Current structure of the forest sector in the Archangelsk region and its' perspectives in light of the new Forest Code implementation

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Foreword

This thesis is my final work for the degree of M.Sc. in forestry at the Department of Ecology and Natural Resource Management (INA), the Norwegian University of Life Sciences (UMB). It is the main result of my long studies in Russia and Norway. Over time I concentrated on issues of the forest governance system in Russia, the transition process toward market economy and legislation change. The theme of this research is apparent from the works I have done before. Use of boreal forest resources is an important subject in environment management and sustainable development. There is a strong dependence between conditions that will be established for business activity, and the social, economic and environmental situation in the Northern part of Europe in general and in the Archangelsk region in particular. In the thesis I have for this region described and analyzed the transition process in the forest sector, designed a questionnaire for forest lessees to study their opinion regarding institutional changes, collected and analyzed the material of the questionnaire survey.

I want to thank the State of Norway and Norwegian State Educational Loan Fund for giving me a chance to study at UMB, Birger Solberg for supervising and guidance, my father, Dmitry Trubin for help in the questionnaires distribution and counseling assistance, my fiancé Andrey Zvyagin for support and sound judgment, and Polina Teplyashina for help with English corrections.

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Summary

The new stage of the forest reform in Russia makes essential changes to the established forest relations between the State and private forest business, not least in the Archangelsk region. In order to utilize the forest resources wisely and get an appropriate development of the forest industries in the region, there is a strong need for improved information about the sector and how major economic agents there look upon the future potential for development.

The main objectives of this study are to provide information for improving the development of the forest sector in Archangelsk region. Two sub-objectives are looked into:
S1: Describing and analyzing the current structure of the forest sector in the region by emphasizing the following main points:

- Socio-institutional situation in which forest business was born and growing
- Enterprises origin and activity
- Main tendencies in today's business environment in the sector

S2: Investigating the opinion of the main economic agents/stakeholders in the forest sector in the region, with focus on stability, skill availability, willingness to accept private forest ownership, opinions about the new Forest Code and perspectives more in general about the future of the forest sector

For covering sub-objectives S1 I used the information in previous studies done by myself and others, and the Internet sites forestforum.ru and forums.wood. For areas lacking data I also got valuable information from my father Dmitry Trubin, head of forest planning section in Department of Forest Sector at the Archangelsk Regional Administration. For analysis of enterprises origin and activity and for creating a dynamic picture of development in the forest harvesting branch in particular, I used data obtained from the annual tables "Usage of forest resources on the forest fund parcels leased out" procured by the Department of Forest sector in Archangelsk Regional Administration for the years 1996-2006.

Sub-objective S2 was covered by performing a questionnaire survey. The questionnaire is shown in Appendix III, and was based on the four hypotheses:

1. H1: The forest leasers are positive if private forest ownership will be implemented.
2. H2: The forest leasers are skilful enough to accept forest owner responsibilities
3. H3: The forest leasers are stable enough to carry out forest owner responsibilities
4. H4: Change of the legislation will make a significant impact on forest enterprises

The questionnaire was sent to 50 respondents, of which 22 replied. No particular tendencies were found between those who replied and those who did not. The answered questionnaires were collected and analyzed.

The study show that the present private forest sector appeared and developed in a very complicated socio-institutional situation. The weak legal base (imperfect control and sanctioning system, unstable legislation, lack of experience in law making and enforcement) made a negative impact on business running. The Absence of clearly defined political course prejudiced expediency of planned prospects. But maximizing of individual profit and legal nihilism, penetrated into society, caused distrustfulness and market obscurity.

After implementation of the industry privatization, state forest governance body and already private enterprises started to establish forest relations in terms of rights and duties separation. One part of the forest lessees originated from the former socialist harvesting enterprises having production & technical basis, more or less out-dated infrastructure, social obligations and weak continuity between the development stages. The other part appeared coming "out of nowhere" with a capital inflow – i.e. from outside the traditional forest sector. Such enterprises were optimized from their beginning, and in this thesis they are la belled "one-day" firms.

As a result of merger and acquisition processes, developing and bankruptcy formed the main groups of forest lessees' companies. The quantitative ratio of small, middle-sized and large companies equals 64%, 22% and 14% correspondingly. The harvested volumes ration is inverse: small - 9%, middle-sized - 24% and large - 67%.

The survey showed that the successful enterprises are presently involved in integration process. Existence within framework of vertically integrated structures stabilizes companies functioning, which in exchange for their independence get competent higher management, support in the equipment renewal, and optimization of the production. The today's tendencies (the new order of state forest governance, new institutional instruments such as investment agreements and sublease, state control and merger of business and politics) were described.

The questionnaire results showed that stability of forest lessees is not high. From the beginning private forest companies took high risks in terms of finances, production, commerce and market. The absence of the political course and legislation changeability keep the businessmen in constant tension. The survey confirmed that the corporatization is going on in the sector and follows by frequent owner change. Against background of the low sector rating compared to other branches, companies do not make plans on long term prospect. The machinery condition is moderate and hard-set. But the companies' owners still invest money in equipment renewal and use the bank services and private capital that in turn indicates fulfilling of rigid requirements. Established good relations with environmental organizations are indicative of forest lessees' willingness to continue their activity.

In terms of lessees' skillfulness, the survey indicated that they are capable to develop the forest sector further according to the questionnaire results. But skill level raising is needed in several knowledge areas, in particular in the areas of forestry, IT and law. Commercial information has a restricted character and can hardly be analyzed and summarized for sharing. In the branch, the demand for consulting services has increased and it didn't find a satisfactorily solution.

Opinion of forest lessees regarding forest privatization was ambiguous. But everyone stood up against the total once-only privatization Assuming forest privatization implementation, the respondents made a forecast of forest ownership distribution. It is believed that the main owner group will be large companies. Positions of the small and middle-sized companies will weaken even more than today. Importance of ecological functions performance is moderate. There are high risks related to private forest ownership. The enterprises feel threatened from the side of state institutions, market, and economical obstacles.

The survey showed that attitude to the new Forest Code (FC) was ambiguous too. Holding and small companies expected a positive net surplus from all consequences of the new FC implementation, while middle-sized and large enterprises expected a negative net surplus. Assumed influence power of the FC was proportionate to enterprises size. The forest lessees were prepared both to positive and negative development in perspective. Holding companies were more optimistic in that sense.

Internal adaptive processes allow forest lessees to orientate themselves in the new legislative field. However, uncertainty of the political course delays and complicates this process. It was expected among the interviewed that the large holding companies will probably develop toward value added products manufacturing. While middle-sized and small enterprises will be in forests as sublessees or contractors under rather hard business conditions due to possible difficulties to compete with larger enterprises on lease auctions.

The survey showed that holding companies are more confident in their future. They, probably, will use a maximum of the opportunities provided by the new FC to extend their activity and diversify the production. Large and holding companies will develop toward value added products manufacturing, while middle-sized and small enterprises is expected to remain in forest operations as sublessees or contractors under rather hard business conditions due to possible difficulties to compete with larger enterprises on lease auctions

The questionnaire survey showed a significant opinions' dispersal among the businessmen and the data does not allow plotting a mean development vector with sufficient validity. Promising future research activities could be to identify probable limits definition and drawing an average development path between the limits. This could be approached by in-depth interviews getting reactions on extreme standpoints regarding perspective development under the survey. The optimistic scenario could probably then reveal more clearly the crucial issues for further development and assist in identifying best probable result achievements, while the pessimistic scenario could point on hidden dangers and make it easier to avoid them.

1. Introduction

It took just 100 thousand years for mankind to find out the planet's weakest points. Destructive effects of pollutant emissions to atmosphere, soil and water were aggravated by too intensive agriculture and forest use. Being a supplier of raw wood for building, furniture, paper, chemical and more other industries, forests are playing a huge ecological role. It is impossible to imagine life on the planet without them. Absorption of CO2 and oxygen production is going on here, not forgetting habitation for infinite number of living organisms.

After realizing the whole seriousness of consequences from the many-sided destructive activity, mankind considers forest ecosystems as one of the trump cards in opportunity not to lose the game with nature. Therefore, it is very important to pay special attention on changing approaches to forest management, adjustment of nature use and forest growing aims, and designing new methods. The forests of Russia are of vital importance in the world today. Russia possesses abundant forest resources, due to environmental factors, its vast area and low population density. It is the biggest forest holder in the world having 22% of all forests or 764 million hectares on 45% of the country territory, (International Institute For Applied System Analysis, 1998).

1.1. The forest sector in Archangelsk

1.1.1. Forest area

Archangelsk region is the Northwestern part of Russia's European territory. Forests are located in the taiga zone, where 70 % takes northern taiga sub zone and 30% is in the middle taiga sub zone (Burdin, 2006). Forest area of the region occupies 22 million hectares and stocks amount to 2.8 billion m^3. The relative percentage of coniferous and deciduous forests is 82% and 18% respectively. There are dominating saw mill logs of middle and small size and pulp wood. The region's annual allowable cut is 22 million m3 while only 47.5% of it is actually felled. Percentage of annual increment to actual cut is 45.1%. Tree stands older than 100 years, so called mature and over-mature forests, makes 54.4 % of forest land.

All Russian forests are divided into three groups according to their conservation value and function. Group 1 includes forests whose functions are predominantly those of water conservation, protection of hygiene and health and air improvement. It makes 26% of the region's forest area. Group 2 are forests close to territories with high population density. There is

only 0.9% of such. Group 3 consists of forest earmarked for exploitation and continuous timber supply and constitutes 73.1 % of total forests (Burdin, 2006, and Filipchouk, 2001)
However having apparent abundance of forests region faced a problem of future supply of forest industry and need of harvesting displacement into the more remote and difficult for developing forestlands. But roads and developed infrastructure is lacking out there, as a result of historically more intensive use of forests close to the centre of processing and transportation routs (rivers).

Russia's forest resources, so called "forest fund", is the federal property. Forest governance and management is carried out by state unitary enterprises. Open access has been an unquestionable traditional quality.

1.1.2. Condition of the present forest sector in Archangelsk region

The Russian forest sector has a very big importance for sustainable development of the country and its successful integration in the world economy.
In the forest industry from harvesting to wood processing, almost all the enterprises are private. On the home market wood products are sold at market competitive prices and foreign-economic activity was liberalized.
The forest sector is still dominating in the regional economy. During the transition period the role of the branch has strengthened because in the other branches (agriculture, machinery construction, building) decline was deeper and they have lost their positions. However the share of the forest industry reduced due to growth in trade services, banking, and transportation. The forest sector demanded this kind of services and forced their development.

More than 60 thousand persons are occupied in the forest sector. In the field of harvesting and wood processing there are engaged 108 large and middle-sized enterprises, 500 small firms and aprox. 500 individual businessmen (Burdin, 2006). According to the former Forest Code issued in 1997, right of use was distributed through forest auctions and forest contests. On the forest auctions, mainly small enterprises bought forest plots for harvesting for one year use. But approximately 7 millions cubic meters per year or 75% of timber volumes were felled under long-term lease contracts made by results of the forest lease contest. Due to much bigger importance of forest leasing companies only they were taken as an inquiry subject. Large and middle-sized enterprises participated in it; few small enterprises took also part in the contests providing themselves thereby stable work. After implementation of the new Forest Code all issued leases were reregistered by enterprises to be valid. In accordance with the new legislation carrying out of the forest contests were cancelled and now both short-term use and long-term lease will be distributed through the forest auctions.

The region's forest industry is a part of Russian forest industry. But Archangelsk region managed to maintain the most balanced forest industry complex during the transition years. In addition to that region has an advantageous geographical location for both home and foreign markets. Its production facilities provide 9.8 % of All-Russian industrial wood production, 9.6% of saw-timber, 34.3% of pulping ad 15.8% of paper production (Bose, 2008). Thus state and economical activity of the Archangelsk forest sector affects the region's economy and forest industry sector in total distinctly. There are 30% stay for forest and wood processing industry in the structure of regional industrial production, while this indicator for Russia in average is 3.9%. Tax proceeds from forest industry to the regional budget amount 13%. In 2005, regional forest industry companies exported products to the sum of 700 million USD or 9% of All-Russian export.

Several forest industrial holding companies were established as a result of merger & acquisition processes. The biggest ones are Titan and Ilim-Group. Titan originates from Archangelsk region and joins enterprises on base of large Archangelsk Pulp and Paper Mill. Ilim-Group is the biggest forest industrial company in Russia. Its enterprises are located in Archangelsk region (Kotlassky Pulp And Paper Mill), Irkutsk (Bratcky and Ust-Ilimsky timber industries), Leningradsky region and Czechia.

There are some smaller companies: Solombalsky Pulp and Paper, Onezhsky Saw mill, “Severmorput-Capital”, “Continental Management”. The listed businesses include enterprises harvesting ca. 70% timber of the total regional cutting volume.

1.1.3. History of the forest legislation hitherto

This chapter gives a brief description of the history of forestry legislation in Russia, and is to a large extent based on Trubina (2004) and Trubina (2005).

The forest legislation gets renewed and developed in accordance with political and economical changes in the country. The newly approved Forest Code is the 8th forest law since the Decree “About Forests” from 1918.

One of the progressive revises for Soviet Union was a law passed in 1977 which was called "Foundation of Forest Legislation in USSR"(Boreiko, V. 1996). It wasn't so bad for the country, which had just come out of totalitarianism and disconnexion. A row of forestry-related and ecological principles were proclaimed there: forest vegetation preservation, continious forest use, better reforestation. However there were unclear paragrafs in that law. For example the cuttings over of an optimal harvesting quantum were prohibited, but if it was needed, Government could allow overharvesting. Forest governance was centralized in a high degree, thus, main questions and management decision had to be approved in Moscow. Forest plots were attached to a certain forest harvesting enterprise for long terms as a raw material base (Trubin D., personal assistance).

The next law was approved in 1993 named "Foundation of Forest Legislation in Russian Federation" (Law of Russian Federation, 1993). Perestroika passed at that time and privatization of industry recently took place. All the state entreprises in forest sector turned into joint-stock or limited companies, i.e. they became private property. Then there was an exigency in regulations of market relations between State as theonly one forest owner and private forest users. The desicion was found in law text of the new "Foundation...".

A system of forest plots distribution was implemented by the "Foundation..." . Forest auctions were organised for small and midle-sized companies where they could bid a fair price to get a cutting area. Forest contests were designed for bigger entreprises. A special commission had to choose the best managment company for a sizeable piece of forest for long terms lease (up to 49 years) out of their economical, environmental and social characteristics (Russian NGOs Forest Club, 1997).

Forest governance got decentralized. Jurisdiction to define charge rates for standing wood and leasing speciality moved down to the district level. This transfering period allowed parts to get experience in the total system adjusting. Contradictions ripened between the Civil Code, the Forest Code and local administration. State rights and resposibilities ended on regional level and the local administration was below that ment to manage federal property. The Civil Code regulated auctions and contests, but they did not fit forest relations. Therefor the way they were organized was illegal in fact.

The previous Forest Code was issued in 1997. It lifted forest governance tasks on the regional level and clearly defined resposibilities for forest management, control, protection, reforestation, use of forest charges between levels and concretized environmental requirements (Federal service for forest governance, 1999). The Law implemented forced stoppage of use rights in cases of violation of any rules or suspesion of paiments. Interactions between districts forest governance units (leskhoz) and forest users conducted within bounds of the Civil Code. Forest concession was foreseen and resolution conserning forest auctions was elaborated.

