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Forest policy issues in modern Russia

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Abstract. The article is devoted to the study of the institutional arrangements for the development of forest-covered territories of Russia. The subject of the research is the current institutional system that regulates economic relations in forest management in Russia. The structural institutional elements of this system are the ownership of forest resources; forest certification and formation of forest payments. The purpose of the study is to assess the state of the institutional arrangements governing the forest management system and the economic relations in this institutional system; substantiation of the mechanisms for establishing effective models of forestry development. The methodology is based on the provisions of the institutional theory, sustainable development and the theory of rent. Research tools include institutional analysis, quantitative and qualitative sociological methods. The empirical footing is formed by the results of many years of comprehensive economic and sociological research of forest areas of the Republic of Karelia in 1998-2018 (public opinion polls; interviews with forest service specialists, local and regional authorities, heads of forest companies), research materials from Russian and foreign scientific schools and official websites. A descriptive analysis of the problems encountered by various forest policy stakeholders relations is offered.

1. Introduction

Two and a half decades of reforms in the forest sector have shown that the existing model of forest management does not allow the forest sector of Russia, which owns a quarter of the world's forest resources, to effectively develop in the conditions of market relations and the requirements of world markets. The forest sector is not a priority for the national economic policy. More than a half of the export volume is roundwood and lumber. The share of the entire forest sector in the country's export is negligible and amounts to just over 1%, whereas in the Soviet time was up to 20-25% [1].

The social consequences of the forest policy of modern Russia are associated with the phenomenon of social inequality, manifested in a severe curbing or even cessation of state-provided vital state social services for the population of forest-covered regions. The absence of an economically sound and socially viable strategy of the state in relation to the population of forest areas in the last 30 years has led to negative economic and social consequences associated with their sinking into a to the depressed condition. Forestry, capable of generating high incomes to both the state and people, is currently one of the lowest-income sectors of the economy. In forest regions of Russia, despite their richness in forest resources, there has been a significant drop in the living standard and quality of life of the population.

The formation of an economically sound and socially justifiable forest-use strategy is possible only on the basis of an effective system of institutions. In this context, there is much demand for studies

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designed to develop the rationale and operationalize the methodological approaches to identifying and substantiating an effective institutional system of forest management in modern Russia.

2. Methods and Materials

The methodology of the presented study is based on propositions of the of institutional theory [2], the concepts of sustainable development [3-5] and the theory of rent [6-8]. Research tools include institutional analysis, quantitative and qualitative sociological methods. The empirical footing includes the results of long-term integrated economic and sociological research of forest source areas of the Republic of Karelia in 1998-2018 (public opinion polls; interviews with forest service specialists, local and regional authorities, heads of forest companies), research materials from Russian and foreign scientific schools and official websites.

The purpose of the study is to assess the state of the institutional arrangements that regulate the forest management system and to substantiate the mechanisms for the formation of effective models of forestry development.

The subject of the research is a modern institutional system that regulates economic relations in the forest management in Russia. The key structural institutional elements of this system are ownership of forest resources, forest certification and the formation of forest payments.

In this study, the current institutional system of forest management in Russia is structured into arrangements that regulate forest relations and the actors involved in these relations, including the authorities (federal, regional and local), forest businesses and local communities (forest company employees and local people).

Russian experts in institutionalism [9-11] and others focus on the degree of consistency between formal and informal institutions that affect the quality of emerging institutional systems. Informal institutions can play a compensatory role where formal institutions fail in handling acute socioeconomic problems. Informal institutions can also play a negative role, where public goods are distributed on the basis of rent-oriented strategies of behavior of a narrow circle of actors in the socioeconomic system.

At the UN Conference on Environment and Development [12], the concept of sustainable development was proclaimed the ideology of a new era. Academics of the forest economics [13, 14] in their research on forestry within the sustainable development framework highlighted the model of sustainable forest management. The model is based on the principle of interests of local communities, forest companies and forest management actors in the process of their participation in forest management. Sustainable forest management should be carried out without damage to the natural characteristics of forests and the society. At the same time, social criteria are embedded in the system of economic strategies, which gives the territory an impulse for development, allows to enhance its internal efficiency and achieve a multiplier effect in development.

