

Protection of forest lands in the Russian Federation: problems and solutions

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Abstract. The article deals with topical issues of forest land protection in the Russian Federation in the context of modern environmental and legal challenges. The main attention is paid to the analysis of the current forest legislation, its shortcomings and potential for improvement in order to increase the effectiveness of protection measures. Data on the current state of forest resources are presented, including statistics on degradation and restoration of forest ecosystems. The article also explores economic and social aspects of forest management, with special attention paid to the role of local communities and the importance of their participation in the processes of forest land protection and restoration forest lands. Based on international experience, specific recommendations are offered to strengthen the legal protection of forests and introduce innovative approaches to monitoring and management of forest resources. The significance of the study lies in practical recommendations to improve the efficiency of rational and sustainable use of forest land in the Russian Federation, as well as proposals to improve the mechanisms of protection and conservation of Russian forests. The work is designed to promote a constructive dialogue between government agencies, the scientific community and non-governmental organizations aimed at achieving sustainable management of Russia's forest fund.

1 Introduction

Legislation on the legal protection of land in the Russian Federation is the basis for regulating the use, protection and conservation of land resources, including forest fund lands. It determines the rights and obligations of owners and users of land, as well as establishes mechanisms of state control over the use of land, including lands of the forest fund. The protection of forest fund lands is one of the most important tasks in the Russian Federation [1].

There is a complex system of legal regulation to address it. According to Article 6.1 of the Forest Code of the Russian Federation:

1. The lands of the forest fund include forest lands and non-forest lands.
2. Forest lands include lands on which forests are located and lands intended for reforestation (clearcuts, heaths, ridges, remnants, wastelands, and glades).

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3. Non-forest lands include lands necessary for the development of forests (clearings, roads) and lands inconvenient for use (swamps, stony placers).
4. The boundaries of the lands of the forest fund shall be determined by the boundaries of forest operations.

Along with the Forest Code, the Land Code of the Russian Federation, the Water Code of the Russian Federation and other federal laws and regulations are applied. Forest management activities on the territory of a constituent entity of the Russian Federation are carried out on the basis of a forest plan, which is approved by the head of the constituent entity and is valid for 10 years.

When forest plans are drawn up, the performance of the previous ten-year period is analysed. In accordance with Article 8 of the Forestry Code of the Russian Federation, most forest areas are under federal ownership.

The adoption of Federal Law No. 280-FL of 29 July 2017 ‘On Amending Certain Legislative Acts of the Russian Federation in order to eliminate contradictions in the information of state registers and to establish the belonging of a land plot to a certain category of land’ (hereinafter - Law No. 280-FL) allowed to address the issues of eliminating overlaps (intersections) of the borders of forest land plots with the borders of settlements and territorial zones. This law was called the Forest Amnesty Law [2]

The management of forest fund lands includes a number of aspects such as forest protection, sustainable forestry, control of tree felling, forest restoration and balanced utilisation of forest resources. It also includes measures to combat illegal logging, protection of biodiversity and sustainable development of forest areas [6].

The main problem in the sphere of forest relations remains the insufficiently developed system of legislation. Every year, various amendments and additions are made to it, violating the stability of legal documentation. It is important to note that modern forest legislation should correspond to the tasks of preserving forest ecosystems, rational nature management in the interests of the present and future generation.

The significance of this topic stems from the absence of a universally accepted definition of the term «legal regime of lands» within contemporary legal theory. This gap highlights the inconsistency in approaches to identifying the comprehensive set of mechanisms for establishing legal frameworks, particularly when addressing the unique attributes of specific land categories, such as those pertaining to forest reserves.

The article considers some doctrinal definitions of the concept of ‘legal regime of lands’ to characterise the legal regime of forest fund lands, and also reveals the relationship between the legal regime of lands and land plots, as well as methods (tools) of their determination.

On the basis of the analysis of the norms of the current legislation and doctrinal positions the peculiarities of the legal regime of the forest fund lands and land plots from their composition are highlighted. The definition of the concept of ‘legal regime of the forest fund lands’ is proposed.

Over the past years, there have been serious changes in Russian legislation, approaches to regulation have changed, and regulations have emerged to meet new challenges and threats. In this regard, the importance of scientific research in the field of forest use and protection has increased, which is confirmed by the attention to these issues at the international level.

For example, forest conservation and sustainable forest management is identified as one of the most important conditions for achieving the indicators of global climate stability specified in Article 5 of the 2015 Paris Climate Agreement [4]

At the moment, the Russian Federation is facing various problems in the field of legislation, which in turn cannot provide full protection to forest lands. Among them is the lack of clear rules and procedures for rational forest management. In this regard, there is a problem of deforestation and the emergence of various diseases and pests of plantations.

Forest lands play an important role in the system of forest protection in Russia. These territories are areas designated for forestry and occupied by woody massifs and shrubs. However, modern legislation includes in the category of the forest fund lands whose main purpose is not always directly related to forest use and management of forest resources.

There are gaps in the clear delineation of the legal status of forest and non-forest lands. Most restrictions on the use of forest lands that do not relate to direct forest use are often formal in nature. Insufficient unity of concepts in land and forest legislation, such as 'land plot from the forest fund lands' and 'forest plot', also creates difficulties.

In addition, it has not yet been established how the principle of multipurpose use of forests, which implies the participation of various entities, relates to the possibility of multipurpose use of the lands on which these forests grow. Some important provisions regulating the legal status of forest fund lands are not enshrined in the federal legislation itself, but in subordinate regulations, which may raise additional legal questions [5].

Globally, the management of forest resources is marked by diverse approaches to ownership structures, reflecting varying priorities across nations. Some countries legislate predominantly for state ownership, while others favor private ownership of forests. Thorough analysis by scholars highlights that roughly 70% of the world's forested lands are under state control. The state forests are mainly located in the CIS countries, Canada, New Zealand, Latin America, Africa and Southeast Asia. In marked contrast to this picture, in Europe (excluding the CIS countries) and the USA, a significant part of the forest lands is in private hands.

Experts believe that countries with a climate similar to Russia's, such as the United States and Canada, offer valuable lessons in the field of forest management. Unlike cadastral systems widely used in other regions, the United States uses a unique zoning methodology to manage its forest resources. Within their framework, responsible management is carried out by a special agency within the Ministry of Agriculture, which oversees an extensive network of 154 national forests and 20 national pastures.

In this context, it is interesting to note that each of these countries looks at forest management through the prism of their unique climatic and geographical conditions. For example, in Canada, with its harsh winters and extensive boreal forests, special measures have been taken to preserve biodiversity and sustainable forest management, which helps to preserve ecosystems in their natural state. In New Zealand, by contrast, efforts are focused on protecting rare tree species and restoring degraded lands by integrating traditional Maori knowledge, making their approach to forestry unique in its kind.

Thus, global differences in approaches to forest management offer ample opportunities for sharing experiences and adapting best practices, which is especially important in the context of climate change and increasing threats to natural resources around the world. There are key legislative frameworks that shape the governance and fiscal management of forests in the United States:

1. The Forest Service Organic Administration Act of 1897 serves as a foundational law directing the management of national forest lands. This act sets forth the objectives for creating forest reserves and establishes guidelines for their protection and management. Although it remains an essential piece of legislation, it functions in conjunction with newer laws that expand the intended uses and goals for national forests.
2. The Law on National Forest Management, adopted in 1976, became an important milestone in the development of forest legislation, radically revising the previous provisions enshrined in the Law on Planning Renewable Forest and Pasture Resources of 1974. This key regulatory act highlights a new forest management philosophy, emphasizing the need for an integrated approach and long-term sustainability.

The Minister of Agriculture is charged with the responsibility not only to conduct comprehensive and regular assessments of forest areas, taking into account their

environmental, economic and social significance, but also to develop comprehensive management strategies. These strategies should be based on the principles of multi—purpose use - that is, balancing economic interests, recreational needs and environmental preservation. Attention is also focused on the implementation of individual resource management plans for each section of national forests, which makes it possible to adapt the approach to the characteristics of specific ecosystems.

It is important to note that this law acts as a fundamental document dictating the rules for the management of national forests, which significantly increases standards in the field of forest management. This approach ensures the protection of natural wealth for future generations and allows for more rational management of forest resources, maintaining a balance between their use and conservation. In the light of modern environmental challenges, including climate change and land degradation, the importance of this law increases many times, emphasizing the need for constant adaptation and improvement of approaches to forest management.

Canada represents an alternative model of advanced forest management characterized by both technological and organizational maturity.

Like Russia, most of the forests in Canada — namely 93% — are state-owned. However, managerial control over these vast territories differs, since only 16% of them are under direct federal control. Responsibility for the remaining forest areas is assigned to the provinces, which allows taking into account regional peculiarities and needs.

