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Forestry violations as a global issue of legal regulation in the field of forest control and supervision: the Krasnodar territory and the Republic of Bashkortostan case study

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Abstract: Control and supervision activities in the field of forest management are a type of activity of state authorities to detect, prevent forest violations. The purpose of this study is to analyse the dynamics and nature of violations in the forest sector on the example and in comparison of such regions of Russia as the Krasnodar territory and the Republic of Bashkortostan. The research methodology is selected taking into account the characteristics of the object under study. With the assistance of employees of the environmental inspectorate, search operations were organized in the areas where the greatest amount of forest damage occurs in the studied regions. The authors concluded that one of the reasons for the existing problems is the lack of interest of the state in the development of this sector of economy. The paper focuses on specific types of forest violations and the problems of their prevention. The authors believe that illegal logging belongs to the most common and socially dangerous forest violations. The article concludes that when adopting new regulations for control and supervisory activities in the field of forest management, the legislator must take into account requirements of administrative reform, regulatory guillotine, and risk-based approach.

Keywords: control and supervision activities; forest use; forest offence; illegal logging; regulatory guillotine; smuggling of forest products

Forest violations can be considered as one of the critical global problems in modern world (Nukusheva et al. 2020). The question regarding the situation around forestry is especially sensitive for Russia as the most of the state is occupied by forest territories. The share of operational forests in Russia accounts for more than 200 million ha of the country's total area (in total, the forest fund lands account for almost 450 million ha) (Asylbaev et al. 2018). However, only a small percentage of forests are currently subjected to economic development. Lack of raw materials is the main cause of forest damage in Russia. For the same reason, not only in the Russian Federation, but also throughout the world, there is an increase in unregulated and irrational anthropogenic impact on forest ecosystems (Khalikova et al. 2019).

Rational use of natural resources in this area is also hindered by the state's lack of interest in developing this area of the economy and bringing it to the world level. Despite the adoption of the principles of state policy in the field of use, protection and reproduction of forests in the Russian Federation for the period until 2030 (approved by Order No. 1724-R of the Government of the Russian Federation from September 26, 2013) and the State Program of the Russian Federation "Forestry Development" (app. by Decree No. 318 of the Government of the Russian Federation dated April 15, 2014), documents

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aimed at improving the system of federal state forest supervision (forest protection) and federal state fire supervision in forests, improving the composition of rights and obligations, as well as expanding the scope of responsibility of the forester, which are necessary for effective state management in the territory entrusted to them , the development of public forest supervision in compliance with these normative documents, were not adopted.

The following requirements are imposed on forest management entities when carrying out their economic activities: rational nature management (monitoring of forest territories, conservation of biodiversity, viability of woody plants, identification and conservation of rare and endangered species of woody plants); compliance with legal requirements, as well as compliance with international obligations (Khalikova et al. 2019).

Unfortunately, not all forest users take a responsible approach to their duties and often commit violations of current legislation. Analysis of the ratio of the number of inspections carried out annually by control bodies in the field of forest management and the number of controlled entities covered annually by control measures on the example of the Republic of Bashkortostan shows that the number of inspections has increased significantly over the past years (Konovalov et al. 2018). However, this did not lead to a qualitative change in the state of forest management – the number of violators and violations remained approximately at the same level.

During the research, the authors conducted a review of the literature over the past 10 years, as well as a comparative analysis to identify the types and nature of offenses in the forest sector of different States. When conducting a comparative analysis of legal regulation in the field of forest management in different countries, the form of government in the state, the economic situation and the percentage of land covered by forest to the territory of the analysed state were taken into account. Research in the field of forest violations revealed issues and problems of improving legal norms regulating the procedure for resolving cases of administrative offenses in forestry. Analysis of literature sources has led to the conclusion that legal differences in environmental management in different countries directly depend on the nature of the use of available forest resources and the understanding that not all forest resources are renewable. Increasing the resilience of natural ecosystems to anthropogenic factors and creating a unified regulatory and legal framework in the field of forest disturbance prevention remain a priority for all countries. Modern researchers in the field of forestry regulation also recognize that environmental offenses in our time are gaining a large-scale character, and there is a need to introduce responsibility corresponding to modern realities, including criminal responsibility, for these types of forest violations (Ahmed, Oruonye 2017; Benţa 2017; Grebenyuk, Varnavskaya 2019).

In Russia, violations of legislation in the field of forest management are distributed unevenly both by territory and by the amount of damage and are usually based on territories with a large area occupied by forest stands, the wood of which has a high marketability. Such regions include the Krasnodar territory and the Republic of Bashkortostan, where forest territories cover more than 60% of the area. Valuable and unique woody plants are concentrated there. The objects of research were selected depending on how various factors affect forest disturbances and the motives for their commission, depending on different forest conditions and the species composition of woody plants. So, especially valuable tree species in the Krasnodar territory are beech (*Fagus*) and oak (*Quercus*) stands, thickets of blunt-leaved pistachio (*Pistacia atlantica* subsp. *mutica*) and juniper (*Juniperus communis* L.) woodlands. In the Republic of Bashkortostan, small-leaved linden (*Tilia cordata* MILL.) grows everywhere, which is a honey crop and becomes an object for illegal logging and further sale. In addition to linden (*Tilia*) forests, birch (Betulaceae) and oak (*Quercus*) stands are being destroyed in the Bashkir pre-Urals zone for the purpose of timber harvesting. In the mountain-forest zone of the Republic, under the influence of vertical zoning, common pine (*Pinus sylvestris* L.) grows, which is also an object of extraction for black loggers.