In 2000-2006 the Government and the Parliament were continuing transformation process of the forest governance system. It was made in three contradictory parallel directions:

- Submission of changes into the Forest Code issued in 1997
- Diverse structural reforms within forest governance body.
- Developing of the new Forest Code, which was approved in December 2006

1.1.4. The main features of the new Forest Code

The essence of the new FC is deepening of market principles in the system of forest relations, its reinforcement within the framework of civil-legal field, reduction of the state administrative regulation. The commercial turnover includes not only felled timber, but also right to harvest and right to lease forest plots. The State makes another step leaving a sphere of the forest relations and hands over this field to a business. By authors design, responding to this, business should show an additional activity and increase the commercial financial turnover. It is expected attraction of capital that will flow into the forest sector to enliven it. An additional motivation is foreseen opportunity of private forest ownership, which implementing has not been seriously evaluated yet.

The new Forest Code is a formula how to raise the Russian forest sector on the world level and solve the president's Putin task of the NNP doubling by 2015(President of RF, 2003).

The forest contests were canceled. Now plots will be granted on lease only by results of sale on timber auctions. The jurisdiction of forest governance and management was transferred from the regional to the federal level, closer to a large financial capital. The last concentrates in its hands greater forest resources with right of the user for long terms that in turn guarantees an intense modern industrial activity today and in the future. It will bring the forest industry to the world standards. And the modernized forest sector will make an important contribution in the NNP doubling.

In order to utilize the forest resources wisely and get an appropriate development of the forest industries in the region, there is a strong need for improved information about the sector and how major economic agents there look upon the future potential for development.

1.2. Study objectives:

The main objectives of this study are to provide information for improving the development of the forest sector in Archangelsk region.

Two sub-objectives are looked into:

S1: Describing and analyzing the current structure of the forest sector in the region by emphasizing the following main points:

- Socio-institutional situation in which forest business was born and growing
- Enterprises origin and activity
- Main tendencies in today's business environment in the sector

S2: Investigating the opinion of the main economic agents/stakeholders in the forest sector in the region, with focus on the following points:

- Stability
- Skill availability
- Willingness to accept private forest ownership
- Opinions about the new Forest Code (FC)
- Perspectives more in general about the future of the forest sector

2. Methods and data

2.1. Analysis of the current structure.

For covering sub-objectives S1, the thesis describes and discusses main processes happened in the forest sector under the transition toward the market economy. The work is based on a sweeping generalization of large material quantity since forest sector in Archangelsk region has been my specialization over time. It was used information from Trubina (2005) and Trubina (2006). I studied also forums in Internet sites forestforum.ru and forums.wood.ru, where specialists discussed processes happened in connection with the legislation change. The areas lacking data were covered by my father Dmitry Trubin, head of forest planning section in Department of Forest Sector at the Archangelsk Regional Administration.

For analysis of enterprises origin and activity and for creating a dynamic picture of development in the forest harvesting branch in particular, I used data obtained from the annual tables "Usage of forest resources on the forest fund parcels leased out" procured by the Department of Forest sector in Archangelsk Regional Administration for the years 1996-2006. See appendix 1. These data was needed to ensure representativeness of the sample interviewed. They provide valuable information for making an overview of forest business actors and revelation of change processes. Excel software was used for statistical analysis and visualization of results.

2.2. Questionnaire survey of forest business actors

Sub-objective S2 was covered by performing a questionnaire survey. The questionnaire was based on the four hypotheses:

1. H1: The forest leasers are positive if private forest ownership will be implemented.
2. H2: The forest leasers are skilful enough to accept forest owner responsibilities
3. H3: The forest leasers are stable enough to carry out forest owner responsibilities
4. H4: Change of the legislation will make a significant impact on forest enterprises

Since there has been very few research carried out in this field it was a strong wish to learn forest users point of view as much as possible. But it was important not to overload the questionnaire to avoid scaring respondents, and it was decided to concentrate on 2 sheets of questions.

The questionnaire is described in Appendix III. Almost all the questions were closed. Answer variants were given in 5 ranges scale. Some questions which were impossible to pose the 1- 5 answer variants on, were used to break the tempo to prevent monotony.
Because the questionnaire was made for people actively occupied in the forest sector basic professional words were used such as sublease, corporatization, technological chain, business climate. For better understanding of the questions, use of more complicated terms was limited due to different schooling level of respondents.

The questionnaire contained a short address to respondent about study purposes, instruction considering filling in the questionnaire, anonymity guaranty. However, there was an opportunity afforded to mention name for respondents with an active standpoint. The form had 38 questions divided into 4 blocks:

Block 1. Personal characteristics

(Position in enterprise, size and activity of the enterprise, education, age, optimist/pessimist, ability to take risks)

Block 2**.** Forest business and legislation change

(+/- evaluation of the new FC, vigilance, plans, time perspective, personal attachment to business (business selling possibility), forest business rate compared to other businesses, corporatization process, relation to environmental organizations, investment appeal, profitability and investment sources, sublease chances)

Block 3. Implementation perspectives of private forest ownership

(+/- evaluation, territorial ambitions, distribution forecast by main owner groups, forecast of capital investment recoupment, goals evaluation, possible risks evaluation)

Block 4. Educational part

(Own skills evaluation, self-instruction, rating of knowledge areas, evaluation of employees skills, Internet)
Consulting services evaluation

The final variant of the questionnaire is a result of long preparation work. Two variants were tasted firstly. I decided to remove the block of questions about relations with local community, it was an interesting topic, but in that case the research would exceed the fixed bounds. The educational block was expanded to get more information about knowledge levels, ways of knowledge extension and so on. Also, based on the testing, the questionnaire structure was changed and answer variants were regulated.

2.2.1. Data collection

50 questionnaires were distributed by me and through Department of Forest Sector at the Archangelsk Regional Administration. 22 answered questionnaires were collected, so, respond percentage was 44%. I managed to get quite good enterprise distribution by size, what was not an easy task considering time lack of large business representatives. The questionnaire quantitative results are presented in appendix II.

The respondents were chosen by two criteria: they had to be employed in the forest sector and have a leading position. Especially, I focused on owners/co owners of a forest business, the ones who take decisions. But due to lack of respondents from bigger companies, not-decision makers were included in the survey. Share of their answers was 14%.
Following distribution of representatives' position in a company was achieved, see table 1:

Table 1. Respondens position distribution in enterprises

	owner	co-owner	leader	manager
Position	4	6	9	3

Holding companies were presented in the study by two persons. But corporatization was revealed in other companies as well. Among the five large forest enterprises participated in survey three mentioned their dependence from holding companies. Out of nine middle-sized firms expressed their views five indicated the same. Small enterprises were presented by six answered questionnaires.
Regarding enterprises' position in the technological chain, pure harvesting is carried out by 11 firms, one enters market with final products and 9 had end-to-end production executing the whole chain of work from harvesting to wood processing.

The majority of respondent had higher education, 17 persons to be precise. Two respondents have got PhD and another three studied at specialized secondary schools. A little more than a half, 12 persons had a forest related profession while other ten had another profession.
The respondents age distribution was toward older (more experienced) people. See table 2

Table 2. The respondents age distribution

	20-30	31-40	41-50	51-60	> 61
Age	1	3	8	7	3

The expressed opinions dispersal was significant and does not allow drawing of serious scientific conclusions. However the survey revealed basic attitudes regarding the questionnaire issues

3. Current structure analysis of the forest sector in Archangelsk region

3.1. Socio-institutional situation in which forest business was born and growing

The institutional environment has affected forest business formation and its character. Here, I will discuss the following main points:

3.1.1. Maximizing of individual profit

As it was said earlier after privatization of state forest harvesting enterprises, new actors appeared in the forest sector. They were owners of the new private forest harvesting enterprises. They entered this business expecting big money raised by big-scale cuttings in the vast expanses of Russia. After almost 70 years of march toward the abstract collective bright future people could finally make a reality of thirst for maximizing of individual profit. A rush for gain has begun.

3.1.2. Incomplete control and sanctioning system

Legislation framework was designed with the least forestall during the whole transition period. All listed below components needed to create reasonable conditions for business running:

1. Rules of harvesting activities
2. Clearly defined procedures of harvesting control
3. Clearly defined sanctions in case of rules violation
4. Sufficient financing bodies responsible for control.

Three last conditions were underfulfiled. Procedures of control and sanctioning were too bureaucratized. A complicated presenting system of inculpatory evidences was designed in favor of infringers. Because of that part of violations was not registered, another part was overlooked and insufficient number of cases reached a court.

This moment made a certain negative influence on discipline of the young forest business.

3.1.3. Unstable legislation

Since 1991 three forest laws have been approved. In addition to that, community got stirred all this time by rumors about preparation of another new FC. This evidences the fact that elaboration of the current FC started in the middle of 2003, i.e. it took 3.5 years. During this period of time deadline for submitting it to hearings deferred constantly (Trubina T., 2005). However situation became more complicated with contradictions between the FCs issued in 1993 and 1997 and other branches of law, such as Civil Code, Land Code, Water Law, and Administrative Code. The FC lost its self-dependence. The Civil and Land legislation overbalanced the previous FC editions. But the other branches did not stay constant either and had being changed in their turn. Each of them moved out of the soviet system with one's own speed.

Current FC was finally brought to conformity with the other Codes in 2006..

3.1.4. Absence of clearly defined political course

A key question of transitioning to the market economy is still open – will it be implemented private ownership on forest resources. Thus, discussion about the issue resulted by defining to confronting parts:

- Radical liberal-reformers who contend that private forest ownership is the best solution. A main motive force was leadership of Ministry of Economical Development with German Gref at the head. Namely that body was responsible for elaborating the current FC and it focused the Code on preparation to the forest privatization (Trubina T., 2005). Last years this part was leading, but state policy became more cautious with followed recent resignation of Gref.
- Conservative part who thinks that natural resources have to be state owned. Its supporters are scientists, the communist party, political party ”Fair Russia”, some Putin's consultants. New developments show consolidation in this part and forests may be entrusted to a state corporate for governance and management (variant similar to the Norwegian Statskog).

Public opinion considering forest privatization is ambiguous. Answer on this question is crucial for forest users who are waiting for definition of development direction. In case of implementing private forest ownership two variants are possible:

1. Once-only privatization which implies auction-based sell of forests. A forest businessman will need a financial capital and good speed of response.
2. Selective evolutional privatization when forest plots will be given to a responsible leaser. Forest user should show off long-term investments, good forest management performance and care for environmental and social aspects.

In case of the state corporations organization, forest users will get only role of contractor and will need a modern machinery and mobility.

3.1.5. Imperfect law making process

The Russian Federation is a young State. Important state institutions just have started to gain experience. A judiciary system of USSR was developed only in sphere of criminal law. All regarding Civil, Administrative Codes and other law branches has begun their history from 1991. A precedent base has not been accumulated yet.

Lawmaking is a young state institution as well. There is a strong shortage of professional lawmaker able to create effective texts. A concept of abortive laws appeared in legislative practice, i.e. a law worked up in such way that makes impossible to use some of its paragraphs or the entire document. Indirect laws imply vagueness. They refer to other documents that may not even exist or use such formulating as “and in other cases”. Some of the defects of forest law were stated above. Criticism of Russian legislation is a popular topic for discussion. That damages its reputation in people’s eyes. Respect to a law is a sensitive social institute and it needs to be cultivated.

3.1.6. Legal nihilism

Here, it should be pointed issue of people’s relation to a law. The Soviet Union set global aims and did not focus attention on an individual. Moreover, USSR used people in its own purposes. The huge state machine ran over humans who started to realize that own interest did not go together with this machine. Therefore their minds became shifty. It is not exactly unabiding, but elusive.

The situation turned out after the dissolution and criticism of USSR that values propagated to society were wrong. It made some more pernicious influence on relation to the State and to the state institutions. Legal nihilism is a big problem currently of Russian society. It is defined as non-recognition of law as social value and is revealing in negative attitude to a laws, legislation, order and lack of faith in law necessity, abilities and utility. It highly damages attempts of reforms implementation.

3.2. Analysis of enterprises origin and activity

The analysis of enterprises origin and activity is made to understand the essence and signatures of forest use stability, which is very important for the forest sector sustainability. And the sustainability can be achieved only when the forest sector will consist of stable enterprises, but they can not appear out of nothing.

It was decided to trace the development of the regional companies from several sides: accumulation of production means and inheritance of property rights, continuity of development stages, and continuity of the staff generations. The dynamics of the production means is quite simple during the considered development stages: from small to large, from primitive to more advanced. The production facilities of the forest sector had been accumulated, amortized, renovated or written off and utilized.

During the years of depression, the total production capacity of the regional forest sector was reduced in 1.5 times compared with 1980's. Presently it can harvest and process 13-14 million cubic meter of raw timber. Modern equipment makes up approx 20-30 % of the means (Burdin, 2006). The rest is outdated harvesting, transporting and wood processing machines. The both parts belong to large, middle-sized and small enterprises. The holding companies have better machinery condition and so, grant on lease some of it to small and middle-sized firms.

The dynamics of property rights, undertaking forms of the forest sector and its management, i.e. history of the origin and transformations of the forest companies is much livelier.

The property rights in the forest sector, except property rights on forest resources, having done an enormous historical turn, returned into the same place. As it is well known, after the October revolution all production assets belonged to local forest businessmen were nationalized and remained in the state property in 70 years. This period of state management had left a certain imprint on the sector. On the one hand state ownership implied a high rate of production growth and association with social development of strategic centers. On the other hand it caused an excessive concentration of production in these few centers and consequently social and economic exhaustion surrounding rural territories. It entailed uneven forest resources exploitation. Moreover this state ownership in forest sector combined with rigid centralized planning constrained the creative activity of personnel, depreciated role of human factor in the technological progress, contributed to disregard of local community interests.

The Nationalizing of forest sector assets was done in one stage implemented by a soviet decree in 1918. Before the revolution owners of forest enterprises constituted a big community, possessing an authority and influence upon social life of the region. Alliance of Archangelsk forest businessmen had up to 50 participants. The small part of former owners and their clerks tried to prevent the nationalizing by active methods, rising in arms against the new regime. The biggest part of forest businessmen emigrated with hope to get back their property or its compensation by legal methods. Another part was employed as managers by new owners (in state enterprises). During the ensuing years majority of them was subjected to repression. Today only two descendants of former forest industrialists are known occupied in forest sector. This is certainly a heavy loss in the intellectual potential and traditions of the region.
After nationalizing one part of the forest industry was granted in the form of concessions to a private-state companies: "Rus-Angloles", "Rus-Norvegoles", "Rus-Gollandles". And another part was constituted so called Rayleskhozy similar to district enterprises. It slightly reduced historical zigzags, but in 1930's these elements of the transition period were liquidated, and the rigid, administrative-command system set in, which had lasted 60 years.
The Privatization of the forest industry in Archangelsk region and in the whole country was carried out quickly and totally, namely during 2-3 years. The last two state owned enterprises Poduzsky and Avnugsky timber enterprise vanished under the market conditions in 8 years. An elimination of the state property was made within the framework of a national privatization program. Forest enterprises were privatized, when stock was been distributed among company employers. Since ordinary staff members were not prepared morally and informationally to control the production, they sold their shares. During 5-10 years property rights concentrated in leaders and external managers hands, who willingly bought up the small share holdings. At the present time redistribution of property rights in forest sector has still gone on. Large national and transnational companies take an active part in this process.

When it comes to continuity of development stages, only couple of companies can show off 100-years indissoluble history, documented evidences, memorial places, preserved corporative traditions and working dynasties. They went through all the stages of development. There are quite many enterprises, which history of the origin and activity is traced from 1930-1950's, i.e. established under the industrialization of Russia. However the reform processes were carried out here harshly therefore continuity of the development stages was poor, staff generations turned out to be disconnected. Territorially they were dragged apart by different owner groups. Principles of forest use continuity and evenness were disregarded and consequently forest resources got fragmentized. Because of it connecting base of enterprises which is forestland was lost.

The substantial stability is shown by the companies where large investments from the state budget were made in 1970-1980's for new forestlands developing. Examples of such are Lukovetsky, Ust-pogshenisky timber enterprises, Svetlozerskles, Onegales, Shalakushales, some enterprises belonging to the group Ilim-Pulp.

