Development of small enterprises in forestry sector

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Abstract. The research is focused on specific features of small entrepreneurship in forestry sector and development of specific organizational and economic tools in forestry sector. The authors have analysed the work of small and medium-sized businesses of Russian Federation in the forestry sector and have made a conclusion that there are negative tendencies in the development of entrepreneurship in this area. Thanks to the ranking method and expert assessments, the causes of the intensification of the negative trends have been identified. Taking into consideration the analytical sectoral indicators and the principles of institutional sectoral regulation, the authors have developed an organizational model of interaction between the state and small entrepreneurship in forestry sector. Basing on the organizational and economic characteristics of the forestry sector, the researchers have also developed a tool for preventing the negative trends in the development of small entrepreneurship in this sphere.

1. Introduction

In modern Russian economic conditions, it is getting important to analyze the development of small businesses in the sectors of the economy that are strategically important for the development of the economy of the whole country. In Russia, the forest resources are strategic as they determine the vector of the development of its economy. It is related to the fact that Russia is the world's largest country with forest resources. It ranks first in the world in terms of forest area and wood supplies.

N.B. Pinyagina [1] notes that the concept of the forestry sector, as it is defined by the international organizations, covers the cultivation, protection and restoration of forest resources, production, trade and consumption of forest products, services and forest utilities. The most important branch of the forestry sector is forestry production, which is currently carried out by entrepreneurial structures leasing the forest area.

The forestry sector of the country today is not a priority of the national economic policy, despite the fact that Russia has more than 20% of the world's forests [2]. There are forests in more than a half of the regions, however, the share of the forest sector in the gross domestic product (GDP) is slightly more than 1.0%, in industrial production it is 3.7%, and in foreign currency revenue it is 2.4%. This proves that significant forest resources of the country are underutilized.

One of the tasks of the balanced and sustainable Russian economy is to provide effective development of small entrepreneurship in the sphere of the forestry sector. However, in the Russian
forestry sector, there are many barriers for a number of small businesses. In addition, in modern management conditions there are some barriers for the development of the entrepreneurship in the sphere of the forestry sector. All these factors underline the importance of this research.

The purpose of the study is, firstly, to determine the specific features of small entrepreneurship in the sphere of the forestry sector and, secondly, to develop specific organizational and economic tools.

2. Methodology
A number of universities and research institutes of the Russian Federation are currently engaged in the development of the forestry sector. St Petersburg Forestry Research Institute [3] is involved in considering the issues of economic security in the use of forest resources, while Voronezh State University of Forestry and Technologies named after G.F. Morozov [4] investigates the problems of organizing entrepreneurial activities in the sphere of forestry.

There are a lot of significant papers within the problem of development of small enterprises in the world [5-7]. The papers within the problem of development of small enterprises in forestry sector have deserved special attention [8-10]. Finally, the aim of this research is so important for the science in globe.

The authors set the task to identify the specific features of the small businesses functioning in the forestry sector. They analyzed the official data of the Federal State Statistics Service, the Federal Forestry Agency and Forestry Management as well as the Internet resources (official sites).

A survey was conducted to determine the significance of the trends in the development of small entrepreneurship in the forestry sector. The questionnaire was given to the staff of the forest management; to the personnel of the timber industry complex; to the employees of district administrations, regional public environmental organizations; to the representatives of scientific institutions engaged in the forestry sector. 7 experts took part in this research.

The experts managed to identify what influenced the development of small entrepreneurship in the forestry sector. The researchers used the matrix method as it gives an opportunity to make some predictions. Thanks to this method, it is possible to set ultimate goals, to make predictions and find the ways and means to achieve the goals. There is a range of alternative solutions to the problem the authors focus on. Let us consider how the matrix method is applied [11]. Firstly, we identify the factors that have an impact on the achievement of the set goals. Secondly, we group the factors on the basis of their typology and nature. Thirdly, we identify how these factors contribute to the achievement of the goals. Fourthly, carrying out a number of operations such as multiplication, addition, subtraction, we study the matrix effect on the achievement of a set of goals. Finally, we study the way the factors influence each other (the influence graph) and rank the factors in accordance with their significance.

The foresight process will be effective only if we take into account the provided information and the assessment of the experts who took part in the surveys.

To solve the problem of systematization of factors and determination of their significance for a particular business structure, it is expedient to apply the method of prioritization to systematize the results of logical analysis of factors and to score their mutual influence. This method is based on the results of expert assessments and the matrix form of recording.

