

## **The Russian Forest Industry in Transition: Historical-Institutional Perspective**

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*First draft, comments are very welcome*

### Abstract:

Adaptation of Russian forest enterprises to the market economy is in many ways affected by existing formal and informal institutions in the forest industry. The paper focuses on the historical development of institutions in the Russian forest sector to explain how the current institutional structure has evolved. Institutions that govern forest industry relationships are analyzed from a historical institutional perspective. This allows for defining the institutions that influence the forest sector in transition. The evolution of the formal institutions such as forest laws and forest use rules are analyzed from the early history to the present. Informal institutions, such as attitudes, and cultural beliefs are analyzed in relation to the formal ones throughout the history. Then, development of the forest industry in transition period is analyzed as a part of the institutional evolution process of these rules from a company perspective. Research contributes to applications of institutional theory to transition processes in general and the forest industry in particular by showing the influences of institutions on economic performance and their dependency on past institutional design.

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# 1. Introduction

As the Russian economy has been going through a transition period to the market economy, overcoming different obstacles, going through the institutional, economic, and cultural changes, Russian forest sector has been also affected by this transition. Having almost one fourth of the forests of the planet, Russia makes only 3 % of world forest production. With 70% of territory covered with forest, Russian forest sector has been one of the most important sectors in the Russian economy, providing 5% of the GNP and employment for 7% of population. Since the beginning of transition period situation in the Russian forest sector has been critical and most of the issues and problems that are affecting forest sector today lie in the existing institutional environment: contradictions and inconsistencies in legislation, unclear property rights, tax code, artificially low timber prices, high interest, increase in illegal harvesting, forest degradation, high transaction costs, lack of funding for forest management operations and etc.

In the last years forest sector was studied and its competitiveness was analyzed with a cluster approach (by Dudarev *et al.* 2002). In addition to the traditional economic analysis, research theory of institutions (North 1990, Scott, 1995) has been applied to the problems of the Russian forest sector in order to better understand current situation (see Nilsson 1997, Carlsson and Olsson 1998, Carlsson *et al.* 1999, Vasenda 2001, Mashkina 1998, 2003).

New institutional economics (NIE) proved that institutions matter (North 1990, Williamson, 1996). Institutions provide rules, constraints and incentives that are instrumental to the governance of exchanges. These institutions or governance mechanisms can be either formal or informal in nature (North, 1990). Formal institutions are rules that are written documents or rules that are determined and executed through formal position, such as authority or ownership. Formal institutions, thus, include explicit incentives, contractual terms. Informal institutions, in turn, are rules based on implicit understandings, being in most part socially derived and therefore not accessible through written documents. Thus, informal institutions include social norms, routines, and political processes.

Application of NIE to the study of micro-level issues, such as organizational design, firm boundaries, and inter-organizational relations, has largely focused on formal institutions. Informal institutions also play a crucial role in defining societal rules (e.g. Denzau & North, 1994; Greif, 1997). *“Although formal rules may change overnight as the result of political or judicial decisions, informal constraints embodied in customs, traditions, and codes of conduct are much more impervious to deliberate policies”* (North, 1990, p.6).

Greif (1998) has been developing historical and comparative institutional approach for analyzing the interrelations between the implicit informal aspects of society’s institutions and explicit formal aspects. Historical institutional analysis considers “institutions that are outcomes emerging exogenously and are self-enforcing” (Greif 1998). Studies in historical institutional analysis focus on origin and implications of institutions and institutional change in certain historical episodes.

After collapse of the USSR the institutional framework in Russia has been described to be immensely complicated. The legacy of pre-transition behavior dominated the economy. Formal rules enacted by the Federal government have been very influential to the forest sector. Unpredicted changes of law and policy were made almost daily which created a chaotic institutional environment. (Lembruch, 1999).

It has been argued that a general problem with many of the proposed measures for improving the situation in Russia is that they presuppose the existence of an already well functioning institutional framework (North, 1997; Carlsson and Olsson, 1998; 1999; Carlsson, 2000).