However a row of like enterprises lost signs of stability despite of equal starting investments. The Main reasons of their degradation were:

- Careless performance of owner duties, including absence of clear and perspective corporative forest policy, washout of circulating assets, unprofitable contracts obtrusion by owners, deliberate bankruptcy, amotivational selling of control stock.
- Weak leading and professional skills of chief executive.
- Absence of an inspection system from the state side on owner duties performance and influence instruments, including ways of state support.

A large quantity of new small and middle-sized forest firms appeared in the transition years. Basically, the undertaking forms were presented by individual businessmen, limited liability companies, closed join-stock companies, trust partnership. They were organized both out of nowhere and in site of the detached parts of former socialist harvesting enterprises. As a whole, their development has been chaotic, but some of them are stable and successful. The factors of their stability are following:

- Inheritance or cheap purchase of base (starting) production assets
- Leadership talent of executive chief (in most cases, the founder of this enterprise).
- Financial support from strategic partners
- Buying of the user right for forest plots in sufficient volumes, on medium- and long-term lease.
- Forming of mutually beneficial relations with municipalities.
- Apt innovation solutions.

3.2.1. Team of forest business actors

Under processing of the tables all lessees were divided into three groups by their cutting volumes in time. As we see in Figure 1, the team structure was changed insignificantly. Small and middle-sized enterprises dominated quantitatively. On average they formed 64% and 22% accordingly. The large companies were not so numerous, they gave 14%.

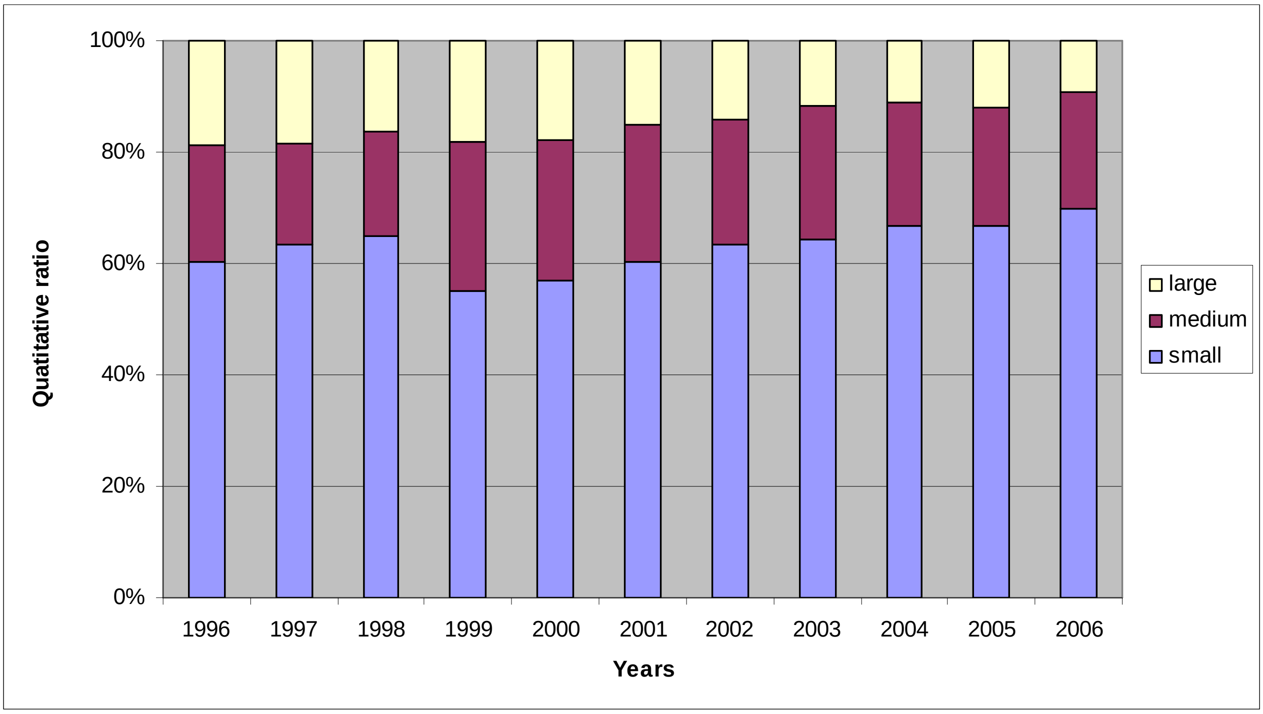

Figure 1 Groups balance by actors number

“One-day” firms

So called “One- day” firms stand out besides regularly working companies. They are not interested in rational developing of a territory. Such firms take out timber from terrain easy of access, do not build any forest roads of twelve-months functioning, and do not go into remote and wetland areas. Their object is a prompt export of round wood, often for dumping prices, ulterior competitive struggle. Rules are often broken including cases of nonpayment for lease, non-observances of the treaty obligations, cancellation of leased area. So, 34 “One- day” firms were revealed in the tables for period 1996-2006. The total area of forest leased to them forms at least 1 886 thousand hectares and 5 companies managed to get on lease area of more than 100 thousand hectares.

It is important to mention in the connection with the “One- day” firms and severe economic situation, that great share of closed down or bankrupted enterprises was detected in the tables. 251 firms stopped working out of 461 for any or several reasons, i.e. 55% of studied companies. Unfortunately official statistics does not provide information about what was caused the closings ad I can not interpret the significant index.
Average size of a leased forest plot was 48.8 thousand hectares; the least one was 145 ha and area of the biggest plot was 607 thousand hectares.

Small and middle-sized enterprises

When one takes a look on cutting volumes in Figure 2, he (she) sees that small companies harvesting not more than 15 thousand cubic meters forms on average only 9%. A lot of small firms (61%) have completed a lease agreement for the period from 2 to 5 years. Such actors often has been criticized that due to vagueness of their near-term prospects, they are not interested in infrastructure development. Besides, they are financially low-powered organizations, which harvest forest plots close to forest roads belonging to large companies and public roads. It contributes a certain absence of pattern in forest fund use. Not having a good facilities for wood processing, they are unable to use rationally the wood resources and build the forest roads. The small lessees can not afford forest certification process and are being suspected of illegal cuttings that leads to destruction of the most valuable wood types (Krupchak, 2007). On the other hand, these mobile enterprises are not burdened by social obligations in provision of local communities. They quickly adapt to new economic and legal situation and find a niche.

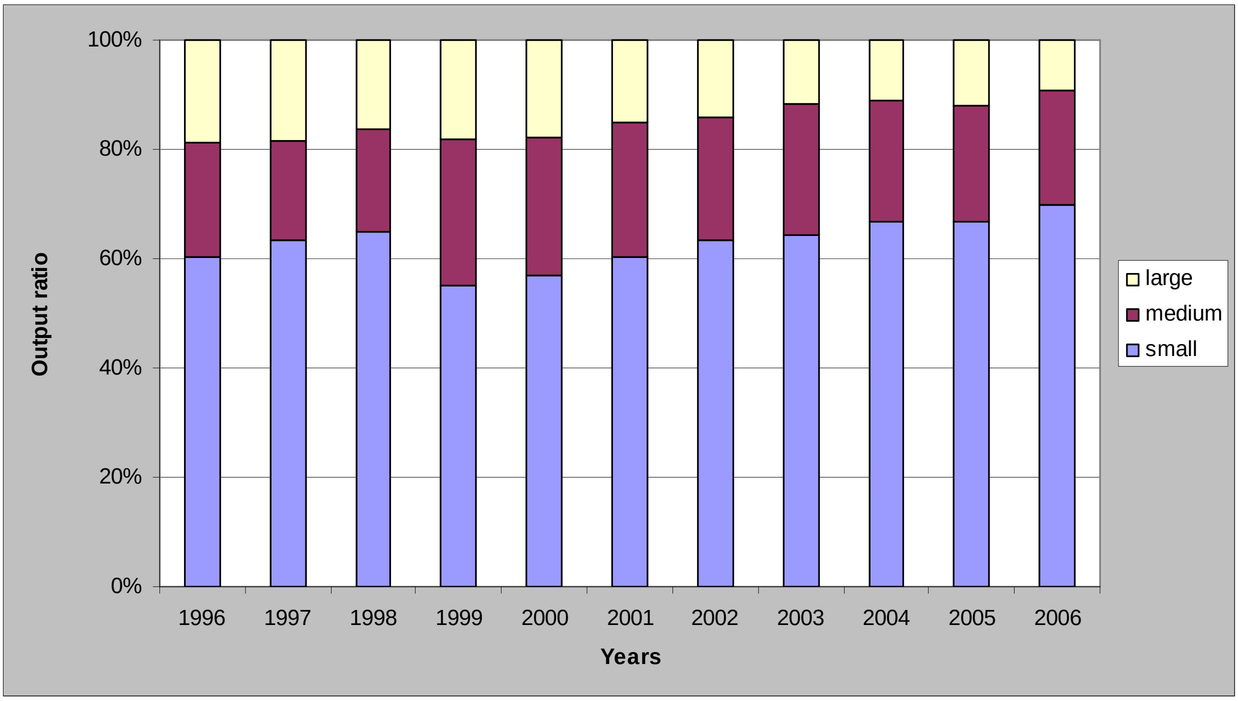

Figure 2 Dynamics of cutting volumes by leasers groups

The middle-sized harvesting enterprises are presented by former small soviet timber industry enterprises and firms grown out of small business. They harvest from 15 to 60 thousand cubic meters per annum. Their share in cutting volumes equals 24%.

It assumed that these small and middle-sized enterprises will remain the important players in the forest sector. Presently their share in harvesting volumes makes approx. 20-30 %, the share in sown timber is lower -10-15%, but in manufacturing of value-added products they are backward. In the sublease perspective an increased share of logging by small and middle-sized firms is expected. It can grow up to 40 % (Trubin, personal assistance)

Large companies

The large companies provide 67% of timber volumes. They undertake serious liabilities for provision of workers and local community affected by their activities. The enterprises, not joined holding companies are built by old patterns, possessing neither modern management methods, nor political weight. They have difficulties for activity efficiency and performing of the social obligations.

The majority of large and middle-sized enterprises is included in integrated structures.

3.2.2. History of holding companies organization and technological integration

Detached forest sector enterprises, highly depending on seasonal activity, faced a challenge in the crisis situation of the transition period (denomination, Default in 1998, highly growing transport and energy tariffs and etc). They were losing circulating assets and investment attractiveness. Both small & middle-sized firms and such crucial for the region enterprises, as Archangelsky, Kotlassky and Solombalsky pulp and paper mills were on the verge of bankruptcy.

The structured realignment of the forest sector business was needed under these circumstances, i.e. establishing of large vertically-integrated structures (VIS), consolidating enterprises on the technological principle.

In 1995 such work has begun. The first forest sector holding companies were organized then. Not all shareholders and leaders of the enterprises understood and conceived this process, however first efforts within the framework of VIS shown advantages of the technological integration. Some of the holding companies formed around pulp & paper mills. Others united logging and sawmill productions. The thirds are parts of large financial-industrial groups (Shwechkov, 2004).

Today the forest sector in Archangelsk region overcomes difficulties of the transition period in many respects due to the activity of such corporative structures, as Group “Ilim” owning Kotlassky Pulp& Paper mill, Group “Titan” owning Archangelsky Pulp& Paper mill, Solombalsky saw & pulp & paper mills and others. They not only survived in the severe years, but were able to develop dynamically. These VISs undertook problem solving hindering the forest sector in the absence of national forest policy and state support under high export duties on wood products. The major of them have been renewal of the outmoded facilities and road construction for developing of new forestlands.

However efficient functioning of the large forest enterprises faced difficulties connected to fast owners change. Often, the integration processes have an unsystematic character, when one purchases everything what is left for relatively low price. It is necessary to form the forest industry assets able to become a basis for long-term development, but there are few such cases.

3.3. Today's tendencies

Since the new FC introduction has gone a bit more than one year. The following processes were going on: reformation of forest governance authorities, developing of necessary subordinate legislation, realignment of the forest relations, business adapting in the new legislation framework . Thus, the new development phase revealed some permanent trends in the sector.

3.3.1. Forest governance in the new order

The new FC was designed in conformity with regulations of the administrative reform in the system of state governance in Russia, which approaches to European patterns. According to them, functions of the state governance have to be performed separately from management function (forest maintenance and reforestation). Credentials are distributed between authority levels: federal, regional and municipal. Forest, as a real estate, is also distributed between levels of the property (federal, regional and municipal). Credentials of estate administration can be handed over to a subordinate level with corresponding financing in form of subventions.

In accordance with those regulations, Archangelsk region has got the credentials on federal forests governance on its territory and has received jurisdiction under former territorial organs of federal forest governance organization (leskhozes in districts and regional forest governance agency). A special representative organ of regional state authority in sphere of the forest relations (Department of forest sector) was formed based on this, but leskhozes were transformed into 30 territorial subdivisions of the Department – lesnichestvo, with simultaneous separation of independent managing structures for performing of forest operations. The managing structures possessing property of the former leskhozes go out to the forest service market. The Sphere of its activity is an execution of forest operations on not leased plots, based on contracts with the Department and services provided to lessees and business activity in the sphere of forest use.

The Lesnichestvo’s are empowered by the state with forest control and inspection under handing over procedures of forest resources for use, forest planning, placing orders for forest operations and other governance authority. They are financed from the state budget.
Thereby modern efficient forest governance system was formed in the region. Certainly, it does not manage the forest business, but is intended to create the favorable conditions for its development in terms of the forest resource provision. In the future it is planned to realize measures of state support of the forest business through this system, but currently such possibilities are limited.

3.3.2. Investment agreements

The Investment agreements become the most attractive form of the relations between the business and state. Investors may assume obligations to develop production of value-added wood products in exchange for fixed preferences. For instance: allocation of a forest plot for preferential rate, funding of interest rate on an investment project credit etc.
In turn investors may be obliged to make output of the most competitive wood products, complex timber use, including wastes recycling.
Interest to the investment agreements was shown by the leading forest sector companies in the region from the very beginning. In 2007, 15 applications were received for forestlands being outside of lease. An order of contest designing and criteria of winners’ selection were established for their consideration. Big work on delimitation of declared forest plots with local interest zones was carried out. Nine investment agreement projects were chosen and sent to the federal organ for approval (Trubin, personal assistance).

3.3.3. Sublease

The Sublease implemented by the new Forest Code, had prerequisites at the end of nineties. A lot of businessmen under conditions of unstable market relations aimed to make a complete technological chain: from harvesting to production of ready-made consumer goods for entering into market. But the business activity enthusiasm exceeded greatly forest plots supply for lease through the contests and short-term forest use through the auctions. At the same time some lessees did not complete forest exploitation on their leased plots due to various reasons. It was developing a new type of forest relations. The "Forestless" companies arrived at a solution with these lessees. They subcontracted and after bought the harvested wood for own use. Thus, the statutory prohibition of sublease in the old FC was evaded.

The new FC allows the sublease specifying that a leased forest plot must be recorded in the state cadastral register. There is a good reason to think that it will contribute to a diversification of the forest relations system and increased level of forest use. According to the new legislation a lessee may recruit harvesting facilities of any other managing subjects, not having forest in lease, for the sublease. Contract work in forests will also develop. It pays for the small and middle-sized enterprises to specialize in a narrow technological range: wood harvesting on a forest plot, reforestation after clear cuttings and timber trucking and floating to saw mills.

3.3.4. Forest planning and state control

Forest planning, state control and supervision in the lawmakers' ideas have to compensate the possible risks of forest use liberalization in terms of change from licensing forest use system to a declaring one and the sublease possibility implemented lately. The system of forest control includes the most part of employees in the state forest governance service. The total number of them in the Archangelsk region is approx. 300 persons. They passed a qualification procedure and were trained. The state inspectors are given large powers for forest users' activity control and decision making concerning punitive sanctions use in cases of forest use rules violation. The broad legislative base and numerous forest planning documents harshly regulate forest companies activity.