3. Results and discussion
3.1. Specific features of small entrepreneurship functioning in forestry sector
The analysis of functioning of small entrepreneurship in the forestry sector has led to several conclusions.

In recent decades, scientists and researchers have noted a significant deterioration in the species composition and productivity of forests. Firstly, it is related to the fact that Russian industry uses exclusively coniferous wood. Two thirds of Russian forest area are not productive. The share of productive (I-III classes of bonitet) of ripe and overripe coniferous stands is not more than 16%. To provide
sustainable development of entrepreneurship in the forestry sector, it is crucial to increase the productivity of forests and to improve the composition of tree species. The current extensive form of forestry and forest management has a negative impact on the state of forests and their productivity [12].

The forestry sector is not very attractive for large enterprises and organizations. Moreover, the monopoly position of the former forestry enterprises that function as state commercial structures, hampers the development of small private enterprises.

If we compare the characteristics of small entrepreneurship in the forestry sector with the businesses involved in the other spheres, we can make the following conclusions [13]:
- there is a territorial distribution of activities in the forestry sector, including technological operations for logging and reforestation;
- there is prevalence of manual labor in processing forest resources, which implies high labor intensity;
- there is a need for an extensive and large-scale infrastructure, including transportation and relocation facilities, warehouses, facilities for a number of operations (repairs, power supply, etc.)
- natural and climatic conditions have a great influence.

It should be noted that small entrepreneurship in this area depends on the allocation of forest resources and corresponding conditions for forest management and logging production. Moreover, there are a lot of other significant factors such as different logging methods (continuous, narrow-logging, selective logging); different methods of processing (trees, whips, assortments), which complicates the use of automation and technological processes in forest exploitation and mechanical processing. Additionally, there are problems related to the technologies for processing resources in the chemical industry. What is more, wood processing means a lot of waste and environmental problems like air and water pollution. Finally, wood processing is not as productive as it is expected to be.

In these conditions, the forestry sector does not function the way it should (table1).

**Table 1. Efficiency of enterprises engaged in logging [14].**

| Regions of the RF | Balanced financial result (profit minus loss) of organizations' activity, mln. rubles | Specific weight of unprofitable organizations in the total number of organizations, % |
|------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
|                  | 2005 | 2011 | 2012 | 2005 | 2011 | 2012 |
| Totally in Russia| -2800 | -3769 | -3818 | 61.7 | 48.3 | 54.1 |
| Central Federal  | -235 | -373 | -21 | 69.1 | 33.3 | 51.9 |
| North-West       | -588 | -2457 | -1833 | 68.6 | 59.6 | 59.0 |
| Southern         | -9 | -30 | 1 | 100 | 33.3 | - |
| North-Caucasian  | -6 | -6 | -6 | - | - | 100 |
| Privolzhsky      | -179 | -626 | -408 | 61.7 | 59.5 | 68.4 |
| Ural            | -196 | -171 | 8 | 71.4 | 53.8 | 55.6 |
| Siberian        | -1402 | -2257 | -1609 | 59.5 | 36.8 | 41.9 |
| Far-Eastern     | -191 | 2145 | 50 | 41.4 | 42.3 | 53.7 |

According to the data, entrepreneurial activities in the forestry sector are unprofitable, and more than half of the enterprises are loss-making. The systematic absence of profit is a factor that influences the level of payment of taxes and obligatory payments by business entities - forest users. Entrepreneurs engaged in the forestry sector have to pay for the use of the forest fund, and these payments are not tax-related. The Federal Forestry Agency and its territorial bodies are responsible for collecting such payments.

The negative tendencies in the development of entrepreneurship in the forestry sector are related to the outflow of labor from the industry (table2). A low level of wages, a high labor intensity and risky
work make this sphere unattractive for specialists. That is why forest settlements are being destroyed, the human potential is low, forestry is stagnating.