The issue of natural resource rents is one of the key dimensions of all-Russian economic problems. This is where the specificity of forest regions is best represented. The concept of resource transformation, i.e. a targeted and efficient "conversion" of natural resources into production, financial and social resources [7, 8] can be based on the correct solution of this problem. The founder of the theory of rent is Adam Smith. His main conclusion was as follows: "Rent, considered as a price paid for the use of land, naturally provides the highest amount that a tenant can afford to pay with this quality of land" [6]. The development of the theory of rent is found in the works of K Marx, who wrote that differential rent arises from differences in the fertility and location of land plots of various categories.

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3. Results and Discussion

Institutional analysis of the processes occurring in the forest sector of Russia over the past 26 years proves the existing formal institutional system is ineffective. Research shows that the Russian forest management system is being permanently reformed. The three forest codes (1993, 1997 and 2006) failed to create a solid foundation for efficient management of forest resources. The functions of formal institutional arrangements are being taken over by informal ones which create favorable conditions for securing illegitimate appropriation of the right to the distribution of forest income. Over the past 26 years of market reforms (1993-1997) this right (namely the right to assign forest income) for the past 26 years of market reforms initially (1993-1997) first belonged to forest companies, at the next stage was passed to regional authority (1997-2006), now (since 2007) it is "divided" by the regional authorities and large forest business [15].

At all times of the Russian forest legislation functioning in the market economy, forest income was distributed without taking into account the interests of society. A natural question arises about how efficient of the state model of ownership of forest resources is. Nevertheless, according to the results of our surveys, the society has no aspirations for private ownership of the forest. Such aspirations are lobbied by a small group of officials and representatives of large forest companies, who possess administrative and financial resources. Their argumentation is that the efficiency of the forest industry is high in Western countries and low in Russia. Therefore, the question of private ownership of the forest in Russia remains open.

At the same time, the authority of a private forest owner in the Western model is severely restricted by state control institutions, up to depriving of property for violations of forest legislation. In addition, the processes of forest cultivation, reforestation, protection and conservation of forests are seriously funded by government programs. In the model of private ownership of forest resources, the state plays not just an active, but a decisive role in the development of forestry. Such a context alleviates the debate about the benefits of private ownership of forest in Russia.

One of the institutional arrangements for sustainable forest management is forest certification. A forest certificate given to a forest company indicates that the forest is harvested without damage to the nature or the society. Such a system is the basis for forest management in many western countries, helping increase the competitiveness of forest products in world markets [16]. At the same time, local communities and local businesses get additional benefits from the redistribution of social and economic goods associated with the creation of new jobs for local people, the ability to control of forest management through public institutions, tax incentives, etc. This logic is the basis of socially responsible business. It implies that the relationship between business and the local community should rest upon partnership principles. This compensatory mechanism can underlie make-up of strategies for forest-resource territories of Russia [17].

In Russia, the institute of forest certification has been formally operating for almost 20 years. The area of certified forests in Russia is 48.3 million hectares [18], with the largest concentrations in European part of the Russia (67%), Siberia (23%) and the Far East (13%). More than 5 million hectares of forests are certified in the Republic of Karelia. Studies have shown that Karelian companies holding forest certificate perform only 5% of social functions in the territory of their economic activities.

Thus, the prevailing institutional conditions implicitly allow businesses not to prioritize the goal of effective social compensation. This negates the social effect of the introduction of forest certification and deprives the local population of their share of the forest rent (i.e., jobs, training and retraining opportunities, etc.). Generally speaking, the territory gets no social support from the business. Hence, forest certification as an institutional arrangement does not fulfill its compensatory functions.

One of the key decisions of the state forest policy, contributing to the establishment of favorable conditions for the transformation of forestry into a profitable business, is institutionalization of forest rent. Forest rent is essentially the main driver of the institutional development of forestry [15].

Over the years of market reforms in Russia, the stumpage fee has remained extremely low level: 3-5 times lower than in Nordic countries (Finland, Sweden). It is the rent-based approach in the process

of establishing forest payments that can become the cornerstone for raising the profitability of forestry, which will contribute to the formation of a transparent system of forest payments (for example, to the "forest rent fund"), which will then be redistributed to forestry development as well as the socio-economic development of territories.