It may be assumed that such excessive state surveillance of business is a short term arrangements during the FC introduction period, which needs to be canceled at some stage of the forest relations. Otherwise it will restrain further economic development, contribute to confrontation and corruptions and waste budgetary funds. New forms of the confidential relations between state and business have to be established. For example, the independent evaluation system of responsibilities performance and differentiation of requirements in accordance with the evaluation.

3.3.5. Merger of business and politics.

Business entering into politics is a reaction of the business on harsh form of the economic activity regulation. The large business leadership or their representatives take part in elections or nominate them selves for key positions in executive powers for lobbing of their corporative interests. Smaller companies go into politics to get more stability in business running and resistance to the corporatization process. But in general it does not contribute to increased quality of the state management and law-making. Such people must decide: either they return to business, or they withdraw from their companies. It is doubtful that forest specialists, delegated from forest companies, will contribute to correct and qualified development of the forest policy.

4. Questionnaire results

In this chapter, the results of the questionnaire study are discussed on 5 main aspects.

4.1. Stability of forest leasers

Stability is one of the crucial characteristics of the forest business in the light of new responsibilities transfer. The future forests condition will depend on quality of these responsibilities performance.

First of all we were curious about how often respondents take risks. Risk is a natural component of market economy, but the transition process required additional risk regarding in terms of finances, production, commerce and market. The most part, 59% indicated that they take risks often. A bit more than one third answered “sometimes” and only one person was most cautious among others. As a matter of fact it had been impossible to run business under the conditions of modern Russia without high risks taking. The privatization, contacts with bandits, business rivals, authorities plus not fully defined property and use rights turned risk into everyday component of the business.

A planning timescale data is presented in the Figure 3. It causes an anxiety around it. More than 40% of the lessees not only middle-sized, but also large companies, plan their own activity only for 3-5 years onward. Regrettably, present-day uncertainty of the direction in which the forest sector will go, does not motivate for long-term investment and progressive development. Other 40% of the middle-sized and large companies are orientated on medium-term prospect of 6-10 years. Remained 20% of the large and 11% of the middle-sized enterprises are more solid (responsible) and do planning for 20-50 years onward. The major holding-companies as most effectively operated structures work for the long-term prospect. There is no uniformity among small companies and full spectrum of the intention timescales is presented here.

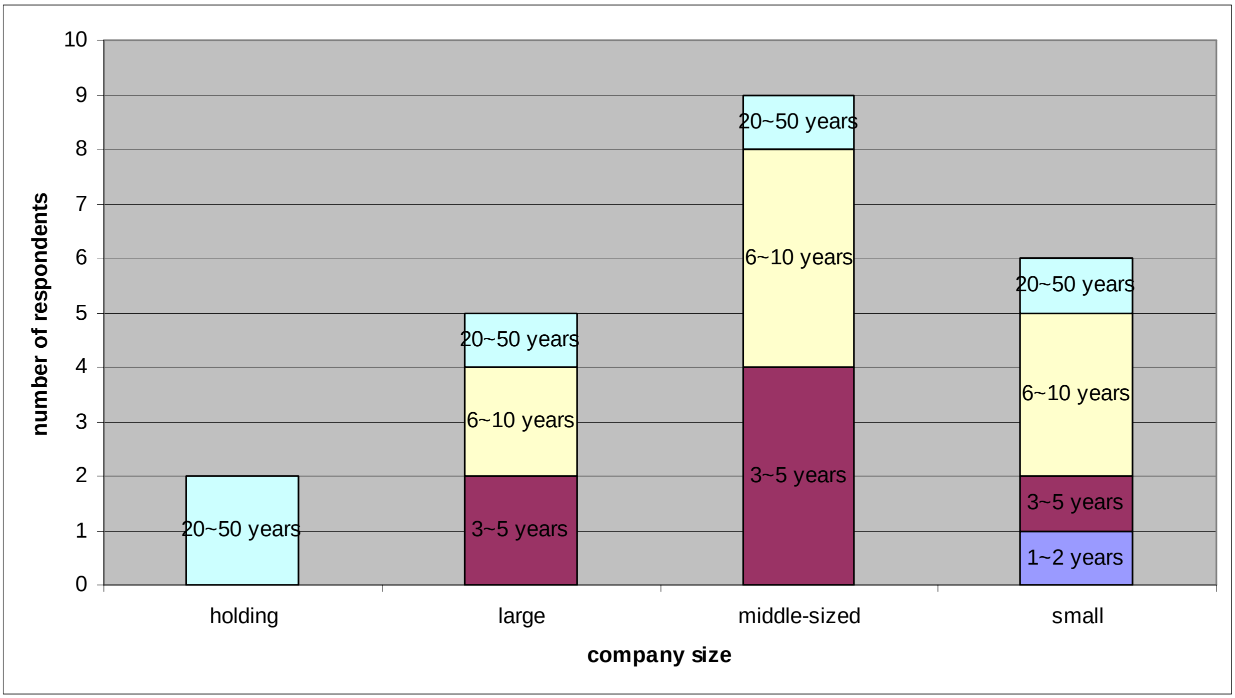

Figure 3 Planning timescale

A new tendency towards sale of forest harvesting enterprises appeared in connection with the same uncertainty in the forest sector development direction. A row of factors force businessmen to give up including unjustified hopes for the excess profits, an exclusion by more active rivals, a vagueness of the prospects and rumors about surviving only the largest actors, a production falling-off connected to productive stands which become more difficult to access. In addition to this, severe conditions for harvesting had disturbed the sector during the last 4 winters. The owner change can cause the behavioral change of enterprise on the market, hardly predictable priority and prospects alteration. Consequently it can affect execution of forestry operations. So, as it shown in the Figure 4, 32% respondents had already sold their companies to larger structures. But in general, stability in terms of owner constancy is typical for 59% of enterprises against 41% of those firms, which may be sold to a third party.

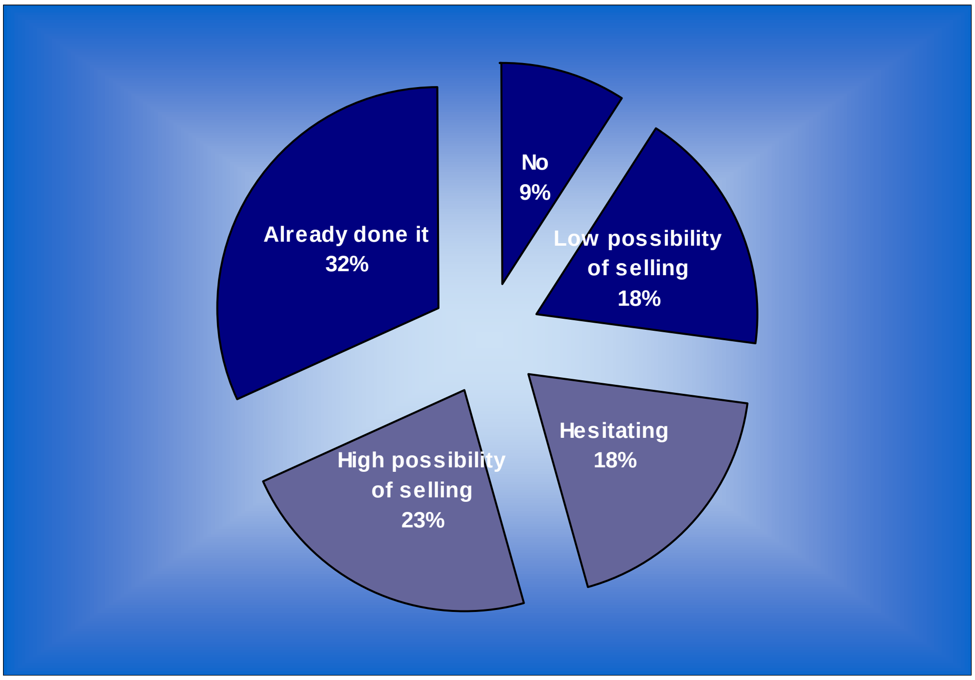

Figure 4 Possibility of business selling.

Regarding processes of corporatization we may conclude following – they do go actively. So, 44% of the examined indicated that their companies are already part of holdings. 40% feel the gravitation of the differently intended structures. And among the four that do not feel any corporatization moments, three are small companies, which by definition do not interest holdings.

The sector attractiveness for investors and at the same time businessmen satisfaction or dissatisfaction in their activity demonstrates the Rating of the sector, which was evaluated under the questionnaire survey.

It is obvious that forest sector in Archangelsk region doesn't make super profit and its yield is much lower compared to other branches and regions. Therefore respondents valued the investment attraction not highly. Only one person put 7 point out of 10 at this index. Other survey participants kept it within the range from 2 to 5.

Comparing the data with the enterprises' size it is easy to see that, holdings valued possibility of the sector highest - they gave 5 points. Efficient management and influence that the large structures have, give a better opportunity to earn money. The small companies consider that running of business in this sphere provides profit as well, having put 4.5 points in average. In this case it may be explained by the most flexibility, possibility to avoid social responsibility. As it was already mentioned, middle-sized and large companies have neither flexibility, nor political influence, nor competent modern management to carry weight of the social problems and due to that, they valued the sector at 3.8 and 3.2 points accordingly.

An equipment condition is one of the stability attributes and things in this case go not so good either. Nearly half - 45% of the respondents' enterprises were hard-set by their machinery condition. The economic constraints are so great that there is no possibility to update the machine park. The moderate condition of equipment is typical for 55% of the firms. And it does not depend on the enterprises size, except the holding companies, having greater resources, gave equally moderate estimation.

Regarding sources of capital investments in the renewal of forest machines shown in the Figure 5 we may say that companies put up their own money, in other words they work to the prospect.

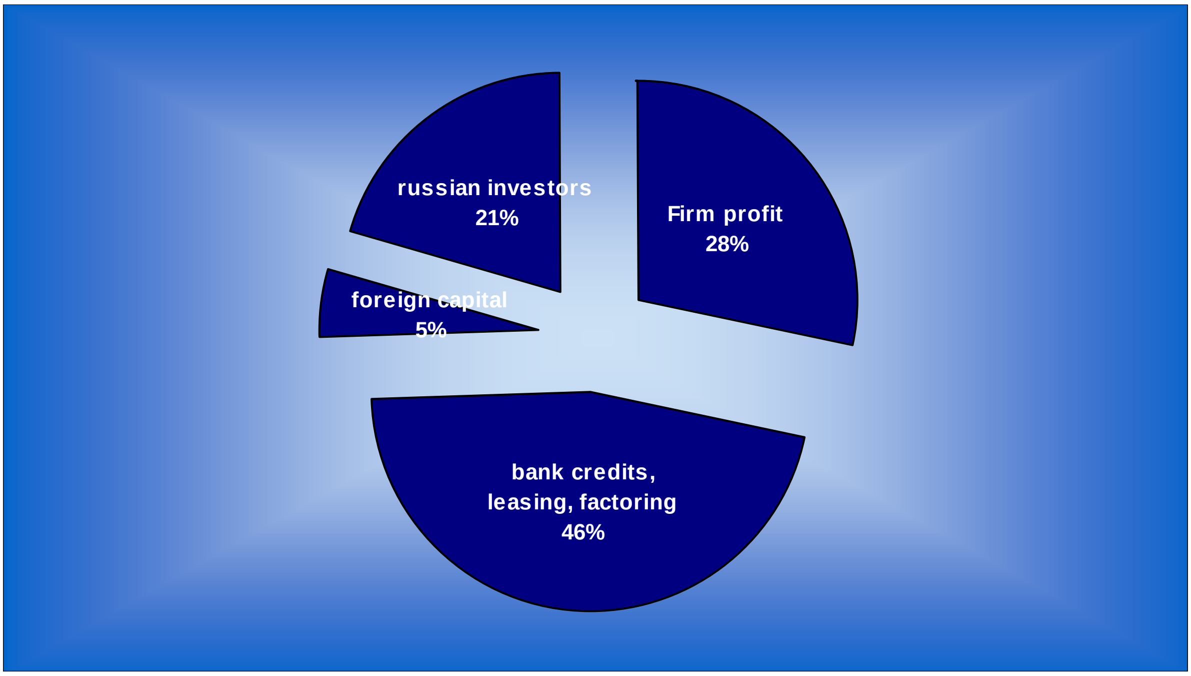

Figure 5 Capital sources in equipment renewal

Also they commonly use facilities of the bank sphere that in turn indicates fulfilling by forest business of rigid requirements for credits and equipment leasings obtaining and confidence of the bank system toward forest users.

The weak participation of foreign capital is explained by the region remoteness from borders, low efficiency of forest use. Here we can oppose the Leningrad region, where foreign investors joined actively the forest sector.

Russian private capital gave the pas that had dominated in 1990's to the credit system which just had started to arise that time. Since then the free private capital has been distributed and for the time being its inflow is limited.

The lessees' solidity is also expressed by their relations with environmental organizations, see Figure 6. The first aversion toward them when forest businessmen just faced the need to show "green" profile is over and now the respondents' general impression of the nature conservation activity became positive. It is supported by 59%.

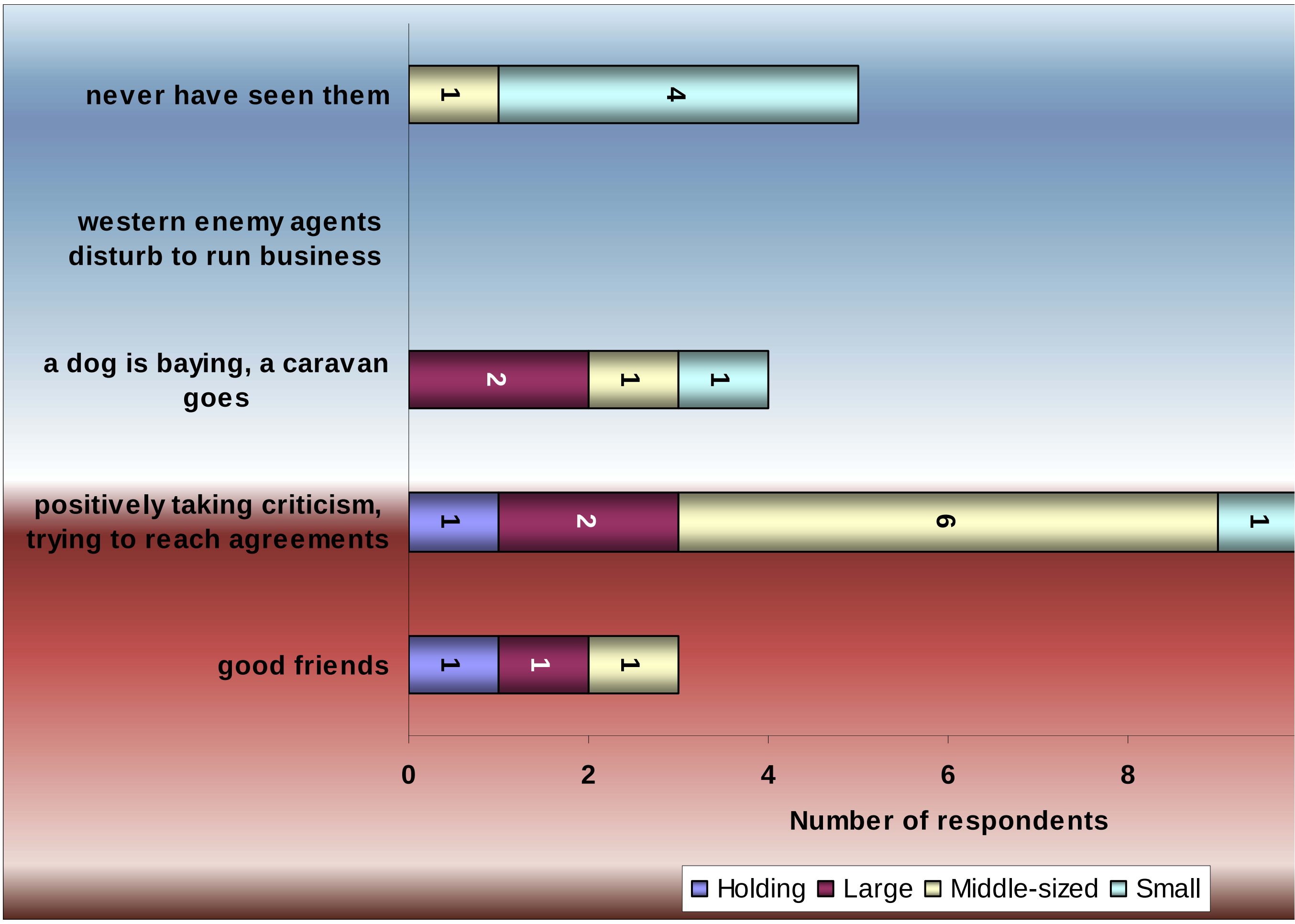

Figure 6 Relation to environmental organizations.