To understand these changes in both formal and informal rules it is important to look at the history of forest management in Russia to see how the formal rules have been changing and how the informal rules and attitudes toward forests have changed along with that. The analysis of the historical evolution of formal institutional changes in addition with the cultural peculiarities of Russian forest industry allows for understanding the behavior of the companies in transition period.

## 2. Forest use before and during Peter I

The history of the forest use and management in Russia can be divided into 9 periods<sup>2</sup>. In the *first period (8<sup>th</sup>-12<sup>th</sup> centuries)* there was an unlimited use of the forests and forest lands. At the same time, there was no need for forest legislation, management or policies. During the *second period (13<sup>th</sup>- late 16<sup>th</sup> centuries)* there was strengthening of property rights for forests included in patrimonial estates. They created the opportunity to transfer forest land as an inheritance or to other persons.

*The third period (early 17<sup>th</sup> century-1725)* created the first legislative acts on forests, their use and preservation that dealt with forests as a separate entity and not as part of other property. This period especially under Peter I was very significant for forest management in Russia. During Peter's reign over 200 decrees and other documents were adopted on rational forest use, preservation, reforestation, wood processing, the training of specialists, etc. Half of the documents were related to shipbuilding. Forest policy of Peter's era was characterized by the appearance of levels of forest management. Peter I was obsessed with the goal of building a regular fleet and made this goal one of the cornerstones of his state policy. This laid the foundation of forest policy, legislation for the protection of the forest and nature and forest management in Russia. As the state became interested in preserving the forests as a military defense line for fleet building, cutting and damaging the forests were punished severely, sometimes by death. "*For felling oak, if anybody cuts at least one tree, as well as for felling in sanctuary forests, the death execution shall be applied*" (Peter the First, 1703).

## 3. Forest sector after Peter I

The early years of the *Fourth Period (1725-1798)* were characterized by the restoration of unlimited freedom of ownership and arbitrary rule in regard to the forests. Beginning in 1769, it became possible to sell forest land after the relatively widespread introduction of the practice of dividing forests into 30 parcels, as specified by the forest masters' instructions. Totally unlimited logging of the forests began after the adoption of the Decree in 1782 which gave private forest

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<sup>2</sup> Classification and description of the periods are adopted from V. K. Teplyakov, Ye. P. Kuzmichev, D. M. Baumgartner, and R. L. Everett (1998) A History of Russian Forestry and its Leaders.

owners "*complete freedom to use all forests to their greatest advantage.*" The shipbuilding forests suffered the most, since "*although they were recognized until this time as preserves, and marked as such,*" they were offered up to private forest owners to exploit as they saw fit.

In addition, from this moment, the character of state forest policy began to change. Forest management, which had as its goal the provision of the needs of the naval fleet, took on direct economic significance as a means to increase the treasury with the income from the forests in the form of stump-age fees. In 1784, upon the demand of the Admiralty Board, free logging on public lands was allowed. For other public needs, timber was produced only after payment of the stumpage fee. The Draft Charter on Forests which was adopted in 1786 contributed new elements to forest policy and forest management.

During *the Fifth Period (1798-1832)* special Forest Department was established in Russia. During the first four years of the Forest Department, more than 70 decrees and commands were issued on forest policy. The Forest Department adopted The Charter on Forests, which focused on implementing main forest policy goals. During the first ten years of its existence the Forest Department solved a number of practical issues connected with improving forest management. It created institutions for forestry education, improved forest legislation and standardized penalties across the country for violations of forest regulations, in particular for cutting without permits. The sale of state timber abroad continued to be forbidden. In 1826-32, a new reform for local forest management was introduced: five types of provinces were created, depending on their forest resources. Provinces were divided into regions, forest districts, forest blocks and forest plats. The Legislative Code of the Russian Empire of 1832 included all forest legislation under the Code of the Forest Charter. Statute on a Permanent Forest Conservation Service was adopted the same year. It freed forest conservation workers from state taxes, civil and military service and military billeting. The term of service was set at twenty years. This demonstrated the state's efforts to solve personnel issues within its forest policy. During this period the foundation was laid for secondary and higher forestry education and rational forestry organization. The marketing of state timber abroad also began.