Developed back in Soviet times, the system currently used for monetary valuation of forest resources, does not take into account the radical changes that have taken place in the country's economy. Today, the revenues the state receives annually as payment from the utilization of forests do not cover the costs of forest management. For example, according to the data from the Federal Treasury of the Russian Federation as of January 1, 2016, forestry costs in 2015 amounted to about 29.18 billion rubles, whereas revenues from forest use - about 17.69 billion rubles, i.e., 1.6 times less costs [19].

Approved in 2013, the "Fundamentals of the state policy in the field of use, conservation, protection and regeneration of forests in the Russian Federation for the period up to 2030", when addressing the task of enhancing the management of the forest sector, stipulate an improvement of the system of payments for forest use. Unfortunately, the improvement process of itself does not include a fundamental alteration of the model for establishing forest payments.

The models of forest management in countries such as Canada and Finland, despite the fundamental difference in the "public - private" ratio (forests in Canada predominantly state-owned, in Finland - private), have no major differences. The regulation of forest relations in both models proceeds from on the rent basis in establishing forest payments. This approach shapes business strategies aimed at maximizing forest income, which is then distributed in according to uniform principles in both the private and the public models [20].

Technically, the collection of the forest rent in many countries is arranged through a mechanism that controls financial flows in the forest sector, linking all partners in the end-to-end process chain. In Canada, for example, the established organizational units bring together representatives of state forest management bodies, forest users themselves, as well as financial and tax agencies [21].

Speaking of the situation in Russia, the issue is not to justify full withdrawal of forest rent from forest companies, but to control the process of its distribution and redistribution, making adjustments if necessary. This control system must be grounded on have a legitimate institutional basis.

There are several options for the distribution of rental income:

- 1. Full withdrawal of rental income from the tenant in favor of the owner of forest resources (the state). In this variant, it is the owner who assumes all obligations for the implementation of forestry actions (reforestation, tending, sanitation felling, forest protection and conservation, development of planted crops, infrastructure projects, etc.), which facilitate the transition to an intensive forestry model
- 2. Partial withdrawal of rental income from the tenant and development of an algorithm for the distribution of obligations for the implementation of forestry actions between the tenant and the owner of forest resources.
- 3. The tenant keeps the rental income. In this option, the owner of the forest resources imposes the implementation of the entire set of forestry obligations on the tenant.

4. Conclusion

Institutional analysis of the forest management system in modern Russia has shown that the system has been in the process of permanent reforming for 26 years, with no positive effect so far. Formal institutional arrangements do not fulfill their functions in what concerns efficient the distribution of the rights of forest resources ownership. The functions of formal institutions arrangements are taken over by informal ones, which create favorable conditions for securing the misappropriation of the right to the distribution of forest income. In this context, the issue of the effectiveness of the existing model of forest ownership, which is lobbied by representatives of large capital, has become highly topical.

Research results show that state forest ownership is rendered ineffective by the opportunism and irresponsibility of officials, while private ownership by the social immaturity and opportunism of large

business. At the same time, there are no aspirations at all for private ownership of the forest among the general public. A changing of the model can lead to dramatic social shocks. Furthermore, the professional community does not support the idea of changing the of forest ownership model, believing that the core problem is seen the set-up of forest payments, which does not depend on the ownership model.

One of the key institutional arrangements for sustainable forest management is forest certification. It's essential social mission is to create a favorable environment both for the business itself and for local communities. Studies have shown that forest certification in Russia does not fully realize its social functions to address negative social processes associated with a degradation of the living standard and quality of life of the local people.

Institutionalization of forest rent can be one of the key factors for a new balance of interest groups in the forest relations system. It is necessary to institutionalize the mechanism for controlling the process of forest income distribution and redistribution. The introduction of a rent-based approach will ensure a decent level of profitability for forestry in Russia, create a sustainable institutional system of forest management relations and conditions to encourage forest companies to use sustainable development principles in economic practice, permitting the transition to intensive forestry, thereby transforming resources into a source of economic development for the economy and the society.

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Referenses

- [1] Forestry and the forest complex of Russia at a crossroads Nature of Russia. National portal available at: http://www.priroda.ru/reviews/detail.php?%20ID=11454&SECTION ID=21824.08.2016
- [2] North D C 1997 Prologue *The Frontiers of the New Institutional Economics* (USA: Academic Press) pp 3-12
- [3] Moiseev N N and Tyukhtin V S 1982 Man, environment, society: problems of formal description (Moscow: Science) p 48
- [4] Kosov Yu V 2002 Genesis of the concept of "sustainable development" *Ecology and education* 1–2 pp 39-45 [Ekologiya i obrazovanie in Russian]
- [5] Treyvish A I 2002 Transition to sustainable development: global, regional and local levels: Foreign experience and problems of Russia (Moskow: Partnership of scientific publications KMK) 1 pp 298-317 [Perekhod k ustojchivomu razvitiyu: global'nyj, regional'nyj i lokal'nyj urovni. Zarubezhnyj opyt i problemy Rossii in Russian]
- [6] Smith A 2008 Study on the nature and causes of the wealth of nations (Moskow: Direktmedia Publishing) p 120-142 [Issledovanie o prirode i prichinah bogatstva narodov in Russian]
- [7] Danilov-Danilyan V I 2004 Natural Rent and Management of Natural Resources Use *Economics and Mathematical Methods* 3 pp 3-16 [Ekonomika i matematicheskie metody in Russian)
- [8] Titova G D 2000 Rent: on the way from theory to practice *Natural resources in the system of public finances in Russia* (Moskow: Russian University of Friendship of Nations) pp 134-142 [Prirodnye resursy v sisteme obshchestvennyh finansov Rossii in Russian]
- [9] Kleiner G B 2017 Problems of achieving economic sustainability and social balance: the imperatives of economic policy ed G B Kleiner H A Konstantinidi (Moscow: Research Institute of History, Economics and Law) p 136 [Problemy dostizheniya hozyajstvennoj ustojchivosti i social'noj sbalansirovannosti: imperativy ekonomicheskoj politiki in Russian]
- [10] Polterovich V M 2016 Institutions of catching up development (to the draft of a new model of

IOP Conf. Series: Earth and Environmental Science 316 (2019) 012025

doi:10.1088/1755-1315/316/1/012025

- economic development of Russia) *Economic and social changes: facts, trends, forecast* **5** pp 34-56 [Ekonomicheskie i social'nye peremeny: fakty, tendencii, prognoz -in Russian]
- [11] Tambovtsev V L 2015 Institutional changes in the social sphere of the Russian economy (Moskow: Moscow State University) p 1-256 [Institucional'nye izmeneniya v social'noj sfere rossijskoj ekonomiki in Russian]
- [12] UN Conference on Sustainable Development "Rio + 20" 2012 available at: https://web.archive.org/web/20120730170520/http://www.un.org/ru/ecosoc/about/uncsd-rio.shtml
- [13] Petrov A P 2013 Economic Organization of the Use of Russia's Forests in Market Conditions Bulletin of Moscow State Forest University 4 (96) pp 42–44 [Lesnoy Bulletin -in Russian]
- [14] Pisarenko A I 2005 Forestry of Russia: from use to management ed A I Pisarenko V V Strakhov (Moscow: Jurisprudence) p 260-551 [Lesnoe hozyajstvo Rossii: ot ispol'zovaniya k upravleniyu in Russian]
- [15] Kozyreva G B 2016 Institutional problems of forest areas of the Russian regions Economic analysis: theory and practice 5 (452) pp 54-63 [Ekonomicheskij analiz: teoriya i praktika in Russian]
- [16] Rannikko P 1997 Village development and social sustainability *Social sustainability and the Taiga Model Forest* pp 9-27 (Joensuu: Joensuu Univercity)
- [17] Kozyreva G B 2007 Socio-economic consequences of forest policy from Russia (Moscow: MONF) 248 p [Social'no-ekonomicheskie posledstviya lesnoj politiki sovremennoj Rossii in Russian]
- [18] Facts and figures FSC, 2018. Certificate holders on 03/29/2018 / FSC Russia (Moscow) available at: https://ru.fsc.org/ru-ru/chto my delaem/facts and figures on 04/11/2018
- [19] Forest portal available at: http://forest-karelia.ru/?id=1701
- [20] Canadian Forest Policy: Adapting to Change 2001 ed M Howlett (Toronto: University of Toronto Press Incorporated) 446 p
- [21] Gray J A 2004 Canadian experience in organizing forest concessions *Sustainable forest use* p 28-35