Since only few environmentalists work in the region, they can not watch all the harvesters, so they do not focus on small companies and, consequently, such enterprises did not face a dialog necessity.

18% of the respondents consider activity the environmental organization unimportant.

4.2. Skill availability of forest leasers

An educational level of the respondents is quite high: 77% have higher education, 9% are PhD and 16% were taught at specialized secondary schools. 55% have forest related profession.

General knowledge evaluation of those who employed in forest sector enterprises is uncomplimentary. It is equal 2.95 points in 5 points scale with 2 as unsatisfactory mark and shown in rick-red zone in the Figure 7. From one side, employees are characterized by more or less passivity and lower ambitions compared with leaders, from the other side, technological backwardness of the forest sector in Archangelsk region causes a thin layer of engineers and specialists and mass of low-qualified workers who don't supposed to be widely-read.

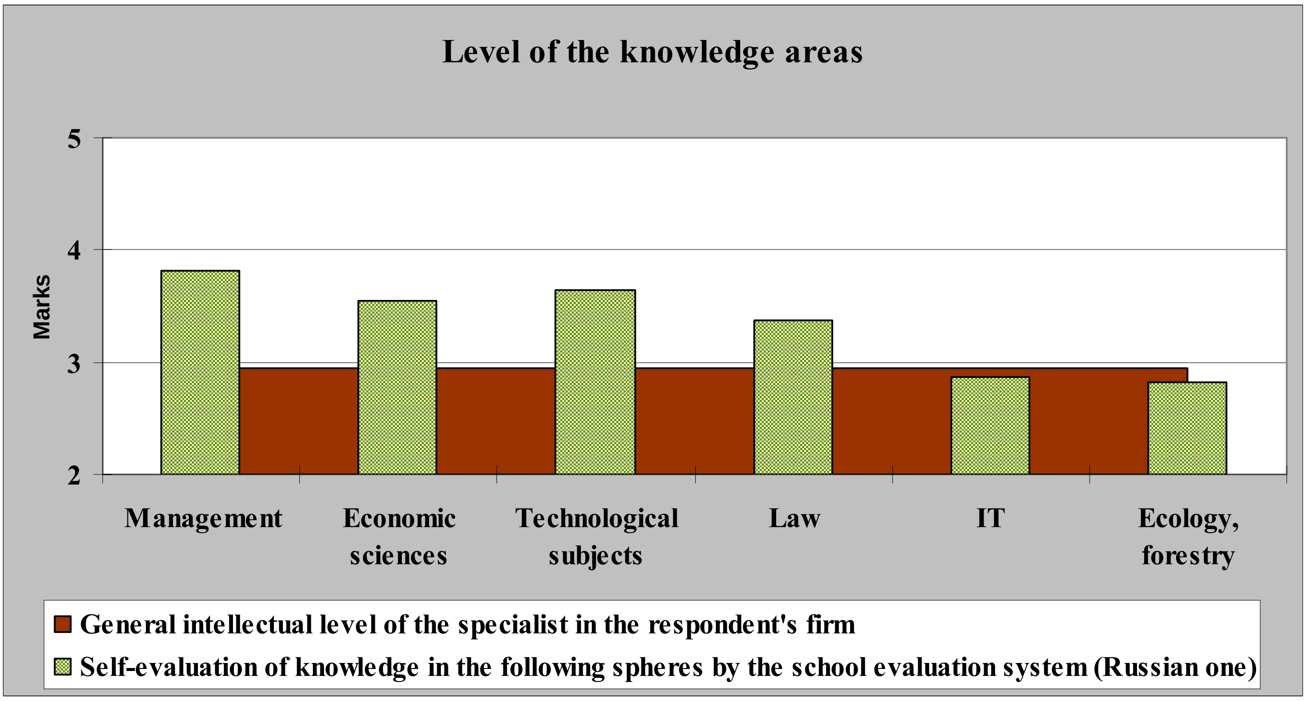

Figure 7 Level of knowledge areas

Against this background, management's self-evaluation wasn't high either (Figure 7, green columns). And this is in spite of the fact that respondents are the most engaged people. It can be explained by several reasons. For the first, they have been educated long ago. Let me remind you that average age of the respondents was high and schooling discipline became obsolete. However we may assume that share of knowledge gotten in institutes of higher education is minor by an example of low marks in ecology and forestry. Because more than a half of respondents had been studied at forest-related faculties, where emphasis was placed on the ageless forestry disciplines, the marks should be higher. The least among other knowledge areas index is 2.82 and it is congruous to the least priority the forestry disciplines, see Figure 8. There is no wonder – forest lessees had not been responsible for forest management tasks. All the ecological and nature protective operations on leased plots were planned by an organization -

Forest Inventory Expedition that makes an obligatory document – Plan of Fellings for each lessee.

In the other areas knowledge level and priority are corresponding as well. I.e. according to the business principals, management personnel expend only the areas having actual value. Knowledge accumulation took place in disciplines which were new for the state in the transition. Changes in economy, technologies and legislation have had the strongest influence upon the profitability and ways of production organization, while modern management methods made it possible to implement them into the production. To the contrary, attention to IT branch and forestry did not affect directly the firm's yield, due to the technological backwardness of the branch and short-term perspectives

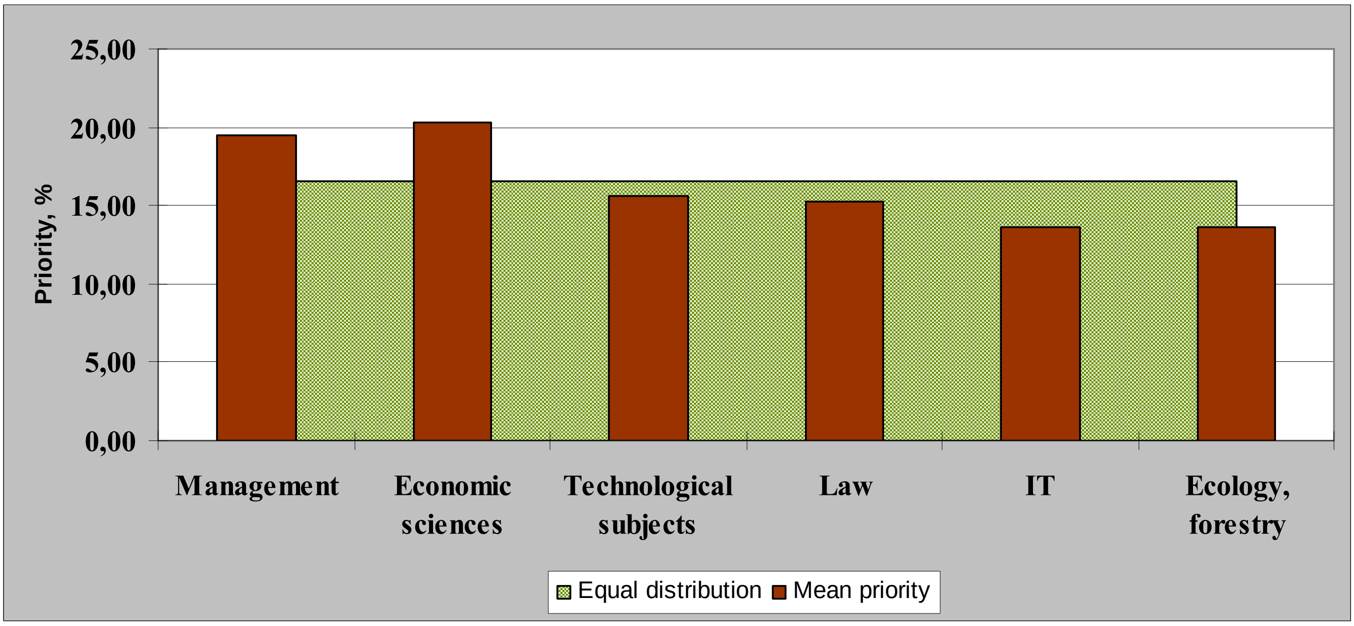

Figure 8 Priorities of the knowledge areas

High priority of the management and economic areas is understandable because right organization and calculation in decision making process allows keeping an eye on novelties in technology, changes in legislation, accepting new responsibilities and implementing modern methods at the right time.

Channels of information obtaining and ways of knowledge extension shown in the Figure 9 characterize this information. Thus, the most relevant way is "informal communication with people whom I trust to" shows its obscurity, abundance of controversial data. Attempts to estimate hardly predictable state actions generate a lot of rumors. Businessmen try to be well informed to make own business secure and prepare it for changes. Circle of acquaintance in this case is a more or less reliable way to analyze situation and plan further actions.

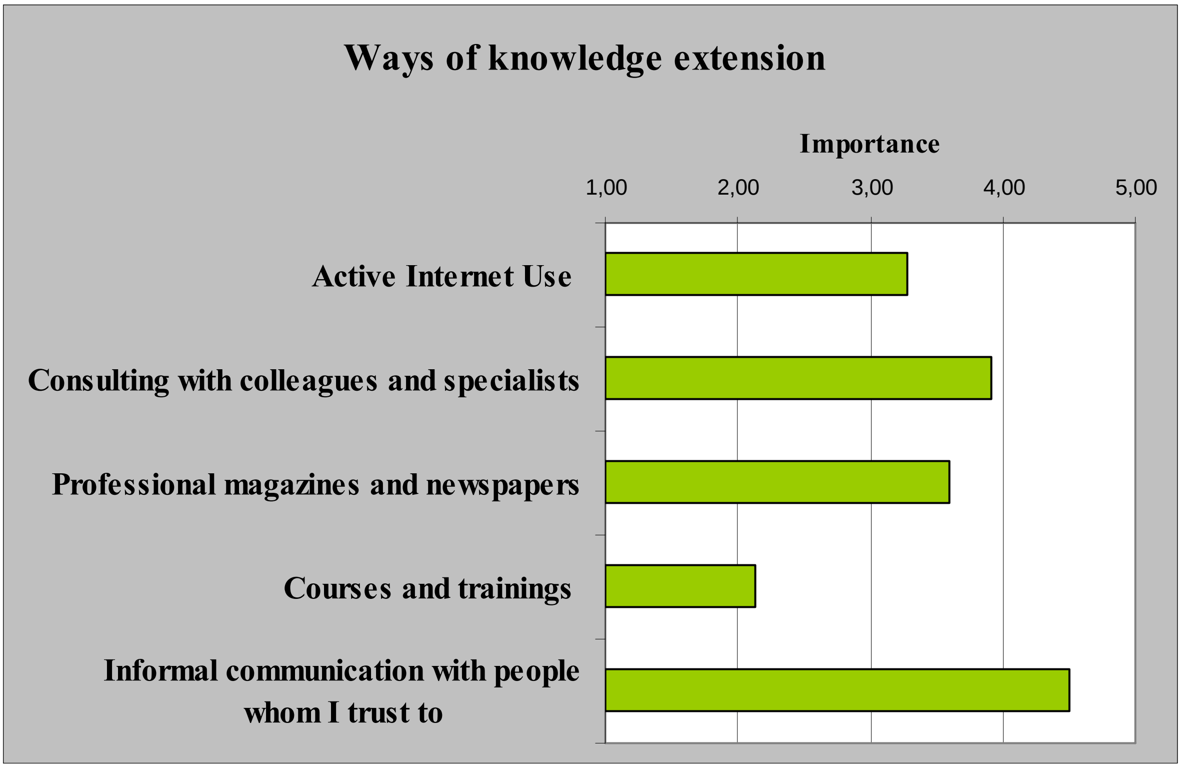

Figure 9 Ways of knowledge extension.

Consulting with colleagues and specialists is more formal communication but still it is a good way to share experience, seek mutual understanding and make compromises.

The most structured information is available on the courses and trainings, but it is the least important way for the lessees. Educational institutions of old type react slowly on the changes and teach in many cases an archaic, unactual material. Therefore degree of trust to them is low. Besides, any modern educational organizations have not been established in the branch. Infrequent new educational programs are demanding in terms of money and time and there are few who can afford to take part in it.

A number of periodicals has lately occurred in the forest sector. There are 14 newspapers and 108 magazines in Russian forest sector. They publish actual market news, analytics, reviews and commercial. Their importance in the structure of knowledge extension is fairly high. The sector's periodicals are delivered directly to an enterprise and one can read them at any time in any place.

The Internet sources can be divided in two groups: formal informational support similar to the printed periodicals and informal communication with colleagues in forums where one can get practical advices, inquire level of prices etc. The smaller contribution of Internet is based on the mature age of respondents and a bit of anxiety for IT. However they realize that potential of the web is quite high see the Figure 10. Probably the ones who do not use Internet facilities but heard a lot about its goods overestimated its importance. WWW resources for the forest sector are limited. One can find information about equipment producers, contacts of forest sector actors etc, but not exact prices, contracts, demands, due to the mentioned data obscurity. Therefore level of Internet use is not so high throughout the branch either. Besides already named low intellectual potential of staff contributes to the forest Internet dormancy.

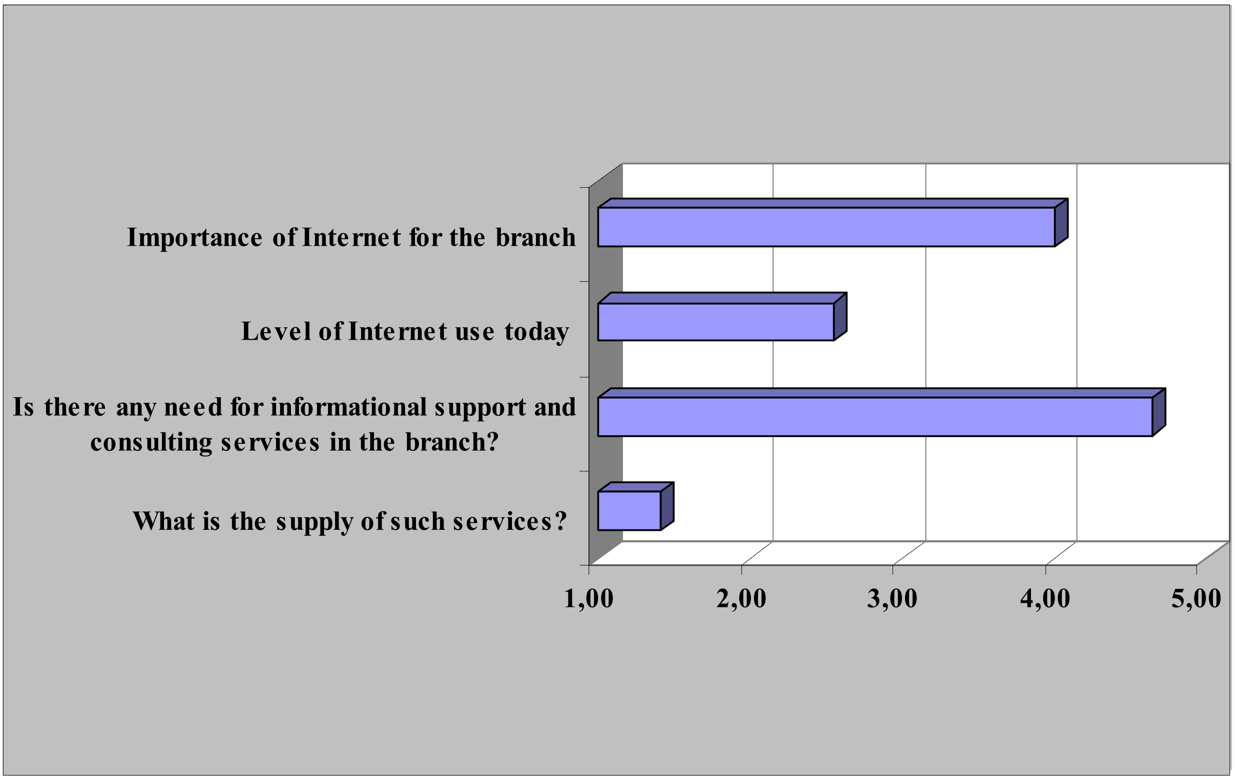

Figure 10 Internet and consulting services

. The extreme demand of consulting services and informational support result from:

1. Their total absence that is confirmed by very low value of the supply which is 1.41.
2. Informational vacuum in terms of the new laws interpretation and application.
3. Lack of important info such as open methods of new projects calculation and evaluation.