*The Sixth Period (1832-1888).* Forest Department was reorganized in 1843. The new Forest Department consisted of six sub-departments: inspection, forest management, forest

conservation, rational forest resource management, forest use, and accounting. This period produced a large amount of legislation connected with logging in various provinces, marketing timber abroad, forest regulation and use, surveying, forest protection and management, forest education, experimental forest plots, forestation and reforestation, etc., etc. Forest management was streamlined into central, provincial and local administrations. After the abolition of serfdom, the condition of the forests seriously deteriorated. The main reasons for this were: elimination of serf responsibility for forest protection, elimination of free serf labor for forest regulation, forest-agronomy and other forest improvement work, and the appearance of large peasant-owned forest plots. A Resolution on Forest Protection on State Lands was published on June 3, 1869 to improve the situation. This resolution introduced the hiring of national paid forest guards who were selected from forest rangers and abolished the responsibility of state peasants for state forest protection.

*In the Seventh Period (1888-1917)* a new forestry code was adopted (1905), which consisted of 815 articles. The code was an important branch in the development of forest legislation and management in Russia. However, it carried an overabundance of insignificant limitations and archaic articles, for example, from the Code of 1649. Over the course of several years, serious work continued on a new Code that was adopted in 1913.

#### **4. Forest use in Soviet period**

The Eighth Period (1917-1991)

Private property ownership was abolished at the Second Congress of Foresters in April and all forests without exception became national (state) property. The duties of the Forest Department were turned over to the Central Forest Office, later renamed the Forestry Agency under the People Commissariat of Lands. The Decree on Forests of May 27, 1918, also known unofficially as the “Main Law on Forests”, stated that forest management must be in the interests of the general good and based on planned resource renewal.

*The law gave "equal rights to all citizens to use the forests with temporary payment of stumpage fees, to secondary forest products, and free access to forests. At the same time, each citizen has*

*duties and responsibilities to promote forest reproduction and conservation, to protect the forest from fire, disease, insects, overgrazing and other damage."*

The law on forests attempted to encourage the people to participate in the creation and improvement of forest management. This required a large degree of knowledge and public consciousness, as well as a correct understanding of the state's goals for the forest economy.

The Central Forest Office was organized as a part of the People's Commissariat of Lands, but it had no budget and no authority over forest products. In addition, the Main Forestry Committee was established at the end of 1918 under the Federal Commissariat for State Economy. Its main function was to oversee forest harvesting. The creation of still another central forest agency violated the Decree on Forests of 1918, which stated that the forests (a public fund) could not be divided between agencies. This undermined the concept of forest management as an independent branch of the national economy. The Forest Code of the Russian Federation became law in 1923.

Forest management problems are related to legislative norms and the specific production characteristics of the forest industry. Much debated was the question of who should be in charge of the administration and management of the forest industry, the People's Commissariat for Lands or the People's Committee for Finance. This resulted from the duality of the forest industry, which is first a timber producing industry based on renewal processes and, secondly, a rent recipient under the system of nationalization and state capitalism.

The implementation of a long-term plan for the forest industry of the Russian Federation in 1925-1928 allowed the industry to increase production to the 1913 level. However, the growth of industry and the population increased demands for timber. Consequently, the founding principles of forest management were even more frequently violated.

In 1947, the Ministry of Forest Industry of the USSR was established. It took over the entire forest fund, material, technical and human resources both centrally and locally. However, the Ministry did not have control over forest products and was financially dependent on the national budget. Damage, severe and for many reasons irreparable, was inflicted on the forests in 1953 after the abolition of the Ministry of Forestry of the USSR. In the following years, forestry was transferred six times from one agency to another.

The management of Russia's forests was centralized in 1966 under the Ministry of Forestry of the Russian Federation, as a part of the State Forestry Agency of the USSR Council of Ministers. This centralization and the creation of new scientific programs for forest management and organization with the combined efforts of all forestry workers permitted significant improvement of the forest fund and forest resources.

The essential laws of the new period were adopted during the next 10-12 years and played an important role for forestry: Reinforcement of Nature Conservation and Improved Usage of Natural Resources (1972), Principles of Forest Legislation of the USSR and Union Republics (1977), Forest Code of the Russian Federation (1978). The principles of forest legislation of the USSR as well as the Forest Code affirmed state ownership of the forests, first proclaimed in 1917, but did not provide the main principles of forest use or clarify the terms *forest* and *forest fund*, etc.

## **5. Forest industry in transition period**

*The Ninth Period (1991- present)* begins in 1991 with the collapse of the Soviet Union, but practically it started in 1993 when the Russia adopted new principles of forest legislation. The new principles were developed on the basis of the new Russian constitution. Among the first changes in the organizational structure were liquidation of the State Committee on Forests of the USSR (in 1992) and the Ministry of Forest Industry of the USSR. The institutions, enterprises and organizations of the abolished state committee were transferred to the Ministry of Forest Industry of the Russian Federation. This ministry was shortly thereafter reorganized as the Russian Committee on Forests under the Ministry of Ecology and Natural Resources of the Russian Federation. Later in 1992, the Russian Forestry Committee was reorganized as the Federal Forest Service of Russia directly subordinate to the Council of Ministers.

The management structure and enterprises of the former Ministry of Forest Industry of the USSR underwent a complex process of reorganization, privatization and sale through stock offerings. At the end of 1992, the holding company Roslesprom became the largest agency in the forest industry. In May 1994, it was reorganized as the Russian state forest industries company Roslesprom. During these years the work on the new Forest Code has been going on based on the

new Constitution rules. New forest Code was adopted in 1997 and brought forest management to a new level in Russia. The Code legislatively affirmed the underlying principles of forest management: sustainable development of the economy and improvement of the environment, rational and sustainable use of forest resources, incompatibility of the functions of forest management and forest harvesting and wood processing.

However, several problems have arisen from the application of the 1997 forest code. One of these problems was decentralization in the decision-making process. Several forest management responsibilities were transferred from the federal government to regional levels without appropriate implementing rules, managers, and lack of funds to exercise their new acquired regulatory functions. There are basically three major provisions in the new version that have triggered reaction from both legislators and interest groups: 1) private ownership of forests; 2) distribution of forest plots through auctions; and 3) management of forest resources by the federal government.

The newest version of the Forest Code which was submitted to Duma in July 2006 has even more problems than the preceding first draft according to many experts. ([www.forest.ru](http://www.forest.ru)). The number of internal contradictions has increased, and the number of articles which allow different understanding and application increased significantly. So, the now more questions depend on the opinion of a certain official or department. The new draft abolishes protected forests. Also, the new draft introduces the private property on national parks and city forests. New draft puts responsibility on leaser for forest management, but just like in the first draft it doesn't define clear requirements. In practice it means that the requirements will be defined by state organs of forestry based on their understanding of the situation. The only issue that has been solved in the new draft is the free access of citizens to the forests. But besides the right of free access to the forests there is no guarantee that these forests will be destroyed because of the unsystematic forest management or built over with official's cottages.

So, nowadays, centralization has been replaced by a very high degree of decentralization in forest management. User-defined issues such as timber harvesting reprocessing were transferred to the

private sector. Both decision-making and management of the forests were given to the regions of the Federation.

This means a positive and significant change in the status of forest management units, which have only management functions now. Now, the legislative relationship between management bodies and forest users is realized through agreements in the form of a lease or forest auction, which allow for competition among forest users even in those regions where round wood markets are monopolized by major consumers, including pulp and paper enterprises and saw mills. The efficiency of stumpage auctions has been proved by the fact that in these cases, actual stumpage prices exceed the minimum stumpage rates by 4 - 5 times, and in some areas the difference reaches 8 - 10 times. Nowadays, auctions account for about 20% of timber sales; thereby only physically accessible resources are harvested, with no investments into road construction.

## **6. Forest companies in transition**

During the Soviet times industrial networks were centrally arranged and planned through Gosplan and ministries in Moscow. So, the creation of linkages between the companies was rather administrative process. With the collapse of the Soviet system, the privatized companies had to be on their own and create their own networks. This caused problems for all companies. They could no longer rely on the state for finding markets and providing for investments. So, in 1998 production volumes in forest industry have declined by 50% in comparison with 1990.