**Table 2.** Dynamics of the number of employees of enterprises engaged in forestry and logging [15].

| Enterprise form          | Coefficient of growth (decrease), a share of units |
|--------------------------|--------------------------------------------------|
|                          | 2010    | 2011    | 2012    | 2013    | 2014    | 2015    |
| Small enterprises        | 1.0     | 1.16    | 1.05    | 0.94    | 0.93    | 1.01    |
| Micro-sized enterprises  | 1.0     | 1.06    | 1.15    | 1.08    | 0.96    | 0.98    |
| Medium-sized enterprises | 1.0     | 0.73    | 0.78    | 0.88    | 1.0     | 1.0     |

In the Russian forestry, there are many factors preventing the penetration of small forms of management into the forest sector. These factors are [14]:

- lack of start-up capital for forestry and logging;
- insufficient or complete lack of infrastructure;
- complicated procedures for leasing forest sites;
- costs do not commensurate with benefits; there is no reliable information about forest resources;
- administrative pressure on entrepreneurship and administrative barriers;
- increase in illegal logging [15]. It should be noted that almost 45% of all shadow activities in the forestry sector are related to illegal logging [16].

We suppose that that this tendency (deformation of entrepreneurial activity in the forestry sector) will remain unchanged in the near future [17]. The national economy will keep suffering due to the violation of forest legislation and due to shadow activities.

3.2. Factors contributing to negative tendencies in small businesses development in forestry sector

The experts came to the conclusion that the lack of financial resources is very considerable as it results in the increasing deformation of small entrepreneurship in the forestry sector. Most experts agree that there will be widespread lack of funds, which is critical, as it will last for at least 50 years.

The legislation is imperfect, it influences all the spheres and is likely to remain unchanged for a long period. Still, experts have different opinions on this aspect. Irrational logging is widespread, in addition, the situation is worsening due to shadow activities. The experts also suppose that the significant problem of high tax burden will exist for a long time. The experts assessed the legal irregularities in the use of the state forest fund and came to the conclusion that this aspect has a constant character, it is widespread, and it is related to the level of shadow activity. The experts also concluded that the procedure of collecting forestry commissions causes some problems that are widespread and have negative results. The forest management is also considered to be ineffective. Moreover, it is characteristic of many regions and is likely to keep unchanged for a long time and to influence the state of the forestry sector.

3.3. The matrix method was used to analyse the causes of increasing deformation of small entrepreneurship in the forestry sector.

Thanks to the matrix method, the experts made the following conclusions. The deformation of small entrepreneurship in the forestry sector is related to the lack of financial means, imperfect forestry and administrative legislation, and high tax burden. The lack of financial resources makes business structures look for the ways to minimize costs. The majority of such enterprises are shadow businesses carrying out illegal activities in the sphere of forestry.

Imperfect legislation results in the incompetent forestry management, which makes commercial use of timber unprofitable and raises the level of shadow activity. The high tax burden contributes to the shadow activity (according to 61% of the entrepreneurs who took part in the survey).

4. Conclusion and recommendations
Let us consider such a problem as the lack of financial resources. To form a sufficiently effective infrastructure for supporting and financing small businesses, it is advisable to amend a set of normative legal acts. For example, it is advisable to introduce a number of amendments to Federal Law No. 184-FL "About General Principles of Organization of Legislative (Representative) and Executive Bodies of State Power of the Subjects of the Russian Federation" and Federal Law No. 131-FL "About General Principles of Organization of Local Self-Government in the Russian Federation" [18].

In the current conditions of management, the rapidly developing market of microfinance services for the so-called microfinance organizations, provides small business with a new access to the financial investment funds. However, despite their great popularity, the microfinance activities have not been officially defined yet. Nevertheless, the existing regulatory framework makes microfinance services accessible to entrepreneurship. There are some proposals which promote financial support for business entities:

- firstly, it is necessary to speed up the procedures for obtaining documents for receiving loans at the level of the microcredit system;
- secondly, it is necessary to reduce the size of the collateral for small and medium-sized businesses at the level of the microcredit system [19].

There is low demand for obtaining an investment loan granted to organizations investing in the objects with the highest energy efficiency. Entrepreneurs claim that this measure does not work due to the fact that they are not informed about it. There are a number of other proposals that would significantly improve the effectiveness of the system of subsidizing and crediting the business entities:

- credit reduction;
- subsidizing the rental rate of retail space or subsidizing part of the costs when buying premises for retail space for manufacturing companies;
- creating an adaptive mechanism for subsidizing the enterprises investing in renovation and modernization of equipment. It is vital to implement targeted programs or to provide an investment tax credit on non-repayable terms.

Imperfection of state regulation in the forestry sector. It should be noted that after the adoption of Law No. 209-FL, the Government of the Russian Federation made a lot of crucial decisions. This resulted in facilitating the entrepreneurship and providing favourable conditions for business. These measures include [19]:

- various forms of property support for small and medium-sized enterprises;
- various innovations in the tax system;
- optimization of the process of the public procurement process;
- maximum reduction of bureaucratic restrictions;
- support for small innovative enterprises;
- development and implementation of federal programs for the development of small and medium-sized businesses
- reduction of infrastructure barriers.

However, the results of small business activity (especially of the enterprises involved in the forestry sector) show that the state support is still insufficient. There are also a number of proposals, the adoption of which would make it possible to significantly provide tax support for business entities:

- the procedures of filling out and submitting reports should be simplified. The number of reports submitted should be reduced;
- it is necessary to reduce taxes for start-ups and provide the so-called tax holidays;
- it is necessary to provide more information on existing tax benefits;
- it is necessary to simplify the calculation method for enterprises that do not have VAT benefits: the tax base should be related to the added value tax (that includes wage fund, profit, depreciation, taxes) and it should be easily calculated in accordance with the accounting data.
There is a set of proposals, the adoption of which would allow to ensure tax support for business entities:
- elimination of ineffective benefits, or their adaptation to the needs of small entrepreneurship;
- reduction of tax rates for producers of consumer goods and for small manufacturing and innovative enterprises, which are currently not competitive on the market and inside the country;
- the procedures of filling out and submitting reports should be simplified. The number of reports submitted should be reduced;
- it is necessary to reduce taxes for start-ups and provide the so-called tax holidays;
- it is necessary to provide more information on existing tax benefits.

Quick and radical measures are needed to reduce the tax burden and to improve tax administration. Some drastic measures should be taken to stimulate the development of small and medium-sized enterprises engaged in forest reproduction. The procedures of tax, accounting and statistical reporting have to be simplified and financial and credit support should be provided for small and medium-sized enterprises (especially, for start-ups and innovation enterprises).
- it is necessary to initiate the introduction of tax holidays for the period up to 2020. It should be done to promote the development of small enterprises engaged in the forest reproduction and using tree planting material with improved hereditary properties and planting material with a closed root system;
- it is necessary to ensure the adoption of regional laws concerning tax holidays for small businesses who have the right to choose the simplified or patent taxation system. After registration small business entities can enjoy this privilege for two years;
- it is crucial to petition the Ministry of Economic Development to grant subsidies to legal small and medium-sized businesses engaged in the forestry sector, to recover costs for the acquisition of tree planting material with improved hereditary properties and planting material with a closed root system.

The authors claim that in order to reduce the number of shadow businesses, and help small entities involved in the forestry sector to recover from the crisis, the following measures should be taken:
- it is crucial to ensure the effective functioning of the forest control system. The forests should be effectively guarded and the system of document circulation and control over the use of forests should be clear;
- it is vital to give a legislative definition the concept of illegal logging;
- it is necessary to effectively prosecute illegal loggers;
- it is crucial to toughen the punishment for illegal logging and illegal circulation of forest resources, especially with regard to logging companies acting on the basis of prior conspiracy;
- it is important to develop public and municipal procurement policies, voluntary forest certification tools and mechanisms;
- it is necessary to provide the population and entrepreneurs with the targeted information on illegal forest turnover, the consequences of its illegal and irrational use, as well as the punishment for illegal activity;
- it is necessary to form a negative attitude to irresponsible behavior and illegal activities in the sphere of forestry.

5. Conclusion
The research has a theoretical significance as the authors have developed the theory of economic stability of economic systems. They claim that it is vital to reduce the number of shadow businesses and to provide state support for small enterprises. The authors have also considered the tendency of the increasing deformation of small entrepreneurship in the forestry sector. The researchers focus on the conceptual and methodological studies; develop their ideas and sum up why small businesses work inefficiently in the forestry sector.

The formulated theoretical positions can be used to conduct further research on the problems of ensuring sustainability of small businesses in various sectors of the Russian economy, especially in reference to the balanced development of the forestry sector.
The research has practical significance as the authors give practical recommendations to:
- public authorities who work on the strategies for the sustainable development of the national economy and its sectors;
- federal and regional forestry authorities who develop regulatory and legal acts ensuring the sustainable functioning of small businesses and reducing deformations in the forestry sector;
- entrepreneurial structures that function in the forestry sector and make management decisions on adjusting the forest management strategy;
- educational and scientific organizations conducting research to find the ways how to contribute to the economic sustainability of small businesses.

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