Extension courses during the transition period were necessary in the changing economic, juridical and technological conditions. But enterprises had small possibilities to train employees in the short-term perspectives. So, general relatively small indicators illustrated in the Figure 11 are not surprising.

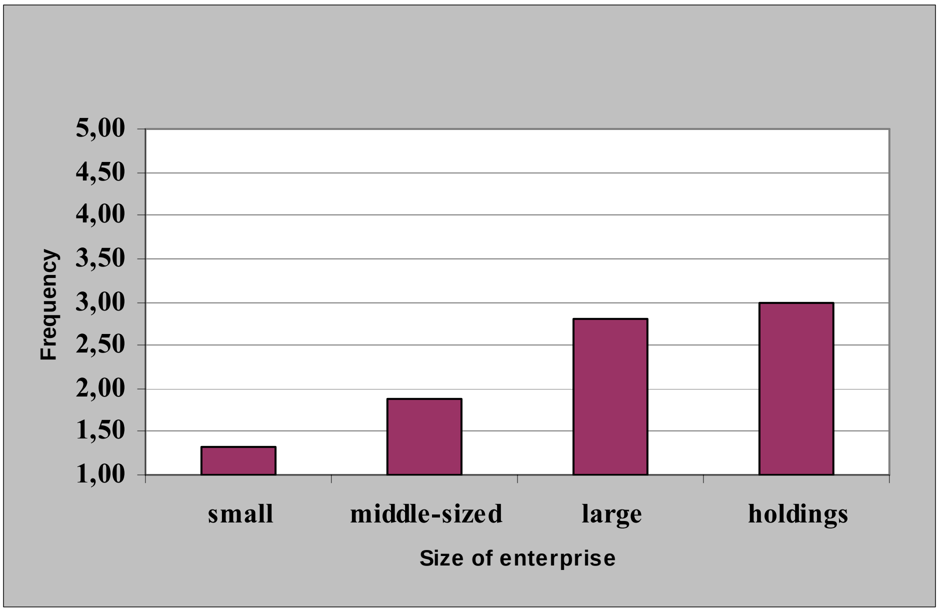

Figure 11 Extension courses use

There is regularity in interdependence between size of an enterprise and frequency of extension courses use. The smaller firm experience more difficulties to provide courses for the staff. At the same time production in small company is simpler. Bigger companies have longer perspective and clear policy in human resource management.

4.3. Willingness of forest leasers to accept private forest ownership

We did not get unanimity asked forest leasers' opinion regarding forest privatization. Positive and negative votes distributed equally. The crucial moment here is not size and facility of an enterprise but age of the respondents. Thus, all the young (less than 40) participants of the survey supported its implementation, while 8 out of 10 respondents who past fifty objected. The most part of their lives they spent and worked in the seemingly indestructible Soviet Union, and after they went through its collapse, breakdown of the forest sector, attempts to organize it in other way, controversial industry privatization. Therefore the denial is understandable. There are 72% of them who have absolute aversion of the private forest ownership and consider it as contrary to the Russian mentality. The other 28% are close to accept the forest privatization. They believe that such reform needs time to be a natural result of systematic changes and appropriate forest users response. The supporters of the private forest ownership have similar point of view. All of them advocate the idea of selective evolutional privatization and none voted for once-only total privatization. This unanimity is important for consideration of such multidimensional and long regenerative resource as forests.

Territorial ambitions of the enterprises correspond well to their sizes (Figure 12). The flat refusal to take part in privatization from the representatives of the large companies and holdings was caused rather by their public opinion since two out of three who refused were managers, but not decision-makers. Opinion of those who actually can buy forest plots is still a mystery.

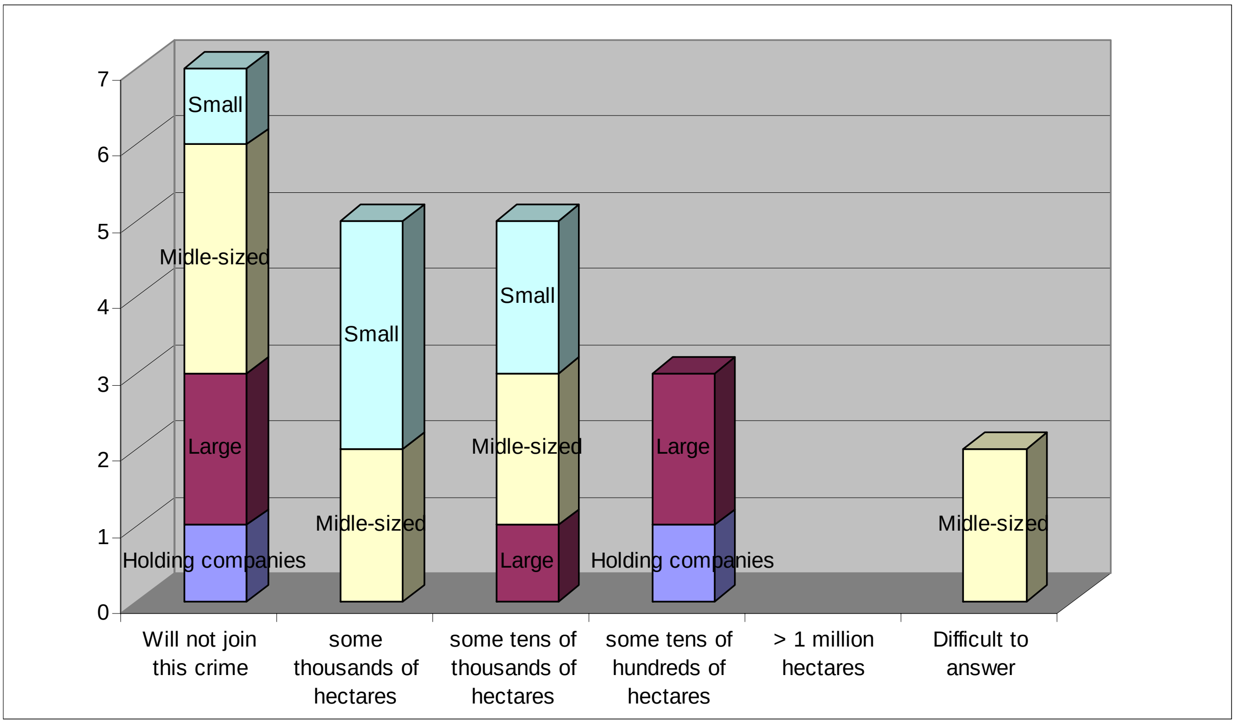

Figure 12 Territorial ambitions of lessees to own forest plots

None of the respondents extended remarkably their territories compared with the leased parcels due to a respective increase of forest maintenance cost and expanses for carrying out forest operations.

Assumed that the forest privatization will take place, the respondents estimated distribution of forests among the main owners' groups in 30 years (approximately such period of time sector will need to balance out the groups) as follows in Figure 13.

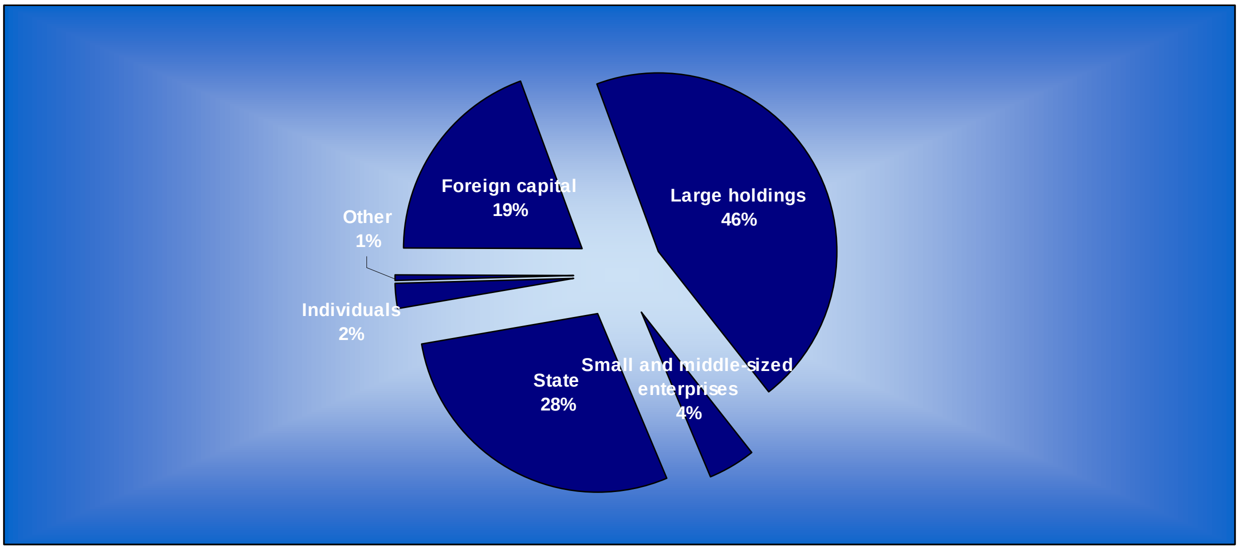

Figure 13 Distribution of forests among main owners' groups in 30 years

The prevailing view is that nearly half of the forest resources will be acquired by the large holding companies which are able to invest heavily in long time perspective. Foreign companies will get 19% of forests. Small and middle-sized enterprises will buy only 4% and will not be able to compete for forest resources with larger enterprises. Apparently, they will be absorbed by the larger actors or go off to niches showing up with introduction of the new FC. For instance, they will become sublessee or will carry out some forest operations. The individuals and other owners get together 3%. The State will remain a little less than one third of the forest lands, where situated protective areas, land of Ministry of Defense, low-productive remote stands.

When it comes to pay-back period of forest resources, the respondents indicated in average 8 years which is a medium term. So quick recoupment is complicated to interpret under an unknown conditions, in which forest plots may be privatized, and "price" for them. There are few moments what comes to mind here. Firstly, we may assume that this index is forest lessees Willingness to pay which is equivalent of a fixed income deduction during 8 years. Secondly, considering experience of quick and total industry privatization it is possible to expect that owners of the forest business hope to get forest resources also relatively “painlessly”. Thirdly, 8 years is the period of medium-term credits used by middle-sized and small lessees. Also it calls up the planning timescale (see above, chapter 4.1) where 77% of the lessees make their activity plans within 10 years prospect.

Figure 14 lists evaluating of goods from the forest estates given by the representatives of the enterprises different in size.

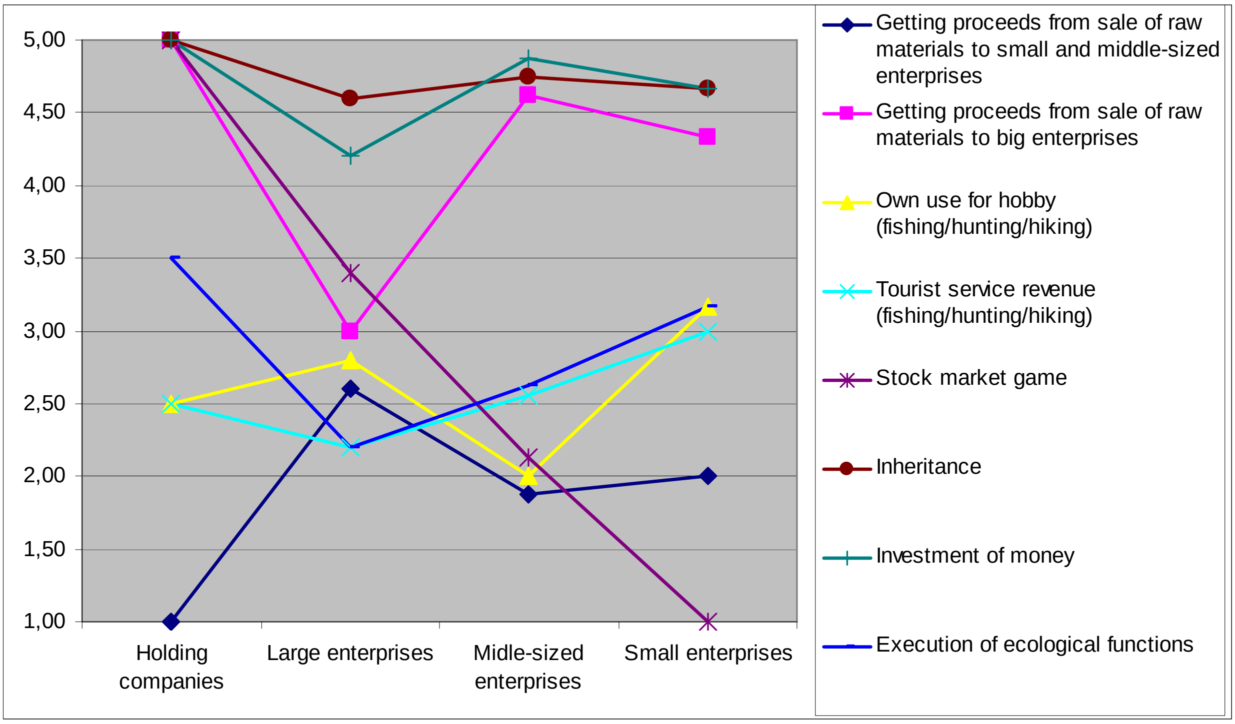

Figure 14 Evaluation of forest estates' goods

The most important for all of the participants is a possibility of money investment and an inheritance. An acquisition of income from row materials sale purchased by large companies was evaluated high as well, with the exception of the large companies them selves, who will not sell the row materials. Holding companies disregard activity of small and middle-sized processing firms, while smaller actors take into account transactions similar to them selves. Increasing size of enterprise makes higher interest to a stock market game, where certainly larger actors are more influential. All of the forest lessees estimated moderate value for both possibility of forest own use and income acquisition from tourist business. Importance of the ecological function execution by forests was middling and was evaluated 2.76 points in average.

Evaluation of risks related to the forest privatization is presented in Figure 15. One can see that forest lessees were unanimous in estimation regardless of the enterprises size.