Based on the results of the survey on institutional framework of the Russian forest sector (IIASA 1997) the following were seen to be the most necessary changes to make to improve situation in the forest sector:

Table 2. Results of survey in 1997

<i>What should be changed in forest sector?</i>	<i>%</i>
Taxation	19,9
Forest legislation	16,3
Business legislation	7,3
Investment/ technology	4,1
Ethics/work discipline	1,6
Investment/legislation/ ethics/politics	3,3
Laws/enforcement	4,5
Credits/rent/finance	10,6
To be public again	1,6
State control	11,4
Other	5,7
No answer	13,4

Source: IIASA surveys of the Russian forest sector 1997-1999

The same survey revealed that about 40 % of respondents believed that contents of existing laws is the basis of problems of formal legislation, whereas only 6 % saw a problem in law enforcement and 20 % considered both contents and enforcement of laws as problem for effective work of forestry enterprises. Respondents have noted, that lack of the finance (24 %), transition economy and taxes (15 %), transport (8 %), technologies (4.5 %) were binding factors of effective functioning of enterprises of forest sector.

Several studies looked at the behavior of the enterprises in transition, including forest companies. The business behavior of many companies in transition was aimed at survival (Huber and Worgotter 1996).

Analysis of the data of IIASA institutional database (1997) with the Q-methodology<sup>3</sup> identified three types of forest managers: classical businessmen, virtual entrepreneur, and advanced entrepreneur. Below is a short description of the types:

§ **"Classical businessman"** By kinds of the property, in this type is both private enterprises and privatized, but the share of the state enterprises is great - about 50 %. The majority of enterprises are large enterprises. About third is engaged in harvesting, a third is engaged in timber processing, and same number has a full cycle. Representatives of this type mainly produce round timber, saw-timbers and only a few are occupied in forest management. In this type the presence of social obligations is typical, and there is a problem with finding markets and lack of financial assets, high interest rates and there are no problems with delivery of forest. Finding markets and lack of means is more of an important problem, than transport and technologies. This type is the most numerous and was the most typical for economic situation of 1997.

§ **"Advanced businessman"** This type has incorporated enterprises, with private or recently privatized enterprises prevailing. The enterprises specialize on timber processing, producing round timber and sawn timber. The majority of the enterprises are small, with less than 100 employees. However, there are also large enterprises in this type (most of them are pulp and paper). This type does not have lack of timber supply, and there are no social responsibilities, there are no problems of trusting and working with banks. The majority of the Swedish companies that we included in the survey for comparison reasons also have fallen in this type.

§ **"Businessman of virtual economy"** The state companies make the most part of representatives of this type. More enterprises are occupied with trade, than in other types. Basically it is the average enterprises, which use barter in the transactions, show mistrust to banks and have social responsibilities. The main problems in effective work are related to a necessity of change of the tax laws, and with finding markets.

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<sup>3</sup> More detailed description of the application of the methodology to the Russian forest sector can be found in Mashkina (2003)

In the first "classical" type forest management enterprises prevail (50 %), as well as timber removal (57%). The second type consists of mainly enterprises dealing with cellulose production (57%) and less of timber processing (26%). It is interesting, that the third type -"virtual businessmen" consists mainly of sales/trading companies and the consulting enterprises for timber sales. Interesting, that in opinion of the majority of "virtual businessmen" forest legislation was quite adequate, while the classical and advanced types considered it inadequate.

As the transition has been going on, the new actors start emerging, such as transnational investors, Russian forest corporations, and oligarchs. Barter disappeared and banking and financial system began to rapidly develop. Institutions of the virtual economy were gradually leaving the scene.

Some companies ended up in the networks of oligarchs and it was the sometimes conflicting type of ownership (Kortelainen 2004). During the last years forest industry became more concentrated and corporate structure emerged in Russia in the all the industries. By the beginning of 2001, forests had become an attractive object for investment (especially pulp and paper) due to the favorable situation of the international markets and improved macroeconomic situation in Russia. However, the result was not a flourishing business, but forest wars – the main industry topic from 2000 to 2004. After the oil and metal industries have been divided, the forest industry has become a next target (Kortelainen 2004). The forest wars (or paper wars) refer to the battles for leading positions in the Russian forest sector among oligarchs and owners from various industries (interbranch flow of capital).