The problems identified in the course of the study indicate gaps in the system of legal regulation of the control and supervision of forestry activities not only in the studied regions of Russia, but also in foreign countries.

Literature review. Modern researches that consider offenses in the field of forestry legislation are devoted to such issues as the role of public consciousness and the impact of law on offenses in the field of forestry (Gençay, Mercimek 2019), the role of corporate social responsibility in the forestry sector (Colaço, Simão 2018), consideration of the relationship between the structural and socio-economic

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characteristics of urban forests with the emergence of crime (Escobedo et al. 2018), linking notions of justice and project outcomes in carbon offset forestry projects (Fisher et al. 2018), consideration of forest offences within the framework of criminal law (Elvan 2014), features of offenses in the field of forestry in Russia (Ditsevich et al. 2017; Grebenyuk, Varnavskaya 2019), consideration of forest offences from the prospect of national security (Benţa 2017), perspectives of the development of forest protection regulation (Karmiłowicz et al. 2018), forestry enforcement issues (Ahmed, Oruonye 2017). As it can be noted, based on the literature review, the world agenda today includes the issues of forest conservation, increasing the role of forests in the natural habitat conservation. It can be assumed from the overview that the ecological and environment-stabilizing role of forests in the near future may become entirely the subject of market relations. Talking about the legal component, the overview gives reasons to assert that the control and supervision functions of the state bodies traditionally require the greatest attention. Based on the analysis of modern sources in the context of this study, it should be noted that the Russian legislative and law enforcement practice in matters of forestry protection, as well as issues related to the work of supervisory and regulatory bodies, is considered exclusively superficially.

MATERIAL AND METHODS

The research is based on the analysis of the legal basis of Russia in the frame of forestry legislation – Order No. 1724-r of the Government of the Russian Federation of September 26, 2013 "On 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". Another source of legislation is Decree No. 318 of the Government of the Russian Federation of April 15, 2014 "On approval of the State Program of the Russian Federation Development of Forestry" (with amendments and additions). Taking into account the fact that many existing international treaties deal with forest-related issues, but there is no global legal instrument in which forests are the main subject and in which they are considered comprehensively, this work focuses mainly on the consideration of national legislation.

Methodology of the research is chosen taking into account the characteristics of the object under study. With the support of environmental inspectors a search operation was organized in areas with the greatest volume of offences in the forest area in the studied regions: the territory of Gelendzhik, Michael, Novorossiysk and Jungsoo forestry of the Krasnodar territory, Abzelilovsky, Beloretsky, meleuzovskiy, Ufa and Yanaul forestry in the Republic of Bashkortostan.

Planning and selection of specific sites for field surveys, included for assessing the state of forest areas and possible violations in the implementation of forestry, were carried out by random sampling based on information about the targeted part of the activities.

The information base of the research comprises the materials of law enforcement practice of the supervisory authorities in the field of forest management, statistical and other data on the implementation of federal state fire and forest supervision from 2011 to 2019, as well as the results of own observations conducted over the past 5 years. The observations were carried out in the course of joint inspections of forests in the studied regions with environmental inspectors. Forestry specialists assisted the authors in collecting data related to the detection of violations in the forest sector of the regions.

To solve these tasks, we used both theoretical (legal methods within the framework of the current Russian forest legislation) and practical methods for studying forest violations (methods of statistical observations of the dynamics and development of control and supervisory activities in the field of forest management).

The study was designed taking into account the nature and type of forest disturbance in a particular region and taking into account the intended purpose of forests. At this stage, public and secret methods of operational search activity were also studied. During the data analysis, the main signs of forest disturbances or their absence were studied, and signs of illegal or unregulated economic activity were studied on the ground.

The available statistical data allowed us to analyse the forest management of the Krasnodar territory and the Republic of Bashkortostan, as well as violations committed by forest users in its implementation. During the research, the authors were also given the opportunity to get acquainted with the technological processes of enterprises that operate in the forests of the Krasnodar territory and the Republic of Bashkortostan.