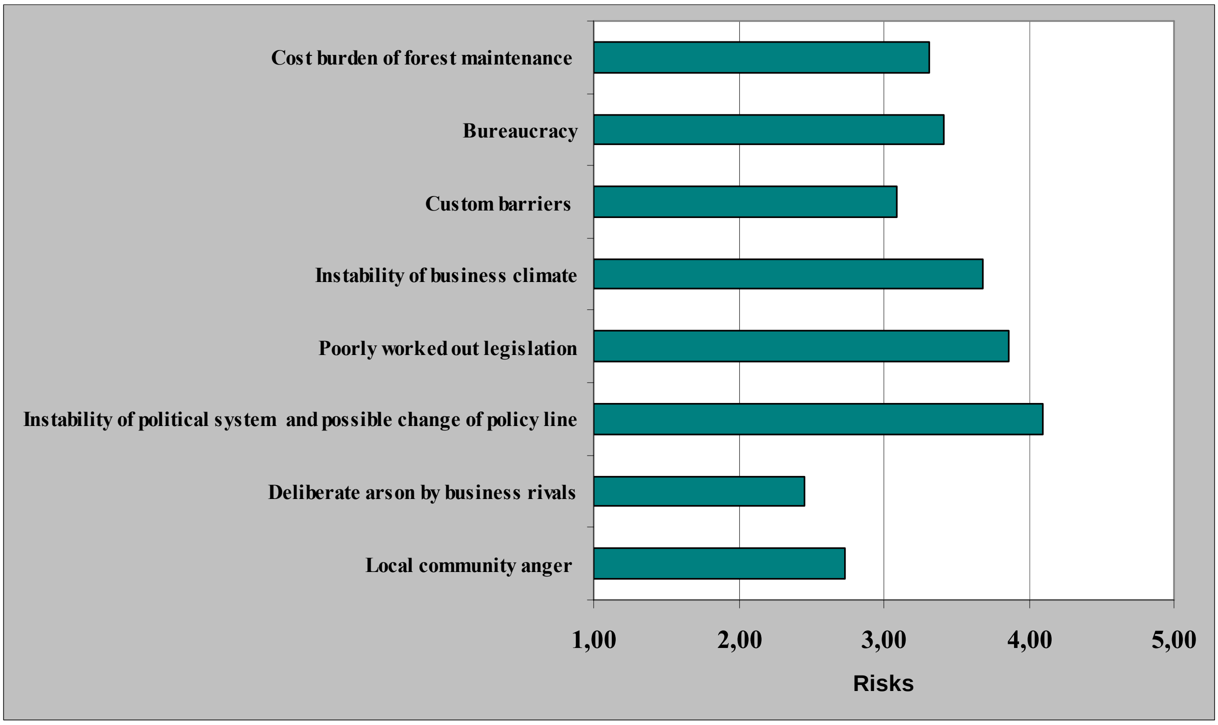

Figure 15 Evaluation of risks under forest privatization

Asking a question about prospect of forestry specialists hiring was pursued an aim to look how quickly and willingly the lessees respond on innovations directed to gradual conveyance of property. It turned out that overwhelming majority of lessee is going to hire the forestry specialists, see Figure 16. The delegation of forest management functions to the forest users forms on labor market a group of professional foresters who were discharged on grounds of staff reduction. The group is expected to join forest harvesting companies.

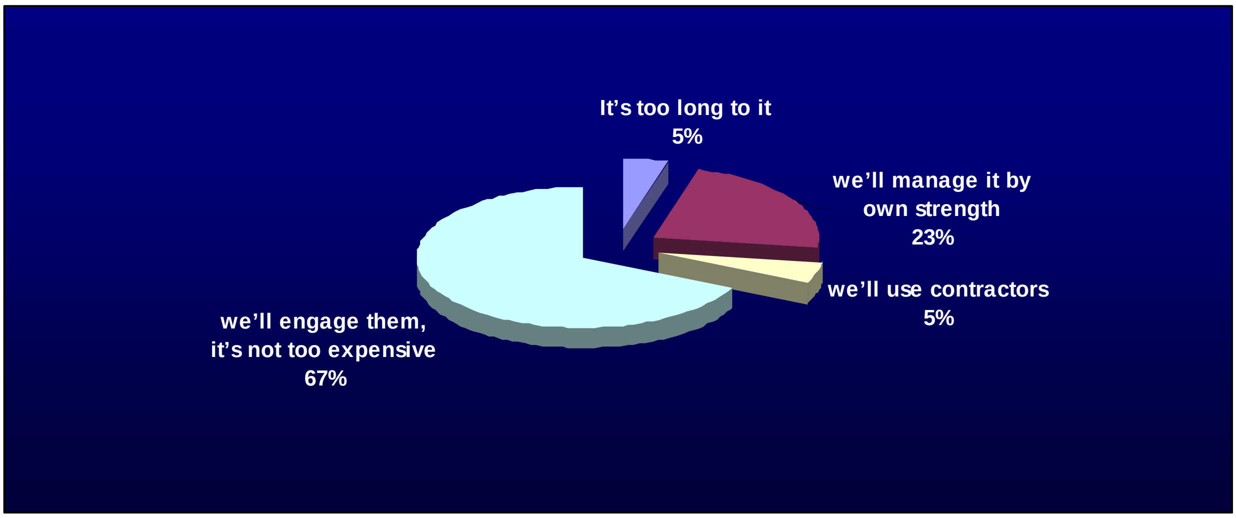

Figure 16 Labour resources for executing of forest management tasks

The 23% of them, who are going to manage by own strength, are mainly the small and middle-sized companies, whom hiring the additional personnel will bring considerable costs to. One holding company is going to engage contractors for the execution of forest management operations; however it probably will establish such enterprise in its own structure. And only one respondent, representing small company considered the need of additional function execution as too far respective.
In the whole, there is an anxiety for the future of professional foresters. This group can suffer from insufficiently considered active reforms.

4.4. Opinion regarding the new Forest Code

The polled opinions regarding the recently implemented Forest Code are divided into several directions. It is recognized that the Code was designed in favor of large actors and this is proved to be true by the unanimously positive reaction from the holding companies side, see Figure 17. The large firms, being organizations of the old pattern of the management system, did not appreciate the law. The ambiguous evaluation was the most popular one; it was given by 59% of the respondents. And only two small and one middle-sized enterprises can allow themselves not to follow the legislation change.

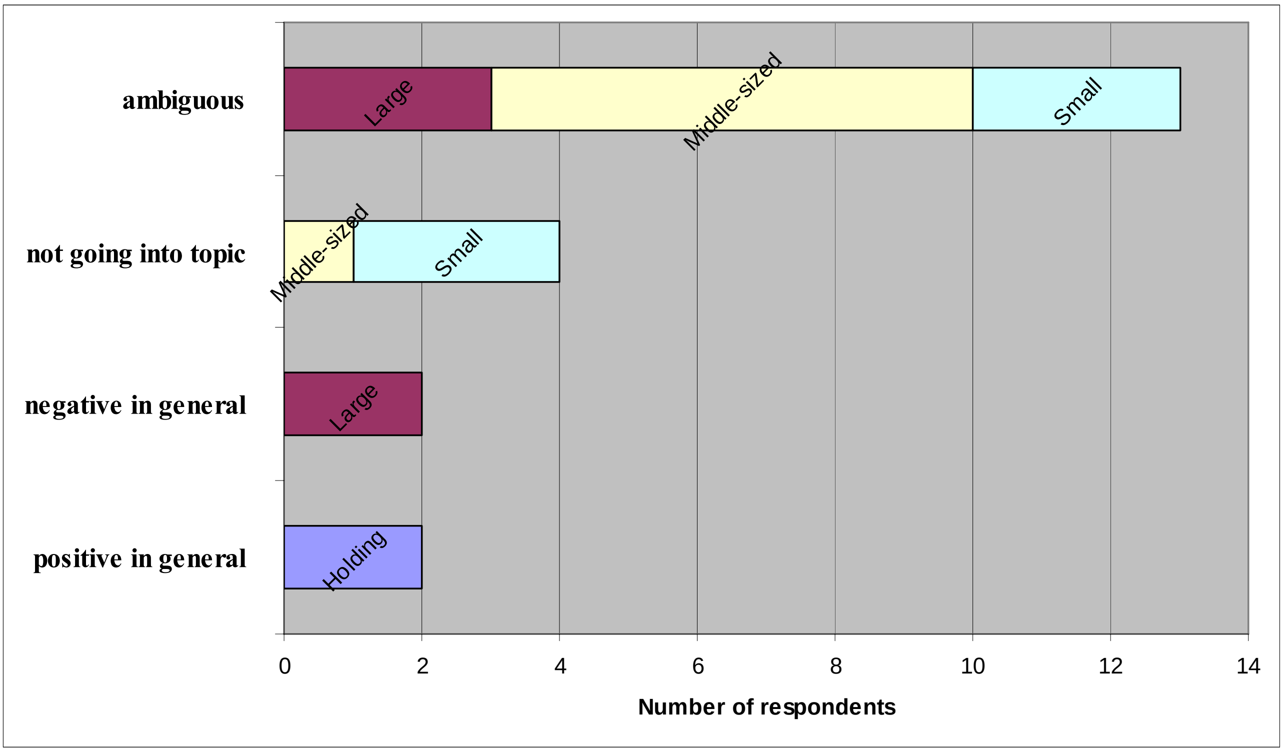

Figure 17 Opinion regarding the new Forest Code

The size increase of enterprises is followed by more profound influence exerted by the new FC supposed by the lessees, see Figure 18. At that, holding companies expect more positive change in the future (I took 1 year perspective). The quickly adjusting small companies think the same way. As for the middle-sized and large enterprises, they regard skeptically about the innovations and expect that much of the negative effect will not be compensated by the future positive effect.

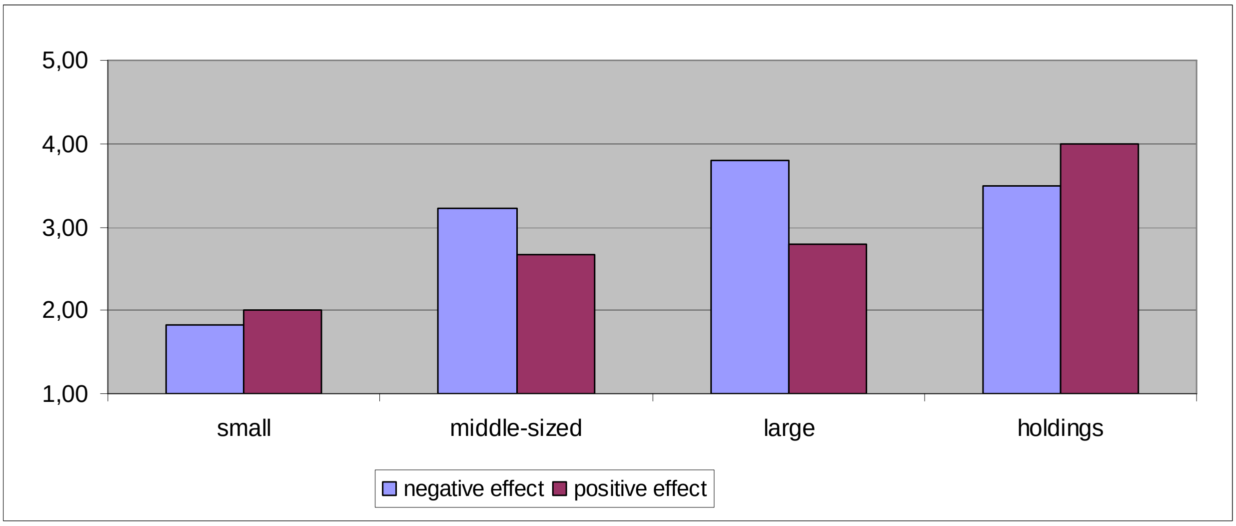

Figure 18 Influence of the new FC on the enterprises.

Regarding further plans of lessees connected to the new legislation it is possible to say that lessees are prepared for anything, see Figure 19. They expect that development can go both by optimistic scenario and then they will extend business and diversify their production and by pessimistic scenario so they will move some part of capital into another branch or shift position through the technological chain. The forest users show interest in the new instruments, such as sublease, pawning of forest plots, investment agreements. Also they suppose that situation in the sector will be stable and will not change activity or will not be able to do that.

As one can see holding companies have the most optimistic attitude toward business perspectives.

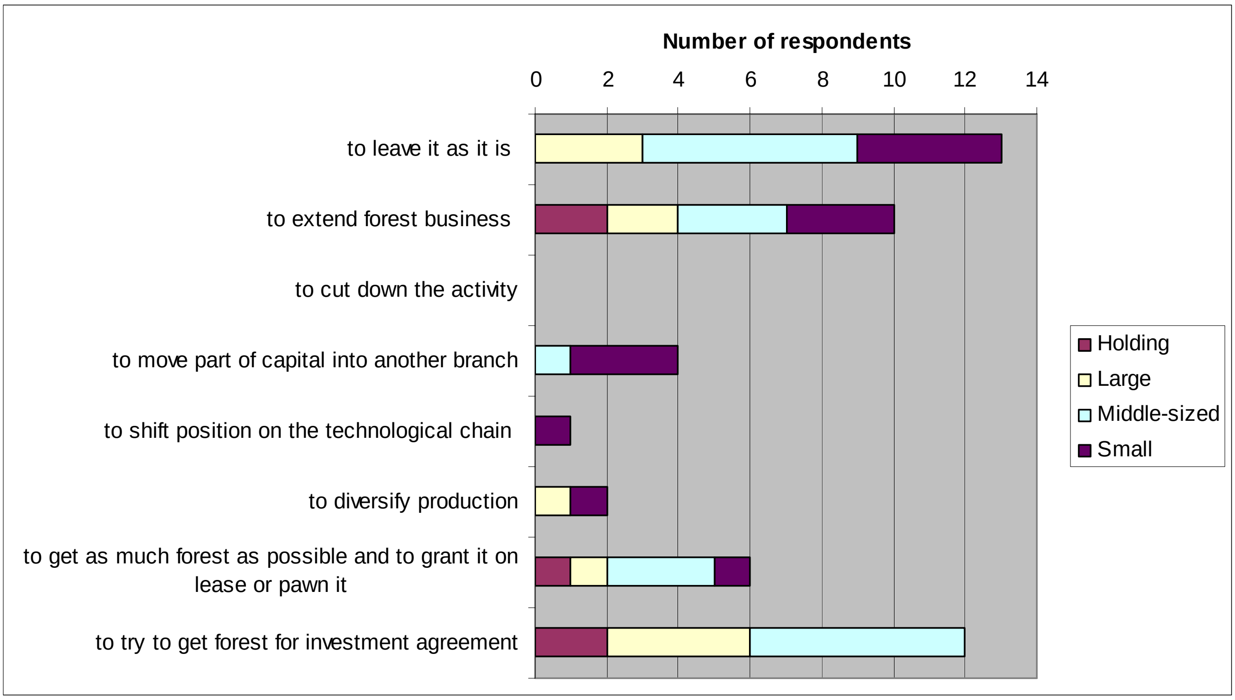

Figure 19 Further plans

The question about perspectives of the sublease purposed an object to infer how quick the legal instruments introduced by the new legislation have been accepted.

Basically, respondents accepted it coolly for the present-day and their own necessity of sublease was evaluated at low - 1.95 points out of 5, but holding companies had it much direr, having put 4 points. They, as especially large companies, leased vast territories and, as it shown, there is demand for facilities of such maneuverable firms. In general, respondents consider that chances of the sublease in the branch are positive and they were evaluated in 2.77 points. In 5 years, need for sublessee will grow still more, it was valued at 3.77 points.

4.5. Perspectives of forest sector in the Archangelsk region - The questionnaire results in perspectives

The Russian reforms (political, economical, structural etc) firstly give a negative effect on the current production dynamics, technological development and social stability, but they promise positive changes in the future. The forest sector undergoes significant changes in the next stage of the forest governance reform and introduction phase of the new FC. Internal adaptive process allows forest lessees to orientate themselves in new legislative field. However uncertainty of the political course delays and complicates this process. Efficiency of harvesting enterprises' owners and management staff is a contributing factor for successful overcoming of inevitable difficulties arisen during the transition period. The forest businessmen support the main direction of the reform and are capable to develop the forest sector further according to the questionnaire results. But skill level raising is needed in several knowledge areas.

