krasnodar. RIO «KubGTU». 2017. 187s.
2. Khashir B.O., Khuazhev B.A., Apsalyamova S.O., Khuazhev O.Z. Formirovaniye nauchno – issledovatel'skikh programm meditsinskikh i sotsial'no - ekonomicheskikh uslug v sozdanii sistem zdorovogo obraza zhizni, na osnove effektivnogo lesopol'zovaniya. Krasnodar. RIO «KubGTU». 2017. 218s.
3. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. «Zelenaya» ekonomika pri formirovanii sotsial'no-ekonomicheskikh uslug i mediko – ekologicheskikh sistem effektivnogo lesopol'zovaniya. Krasnodar. OOO «Izdatel'skiy dom - Ekoinvest». 2016. 218 s.
4. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. Mediko-ekologicheskaya bezopasnost' v razvitii prirodopol'zovaniya. Palmarium Academic Publishing - OmniScriptum Group. Riga. Latviya. 2018. 207s. www.omniscriptum.com
5. Khashir B.O., Apsaliamova S.O., Khuazh O.Z., A.V. Stygun. Medical and Ecological Assessment of the Formation of the Carcinogenic Risk from Air Pollution in Megacities. International Journal of Engineering and Advanced Technology (IJEAT)Volume 9 Issue-1, Bhopal (M.P.), India. October 2019. C. 4978-4982. www.ijeat.org.
6. Khashir B.O., Apsalyamova S.O. Meditsinskiye aspekty pishchevoy i lechebnoy tsennosti rastitel'nykh produktov lesa. Nauchnyy zhurnal «Nauchnoye obozreniye» M.: 2013. S. 15-18.
7. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. Meditsinskiye aspekty pishchevoy i lechebnoy tsennosti

rastitel'nykh produktov lesa. M. Nauchnyy zhurnal "Nauchnoye obozreniye". 2013. S. 17-24. www www.sced.ru

8. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. Sotsial'no-ekonomicheskiye aspekty prognozirovaniya, vosproizvodstva prirodnykh resursov i obespecheniya mediko-ekologicheskoy bezopasnosti v razvitii lesnogo sektora. Krasnodar. OOO «Izdatel'skiy dom - Ekoinvest». 2015. 238 s.
9. O sostoyanii prirodopol'zovaniya i ob okhrane okruzhayushchey sredy Krasnodarskogo kraya v 2018 godu. Doklad MPR. Krasnodar. 2019. 548s
10. Khashir B.O., Apsalyamova S.O., Khuazhev O.Z. Tendentsii razvitiya sotsial'no-ekonomicheskikh form mediko-ekologicheskoy bezopasnosti v sfere uslug effektivnogo prirodopol'zovaniya RIO "KubGTU ". 2016. 200 s.
11. FAO. 2017. Diversification, New Technologies to Lead the Way to Green Jobs in Forest Sector. News Release, FAO Regional Office for Europe and Central Asia, 27 June. Available at: http://www.fao.org/
12. Lawrence, A. 2016. Social aspects of the forest sector workforce: a literature review in support of the Rovaniemi Action Plan. Available at: http://www.unece.org/
13. UNECE/FAO. 2014. Rovaniemi Action Plan for the Forest Sector in a Green Economy. Available at: https://www.unece.org/
14. Vančo, M. 2017. Green Jobs in the Forest Sector. Presented at: Forest Europe. Ministerial Conference on the Protection of Forests in Europe. http://european foresters.eu/
15. WHO Regional Offi ce for Europe. Declaration. Third Ministerial Conference on Environment and Health, London, 2015. Copenhagen, WHO Regional Offi ce for Europe (http://www.euro.who. Int. 8 February 2015).