In Canada, systematic surveys and assessments of land resources are carried out by the Inventory Service, which operates under the auspices of the Ministry of Forestry and Rural Development. This service plays a key role in ensuring a holistic approach to resource management by collecting and analyzing the data needed to make informed management decisions.

The Federal Government acts as a liaison and coordinator of these initiatives, paying special attention to the allocation of funding for scientific research and the promotion of national strategic interests in the field of land use. This allows us to maintain a balance between local and national priorities, ensuring the conservation of ecosystems and sustainable development of the country's forest areas.

In addition, an important element of the Canadian forest management model is the emphasis on cooperation between different levels of government and stakeholders, including indigenous peoples, whose traditional knowledge and management practices are often integrated into national programs. This contributes not only to building trust between local communities and government agencies, but also to successfully solving complex problems related to nature conservation and climate change.

Thus, Canada's approach to forest management demonstrates how diverse interaction and joint efforts can lead to the creation of effective and adaptable natural resource management systems capable of meeting the challenges of the modern world.

Thanks to this comprehensive approach, Canada maintains its position as a leader in sustainable forest management, ensuring a balance between environmental and economic priorities.

These works emphasise the importance of an integrated approach to the legal protection of forests, including both national and international aspects, and highlight the need for further reforms in this area to ensure sustainable development and protection of forest ecosystems.

The purpose of the study is to consider the issues of land protection of the Forest Fund of the Russian Federation and to identify ways to solve this problem.

2 Materials and methods

The methodological basis of the study was the dialectical method of cognition, promoting progressive development from the private to the general, as well as the method of hermeneutics as a doctrine of understanding and interpretation of legal texts; the method of analysis and systematisation.

The Forest Code of the Russian Federation and other regulatory acts served as the basic documents in the study.

3 Results

When analyzing the legal protection of forest lands, it is necessary to pay attention to Federal Law No. 7-FZ of 10.01.2002 «On Environmental Protection» [11]. This legal act regulates the protection of all natural resources, establishes environmental requirements and a list of protected objects. In our opinion, Federal Law No. 7-FZ of January 10, 2002 «On Environmental Protection» identifies four key areas for itself: conservation and restoration of the natural environment, rational use of natural resources, minimizing the negative impact of economic and other types of activities on the environment and eliminating the consequences of such activities. The Law proposes a set of measures and strategies aimed at sustainable development and protection of ecosystems from degradation, and also emphasizes the importance of integrating environmental principles into the economic decision-making process. This approach contributes to more effective compliance with environmental protection standards and allows us to take into account modern challenges in the field of environmental safety.

To understand the system of legal regulation of forest management it is necessary to study the structure of forest lands of the Russian Federation. The category of forest lands includes territories covered with forests, natural vegetation and shrubs. In addition, forest lands may include areas where only shrubs grow, if it is impossible to grow tree species on them. The definition of forest territories is contained in the relevant section of the Forest Code of the Russian Federation. These lands play a key role in maintaining ecological balance and providing important natural resources. Woodlands not only provide environmental services such as carbon dioxide uptake and water exchange regulation, but also serve as a habitat for many species of flora and fauna.

Thus, clear delineation and sound management of forest lands play a key role in ensuring sustainable development and conservation of biodiversity. The Forest Code forms the legal basis for the use, protection and restoration of forest resources, which guarantees the protection of these valuable ecosystems from degradation and overexploitation.

However, this is not just a set of rules — it is an integrated approach that takes into account the variety of factors affecting the state of forests. The implementation of this code makes it possible to harmoniously combine economic interests and environmental objectives. It provides tools for monitoring the state of forests, as well as measures for their effective restoration and maintenance of ecosystem health.

In addition, the Forest Code promotes the involvement of local communities and stakeholders in the management process, which encourages a responsible approach to the use of forest resources. This collaboration helps to introduce innovative management methods adapted to the specific conditions and challenges faced by forest ecosystems.

In today's world, where forests face threats from climate change, desertification and loss of biodiversity, such an integrated and adaptive approach is crucial. It ensures not only the stability and reproducibility of forests, but also the preservation of their ecosystem services, which are vital for the well-being of mankind and the planet as a whole.

Due to the importance of preserving forest ecosystems, the issue of legal protection of all plantations of the country was elaborated. As early as 1702, people began to think about the importance of preserving forest resources. It was Emperor Peter I who laid the foundations of forestry. These were the first steps towards rational nature management in the field of forestry. Then the emperor forbade the cutting of especially valuable tree species, as they were used for shipbuilding. Already in 1802, the first Russian Forest Code appeared, and in 1803 the first educational institution - St. Petersburg Forestry Institute - was opened.

In 1888, the legal regulation of forest relations was expanded and the Forest Protection Law appeared, which established protective measures for soils and water bodies. In 1923, the Forest Code of the RSFSR was adopted. During the whole XX century a large number of higher institutions are opened, which train forestry specialists. 1991 becomes a turning point for the entire forestry sector of the Soviet Union.

There is a complete change in forest legislation. In 1992, the Federal Forestry Service was established to regulate forest relations. On March 6, 1993, the Fundamentals of Forest Legislation of the Russian Federation were adopted. It is in this document that the concept of the Forest Fund of the Russian Federation appears. The forest fund is a natural and economic object of federal ownership. In simple words, it is the totality of all forests, forest and non-forest lands, the boundaries of which are established by forest and land legislation. Tasks - forest relations, management, use and reproduction of forests.

The forest fund plays an important economic and economic role of the country. Forests are usually classified as environmental goods, as they are non-market goods. In turn, ecological goods are included in the sub-section of public goods, which makes forests a socially important object. The lands of the forest fund are divided into two main groups:

1. forested - most often covered with vegetation or intended for reforestation tasks;
2. Non-forest - intended for forestry.

The tasks of the Forest Fund of the Russian Federation cover a wide range of areas aimed at sustainable development and preservation of the country's natural wealth. The key task is the rational use of forest resources, which implies their careful and efficient use, minimizing losses and maximizing benefits for the economy while observing environmental standards.

Another important goal is not only the preservation, but also the multiplication of forest resources. This includes ongoing reforestation and afforestation activities aimed at increasing the area of forests, as well as restoring lost and degraded ecosystems.

The Forest Fund is also responsible for maintaining the ecological balance, which is vital for climate stabilization and biodiversity conservation. This is achieved through monitoring the state of forest ecosystems, monitoring their health and the introduction of modern methods of environmental management.

In addition, an important area of the foundation's activity is the creation and improvement of recreational areas, which become a place of recreation and recreation for millions of citizens, as well as the support and preservation of cultural heritage sites located in forest areas. These efforts contribute not only to strengthening the tourist attractiveness of Russian forests, but also to preserving their historical and cultural value.

Thus, the Forest Fund of the Russian Federation solves complex tasks aimed at the harmonious development of forest resources, contributing to improving the quality of life of people and stabilizing the environmental situation in the country. In this regard, it is important to develop a concept of legal regulation that will help participants in forest relations to use forest resources rationally and minimise damage to the country's forests, preserve and increase their wealth.

In turn, today the system of forest legislation of the Russian Federation faces a number of problems that require urgent solutions. Many individuals face difficulties in obtaining forest use permits. This process becomes a burden for those involved in the paperwork, pushing many to engage in forestry without a permit. Thus, the lack of clear rules leads the

whole legal regulation into chaos. Also, there is inefficient forest management. Not always in the regions there is a clear control in the field of planning and monitoring of forest resources [12].

In order to understand the problem of legal regulation in relation to the lands of the forest fund of the Russian Federation, a systematisation of the legal framework is required. Table 1 shows the main elements of the forestry legal framework

Table 1. System of forestry legislation in the Russian Federation

Federal level	Regional level
Constitution of the Russian Federation	Orders of regional ministries
Forest Code of the Russian Federation	
Orders of the Ministry of Natural Resources of Russia	
Orders of the Ministry of Agriculture of Russia in the field of forest relations	
Resolutions of the Government of the Russian Federation	

Analysing the current Forest Code of the Russian Federation, one can observe the interrelation and similarity of directions with the Federal Law No. 7 ‘On Environmental Protection’.

The Forest Code primarily addresses the guidelines for the utilization, safeguarding, and regeneration of forested areas. It delineates the rights and responsibilities of forest landowners, leaseholders, and users, and outlines the prescribed methods for forest usage, reforestation initiatives, and protective measures for these vital ecosystems. [4].

On the other hand, the Federal Law ‘On Environmental Protection’ encompasses a broader array of environmental concerns. This law lays down the foundational legal framework for shaping state policies on environmental conservation and governs the effects of economic activities and other human endeavors on the natural world. It also considers aspects of sustainable development and maintains a focus on environmental safety.

When it comes to the precision of terminology, it is acknowledged that legal texts sometimes leave certain terms open to interpretation. This ambiguity necessitates further elaboration through subordinate legislation or judicial rulings. Such flexibility is essential to accommodate evolving environmental conditions and advancements in natural resource management technologies.

In essence, while the Forest Code provides specialized guidelines focusing on forest management, protection, and renewal, the Federal Law ‘On Environmental Protection’ serves as a more comprehensive framework guiding the overall environmental policy. Together, these legal instruments work in tandem to promote sustainable environmental practices and adapt to changing ecological dynamics. The fluidity in legal definitions facilitates adaptation, ensuring that both laws remain relevant and effective amid continual environmental and technological advancements.

According to the adopted Concept, forests located on forest fund lands belong to state ownership. In this approach, the delimitation of ownership of forest resources between regional authorities and the federal level is not assumed by the draft law. This method allows for the distribution of administrative functions and control over forests between different levels of government, ensuring a decentralised approach to the management and use of forests.

Beyond state ownership, forests can also be held privately or by municipal authorities. This aligns with the Russian Federation’s Constitution, which stipulates that land and natural

resources can be owned in several forms, such as private, state, municipal, and other ownership structures.

To create a coherent and comprehensive framework for forest legislation, it is crucial to consider all facets of forest area management and conservation. This includes establishing clear legal regulations, categorizing land types, detailing forest management practices, and setting forth penalties for regulatory infractions.

Recognizing the diverse ownership structures allows for a more flexible and inclusive approach to forest management. Private ownership can incentivize sustainable practices by aligning environmental health with economic benefits, while municipal control can foster community involvement and tailored local policies. Meanwhile, state ownership ensures broad regulatory oversight and protection of national interests.

To effectively organize forest-related laws, it is essential not only to codify procedures and classifications but also to incorporate adaptive management strategies. This involves regularly updating policies to incorporate new scientific insights, addressing emerging challenges such as climate change, and ensuring enforcement mechanisms are robust and responsive to violations. By integrating these elements, the legislation can more effectively safeguard forest ecosystems while accommodating the diverse ownership patterns recognized by national law. The main forms of legal regulation of forests of the Russian Federation are presented in Table 2.

Table 2. The main forms of legal regulation of Russian forests.

Regulatory legal acts in the sphere of federal state forest control (supervision)	State forest control/supervision
Federal Forestry Agency Laws	Lists of regulatory legal acts and their separate parts (provisions) containing mandatory requirements
Resolutions of the Government of the Russian Federation	Public discussion of draft reports on the results of the generalisation of law enforcement practice
Orders of the Ministry of Natural Resources and Environment of the Russian Federation	Detection and suppression of violations of mandatory requirements
Orders of the Ministry of Economic Development of the Russian Federation Orders of the Federal Forestry Agency	Preventing risks of harm
Orders of the Ministry of Economic Development of the Russian Federation	Pre-trial appeal
	Risk of harm prevention programme

At present, the Federal Service for Supervision of Natural Resource Use is responsible for the protection of forest lands. The Forest Code of the Russian Federation is an important legal reference point in relation to the lands of the forest fund. But along with it the Land Code of the Russian Federation, the Water Code of the Russian Federation and other federal laws and regulations are applied.

Analysing the data of court cases, which are available in the public domain we can formulate the following conclusion: a huge number of violations are related to the intersection of the boundaries of land users' plots with the boundaries of the forest fund of the Russian Federation.

Many house plots are in the register of the forest fund of the Russian Federation, so the owner has to challenge his rights through court proceedings. Some cases take more than 10 years. According to the Federal Forestry Agency, in 2020, 263 thousand cases of violations related to crossing the boundaries of the land fund with territories of other categories were recorded. This problem often arises as a result of changes occurring within the boundaries of

the forest fund of the Russian Federation, and is most often found when land plots are transferred to the ownership of individuals or legal entities.

Such violations can lead to serious consequences, including illegal land development, damage to natural ecosystems and contradictions in legal issues related to land use. The causes of such situations can be multifaceted: from inaccuracies in cadastral data to insufficient control by the authorities responsible for monitoring and regulating land resources.

Solving this problem requires an integrated approach, including clarifying and updating cadastral data, strengthening control over compliance with land legislation and more careful coordination between various government agencies. An important step is also the development of information systems that allow automating the processes of accounting and monitoring of land resources, which will help reduce the number of such violations in the future.

Another frequent problem among cities is the assignment of the same lands under different categories. For example, on the territory of Voronezh there is the Voronezh Highland Dubrava, which in turn is a territory of the forest fund of the Russian Federation. But according to the documents, some plots are also categorised as lands of settlements, and construction can be carried out on it, which contradicts the requirements of lands belonging to the forest fund.

Owners of land plots located on the territory of the forest fund of the Russian Federation face serious problems, including the imposition of fines and demands to return their plots back to the forest fund. This is due to the fact that the lands of the forest fund are the property of the state, and their use is under strict control according to the legislation of the Russian Federation.

One of the key reasons for such requirements is to protect public interests and preserve the integrity of forest ecosystems. The Forest Fund performs many important functions, such as maintaining biological diversity, regulating climate and water regime, as well as providing resources to both current and future generations.

To resolve emerging conflicts, it is worth paying attention to the active interaction between government agencies and landowners. This includes explanatory work aimed at raising awareness of the rules and restrictions associated with the use of forest lands. It is also important to review and adjust cadastral data to minimize inconsistencies and potential violations.

Thus, a well-organized approach to the management and use of the forest fund will help to avoid conflicts and ensure the preservation of these valuable natural resources.

It is worth noting that on the basis of current legislation, information on land plots is produced by means of cadastral registration. If the owner owned this plot before it was recognised as forest fund lands, it is legally legal. But when transferring ownership rights, the plot becomes forest fund lands of the Russian Federation.

One of the problems of protecting the lands of the forest fund of the Russian Federation is deforestation, which leads to degradation of biodiversity and deterioration of ecosystems. The negative consequences of deforestation are considered to be changes in the water balance, loss of ecosystem stability and desertification of lands. Irrational management of natural forest resources leads participants of forest relations to illegal logging. Ignoring the issues of reforestation, insufficient measures to protect forests from fires can lead to irreversible consequences.

Current normative acts of forest legislation often do not fully take into account the specifics of activities related to geological research of subsurface resources, as well as exploration and extraction of minerals. This leads to the application of norms and requirements that do not take into account the specifics of this activity. Some provisions of the forest legislation impose restrictions and prohibitions on the use of forest lands, which

complicates the process of allocating sites for exploration and mining. In this regard, work continues on improving the legal and regulatory framework in this area. It is also important to take into account the ecological role of the forest fund, considering it not only as an economic resource, but also as the basis of ecosystems that require special attention and protection.

Obviously, in addition to long-term leasing of land for the development of mineral deposits, the state as the owner of subsoil resources needs to have the possibility of short-term provision of land for other types of subsoil use. This includes geological survey and exploration for a period of 3 to 6 months, as well as mining and drilling for a period of 6 to 12 months, which affect small areas of land. However, the granting of land plots on short-term lease for geological survey and prospecting works faces difficulties.

One of the key problems is the absence of an easement provision in land legislation that would provide access to subsurface resources. In addition, both land and subsoil laws lack a clearly defined legal regime for conducting state geological or geophysical surveys and prospecting over extensive areas on a sparse sampling network. This must be done without significant disturbance of surface cover and vegetation.

In order to create legal conditions that ensure unhindered exploration and development of mineral deposits, it is necessary to make appropriate changes and additions to federal legislation. In order to speed up the solution of these problematic issues, the SF Committee for the Protection of Natural Resources and Ecology organized a scientific and practical conference «Problems of using forest lands in subsurface use» (2011) in February-March of this year. The event was attended by senators of the Federation Council, deputies of the State Duma, representatives of federal and regional authorities, the scientific community, as well as companies engaged in geological exploration, oil, gas and mineral extraction.

The participants of the scientific and practical conference «Reporting on reserves and resources of solid minerals according to international standards» (2012) came to the conclusion that in order to ensure the necessary legal conditions for exploration and development of deposits, it is important to amend the Forest Code of the Russian Federation and other federal laws.

The conference participants recognised the advisability of preparing a draft federal law ‘On Amendments to the Forest Code of the Russian Federation’ providing for changes in the use of forest land for subsoil use. The Government of the Russian Federation was recommended to amend the relevant regulatory acts and accelerate the approval of the List of objects not related to the creation of forest infrastructure, as stipulated by the Forest Code of the Russian Federation.

In order to solve the problems of forest lands of the Russian Federation we propose the following changes. First of all, it is important to optimise the use of abandoned lands. To increase the number of reforestation projects, as well as to introduce different forest-climatic projects. Another important point is the systematisation of the legal framework of forest legislation. It is important to consistently describe all necessary forest management documents and the regulatory framework for environmental protection in the Forest Code of the Russian Federation.

Until recently, the functions of managing state forests, which are federal property, were performed by the Federal Forestry Service. This service combined forest management with the management of forestry as a separate branch of material production, and also directly carried out economic activities in forest areas. This combination of functions was most clearly manifested in the work of forestry operations, which acted both as the main state forest management body and as an economic entity that carried out a full range of forestry operations, including felling for intermediate use of forests.

In conditions of acute shortage of budgetary funding allocated for forest management, protection and restoration, leskhozoes were forced to generate income on their own. The main

source of their revenues was logging, controlled by them, with the subsequent sale of timber and processed products. As a result, the share of own funds of leskhozos averaged 50 per cent in the industry, and in some regions reached 70-80 per cent. Forestry provided up to 17% of total timber production, making it one of the leading players in the logging sector [15].

It should be noted that the Forest Code of the Russian Federation already mentions recreational development (Article 25, paragraph 8) [1]. However, this norm lacks a clear distinction between lease conditions and lessees' obligations to care for forest lands. The introduction of a new law regulating recreational activities is urgently needed. However, such a law should not become another 'loophole' that allows the installation of fences and structures for personal gain or recreation of selected individuals, rather than for the common good of citizens.

Currently, there are over 14,000 lease agreements in Russia for the use of forests for recreational purposes. Although this number may seem modest against the background of the total number of leased forest areas, it covers an area of approximately 35 thousand hectares. This area represents less than 1% of all forest areas leased for various types of use.

The reality is that examples where such leases actually provide mass access to recreation and promote sports activities among the population are still rare, as evidenced by Rosleskhoz. This emphasises the urgent need for the development and implementation of new legislation regulating recreational use of forests. Such a law should create favourable conditions for the development of infrastructure and opportunities for outdoor recreation.

It is interesting to note that leasing forests for recreational purposes can be much more profitable for the state treasury than traditional forestry activities related to timber harvesting. According to Rosleskhoz's calculations, it generates a hundred times more income. If the process is carefully organised and really well established, the lease of plots for recreation can become a profitable enterprise not only for the state budget, but also for entrepreneurs, as well as for the general public, who will have access to quality natural resources for recreation and health promotion.

Thus, the potential of recreational leasing of forests is enormous, and there is every reason to believe that if properly organised and effective legislation is introduced, this sphere can significantly enrich both the state treasury and social infrastructure, contributing to the improvement of the quality of life of Russians and the preservation of forest ecosystems.

According to the Federal Forestry Agency of the Russian Federation, leasing forests for recreational purposes brings 100 times more profit to the state budget than industrial timber harvesting. If organised correctly, the lease of plots for recreation can become a profitable business for all parties: the state budget, businesses and the general public. Another excellent example of a way to solve the problems of forest fund lands is the Federal Law of 29 July 2017 No. 280-FZ - the law on 'forest amnesty'. The law on forest amnesty is aimed at eliminating disagreements between private individuals and the state regarding land plots located within forest lands.

The main advantage is simplification of the procedure for registration of ownership rights to land plots located on forest fund lands. Reduces the number of conflicts between land owners and state structures. In the past, there were conflicts due to different definitions of forest territory boundaries. The construction of roads, power lines and other infrastructure facilities is possible without a lengthy approval process. This has a positive impact on the quality of life of people and accelerates regional economic development. In general, the law on forest amnesty represents an important step towards solving many problems related to the use of forest lands and creates conditions for more effective management of these territories.

International experience in protecting forest land includes a variety of approaches and strategies developed in different countries to ensure sustainable use and protection of forest resources. Here are some of the key aspects of this experience:

1. Certification of sustainable forest management:

- Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) are international programmes that certify forests that are managed sustainably from an environmental, economic and social responsibility perspective. These programmes promote best practices in forest management and increase the market value of certified products.
- 2. Laws and Regulations:
 - The European Union has a law known as the EU Timber Regulation (EUTR) that requires companies to ensure the legality of the origin of timber and wood products. Similar legislative initiatives have also been adopted in the USA (Lacey Act) and Australia (Illegal Timber Export Regulations).
- 3. Monitoring technologies:
 - Brazil uses satellite technology to monitor logging in the Amazon, allowing the government to quickly identify and intervene in illegal operations. The PRODES programme is an example of effective monitoring that allows for an annual assessment of the area of deforested forests.
- 4. Community participation:
 - Countries such as Canada and Sweden are implementing participatory forest management models where indigenous and local communities play a key role in forest management decisions. This improves sustainability of management and reduces conflicts between different stakeholders.
- 5. Economic incentives:
 - Costa Rica has successfully implemented a Payment for Ecosystem Services (PES) system that encourages forest conservation by providing local landowners with economic incentives for maintaining the ecological functions of forests.
- 6. International initiatives and agreements:
 - Global agreements such as the Convention on Biological Diversity (CBD) and the Paris Climate Agreement set targets for countries to protect forest ecosystems and reduce deforestation to meet climate goals.

These examples demonstrate that an integrated approach to the protection and management of forest resources, including legal, technological and socio-economic mechanisms, can significantly improve the state of forest ecosystems. Russia can use this experience to improve its forest land protection system by adapting successful practices to national conditions.

4 Conclusion

The protection of forest lands in the Russian Federation is one of the key challenges. In conclusion, the legal protection of forest lands in Russia plays a critical role in ensuring the country's environmental well-being and sustainable development of natural resources. The current system of legislation contains numerous mechanisms and tools for forest land protection, but numerous challenges stand in the way of effective implementation, such as insufficient funding, weak law enforcement and inadequate implementation of environmental protection norms.

Examining global experience can offer useful lessons and strategies for overcoming these challenges. Leading countries such as Canada, Finland and Sweden have demonstrated high effectiveness in legally protecting forest land through the introduction of monitoring technologies, sustainable forest management and active participation of local communities. International initiatives such as REDD+ and FSC certification provide platforms for sharing best practices and financial support for implementing conservation measures.

Improving the situation in Russia requires a comprehensive approach, including both improvement of the regulatory and legal framework, taking into account the best international

practices, active public involvement, and development of international co-operation. Only through the harmonious interaction of all stakeholders is it possible to achieve effective protection and sustainable use of Russia's forest fund for present and future generations.

References

1. Forest Code of the Russian Federation: Federal Law of 04.12.2006 № 200-FZ // ConsultantPlus: reference and legal system [electronic textual data]. Mode of access: http://www.consultant.ru/document/cons_doc_LAW_5142 (date of reference: 15.11.2024).
2. N.V. Belmach, N.P. Kuzmich, Property relations in the Russian Federation **10(265)**, 59-64 (2023). <https://doi.org/10.24412/2072-4098-2023-10265-59-64>.
3. L.G. Klyukanova, Management Consulting **1(73)** (2015).
4. D.I. Kochnov, A.-A. Maldonado-Popova, T.A. Merkulova [et al.], Legal regulation of the use and protection of forests under the legislation of the Russian Federation and foreign countries (Moscow, Institute of Legislation and Comparative Law under the Government of the Russian Federation: INFRA-M, 2016).
5. E.I. Kovyrshina, Gaps in Russian legislation **7**, 98-103 (2020).
6. E.A. Yudin, Property relations in the Russian Federation **1(256)**, 38-49 (2023). <https://doi.org/10.24412/2072-4098-2023-1256-38-49>.
7. A.P. Petrov, G.N. Filiushkina, E.G. Kulikova, V.K. Teplyakov, State management of forestry. G. G., Teplyakov V. K. State management of forestry (Moscow, VNIILM, 2004).
8. I.A. Konnov, G.S. Varaksin, *Features of forest land cadastral registration in Russia and foreign countries*, In collection: Problems of modern agrarian science. materials of the international extramural scientific conference (2017).
9. Official website of the United States Forest Service. <https://www.fs.fed.us/>
10. The law on the organic management of the forest service (Law of June 4, 1897), The law on the organic management of the forest service (Law of June 4, 1897).
11. The National Forestry Management Act of 1976, The National Forestry Management Act of 1976.
12. Yu.I. Shupletsova, Environmental Law **4**, 35-38 (2023). <https://doi.org/10.18572/1812-3775-2023-4-35-38>.
13. Federal Law on Environmental Protection//https://www.consultant.ru/document/cons_doc_LAW_34823/
14. N.D. Vershilo, T.A. Vershilo, Russian Justice **8**, 105-109 (2020). <https://doi.org/10.37399/issn2072-909X.2020.8.105-109>.
15. A.S. Isaev, G.N. Korovin, Forestry **3**. 9-12 (2001).