At the same time, there were many economic processes going on in the industry that were not connected with the forest wars. The most important events in the Russian forest and pulp and paper industries in the last four years were the changes in corporate governance of companies, the start of the formation of vertically integrated, specialized holdings. The changes in corporate governance in the forest industry during Putin's presidency are not only the consequence of the forest wars, but also because the large players change of their goals. Before 2000, the majority of Russian forest industry companies were more oriented towards the principle of "live for

today”. The forest industry is a long way from the principles of corporate governance that oil companies have adopted transparency, strict corporate accountability, and division of management powers are regarded as targets for most management teams. Despite the fact that most forest industry companies are corporations, this can be considered a formality, since managers are often indistinguishable from owners (Butrin 2005).

The change of ownership structure of Russian forest companies (especially pulp and paper) will be further concentrated and stronger corporations will emerge in the sector in the future. (Kortelainen 2004). The changes in the ownership reorganize the structure of Russian forest industry by creating new links and networks between actors.

## **7. Conclusions**

In historical perspective, the forest policy of Russia formed over several centuries. The history of Russian forest policy, legislation and management has shown inconsistency and shortsightedness, which often resulted in the sacrifice of the forests in the name of national political interests. History shows numerous examples of the extreme changes in the forest laws, from completely unlimited forest use and destructive mass clear-cuts to strict prohibitions and application of the death penalty to punish unauthorized use of the forests.

NIE historical approach to Russian forest sector showed that the Russian forest sector undergone numerous institutional changes: from centralization to decentralization, from unlimited use, to private property, being in state ownership for 80 years and attempts to becoming private again. Both formal and informal institutions that govern relationships in forest sector have undergone tremendous changes over the time. So, in transition period the institutions of the forest sector in Russia have been a product of a complicated formal and informal rules and path dependency from the Soviet regime combined with the Tsarists time practices.

During the Tsarist times there was no clear distinction between the official and the private, the ruler was the state and the state was the owner (Lehtinen 2004). So, in pre-revolutionary Russia, a system developed which included a state forest policy, forest legislation, forest management,

forest regulation, forest conservation, education; the system was oriented toward the various types of ownership in Russia. In spite of a broad foundation for private ownership, the country's forest policy focused more on the public interest and the future of the country. This is why people often viewed private owners negatively, since their main concern was receiving maximum profit from the forests.

Forest policy, forest legislation and forest management of the Soviet period was under pressure from the monopoly of the national economy. *“The state, sometimes even ignoring common sense, continued to conduct internal and external policies that sacrificed the forest sector to its short-term interests”* (Teplyakov et al 1998).

After disintegration of the USSR forest industry has collapsed, as the existing networks disintegrated and the existing institutional framework was not conducive for effective functioning of the sector. Reforms of the forest industry during the early period of transition changed organizational structure of the forest industry and created a lot of problems with decentralization of management and financing of the forest sector. Strategies of forest management have been based on soviet patterns, but steadily evolving. Institutional isomorphism with western patterns has been playing an important role in the adaptation process and concentration of the forest companies and creation of forest corporations (Lembruch 1999).

At present forest sector still lacks the main legal document (Forest Code) which will be free from contradictions and unclear issues that can be understood differently by different actors. The issue of the property rights has not been solved yet.

In addition to property rights and formal institutions, mentality, cultural believes and attitudes (i.e. informal institutions) toward forests also have been changing during Russian history. The attitude towards forests changed from being the main source for shipbuilding, then as a part of the territorial-industrial complexes of Soviet economy, and to the generation of the quick income in transition.

Research of institutions and business behavior of forest companies in early transition showed that three types that were present in the 90s: virtual, classical and advanced entrepreneurs. At present

the new actors emerged in Russian forest sector and new formal and informal rules are coming into play.

Transition of the Russian forest sector has been different from the other industries in Russia, and it is due to the special role that forestry played in Russian history (shipbuilding, prison camp labour etc.). Nowadays, Russia still holds the largest remaining softwood resources, domestic markets are quite large, foreign investors have high interest in Russian forests. The second reading of the Forest code is coming up in September, and the question whether it will allow private ownership of forest and whether appropriate institutions for private property will emerge remains.

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