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RESULTS AND DISCUSSION

The role of forests and other wooded areas for the global ecosystem cannot be overemphasized. Forestry is the main storehouse of biological diversity in most of the land, providing important general ecological functions, as they serve as sinks for carbon removed from the atmosphere, and preserve the quality of water and soil. At the same time, legislative mechanisms and law enforcement are not always able to resolve issues related to the need to preserve forests, and in the light of numerous challenges the world community is facing, forestry issues in modern conditions are given critically little attention. An example of this is the absence of a comprehensive international legislative regulation in this area, which provides for prohibiting, prescriptive and sanctioning mechanisms in this area, transferring these issues to the national level. Considering the general context of the issue, an important characteristic describing the state of the world forestry is that each country has its own culture of forestry, has specific goals, different forms of ownership, special social requirements, as well as such forms of environmental pressure as climate change, depletion of biological diversity, illegal logging. In Europe, traditionally considered a flagship in environmental protection, forests are the subject of many policy initiatives and processes at various levels. This includes a number of international conventions and two pan-European ministerial processes: Environment for Europe and the Ministerial Conference on the Protection of Forests in Europe (MCPFE), which aim to reach a common solution and work out the plan of necessary actions. In particular, an integrated approach is needed when maintaining biodiversity, as reflected in the MCPFE, where biodiversity is considered one of the indicators of responsible forest management. The MCPFE applies one biodiversity criterion for protected forests and eight biodiversity criteria for other forests. In the EU, these initiatives are implemented through strategic program packages, action plans, directives and regulations. This political structure reflects the long tradition of forestry in the EU countries and ensures that the forest resources are under satisfactory control and protection, although environmental threats remain (it is necessary to stop the depletion of biological diversity, improve the efficiency of forests as carbon sinks, etc.). On a European scale, the situation is more complicated. For example, forests in countries with economies in transition are undergoing many changes resulting from the opening of new export markets, organizational restructuring and changes in ownership (Benţa 2017; European Commission 2020).

Until relatively recently, timber that was harvested illegally was no longer considered illegal after it left the harvesting country. The EU Timber Regulation, the US Lacey Act and the Australian Illegal Logging Prevention Act have changed this. They *de facto* declare it illegal to place timber in these markets if it was illegal in the country where it was harvested. In particular, they require companies to exercise due diligence (or, in the case of the Lacey Act, exercise "due diligence") to minimize these risks.

The following legislative initiatives can be noted as milestones of legislative measures to combat illegal logging around the world:

– 2003 – The EU Action Plan for Forest Law Compliance, Governance and Trade (FLEGT) sets out measures to help developing countries control illegal logging and reduce the trade in illegal timber between these countries and the EU;

– 2006 – The Green Procurement Law (Japan) introduces a government procurement policy that prioritizes wood products derived from legally harvested timber in a sustainable manner;

– 2007 – Norway bans the use of tropical timber in government procurement;

– 2008 – The Lacey Act (USA) was amended for wood and paper. The original law prohibits wildlife trafficking. The amended law is the world's first law to prohibit the sale of illegal timber products;

– 2010 – EU Timber Regulation was adopted. The Regulation bans the placement of illegal wood products on the European market and requires companies to conduct due diligence;

– 2012 – Australian Illegal Logging Prohibition Act was adopted. It prohibits Australian companies from importing illegally harvested timber into Australia and processing illegally harvested Australian timber;

– 2013 – EU Timber Regulation came into force. It bans the placement of illegal wood products on the European market and requires companies to conduct due diligence;

– 2016 – The Law on the Promotion and Use of Legally Harvested Wood (Japan) requires companies to register to certify that they will only trade legally produced timber (Preferred by Nature 2019). EU forestry legislation also covers such documents as Regulation of the European Parliament and of the Council laying down the obligations of operators

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who place timber and timber products on the market (20 October, 2010); Commission delegated Regulation of Februar 23, 2012 on the procedural rules for the recognition and withdrawal of recognition of monitoring organisations as provided for in Regulation (EU) No. 995/2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market; Commission implementing Regulation (EU) No. 607/2012 of 6 July, 2012 on the detailed rules concerning the due diligence system and the frequency and nature of the checks on monitoring organisations as provided for in Regulation (EU) No. 995/2010 of the European Parliament and of the Council laying down the obligations of operators who place timber and timber products on the market.

In Russia, the issue of illegal logging is given special importance as according to some estimations the scale of illegal logging accounts for up 40% of the total volume of logging (map of Russia's forests – Figure S1 in the Electronic Supplementary Material). Since the beginning of 2019, the Ministry of Natural Resources of the Krasnodar Region and the regional state institution "Forest Committee" subordinated to it have conducted 23 planned and 12 unscheduled inspections to monitor compliance by legal entities with the requirements of forest legislation. More than 3 000 violations and 722 cases of illegal logging of forest stands with a total volume of 109.2 thousand cubic meters were detected in the course of 5 073 control and supervision activities in the forests. The damage caused to the forests amounted to 734 525.4 thousand rubles (Ministry of Natural Resources of the Krasnodar Region 2019).

According to the Ministry of Forestry of the Republic of Bashkortostan, more than 30 000 route patrols and more than 1 500 raid checks are conducted annually in the Republic together with law enforcement agencies. More than 2 500 violations were detected, including 2 547 cases with total damage in the amount of 129 million rubles in 2019, while 534 (almost 20%) cases relate to illegal logging with damage in the amount of 129.0 million rubles (Ministry of Nature Management and Ecology of the Republic of Bashkortostan 2020).

Illegal logging was detected during the monitoring of forests in the Krasnodar territory and the Republic of Bashkortostan. The geographical coordinates of the cuttings were determined using a GPS Navigator and compared with a specific block. The legality of the observed logging during the survey was established according to the logging tickets. Thus, illegal logging in the Krasnodar territory is detected annually within almost all quarters of such forest areas like Gelendzhik, Mikhailovsky, Novorossiysk and Dzhubgskoe. The stands of beech (*Fagus* L.), oak (*Quercus robur* L.), and hornbeam (*Carpinus betulus* L.) are of interest to black loggers there. The most valuable for them are juniper (*Juniperus communis* L.) woodlands and especially valuable wood of the blunt-leaved pistachio (*Pistacia atlantica* subsp. *mutica*), which is located in the Novorossiysk forest area (the big Utrish reserve has been completely destroyed by black loggers over the past 5 years).

In the Republic of Bashkortostan, the largest traces of illegal logging were found within the Yanaulsky forest area and in the Meleuzovsky district (near the Nugush reservoir). Here, of particular interest is the small-leaved Linden (*Tilia cordata* MILL.) nectar, which is a honey crop (any types of logging were previously banned in the Republic).

It should be mentioned that Federal state forest supervision (forest protection) and Federal state fire supervision in forests are carried out by the Federal Forestry Agency, Federal Service for Supervision of Natural Resources and executive authorities of the Russian Federation's subjects within the framework of the transferred powers of the Russian Federation to implement Federal state forest supervision (forest protection) in accordance with their competence in accordance with the legislation of the Russian Federation. The municipal forest control over forest plots that are in municipal ownership is carried out by local self-government bodies. Thus, forest users fall under different types of state (municipal) forest supervision and control. At the same time, different types of control often seriously overlap with each other. Some researchers note that approximately 10–14% of controlled entities that are included in the audit plan of the Federal body are also included in the audit plan of regional control bodies in the field of forest management (Konovalov et al. 2018). The low efficiency of some types of state control and supervision leads to controversial situations in the activities of other state bodies.

Based on the understanding that duplication of powers and excessive control (supervision) in the field of forest use are unacceptable – within the framework of the regulatory guillotine mechanism, it is necessary to decide how many types of state supervision (control) in the field of forest use should be retained. In the regulatory guillotine of permissive

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activity, the composition of mandatory requirements for state control and supervision in the field of forest use is directly related to the phenomenon of administrative responsibility (Gabdrakhimov et al. 2018). By revising the types of state control (supervision) in this area, eliminating duplication of control and the associated negative consequences, it is possible to achieve and improve the rule of law in the activities of economic entities – forest users.

There are some reasons to consider that it is impossible to reduce the types of state control (supervision) without having an initial fixed list of them. It is important that Article 18 of Federal Law No. 248-FZ of July 31, 2020 "On state control (supervision) and municipal control in the Russian Federation" provides for maintaining a unified register of types of Federal state control (supervision), regional state control (supervision), and municipal control. By July 1, 2021, when the Federal law comes into force, it is necessary to determine which types of state control (supervision) in the field of forest management should be preserved and included in the above-mentioned register.

One of the options for reducing control and supervision activities in Russia is a mechanical reduction in the number of inspectors. However, in relation to the Republic of Bashkortostan, there is an insufficient number of employees of the control and supervisory bodies of forest and fire supervision in the conditions of higher standards for the area of forest plots per employee (Asylbaev et al. 2018). There are some reasons to believe that the process of implementing the regulatory guillotine of control and supervisory activities should take into account the geographical, territorial, socio-economic and other features of a particular subject of the Russian Federation.

Of course, in order to optimize the use of labour, material and financial resources involved in the implementation of state control (supervision) in the field of forest management, the specified activities of state authorities and local self-government should be carried out using a risk-based approach, that is, the choice of types of control (supervision), time, duration and frequency of activities should be determined depending on the classification of the legal entity's activity, individual entrepreneurs and their production facilities belong to a certain risk category. For example, it is advisable to conduct forest fire surveillance during the period from April to September, which is characterized by a deterioration of the situation with fires in the forests. In the regions under study, the risk-based approach is successfully applied when conducting state control and supervision activities. So, in the forest areas of the Krasnodar territory, unscheduled raids by nature protection inspectors are carried out mainly during the tourist season.

In order to ensure the effectiveness of the control and supervision activities, and to achieve order in forest management relations as a result of their implementation, it is necessary to involve civil society institutions, including various non-profit organizations (public control), in the conduct of control activities.

The following violations of forest legislation are detected during control and supervision activities:

– violation of the rules of wood harvesting or the procedure for logging forest stands;

– unauthorized use of forests, violation of the rules for using forests for farming;

– violation of the requirements of forest legislation on forest reproduction and afforestation;

– illegal logging, damage to forest stands;

– failure to submit or late submission of the declaration on transactions with wood, as well as the submission of deliberately false information in the declaration on transactions with wood;

– violation of fire safety rules in forests and others.

One of the most common forest violations is illegal felling of trees. According to the clarification contained in Paragraph 16 of the Resolution of the Plenum of the Supreme Court of the Russian Federation from October 18th, 2012 No. 21 "On application by courts of legislation on liability for violations in the field of environmental protection and nature use" it shall be declared illegal felling of forest stand production was conducted in violation of law, without the needed documents, or outside the cutting area (Supreme Court of the Russian Federation 2012).

Depending on the significance of the damage caused by such cutting, an act may become co-administrative misconduct (Article 8.28 of the Administrative Offences Code of the Russian Federation) or a criminal offence (Art. 260 of the Criminal Code of RF). At the same time, a significant amount of damage is understood to be damage caused to forest stands, calculated according to the taxes and methods approved by the Government of the Russian Federation, exceeding 5 thousand rubles.

When detecting forest violations, it is important to correctly record the violation and collect evidence confirming the offender's guilt. Here, just like in criminal proceedings, the requirements for the relevance and admissibility of each piece of evidence

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must be clearly observed, and in the aggregate, all the evidence must be sufficient to bring the perpetrators to justice when considering a particular case. Questions of evidence collection and proof are problematic, since the inspectors who found the forest violation are not lawyers.

When illegal logging of forest stands of the appropriate species is detected, officials of the state forest supervision service, together with employees of divisions of the Ministry of Internal Affairs of the Russian Federation, carry out cuts from trees that are in loaded vehicles installed by them, as well as cuts from tree stumps from places where illegal logging of forest stands is detected. Involvement in the Commission of Forest Violations is established if comparing the cut from a tree with the cut of a stump, the coincidence of their contours is recorded. However, tree rings are not compared. In a number of forensic centres of the Ministry of Internal Affairs of the subjects of the Russian Federation, it is difficult to carry out such examinations. Currently, there is a need to develop software and mobile applications designed for rapid calculation by state forest supervision inspectors of matching contours on tree cuts and issuing conclusions for each cut tree for matches with sawn stumps. In our opinion, this should significantly facilitate the process of qualifying forest violations and bringing the perpetrators to the appropriate type of legal responsibility. Interaction of control and supervisory authorities in the field of forest management in detecting and recording during State Forestry Supervision Service (SFSS) inspections, as well as in the consideration of forest violations is necessary. At the same time, an analysis of the implementation of Federal state fire and forest supervision from 2011 to 2019 in the Republic of Bashkortostan allows us to conclude that the number of SFSS inspections conducted jointly with law enforcement agencies over the past 3 years has been steadily decreasing (from 1 899 inspections in 2017 to 1 508 in 2019) (Ministry of Nature Management and Ecology of the Republic of Bashkortostan 2020), which, certainly, may negatively affect the effectiveness of control and supervision activities in the field of forest management.

The activities of forest protection inspectors, as well as employees of the supervision departments of the EMERCOM of Russia, who investigate and establish the cause of fires at the fire site, are under pressure from representatives of local governments who try to counteract an objective investigation of the causes of fires in their own interests by threatening to dismiss and influence the legitimate activities of supervision inspectors through the management of supervisory authorities (Konashova et al. 2018). The attitude of local self-government bodies to state forest and fire supervision authorities leaves much to be desired. Support for the legitimate activities of state forest and fire surveillance agencies by the Prosecutor's office is in many cases a guarantee of public order, environmental well-being and social justice.

Besides that, there exists a problem with the implementation of national projects through obsolete standards, included in the normative documents of forest control and supervision. Outdated mandatory requirements significantly increase the time and cost of implementing priority national projects. Obsolete sanitary and fire regulations in forest management can significantly increase the budget and timing of control and supervision activities. Forest control and supervision are a matter of the balance of interests between business on the one hand, and the state and society on the other. Unfortunately, a large number of mandatory rules do not improve the situation with levelling real risks. Before the beginning of the fire season, the state fire supervision bodies annually perform preventive measures in compliance with fire safety rules in forests. They familiarize officials, managers of farm enterprises and peasant farms with fire safety requirements in forests against signatures. Thus, in early April 2015, the head of one of the agricultural enterprises in the municipal district of the Republic of Bashkortostan was familiarized with the rules against signature (Gabitov et al. 2018). A week later there was a fire on the land of the forest fund, bordering on agricultural land. The fire moved from the fields of the farm enterprise as a result of burning the remains of straw and not taking fire-fighting measures. On the date of the offence, agricultural burning was not prohibited, but the burning of grass, straw remnants, garbage was allowed only under the supervision of responsible persons. Fields should have been ploughed around, and there should be provided machinery with a barrel of water. These rules were not followed, as a result, the fire moved into the forest. This confirms the need for cadastral registration of forest land with a clear delineation of land boundaries of other categories and to coordinate the boundaries of forest land when allocating land for agriculture, private subsidiary farming and other uses.

Current research gives reasons to consider that as a result of control actions in the field of forest

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management for some types of control, the situation with fire hazard, forest loss, violation of the order of forest use, illegal logging of forest stands improves slightly, or does not improve at all. It often worsens due to the fact that business entrepreneurs are forced to invest in the implementation of outdated mandatory requirements.

The problem consists in the fact that the requirements that are currently contained in regulatory documents do not prevent this risk. At the same time, they create the need to invest in something that distracts the entrepreneur's money from real production. Changing and improving forest legislation do not always meet current requirements.

At the moment, the forest legislation of the Russian Federation does not provide any legal regulation of cutting of forest stands as the cleaning of individual woody plants. In the law enforcement practice of the Soviet period, forest farms realised dead pine and larch. Forestry workers sold these trees to the population piece by piece for firewood, for construction (repair) on private farms. Current forestry regulations do not include this type of cutting of forest stands. There is a problem of increased theft of dead trees in rural settlements with a high level of unemployment. At the moment, forestry enterprises have no opportunity to conduct forest sanitary logging. It would be reasonable to make amendments of the current forest legislation in terms of fixing the harvesting of individual trees as a type of logging of forest stands.

Currently, the forestry regulations should provide for such a type of felling of forest stands as harvesting individual trees. It would be reasonable to amend the current forest legislation regarding the harvesting of individual trees as a type of logging of forest stands. According to the current forest legislation, in rural localities where there is a high level of unemployment, there is a problem of increasing the facts of theft of dead trees. At the moment, forestry enterprises are not able to carry out sanitary logging (Khalikova et al. 2019).

At once, there remains a question about the methodology for assessing the risk-based approach, including the harm and damage that may be caused as a result of non-compliance with the requirements of forest control and supervision. Presumably, if all activities, related to the recognition of certain requirements as excessive, are conducted through assessing harm and damage, then there will be positive results. To do this, it is necessary to agree on the principles that should guide the development of such a methodology.

The goal setting of control and supervision activities in the field of forest management should be changed by law, that is, from the scheme of detecting violations and applying sanctions, we should move to a system that will ensure high-quality contractual relations based on the principle of good faith, and at the same time that will exclude risks to life and health, the well-being of the population and public safety. In our opinion, the accounting of objects without control over the planning of control activities should be one of the principles of control and supervision in the field of forest management.

Gaps in legislation lead to unfair actions of people and businesses that are not always held accountable. Thus, in the law enforcement practice of forest supervision (control) bodies, there is a problem of non-compliance with the requirements of forest legislation, as well as the rules of recreation in forests with the normative documents for the capital construction projects.

In addition, it would be reasonable to modernize the organization of inspections, mandatory verification, pre-trial appeal and consideration of appeals by controlling entities to the actions of officials of the control body, as well as improve performance indicators, taking into account the interaction of control and supervisory bodies with citizens and civil society.

At the moment, in our opinion, the issue of development and functioning of the so-called personal accounts of officials authorized to conduct state control (supervision) in the field of forest management requires implementation. Remote control has potentially large reserves in order to exclude the contact of inspectors with the objects and subjects being checked, taking into account that mechanisms must be provided for stimulating the use of methods by control objects to ensure compliance with mandatory requirements (planning, internal audit, liability insurance, self-regulation, automation of remote-control systems).

Considering the context above, foreign experience in regulating forest legal relations deserves attention. Certain management rights are transferred to user groups through a combination of administrative entities, bureaucratic activities, and virtual platforms (Erbaugh 2019). The changes introduced through the VPA implementation – the Timber Legality Assurance System, updated forest management plans, and an artisanal milling strategy, largely represent technical fixes to deeply political processes that have long upheld unsustainable practices. Other changes such as enhanced enforcement of Social Responsi-

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bility Agreements and more transparent allocations of timber rights are improvements, but they do not fundamentally change the tenure and benefit sharing arrangement, which by any standard is inequitable (Hansen et al. 2018). Since social innovation initiatives in forestry cannot be officially recognized as such, there are two possible ways to develop them. The first refers to market-oriented, forestry-based social innovation initiatives that offer new products or services. Such initiatives can register as social enterprises and mobilize resources that they can access within the social enterprise regulatory framework and rural development program measures that are directly targeted at social entrepreneurship. The second way concerns social innovation initiatives in forestry that are not market-oriented (Rogelja et al. 2018). Within the framework of the strategy of instrumental variables, forests with more extensive community forestry are much more likely to have a proportionally larger area of forest cover and a lower prevalence and intensity of fires. Although the impact extends to reducing fires in neighbouring agricultural areas, it exacerbates fires that occur in nearby open and non-excluded national parks (Chankrajang 2019).

Here are some examples: forest certification has become widespread in the forestry sector of Chile (Tricallotis et al. 2018). The impact of certification was greatest in the plantation forest sector and for larger businesses. These impacts include ending deforestation to create plantations, restoring natural ecosystems, increasing benefits for local communities, and developing a positive dialogue between forest enterprises and their stakeholders. Despite the creation of a legal and institutional framework for the transfer of significant power to local populations, participatory forestry in Bangladesh faces many management challenges (Mollick et al. 2018). The legitimacy of institutions stems from the coercive and conventional social ability to control access to resources and opportunities (Agyei et al. 2019). The state (the Ghana forestry Commission) and non-governmental organizations in Ghana encourage the regularization of rights to commercial tree species or "tree registration" to help minimize the capture of elite forest land (Gaither et al. 2019).

Another example, over the past 20 years, Uganda has become a testing ground for various types of carbon forestry used in Africa. Carbon forestry initiatives in Uganda raise questions of equity, given that people with a relatively small carbon footprint suffer from land-use changes caused by the desire of rich people, firms, and countries to reduce their larger carbon footprint (Fisher et al. 2018).

Companies appreciate wood certification and prefer to focus on disclosing environmental issues related to their activities (Colaço, Simão 2018). At present, when the benefits of forests are becoming more important, there are increasing achievements to ensure the rule of law in forest protection and to raise public awareness of this issue (Gençay, Mercimek 2019). The increase in forest cover and density in urban conditions is associated with an increase in crime according to Escobedo et al. (2018). The long-term employment of homeless people in national forests and grasslands in the United States leads to ongoing management and resource problems. Management issues related to vacationers (homeless, long-term residents) include: maintaining sanitary conditions, public safety, vandalism, and conflict with other forest visitors. These management problems can already have serious consequences for district supervisors and law enforcement officers in many parts of the United States (Baur, Cerveny 2019). The environmental impact of invasive tree pests is increasing worldwide. However, invasive tree pests can also have significant social costs (Kondo et al. 2017). Turkish forests are monitored and controlled by the state. The applicable law on forestry defines what actions will be considered as forest-related offences and the penalties for them (Elvan 2014). Here is another example from the field of forestry: there were numerous situations when the law was not applied for various reasons in different countries (the most important of which is corruption); in Romania in the 1990s this led to the loss of 60% of the forest area, this trend continues there to this day (Ilie 2013).

Speaking about the EU policy in the field of forestry, it should be noted that since the signing of the Rome Treaty, the development and implementation of a common forestry policy in the EU are determined by the legal norms governing the common agricultural policy, environmental protection, free movement of persons, services and capital and others. The European Union exercises its competence in the field of forestry, as well as in other spheres of public life, through its institutions and other special bodies. However, neither the Council of the EU, the main legislative institution of the EU, nor the European Parliament have permanent formations and committees which would be exclusively responsible for forestry issues.

In the EU member states, forestry management is carried out within the framework of national law,

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the formation and development of which are closely related to climatic conditions, culture, and the level of socio-economic development. It should be noted that the dominant role in forestry issues within the EU is played by national forest legislation, which primarily ensures state interests based on the prevailing role of the state priority. Sovereignty in this case is manifested in the fact that the EU countries have independence regarding the exploitation of forests, independence in the choice of development priorities, the formation and implementation of national forest policy (Gordeeva 2014).

The integration of EU forestry policies was reflected in the development of a draft Forest Strategy by the European Commission at the end of 1998 (European Commission 2021a). The European Commission and the European Parliament have recommended the adoption of the Strategy in the form of a normative legal act of the generally binding nature. However, within a fairly short time frame, the EU Council approved the document by its resolution, which has only a recommendatory and political nature, which is the source of soft law. Despite this, this document is still considered the EU political charter in forestry (Gordeeva 2014).

The EU Forest Strategy 2014-2020 has been one of the main political and legal initiatives of the EU in recent years. This strategy has been developed to provide a coherent framework for both EU forest policy and national forest policy in individual EU countries. It was developed by the Commission in close cooperation with EU countries and stakeholders.

The strategy aims to promote the concept of sustainable forest management, which aims to protect and achieve the balanced development of multiple functions of forests and the efficient use of resources. This concept should underpin the role of forests in serving several EU priorities, including: EU rural development policy; environmental and climate policies (especially biodiversity and climate change mitigation); provision of ecosystem services (such as clean water and air or erosion control); ensuring sustainable growth and jobs in rural areas (e.g. clean renewable energy production and bioeconomy providing biomaterials).

The EU Forest Strategy focuses on eight main priority areas: support for rural and urban communities; promoting the competitiveness and sustainability of the EU forest industry, bioenergy and the broader green economy; protecting forests in a changing climate while promoting sustainable forest management to mitigate the effects of climate change; protecting forests and improving ecosystem services; strengthening the knowledge of EU forests and how they are changing; development of new and innovative products in forestry and value added; work together to manage forests consistently and better understand them; focusing on forests from a global perspective, including forest conservation outside the EU.

In addition, the strategy emphasizes the importance of a national forest policy, taking into account policies at the EU level (European Commission 2021a). As part of the Green European Agreement (an action plan to make Europe the "first climate-neutral continent" by 2050), the European Commission announced a new EU forest strategy that will build on its biodiversity strategy, cover the entire forest cycle and promote a variety of services provided by forests. The strategy will seek to ensure healthy and resilient forests that support biodiversity, climate targets and secure livelihoods, and support a circular bioeconomy. It will focus on the protection of the EU forests, restoration and sustainable management, as well as on world forests that were not already covered (European Commission 2021b).

In Austria, an EU member, there is growing awareness of the need to address forest resources protection issues through the systematic introduction of new forest protection rules. Under Austrian law, forest resources are considered not only as a source of raw materials, but also as an integral component of the environment.

In accordance with the current forest legislation in Austria, an important criterion is the distinction between forest and non-forest vegetation, which is carried out depending on the area that such vegetation occupies. As a result, a significant part of the green areas are covered by forest legislation. This is the reason for many legal disputes in cases of forest offenses.

The Federal Forest Law of Austria, adopted in 1975, aims to ensure the protection of forests and the continuous performance of their main functions. The main requirements for forest management include that the old forest should be replaced with the new forest. Logging of forest stands, for example for the needs of localities or roads, is allowed in exceptional cases.

In Austria, the protection of forest resources from wrongdoing is the main socio-economic factor implemented by forest legislation and the activities of professional foresters who are highly qualified and

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competent to systematically prevent damage and destruction of forest resources.

It would be reasonable to draw attention to the legislation of Finland, a member state of the European Union. The first forest law in Finland was passed in 1886. This normative legal act contained a ban on forest destruction and stipulated the obligation to ensure the restoration of forest stands after logging. More recent changes in this law were to establish the principle of sustainable forestry, which assumed exclusively sustainable wood production.

At the end of the 20th century, Finland's forest management policy was significantly adjusted. The definition of the principle of forest sustainability has acquired a new content. The importance of sustainable wood production was complemented by environmental and social sustainability. The improved principle has been reflected in the current Finnish forest legislation and in the practice of forest management authorities. According to the current Finnish forest legislation, land owners are legally responsible for failure to implement reforestation measures.

The problem of applying administrative control and supervisory proceedings is actually represented at this moment by parallel regulations for verification activities. This form of administrative investigation is actually replaced by control and supervisory proceedings. With this in mind, the authors believe that modernization is required by the Code of the Russian Federation on administrative law violations.

Summing up, it should be noted that the lack of efficiency of the control and supervising activity of bodies of the state forest and fire supervision in the Russian Federation is caused, in our opinion, by a number of factors: a shortage of employees in terms of increased standards of forest management per employee; weak logistical support and equipment of bodies of the state forest and fire supervision; the lack of development of information and software activities of bodies of the state forest and fire supervision. Control and supervision activities of the state forest and fire supervision bodies are carried out both in hard-to-reach and mountainous areas with poor roads. Obsolescence, lack of adequate funding and modernization of the transport (automobile, helicopter, aviation) fleet significantly affect the efficiency of this activity. The indicators of the effectiveness of supervisory activities to which this activity should be targeted should also be reviewed.

According to Decree No. 194 of the Government of the Russian Federation of March 6, 2012, the criteria that characterize the implementation of Federal state forest supervision (forest protection) on forest lands are:

(*i*) the ratio of damage from illegal logging and payments to the budget system of the Russian Federation for timber harvesting;

(*ii*) the ratio of the volume of illegal logging committed by undetected (unidentified) violators of forest legislation to the total volume of illegal logging;

(*iii*) the ratio of the number of registered violations of forest laws committed by identified (established) violators of forest laws, and the total number of registered violation of the forestry law;

(*iv*) the ratio of the amount of recoverable damages from violations of the forest legislation and the amount of forest damage damage from the violation of forestry law (compensation for damage from the violation of forestry law);

(*v*) the damage caused to forests compensated by violators of the forest legislation, based on one official performing the Federal state forest supervision (forest protection);

(*vi*) the number of registered violations of the forest legislation per official performing the Federal state forest supervision (forest protection).

In our opinion, such indicators should also be:

– reduction of the number of forest violations in the relevant area;

– minimization of damage to forest resources;

– reducing the amount of costs incurred by forest users in connection with the implementation of control measures against them;

– increasing the level of satisfaction of the company with the results of control and supervision activities in the field of forest management.

CONCLUSION

As can be seen from the current research, depending on the degree of public danger and the consequences caused, forestry violations may form part of an administrative or criminal offense. One of the most common forest violations is illegal felling of trees, which is understood as felling of forest stands made in violation of legal requirements, without registration of documents, or in excess of the permitted amount, or outside the cutting area.

Activities aimed at detecting, suppressing and preventing forest violations can be effectively and efficiently carried out provided that appropriate regulatory legal acts are adopted aimed at improv-

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ing the system of Federal state forest supervision (forest protection) and Federal state fire supervision in forests, improving the composition of rights and obligations, as well as expanding the scope of responsibility of the forester, which are necessary for effective public administration in the territory entrusted to them, development of public forest supervision in the area under review.

When adopting new regulations regulating control and supervisory activities in the field of forest management, the legislator must take into account the requirements of administrative reform, regulatory guillotine and risk-based approach, taking into account the geographical, territorial, socio-economic and other features of a particular subject of the Russian Federation. The duplication of various types of state (municipal) control and supervision and the associated negative consequences should be eliminated in the enforcement practice of forest management law.

In order to improve the current regulations in the forest sector of Russia and the world, it is necessary to change the goal setting of control and supervision activities in the field of forest management. From the scheme of detecting violations and applying sanctions, the supervisory authorities should move to a system that ensures high-quality contractual relations based on the principle of good faith, while eliminating risks to life and health, the well-being of the population and public safety.

Indicators of effectiveness and efficiency of control and supervision in the sphere of forest management should be to reduce the volume of illegal logging and other forest violations, the most complete compensation by the perpetrators of damage, and a reduction in costs of forest arising in connection with carrying out against them control activities and compliance status of the conservation, protection and production forest social, environmental and economic requirements, increase the level of satisfaction with results of control and supervisory activities in forest management.

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