The survey showed that holding companies are more confident in their future. They, probably, will use a maximum of the opportunities provided by the new FC to extend their activity and diversify the production. Large and holding companies will develop toward value added products manufacturing. Middle-sized and small companies will go into niches and specialize them selves in narrow bounds. Due to possible difficulties for them to compete with larger enterprises on lease auctions they will be in forests as sublessees or contractors under sufficiently cruel conditions. Forecasting of the forest business development is a complicated issue and is connected with low validity.

5. Conclusions

The Process of the transition from the planned economy to the market one began in 1991 and realignment of forest resources management and use system is a part of this complex process. The aim of this work was to describe and analyze it with relation to the established structure of forest sector actors and to study their opinion concerning present-day situation and perspectives of the forest sector.

The private forest sector appeared and developed in a very complicated socio-institutional situation. The weak legal base (an imperfect control and sanctioning system, unstable legislation, lack of experience in law making and enforcement) made a negative impact on business running. The Absence of clearly defined political course prejudiced expediency of planned prospects. But maximizing of individual profit and legal nihilism, penetrated into society, caused distrustfulness and market obscurity.

After implementation of the industry privatization, state forest governance body and already private enterprises started to establish forest relations in terms of rights and duties separation. One part of the forest lessees originated from the former socialist harvesting enterprises having production & technical basis, more or less out-dated infrastructure, social obligations and weak continuity between the development stages. The other part appeared out of nowhere with a capital inflow. Such enterprises were optimized from their beginning. The forest sector could not escape the schemes of “one-day” firms.

As a result of merger & acquisition processes, developing and bankruptcy formed a forest lease actors team The quantitative ratio of small, middle-sized and large companies equals 64%, 22% and 14% correspondingly. The harvested volumes ration is inverse: small - 9%, middle-sized - 24% and large - 67%.

The successful enterprises are presently involved in integration process. Existence within the framework of VIS stabilizes companies functioning, which in exchange for their independence get competent higher management, support in the equipment renewal, optimization of the production. Consequentially, adaptability to new conditions is gone through faster and more accurate.

The new stage of the reform takes place lately. The State leaves forest. It changed the forest legislation, transmitted many forest management functions to lessees, extended the lease periods. It appeared new institutional instruments - a sublease and investment agreements. They aimed to contribute to a diversification of the forest relations system and increased level of forest use. Rigid state control of business functioning was implemented by the new FC. It intends to watch closely new responsibilities performing. Reacting on this business goes into politics. Holding companies lobby their interests on the federal level, but small and middle-sized enterprises trying to keep independence from the integration enter the regional and municipal authorities.

The main results of the questionnaire analysis can be summarized like this:

1. Stability of forest lessees is not high. From the beginning private forest companies took high risks in terms of finances, production, commerce and market. The absence of the political course, legislation changeability keeps the businessmen in constant tension. The sector is disturbed by the frequent owner change. The corporatization was sensed by 40 % of respondent companies and 44% were already joined vertically integrated structures. Against background of the low sector rating, companies do not make plans on long term prospect (80% of middle-sized and large companies). The residual equipment since USSR and renovations in 90's imply moderate machinery condition (55%) and hard-set condition (45%). For production means renewal besides own profit companies use the bank services and private capital. Established good relations with environmental organizations are indicative of forest lessees' willingness to continue their activity.

2. The forest sector had accumulated significant intellectual resources in the transition process. However a rather high knowledge shortage in the areas of forestry, IT, and law was revealed there due to their low priority. But when knowledge requirements will appear it will be satisfied. Commercial information has a restricted character and can hardly be analyzed and summarized for sharing. The informal communication is the primary way of obtaining information. The Internet importance was evaluated high, but at the present-day net use activity is moderate. In the branch, the demand for consulting services has increased and it didn't find a satisfactorily solution. The clear policy in human resource management defined in large and holding companies causes extension training.

3. Opinion of forest lessees regarding forest privatization was ambiguous. There was no unanimous consent. But everyone stood up against the total once-only privatization Assuming

forest privatization implementation, the respondents made a forecast of forest ownership distribution. It is believed that the main owner group will be large companies. Positions of the small and middle-sized companies will weaken even more than today. Enterprises were expecting a fast recoupment of forest estates. Large companies highly evaluated possibility to play on a stock market. Importance of ecological functions performance is moderate. There are high risks related to private forest ownership. The enterprises feel threatened from the side of state institutions, market, and economical obstacles.

4. Attitude to the new FC was ambiguous too. Holding companies considered that it is rather positive while large companies of old order considered it negative. Assumed influence power of the FC was proportionate to enterprises size. Holding and small companies expected a positive net surplus from all consequences of the new FC implementation, while middle-sized and large enterprises expected a negative net surplus. The forest lessees were prepared both to positive and negative development in perspective. Holding companies were more optimistic in that sense. Sublease as an instrument interested mostly holding companies, but as a whole, its relevance for the forest sector will grow.

Internal adaptive process allows forest lessees to orientate themselves in new legislative field. However uncertainty of the political course delays and complicates this process. Efficiency of harvesting enterprises' owners and management staff is a contributing factor for successful overcoming of inevitable difficulties arisen during the transition period. The forest businessmen are capable to develop the forest sector further according to the questionnaire results. But skill level raising is needed in several knowledge areas.

The survey showed that holding companies are more confident in their future. They, probably, will use a maximum of the opportunities provided by the new FC to extend their activity and diversify the production. Large and holding companies will develop toward value added products manufacturing, while middle-sized and small enterprises is expected to remain in forest operations as sublessees or contractors under rather hard business conditions due to possible difficulties to compete with larger enterprises on lease auctions. However, forecasting the forest business development is a complicated issue and is connected with high uncertainty.

The questionnaire survey showed a significant opinions' dispersal among the businessmen and the data does not allow plotting a mean development vector with sufficient validity. Promising future research activities could be to identify probable limits definition and drawing an average development path between the limits. This could be approached by in-depth interviews getting reactions on extreme standpoints regarding perspective development under the survey. The optimistic scenario could probably then reveal more clearly the crucial issues for further development and assist in identifying best probable result achievements, while the pessimistic scenario could point on hidden dangers and make it easier to avoid them.

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Appendix I The annual tables “Usage of forest resources on the forest fund parcels leased out” 1996-2006

Appendix II The Questionnaire answers

Appendix III Questionnaire

Questionnaire "Present and future of forest business"

Dear colleague!

Past few years, it has been happening many changes in forest sector. Lots of officials, scientists and public figures have presented their arguments pro and contra of the reform. We decided to study opinion of people working in real life in the framework of changing legislation. It is very interesting for us to know your opinion about going processes in the forest sector.

The questionnaire is anonymous, but if you are open in your intentions we will be glad to know your name. To answer the questions you can just flag the variants you consider right, write numbers and text, as well as comments.

Thank you for participating in the survey.

Few questions about yourself:

1.YOU ARE	□ OWNER	□ CO-OWNER	□ LEADER		□ MANAGER
2. Size of your enterprise	□ holding	□ large	□ medium		□ small
3. Its position in the technological chain:	□ Beginning (Harvesting)	□ middle (sawing)	□ End (Exit to the market with final production)		□ end-to-end production
4. Your education:	□ Forest related		□ other branch		
5. Its level	□ Self studied	□ Specialized secondary	□ Higher		□ PhD
6. Your age:	□ 20-30	□ 31-40	□ 41-50	□ 51-60	□ >61
7. Your point of view	□ Optimistic	□ Pessimistic	□ pure cold evaluation		
8. Please, evaluate your ability to take risks	1 Never □	2 Seldom □	3 Sometimes □	4 Often □	5 Very often □

Now about forest business and new forest legislation:

9. YOUR OPINION CONCERNING THE NEW FOREST CODE:	□ POSITIVE IN GENERAL	□ NEGATIVE IN GENERAL	□ NOT GOING INTO TOPIC	□ AMBIGUOUS	□ WHAT IS IT?
10. How negative will the new FC affect your firm	no affects □	lightly □	moderately □	noticeably □	hardly □
11. How positive will it affect the firm in one year	no affects □	lightly □	moderately □	noticeably □	hardly □

12. What are your further plans concerning regulations of the new FC:

□ - to leave it as it is
□ - to extend forest business
□ - to cut down the activity
□ - to move part of capital into another branch
□ - to shift position trough the technological chain
□ - to diversify production
□ - to get as much forest as possible and to grant it on lease or pawn it
□ - to try to get forest for investment agreement

□ - OTHER

13. WHAT IS TIMESCALE OF YOUR PLANS?	☐ 1-2 YEARS	☐ 3-5 YEARS	☐ 6-10 YEARS	☐ 20-50 YEARS	☐ HERE MY GRANDCHILDREN ARE GOING TO LIVE
14. Have you been considering possibility to sell you business in 2006-2007?	No ☐	Low possibility of selling ☐	Hesitating ☐	High possibility of selling ☐	Already done it ☐
15. Do you fill process of corporatisation on your firm	☐ no	☐ Yes, filling gravitation of friendly organizations	☐ Yes, filling gravitation of distrustful organizations		☐ already part of a corporation

16. Please, rate the forest business investment attraction in 10 points scale compared to other branches:

1	2	3	4	5	6	7	8	9	10

lowest highest

17. WHAT ARE YOUR RELATIONS WITH THE ENVIRONMENTAL ORGANIZATIONS?	☐ GOOD FRIENDS	☐ POSITIVELY TAKING CRITICISM, TRYING TO REACH AGREEMENTS	☐ A DOG IS BAYING, A CARAVAN GOES	☐ WESTERN ENEMY AGENTS DISTURB TO RUN BUSINESS	☐ NEVER HAVE SEEN THEM
18. Machinery condition in your enterprise and future plans:	☐ On the decline, investments will not make a profit	☐ On the decline, willing to invest, but there are no funds	☐ Moderately, trying to invest, but there is capital lack	☐ Well, on the way of renovation	☐ All right
19. What funds you are using for renovation?	☐ Firm profit	☐ bank credits, leasing, factoring	☐ foreign capital	☐ russian investors	☐ other

20. Have you been considering possibility to use entrepreneurs for harvesting and how seriously?	1 only by ourselves ☐	2 ☐	3 ☐	4 ☐	5 Extreme entrepreneur shortage ☐
21. Sublease perspectives in the branch at the present	1 very low ☐	2 ☐	3 ☐	4 ☐	5 very high ☐
22. Sublease perspectives in the branch in 5 years	1 very low ☐	2 ☐	3 ☐	4 ☐	5 very high ☐

Your opinion regarding possible private forest ownership implementation

23. YOUR OPINION ☐ FOR ☐ AGAINST IF AGAINST, SO ☐ IT CONTRADICTS THE RUSSIAN MENTALITY ☐ YES IN GENERAL, BUT IN …. YEARS	**24. YOU ARE INCLINED TO:** ☐ ONCE-ONLY TOTAL PRIVATIZATION ☐ SELECTIVE EVOLUTIONAL PRIVATIZATION

25. IF THE PRIVATE FOREST OWNERSHIP WILL BE IMPLEMENTED, HOW BIG FOREST PARCEL YOU BUY?	☐ WILL NOT JOIN THIS CRIME	☐ SOME THOUSANDS OF HECTARES	☐ SOME TENS OF THOUSANDS OF HECTARES	☐ SOME TENS OF HUNDREDS OF HECTARES	☐ > 1 MILLION HECTARES

26. WHAT DO YOU THINK, IN HOW MANY YEARS YOU WOULD RECOUP IT?	☐		**27. HOW FOREST FUND WILL BE DISTRIBUTED IN 30 YEARS AMONG MAIN OWNER GROUPS:**	FOREIGN CAPITAL	**%**
				large holdings	**%**
				Small and middle-sized enterprises	**%**
				individuals	**%**
				state	**%**
				other	**%**

28. EVALUATE PLEASE IMPORTANCE OF LISTED GOODS FOR YOU AS POSSIBLE FOREST OWNER:	1 NO MATTER	2	3	4	5 VERY IMPORTANT
Getting proceeds from sale of raw materials to small and middle-sized enterprises	☐	☐	☐	☐	☐
Getting proceeds from sale of raw materials to big enterprises	☐	☐	☐	☐	☐
Own use for hobby (fishing/hunting/hiking)	☐	☐	☐	☐	☐
Tourist service revenue (fishing/hunting/hiking)	☐	☐	☐	☐	☐
Stock market game	☐	☐	☐	☐	☐
Handing down (Inheritance)	☐	☐	☐	☐	☐
Investment of money	☐	☐	☐	☐	☐
Execution of ecological functions	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐
29. Evaluate risks regarding possible private forest ownership implementation:	1 Low	2	3	4	5 High
Local community anger	☐	☐	☐	☐	☐
Deliberate arson by business rivals	☐	☐	☐	☐	☐
Instability of political system and possible change of policy line	☐	☐	☐	☐	☐
Poorly worked out legislation	☐	☐	☐	☐	☐
Instability of business climate	☐	☐	☐	☐	☐
Custom barriers	☐	☐	☐	☐	☐
Bureaucracy	☐	☐	☐	☐	☐
Cost burden of forest maintenance	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

Educational part

30. Evaluate please Your knowledge of following spheres by the school evaluation system (Russian one)?

MANAGEMENT	2 GAP	3	4	5 EXCELLENT	NOT IMPORTANT FOR ME
Economics subjects	2 Gap	3	4	5 Excellent	Not important for me
Technological subjects	2 Gap	3	4	5 Excellent	Not important for me
Law	2 Gap	3	4	5 Excellent	Not important for me
IT	2 Gap	3	4	5 Excellent	Not important for me
Ecology, forestry	2 Gap	3	4	5 Excellent	Not important for me

31. HOW DO YOU EXTEND YOUR KNOWLEDGE	1 NEVER	2 SELDOM	3 SOMETIMES	4 OFTEN	5 VERY OFTEN
Active Internet Use	□	□	□	□	□
Consulting with colleagues and specialists	□	□	□	□	□
Professional magazines and newspapers	□	□	□	□	□
Courses and trainings	□	□	□	□	□
Informal communication with people whom I trust to	□	□	□	□	□

32. Taking for 100% brains of average perfect specialist for your firm how will you distribute it between areas of knowledge?

MANAGEMENT	%
Economics subjects	%
Technological subjects	%
Law	%
IT	%
Ecology, forestry	%

33. Evaluate on base of 5-points scale:

GENERAL INTELLECTUAL LEVEL OF THE SPECIALIST IN YOUR FIRM	1 VERY LOW □	2 □	3 □	4 □	5 VERY HIGH □
Importance of Internet for the branch	1 not important □	2 □	3 □	4 □	5 Very important □
Level of Internet use today	1 Very low □	2 □	3 □	4 □	5 Very high □

34. In the light of new responsibilities, have you been considering engaging forestry specialists to your enterprise?

□- No, it’s too long to it
□-Yes, we’ll manage it by own strength.
□-Yes, we’ll use contractors
□- Yes, we’ll engage them, it’s not too expensive.
□- Yes, we need to show off an eagerness in the face of FSC auditors.
□- Yes, need to help my ex-classmate.

35. HAVE YOU BEEN USING EXTENSION COURSES FOR YOUR EMPLOYEES	1 NEVER □	2 □	3 □	4 □	5 OFTEN □

And where?

36. IS THERE ANY NEED FOR INFOTAINMENT AND CONSULTING SERVICES IN THE BRANCH?	1 NO, NEED □	2 □	3 □	4 □	5 YES, EXTREME NEED □
37. What is the supply of such services?	1 □ deficit	2 □	3 □	4 □	5 □ surplus

Comments: