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**Institutional Changes in Forest
Management in Countries with
Transition Economies:
Problems and Solutions**

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Workshop Proceedings

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INTRODUCTION

The International Workshop on Institutional Changes in Forest Management in Countries with Transition Economies took place on February 25, 2003, in Moscow, Russia. Approximately 100 participants representing eight ministries of the Russian Government and 16 regions of Russia, 18 countries with transition economies, the World Bank, the private sector, research institutes, academia, and environmental non-governmental organizations attended the one-day event organized jointly by the Russian Ministry of Natural Resources and the World Bank with support from the Program on Forests (PROFOR). The workshop was held in parallel to the All-Russia Foresters Congress, a gathering of some 5,000 foresters from across Russia to discuss forest management through 2010.

The workshop provided an opportunity for decision-makers within the Russian forest sector and transition countries to benefit from the experience of other transition countries. Discussions focused on key issues for the development of the Russian forest sector, including benefits and risks associated with concession management, opportunities associated with forest certification, approaches to forest institution reform, public-private partnerships, and balancing the economic, ecological and social roles of forests. The workshop resulted in a number of conclusions and recommendations to inform the process of forest institution and policy reform. This book is a collection of papers presented and speeches delivered at the workshop, the outcomes of the workshop, and a number of background papers relating to the World Bank's Forest Strategy and operations in the region.

CHAPTER 1: TOPICAL GOALS IN REFORMING THE RUSSIAN FOREST ADMINISTRATION AND MANAGEMENT SYSTEM

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Throughout the last decade of economic and structural reforms in the Russian Federation, the forest sector has remained on the sidelines, retaining several attributes of the old economic system, including:

- A monopoly of public ownership in forests;
- Forest administration through *leskhozhes*, local-level forest administration structures which combine both public administration and forest management functions;
- A forest resource allocation system without any real competition; and
- A non-transparent financial system characterized by low returns from forest use and government funding for forest management operations.

These aspects of the forest administration system should be addressed as priorities in reforming forest administration and management in the Russian Federation.

Forest Stock Ownership and Authority for Forest Use, Protection, and Renewal

While the Russian forest stock is federal property, the Forest Code of the Russian Federation delegates a number of important forest management functions to the subjects¹ of the Federation. However, these management functions and associated authority are not accompanied by respective obligations. For example, government authorities of the subjects are able to make decisions on the allocation of forest plots for lease and free use, decisions which ultimately determine the level of

¹ The Russian Federation is comprised of 89 administrative subjects, including 21 republics, 6 krais, 49 oblasts, 2 Federal cities (Moscow and Saint-Petersburg), 1 autonomous oblast and 10 autonomous okrugs.

income from forestry. However, the federal government is responsible for financing the protection, renewal and organization of forest use.² This unequal distribution of rights and obligations leads to conflicts in forest administration and forest use. Further conflict stems from the fact that in some subjects, authority for forest administration has been delegated to local governments, which do not belong to the official system of government authorities and thus do not perform state property management functions.³

Given that the forest stock is federal property, the basic normative, regulatory and administration functions should be carried out by federal authorities, and rights to forest stock use should be distributed with respective obligations. The federal government should be given authority to undertake institutional reform in forest management and develop a forest administration structure in line with the economic context of the forest sector, recognizing local differences evolving in the use and cultivation of forests.

Institutional Reform in Forest Administration

In the 1930s forests were nationalized, and leskhoz were established as state enterprises responsible for forest administration, harvesting, wood processing, and forest renewal. With the adoption of the Fundamentals of Forest Legislation in 1993, leskhoz began operating as state institutions, with their financial activities regulated by the Budget Code of the Russian Federation. The leskhoz forest management system is in need of reform due to the following:

- Lack of interest in earning money by performing the public administration functions;
- Lack of interest in performing management functions because salaries are paid to workers in accordance with the tariff system;
- Lack of legal sources of investment in economic development; and
- Lack of competition in allocating budget resources for economic activities.

The leskhoz system should be reformed through separation of public administration and economic functions so that functions of the forest public administration are performed by the state forest service responsible for compliance with the forest legislation; and forest management functions (use, protection, and renewal) are performed by state-owned commercial organizations regulated by business norms and criteria. Any institutional reforms in forest administration should be in line with the government policy in the area of forest use management.

² These rights and responsibilities are set out in Articles 18 and 47 of the Forest Code of the Russian Federation.

³ As set out under the Federal Law “On General Principles of Organization of Local Self-Government in the Russian Federation”.

A New Institutional Arrangement for Forest Management and Use

Figure 1 demonstrates four systems for distributing rights and obligations between the state and private forest business.

FIGURE 1 DEVELOPMENT OF RELATIONS BETWEEN THE STATE AND BUSINESS

The State	Final cutting	Business	Final cutting	Business	Final cutting	Business	Final cutting
	Forest renewal	The State	Forest renewal	The State	Forest renewal	The State	Forest renewal
	Decision making		Decision making		Decision making		Decision making
	Control		Control		Control	The State	Control
a) Soviet system		b) Current system		c) Forest use under concession agreement		d) Private forests	

Under market-based forest use, the government would eventually abandon production functions. In a centrally planned economy, the state monopolized both production and administration functions. Currently, the state production functions are those performed by leskhozoes. Further withdrawal of the state from production functions suggests development of long-term, use-based concession and lease agreements. In the case of concession-based forest use, private enterprises receive harvesting rights along with responsibility for forest management planning, performance of silvicultural operations, and investment.

Forest management and use could be carried out through an institutional arrangement based on two models: the first model (model 1) would delegate all economic functions to users under concession (lease) agreements; and the second option (model 2) would be an institutional arrangement for forest use based on state-owned commercial enterprises. Model 1 would be applied in forested areas with conditions suitable for private business operations and model 2 would be applied in other forested areas. State-owned commercial enterprises would not conduct forestry operations in regions under concession agreements.

Under model 1, a forest public administration body (a federal body or its regional branch) would represent the interests of the forest stock owner as a party to the concession. A special state supervisory agency would monitor concession agreements to ensure their integrity. In areas lacking conditions for large-scale private businesses, model 2 would be implemented, with the state-owned commercial enterprises responsible for forest resource use, forest management, silvicultural operations, and investment. The enterprises would have the right to

lease forest resources for short-term use and enter into agreements for silvicultural operations with contractors. Such contractual short-term forest use would promote development of medium and small business in the forest industry. The forest public administration bodies would verify the state-owned commercial enterprises compliance with the forest legislation in carrying out economic functions.

Financial System for Forest Administration and Management

Currently, forest management operations are financed by a forest stock use tax. Under model 1, this system could be replaced with payments for standing timber determined through concession agreements. The revenue from such contracts would be placed in funds targeted for forest cultivation and renewal supervised by the forest public administration body. Any remaining balance from the concession fees and cultivation investments would be transferred to the forest budget.

In the case of forest use and management based on state-owned commercial enterprises (model 2), the financial system would consist of: transfers from the federal budget for production purposes (works, services) under public procurement; revenue from products and services provided by the enterprise; and fees paid for short-term forest use (standing wood sales). State-owned commercial enterprises would pay a set portion of its proceeds to the forest budget, and the remaining revenue would cover the costs of production and contracted silvicultural works, and finance investment.

Since the state would run operations in all forest areas not under concession, forest revenue would need to be redistributed through a budget system. Revenue from concession and lease payments and the state-owned commercial enterprises would finance maintenance of the federal forest administration body, national parks, and activities such as fire fighting, pest and disease control, seed production, forest monitoring, and staff training.

In closing, the models outlined above should be piloted to inform institutional reform in forest management. Knowledge gained in the pilot would provide experience needed to assist the Russian Federation to establish high-profit forest-use and management systems that meet the principles of sustainable forest management.

CHAPTER 2: FOREST SECTOR REFORMS IN EASTERN EUROPEAN COUNTRIES - OVERVIEW AND LESSONS LEARNT

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Introduction

Since 1990, the Eastern European countries have been undergoing significant reforms in their forest sector involving changes in legislation, institutional arrangements and introduction of new policy instruments. Restitution of private land ownership has been a major undertaking influencing the forest sector in many countries.

The objective of this paper is to provide selected lessons learnt from reform processes in Eastern Europe which have relevance to the Russian Federation and other countries with economies in transition. An overview of reforms is first made and then phases and institutional arrangements of reform processes are summarized. Funding and financing arrangements are reviewed and elements for best practices and lessons learnt are identified.

The paper is largely based on a recent study prepared by Indufor for the European Commission on forestry in the EU Accession Countries.

Common Elements in Forest Sector Reforms

A number of common elements can be identified in the forest sector reforms:

- The reforms have been implemented due to the introduction of a market economy, privatization and low efficiency of past institutional structures;
- There are significant cross-country differences in scope, pace and outcome of the reforms;

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- The reform processes have been gradual, needing time, and have often been implemented step-wise to minimize risks and frictions between the parties involved;
- There has been an initial focus on institutional issues leaving sectoral policies and strategies to be addressed later; and
- Environmental management has recently gained importance within the framework of sustainable forest management, with social issues likely to play increasing role in the future.

Reform processes have covered all the key functions in the forest sector including:

- Management of forests (state and non-state forests);
 - Forest management operations (silviculture, regeneration, harvesting, planning and control);
 - Sales of timber and non-wood forest products;
- Processing and marketing of timber and non-wood products;
- Public forest administration;
 - Formulation of policy and legislation;
 - Control and enforcement;
 - Development of forest information systems;
 - Education & research; and
 - Extension.

Forest industries have been established as separate economic entities as part of the overall economic reforms in the early 1990s. In most cases the separation was coupled or followed with privatization of parastatal enterprises.

Existing Institutional Arrangements

The changes have also taken place with regard to the institutional framework for forest management and the public sector's role in operations. In the majority of Eastern European countries, there is currently some degree of administrative separation, but the integrated approach dominates. It should be noted that reform processes have usually been coupled with a comprehensive overhaul of forest policy and legislation and they have not been independent exercises.

Three different types of institutional arrangements can be identified in the region:

1. State Forest Administration is responsible for all functions (e.g. Bulgaria). One unit is responsible for public functions and organization of timber sales and

state forest management. Its activities are funded from the state budget, while the sales revenues from timber and services have been transferred to state budget. This is the traditional approach widely practiced under socialist regime.

2. State Forest Administration and State Forest Enterprise are separated (e.g. Estonia, Latvia):
 - State Forest Administration is funded from state budget being responsible for public functions;
 - State Forest Enterprise is responsible for timber sales and forest management activities and depends on sales revenue for funding, Government defines the portion to be transferred to the state budget but the criteria used in this context are not necessarily clearly defined.
3. State Forest Administration is managing a concession of state forest (Slovenia):
 - State Forest Administration, funded from the government budget, is responsible for public functions as well as managing a concession of state forest which has been awarded to private companies;
 - Enterprises holding concessions rights pay a pre-determined fee to the state budget;
 - Harvesting levels and forest management plan are defined by State Forest Administration.

There have proved to be considerable difficulties related to evaluation of performance of public bodies. Methods of assessing the performance of State Forest Administration and State Forest Enterprises vary widely, and generally there is a lack of clear framework for evaluation. This makes decision-making on budget or fund transfers easily arbitrary. Development of overall performance indicators for state forest management is difficult because indicators used in the business sector do not apply to forest management. On the other hand, the performance in all operations that could be undertaken by the private sector (e.g. forest operations) can and should be assessed using enterprise criteria but (i) inadequate accounting procedures hinder assessment of costs of operations carried out by own staff, and (ii) the problem is often circumvented by using sub-contractors.

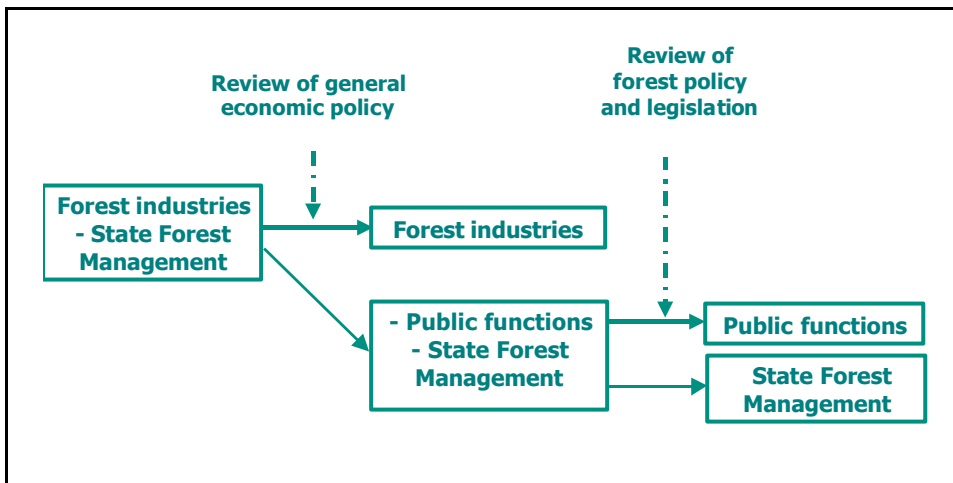
Reform Process

A number of typical steps can be identified in the reform process (Figure 1). The macro-level economic policies have usually first lead to separating forest industries as independent units usually through privatization. This has also happened in Russia.

In the next phase, reforms are introduced within the context of revision of forest policy and legislation. At this stage the roles of public forest administration and

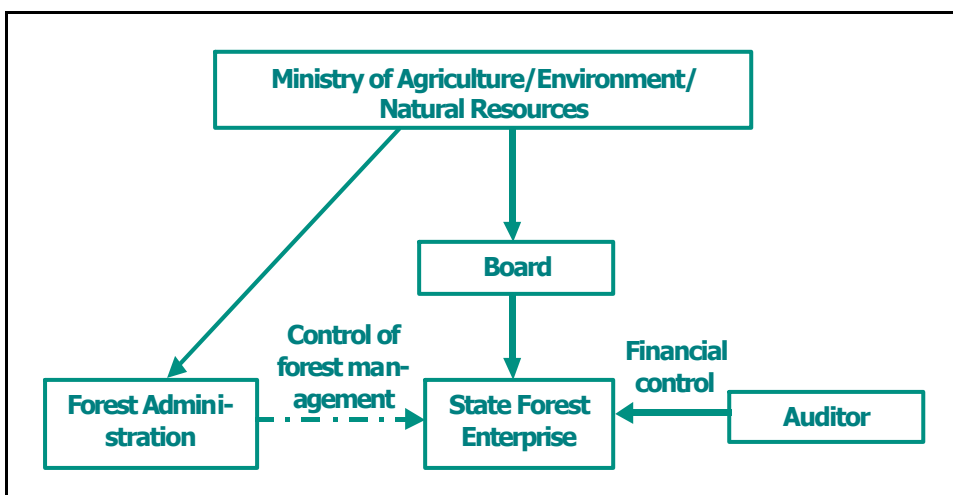
management of state forest land are separated. The Russian Federation is currently considering options for these roles.

FIGURE 1 TYPICAL STEPS IN REFORM PROCESS



The resulting best practice institutional arrangement in Eastern Europe is illustrated in Figure 2. While earlier institutional arrangements suffered from the conflict of interest when the same body was supervising and controlling its own operations, in the new approach these two functions are separated. Forest administration, as part of its enforcement functions, supervises and controls how forests are managed, be they owned by the state (and managed by the State Forest Enterprise) or by private forest owners. It is also important that a separate control activity in financial flows is maintained or set up, either through an independent government body or accredited private auditors, which are typically used in many Western European countries.

FIGURE 2 BEST PRACTICE INSTITUTIONAL ARRANGEMENT



Funding and Financial Flows

Funding and financial flows are critical elements in any institutional reform. It is generally accepted and applied that the public functions of forest administration are funded by state budget allocations. Whether these financial flows should be related to what is collected from State Forest Enterprise (and private and other forest owners) is an open question.

In all the Eastern European countries, except Estonia, the government pays more to the forestry sector (including public functions, management of state forests and protected area management) than it receives from the sector in taxes or other payments. In a few Eastern European countries, the government provides additional subsidies to state forest enterprises, while in others they are required to contribute to state budget. It has proved to be difficult to determine “objectively” an appropriate level of funding for state forest enterprises. As demonstrated in Table 1 (following page), differences in the availability of funds for forest management (per ha) are wide in Eastern European countries. This variation is due to differences in objectives, revenue base and costs, and efficiency.

Another important feature is the contribution of state forest enterprise to the budget of local government in areas of operation. This can be through taxes or other statutory payments. Figure 3 summarizes a typical funding arrangement.

FIGURE 3 FINANCIAL FLOWS

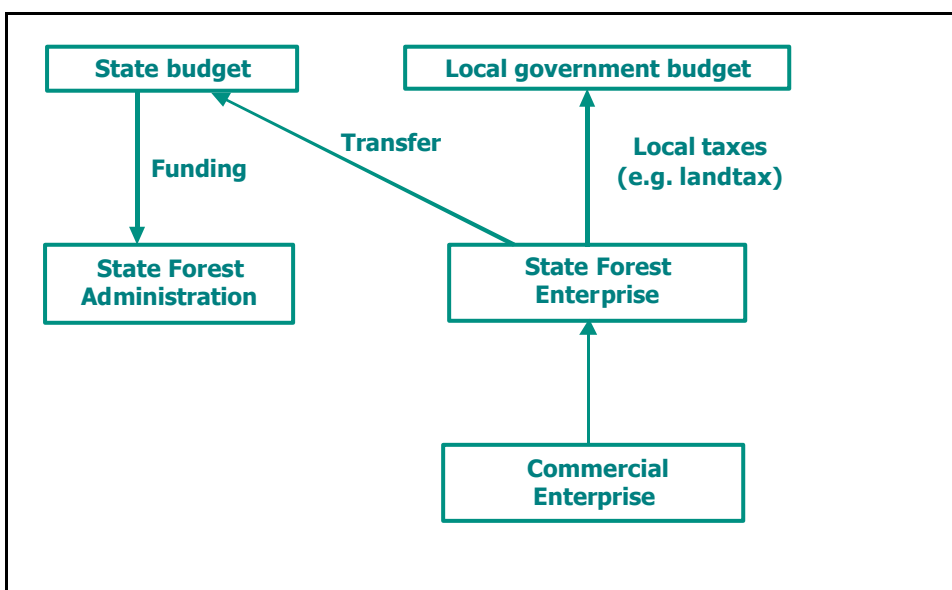


Table 1 Management of State Forests

Country	Reference year	Forest area managed by organization	Employees	Employees per hectare (ha)	Revenue	Revenue per ha	Transfer to/from (-/+) govt.	Transfer per ha	Proportion of transfer generated by state organization	Funds per ha after transfer
		1,000 ha		people/ha	million €	€	million €	€	%	€
Bulgaria	2001	3,199	6 431	2	38.7	12.1	4.5	1.4	11.67	13.5
Czech Republic	2000	1,435	3,748	2.6	474.7	293.6	5.9	4.1	1.2	334.9
Estonia	2001	850	1,438	1.7	58.7	69.1	-13.9	-16.4	-23.72	52.7
Hungary	2000	973	10,309	10.6	180.7	0.2	-1.3	-1.3	-0.74	184.4
Latvia	2000	1,370	565	0.4	30.1	22	-13.7	-10	-45.67	11.9
Lithuania	2000	1,005	7,578	7.5	81.4	81	-6.2	-6.2	-7.64	74.8
Poland	1999	6,828	33,164	4.9	842.9	123.4	-4.8	-0.7	-0.57	122.7
Romania	2000	5,291	29 000	5.5	152.2	28.8	-7.5	-1.4	-4.94	27.3
Slovakia	2000	1,166	15,675	13.4	140.2	120.3	6.7	5.8	4.79	126
Slovenia	2001	301	na	na	27.4	91	-2.7	-9.1	-10	81.9
Turkey	1999	20,763	23,206	1.1	421.7	20.3	206.2	9.9	48.9	30.2

Elements for Best Practice

The experience in Eastern Europe and many other countries suggest a number of elements which should be identified as part of successful institutional reforms:

- Remove direct links (administrative, financial) between entities responsible for public functions and state forest management in order to:
 - eliminate potential conflicts of interest; and
 - ensure independence, transparency and neutrality of public forest administration.
- Increase productivity and efficiency in state forest management through:
 - establishing an independent budget for the entity managing state forests with well-defined obligations towards state budget; and
 - development of salary schemes which are based on staff performance to reduce incentive for corruption.
- In order to ensure effective operational control over State Forest Enterprise:
 - require transparent budget procedures and accounting systems matching corporate standards;
 - assign responsibility for controlling forest harvesting and management to state forest administration; and
 - arrange financial auditing through accredited third party auditors.
- In order to ensure strategic control over state forest management:
 - establish a management board to supervise the activities of the entity managing state forests, including representatives from government, as well as professionals with qualifications in forestry, environmental conservation and corporate management
- Arrange marketing of timber and non-wood forest products based on competitive bidding in order to:
 - establish a “fair,” market-based price level;
 - ensure open and equal access to timber and non-wood resources for potential beneficiaries at equitable conditions; and
 - limit monopolistic features in resource supply.
- In order to determine an appropriate level of funding for state forest management:
 - define physical targets for forest management and environmental conservation, and assess necessary investment requirements and operational costs;
 - ensure cost efficiency of forest operations by using sub-contractors from private sector when possible;
 - carry out independent research on efficiency factors; and
 - establish the transfer to the state budget as a residual amount deducting the estimated cost from total revenue (efficiency gains remain in the organization as an incentive for improved performance).

Concluding Remarks

There are also a number of other lessons learnt which merit attention in the implementation of institutional reforms:

- National forest policy and strategy should be the basis of institutional reforms - not vice versa;
- Markets can be the best drivers towards sustainable forest management but they can also be devastating if not coupled with necessary safeguards;
- Sustainable forest management provides an appropriate framework for the assessment of policy options. Impacts should be quantified and properly evaluated before decisions are made on choosing the most desirable option;
- Stakeholder participation and transparency are essential in assessing policy options and implementing institutional reforms;
- Experience in large countries like the USA and Canada shows that decentralization in forest administration is an appropriate strategy within an adequate national legal and institutional framework. Forestry development is best addressed at the local level. Reforms towards decentralization have to be coupled with strong orientations at the regional level (e.g. through oblast/kray level forestry programs) and effective monitoring and control systems to avoid short-term political and economic interests leading to uncontrolled use of forests;
- In view the large size and diversity of the Russian forests, a combination of institutional arrangements for forest management are likely to be required including lease rights, concessions, leskhoz management (and commercialization), and privatization of forest land;
- Leskhozoes represent an important social capital for sustainable forest management in Russia which is currently underutilized due to limitations in their mandates. This asset should be properly considered in future reforms;
- Transaction costs tend to be high in countries like Russia where markets do not (yet) work effectively, corruption is common, risks and business protection costs are high, and other structural reasons (uncertainties and frequent changes in taxation and other rules) increase costs of economic operators. High transaction costs significantly reduce the international competitiveness of the Russian forestry sector and impede private investment. Policy reforms should pay a due attention to the potential of reducing transaction costs.

It is obvious that lessons learnt from other countries are not directly transferable and have to be interpreted in the political and socio-economic context of the Russian Federation. Forest legislation should be defined in a way, which creates a clear institutional framework for economic operators and ensures that the long-term policy objectives related to sustainable forest management are achieved.

CHAPTER 3: FORESTRY IN UKRAINE: OLD AND NEW FOREST MANAGEMENT

Nikolay Kolisnychenko

State Forestry Committee of Ukraine

The last twelve years have been a time of testing strengths and seeking new ways and forms of managing Ukrainian state forests. The State Forestry Committee and its enterprises have focused their activities on preservation and regeneration of forests, and on strengthening the state forestry service. The principal achievement of this time is a professional system of state forest management and forestry management and an effective forest legislation that is continuously being improved.

At the start of reforms in the Ukraine, a number of unforeseen negative outcomes, including the closing of large woodworking enterprises and drastic reduction of the domestic timber market, resulted from excessive local self-government authority, unreasoned privatization of large woodworking enterprises and unbalanced price policy. Learning from Ukraine's experience, countries in transition to a market economy should retain and develop the best elements of the planned economy to smooth the transition.

Changes in Forest Cover and Forest Management

Since 1991, forest cover in the Ukraine has grown, with annual new forest generation of 35 - 40 thousand hectares, an area 10-20% greater than that felled annually. Forests cover 15.6% of Ukraine's geographic area, and 50% of this forested area is planted. The estimated timber stock is 1.7 billion cubic meters. Ukraine has four climatic zones with different growing conditions for forest, including a large steppe zone with 3-5% of its area forested. Average annual growth in these regions vary, for example from increments of 5 cubic meters in the Carpathian Mountains to 2.5 cubic meters in the steppe zone.

The key priorities for Ukrainian forest management are reforestation and afforestation, forest preservation and protection, improvement of their resistance and biodiversity. These priorities are becoming increasingly urgent in light of forests' role in mitigating global climate change. The primary role of Ukrainian forests is to perform environmental functions: in almost 50% of forests, main cutting is not allowed, and over 12% of forests belong to natural reserves. Under the current Ukrainian legislation, almost all forests are owned by the state and are

managed by more than fifty ministries, agencies and organizations. The largest of these are the State Forestry Committee (68%) and agricultural entities (24%).

The forestry legal framework in Ukraine has been completely developed and its improvement is an on-going process. The Forest Code of Ukraine was approved by the Supreme Council in 1994. With adoption in 2002 of a new Land Code, the Ukrainian State Forestry Committee is now revising the Forest Code based on the principles of sustainable development of the forestry sector, broad regeneration, and preservation of forest biodiversity. The revised version of the Forest Code stipulates changes in forms of ownership of forests (state, municipal and private); suggests changes in terms of division of forests into protective categories; and defines subjects and objects of forest relations.

In 2002, the Cabinet of Ministers of Ukraine approved another document important for the Ukrainian forestry sector, the State Program "Forests of Ukraine." This program will continue through 2015 and is aimed at improvement of the condition and qualitative pattern of forests, strengthening their environmental protection function and growth of productivity. Scenario modeling (see Table 1) showed that as a result of the program, by 2015 the forest cover in Ukraine will increase from 15.6% to 16.1% and the overall growing stock will increase 16.7%. The program also provides for the implementation of new environmentally-safe harvesting technologies, watershed-based principles of forest management, zone-based forest management, and reform of forest management technologies based on trends in forestry development and implementation of geo-information systems.

TABLE 1 PROJECTED OUTCOMES OF THE STATE PROGRAM "FORESTS OF UKRAINE"

Indicators	Unit	2002	2005	2010	2015
Total forest covered area and other wooded land	million ha	10.8	10.9	11.1	11.3
Total growing stock	billion cub. M	1.74	1.86	1.97	2.03
Mean growing stock per ha	cub. M	186	200	205	210
Percentage of forest cover	%	15.6	15.6	15.8	16.1

With adoption of the new Forest Code of Ukraine and respective regulatory acts, the legal environment for forestry activities in Ukraine will be brought in line with the norms of international law, and the forestry sector will take up a management model based on sustainable development principles.

The State Forestry Committee is responsible for implementation of the state forest policy. The oblast state forestry associations and the Committee of Forestry and Hunting of the Autonomous Republic of Crimea are directly subordinate to the State Forestry Committee. The State Forestry Committee runs 387 enterprises and

organizations, including 294 state forestry enterprises and specialized forestry and hunting enterprises, two national natural parks, six natural reserves, and three design organizations. Two scientific research institutes and a network of ten regional forest experimentation stations provide academic support of the sector. Forestry specialists are trained in eight sector technical colleges and at five universities. The forest sector's demand for qualified personnel is fully met.

State forestry enterprise has been substantially reduced due to increases in protected areas. The volume of timber harvesting (main cutting) in Ukraine is down 10-20%, and demand for timber in the domestic market has dropped substantially due to general economic crisis, forcing the sector enterprises to focus on international markets. International contacts have led to a number of proposals for projects for environmentally sound harvesting technologies in the Carpathian Mountains and for plantations for carbon sequestration.

Since 2000, 203 thousand hectares of forests in Ukraine (four state forestry enterprises) have been certified by the Forest Stewardship Council (FSC). Ukrainian academic organizations are currently developing a national certification system that would meet the specific Ukrainian forest management conditions and international certification standards. A Ukrainian forest monitoring network is another new initiative intended to fortify sound management decisions and strategic planning. Additionally, Ukraine is working to harmonize national standards for forest management and harvesting with international standards.

The State Forestry Committee of Ukraine is strengthening and broadening contacts with international organizations. For example, sector scientific institutes are members of the International Union of Forest Research Organizations (IUFRO), and the State Forestry Committee has been cooperating with the United Nations Economic Commission for Europe (UNECE) Timber Committee and Joint FAO, ILO and UNECE Committee on Forest Technology, Management and Training. Ukraine also participates in the pan-European process of forest protection and the Ministerial Conference on Protection of Forests in Europe. Over the last five years, the State Forestry Committee has signed memorandums of cooperation in the area of forestry and forest science with the forest services of Austria, Poland, Russia and Slovakia.

In sum, throughout the difficult conditions of economic instability of the last decade, the Ukrainian forest sector preserved its efficiency and capacity, and maintained production through comprehensive management of forest functions, felling and primary woodworking. Within the last five years the State Forestry Committee of Ukraine has been covering up to 70% of the forest management costs through its own funds. However, a number of state forestry enterprises in Polesye are now self-sustaining. The State Forestry Committee of Ukraine is continuing to work on new schemes to ensure increased efficiency of forest resource use and forestry finance, based on analysis of the situation and models for further forestry development.

CHAPTER 4: THE NEW FORESTRY POLICY OF THE REPUBLIC OF KYRGYZSTAN

Turatbek Musuraliyev

State Forestry Service, Republic of Kyrgyzstan

Kyrgyzstan's forest resources are of natural and aesthetic value, and also form part of the renewable basis of the national economy. The total area of Kyrgyzstan is 198.5 thousand square kilometers, with mountains covering over two-thirds of the territory. Forest cover is 849.5 thousand hectares, or 4.25% of the Republic's total area.

The transition to independence and a market economy has created conditions for economic growth and improvement in living standards, however it has also resulted in the deterioration of the social and economic conditions of workers, and the appearance of poverty and social inequality. The contribution of forests to economic and social well being is being reevaluated and the forestry department in Kyrgyzstan is undergoing an important and complicated stage of development.

During the last eleven years of independence, a number of noteworthy events have taken place in Kyrgyzstan's forestry complex:

- The 1993 and 1999 Forestry Codes of the Kyrgyz Republic were adopted;
- In 1994, the Forestry and Hunting Service was established;
- In 1995, the first international conference on biological diversity and rational utilization of nuciferous forests convened;
- The 1995 and 2001 National Government Forest Programs were adopted;
- In 1996, Kyrgyz Agrarian University started a silviculturists training program;
- On April 2, 1997, a decree (no. 73) was signed on measures associated with forestry development;
- In 1998, an international seminar of silviculturists was organized;
- In 1998, the "New National Forestry Policy in the Republic" was signed and a Government Resolution on the Long-Term Concept of Forestry Development was adopted;
- In 2000, the International Conference on Juniper Forests was held in Osh;

- In 2001, the Regulation on Communal Forestry in the Kyrgyz Republic was adopted;
- In November 2001, the State Forestry Service was established with 78 organizational departments and over seven thousand employees;
- In 2002, the forestry sector celebrated the 55th anniversary of the formation of an independent forestry sector; the first Congress of forest wardens of Kyrgyzstan was held;
- In 2002, the State Forestry Service was actively involved in the preparation of the International Year of Mountains and of the Bishkek Global Mountain Summit. During this period, 16 forest farms and 7 national government natural parks were set up.

In 2003, it will be five years since the adoption of the new forestry policy, and we have already begun the analysis and preliminary evaluation of the results achieved so far. Our top priorities will include the improvement of forestry legislation, increasing forest cover, forest farm reforms, involvement of the population in communal forestry, the development of silviculture, and education for the processing of forest products.

Since 1995, the State Forestry Service has been closely cooperating with the Kyrgyz-Swiss Program of support to the Kyrgyz forestry sector, which annually contributes about 2.2 million Swiss francs. A program to preserve the biological diversity of Lake Issyk-Kul, including a biosphere preserve, is underway in partnership with the German Government.

In 2002, Russia and the Kyrgyz Republic signed an Agreement on Cooperation in the field of timber industry and the forestry sector. Contacts with China and Korea in the field of re-processing wood and non-wood forest products are being expanded.

The Central Asia Transboundary Biodiversity Project in cooperation with the Global Environment Fund (GEF) and the World Bank is an example of international cooperation between Kazakhstan, Uzbekistan, and Kyrgyzstan targeted at the preservation of the biological diversity of western Tien Shan. In the Kyrgyz Republic, the project covers two transboundary preserves.

CHAPTER 5: THE LATVIAN FOREST SECTOR REFORM PROCESS

Otto Žvaginš

Latvian State Forest Service

Development of Latvia's Forest Policy

The forest sector in Latvia started the transition to a privatized economy in 1990. At that time, supervision of both compliance with laws and economic activities in government-owned forests were assigned to one management entity. The prices for forest stock was fixed by administrative methods, and the lack of funds for forestry operations quickly led to a situation where timber sales at set prices translated into forestry operations at the buyers' expense. The result was a lack of fair competition or real prices. Enforcement of laws was also ambiguous because the same people who were responsible for decision-making were also responsible for supervision.

The processes of social democratization and the emergence of various interest groups resulted in a process which ultimately led to the Forest Policy of Latvia. This process of developing the forest policy was important because various interest groups learned to listen to and take account of others views and opinions, and also to express their opinions and the reasoning behind them. Through the process, the Forest Advisory Council was established as a forum where interest groups and industry institutions are represented. The council also acts as an advisory body of the Ministry of Agriculture in finding solutions to the industry's major problems.

The Forest Policy of Latvia clarifies the role of the government in ensuring sustainable forestry operations, and the government seeks to create conditions to attain the overall goals of the forest policy. In the forest sector, the government has four main functions:

- **regulation**, which includes the development of a forest policy, legislation and regulations to uphold the policy,
- **supervision**, which means building an institutional system that ensures enforcement of regulations and supervision of compliance in all forests regardless of ownership;
- **support**, which includes efforts to create an environment favoring long-term forest functions, and development of the private sector (education, science, advice for forest owners, fire protection and forest monitoring, and so on); and

- **ownership**, which implies that the government as a forest owner pursues economic activities for profit.

The main principles of the forest policy clarify that regulatory and supervisory functions are to be performed by government institutions, and owner's functions are performed by economic entities.

Institutional Reform to Support the Forest Policy

To meet the objectives of the forest policy the forest management system in place needed to be reformed. The reform resulted in two departments of the Ministry of Agriculture becoming responsible for drafting industry regulations, the design of a national forestry development program, and industry representation at international forums.

The State Forest Service (SFS) is a management institution supervising compliance with forestry and hunting legislation and regulations. It is funded mostly by the government budget, with a small proportion of funds generated from the sale of services. The SFS provides advice for private forest owners, fights forest fires, monitors forest health, and maintains a system of information about all forests. The SFS includes a special unit, the Experimental Forestry Station, which pursues economic activities in forests of scientific value. Certain provisions of forest laws do not apply to scientific research forests.

The reform eliminated the monopoly of the Government Forest Management Institute on forest inventory information, and such information is now provided by the private sector and available to anyone for a fee. The government defines the scope of information that forest owners must submit to the State Forest Register at least every ten years.

Economic activities in government-owned forests are entrusted with the government joint-stock company Latvijas Valsts Meži (Latvian State Forests). It is a commercial company governed by the same laws as private businesses. It is owned by the government, with the Minister of Agriculture holding its shares. The joint-stock company is responsible for the entire forestry cycle, and has operated successfully since it was set up, providing a continuous flow of timber for the industry. The main source of profit is through auction sales and in accordance with long-term forest-use contracts originating from a period prior to the establishment of the government joint-stock company. These contracts specify the amount of growing stock to be sold annually. The prices are negotiable, and the base price is determined by the market.

The government sets a fixed payment which the company transfers to the government budget during the year. In terms of costs, all activities to support forestry production, from planting stock for reforestation to investment in the construction of forest roads, are provided.

The entity's revenues from selling the growing stock are rising, but not due to bigger scopes of felling, as the government has set the maximum allowable figure for a five-year period (about 75% timber is produced by the main felling). To increase its revenues, the company works to make sure some timber is sold as ready-made assortment, buying procurement and log transportation services on the market rather than procuring on its own. Other areas are being developed by the company, too, such as hunting and recreation services. One indication of the company's high level of economic activity is the international FSC certificate it holds.

Legislative Reform to Support the Forest Policy

In parallel with the reorganization of institutions, Latvia initiated reform in legislation and regulations. As a result, new legislation and respective Cabinet of Ministers rules were developed. Whereas previous regulations looked like sets of forestry manuals that defined the results to be achieved and the methods of getting those results, the new regulations may be described as a fence enclosing a playing field inside which the players are free. It should be noted that while the legislative process is completed, the process of improving these laws is ongoing.

CHAPTER 6: FOREST REFORMS IN ESTONIA, 1990 - 2002

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In Estonia, forest reforms involved economic, administrative and ownership changes:

The **economic changes** were: a decision against allocating forests through funds; no fixed prices; and allowance of economic activities (ranging from forest planting to sale of logs) in public forests. The outcome is that since 1992, the management of public forests has become four times more efficient, and the forest industry has developed, with production at saw-mills having increased five fold.

Administrative changes included: economic activities were separated from oversight functions; the manager of public forests was made responsible only for public forests; special institutions were established to provide extension services and exercise oversight; and the state monopoly on forest inventory and management was ended. These changes resulted in improved cost effectiveness, and better oversight to prevent forest crimes.

Changes in ownership led to 60% of forests being passed into private ownership and the privatization of forest industries. This resulted in increased harvesting in private forests and fast development of forest industries.

As a result of these changes, public forests now contribute \$12 million to the national budget and 20% of Estonians are forest owners. Forest-related products comprise 20% of the total output of processing industries, 5% of working people have forest-related jobs, and forest-related products constitute 7% of foreign trade. In sum, the forest is an employer, with a number of employees depending upon the efficiency of forest management and the willingness of industry to utilize timber harvested in the forest.

CHAPTER 7: COMMERCIALIZATION OF THE STATE FOREST MANAGEMENT IN FINLAND AND POSSIBLE OPTIONS FOR DEVELOPMENT IN RUSSIA

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Origin of the Forest Service as a Governmental Body

Since 1859, the Forest Service has been responsible for forest management in Finland. Initially, forest management consisted of three levels, with local branches similar to leskhoz that reported to regional forest management departments administered by the national government. Up until the 1970s, much of the state owned forests were transferred to private ownership and today, the state owns 25% of the forest area.

In its early days, the Forest Service's major responsibilities included managing state-owned forests utilization by local populations and selling standing crop. At the beginning of the 20th century, rights to use forests were sold in the form of long-term concessions, resulting in the misuse of forests. In the mid 1950s, the Finnish Forest Service started to develop its own lumber production and selling the lumber, supplying it by raft to mills.

The Forest Service had been controlling its own activities and prior to the 1970's it controlled even those of private forests. Even as a state-owned department, the Forest Service possessed its own commercial activity which contributed to the state budget and in fact provided resources for other activities. In the 1960s Finland began intensive mechanization to develop the forest harvesting industry. The modernization of forest management started a little bit later, in the 1970s, and at the end of the 1980s new ecological silviculture began.

Commercialization of the Forest Service

In the early 1990s, the Finnish Government decided that state bodies which conduct commercial activities such as the Forest Service would be turned into state-owned commercial enterprises. In response, the Forest Service developed a model of commercial enterprise, which was eventually established in 1994. Its operations evolved in such a way that commercial activities now include silviculture, consulting, production of planting stock of various species of trees, sales and lease of forest lands, sales of soil and recreational services. The public functions are protection of environment and services to vacationers and some administrative tasks. The Forest

Service consists of separate departments for commercial and public activity. The commercial operations are financed from commercial profit of the enterprises and the major part of profit has been allocated to the Treasury, in other words – to the owner. The public functions are financed from state budget resources. The Forest Service signs the annual operational and financing agreements with the Ministry of Agriculture and Forestry as well as with the Ministry of Environment.

State-owned commercial enterprises are often a phase in the transition to a joint-stock company. However, in the case of the Forest Service, it is accepted that state-owned forests have such a number of public and environmental specifics that at present it would be impossible to transform them into a joint-stock company. But some operations conducted by the Forest Service – such as the production of seeds and planting stock - could be outsourced to companies.

Similar developments have been observed in neighboring countries, such as Norway and Sweden. In Norway there is a state-owned commercial enterprise similar to Finland's Forest Service. In Sweden the development went further and state-owned production forests were given to a joint-stock company. However, the Swedes returned to a management structure similar to the Finnish one.

Development Scenarios for Russia on the Basis of the Finnish Experience

The main forest management structure in Finland and Russia was created from the prototype of the same German model. From 1859-1917 during the initial period of the Finnish Forest Service's activities, Finland was a principality of Russia and thus had a similar management structure. After the revolution, the two countries developed in different directions, but the state-owned forests management structure maintained some common features as mentioned above. In my opinion, currently the major principal differences are as follows: the state monopoly on forest ownership in Russia; the absence of efficient product markets in Russia; the relationships between the forest industry and silviculture; and the intensity and scale of forest use.

When Russia began moving toward a market economy in the early 1990s, the forest industry was privatized quite fast, but there were no major changes in forest management except for the changes in the structure of central governmental bodies. In the next few years, the Russian forest sector has to solve the same major development issues which Scandinavia has been solving for the past three or four decades. The major tasks are management reform and the modernization of forest inventory, forest harvesting, and ecology issues of forestry.

Forests Ownership

Land ownership policy in Russia has been evolving toward private ownership of both industrial and agricultural lands. In contrast to this, the political will has been to keep forests in state ownership. This is most likely reasonable if one considers the numerous pressures on how to utilize forests. Experience in many countries shows

that variety in forests ownership is much more beneficial and leads to more even utilization of forests than under monopoly ownership. While, unlike Scandinavia, Russia doesn't have a history of peasant forest ownership, it would be natural to start the privatization of forests in Russia with rural forests. At present, the development of forest industry in Russia should be based on the fact that forests are in state ownership for the time being.

Forest Industry as a Commercial Activity

In market economies, silviculture is considered a commercial activity insofar as revenues from forests cover the costs of silviculture and forest management. In the Soviet Union, forestry was considered a material production industry responsible for forest inventories, silviculture, fire protection, pest and illness protection, regulation of utilization of forests, and control of the utilization of forests. According to the Forest Code of 2002, forestry encompasses the activities of utilization management, protection, guard, reproduction of forests, utilization and guard of Forest Fund lands. The Forest Code of 1997 states that forest owner bears the burden of guard, protection, reproduction and rational utilization costs of belonging objects of forest relationship and has the right to receive revenues from utilization of forest fund and forests which are not part of forest fund. Nevertheless, so far I haven't seen anywhere in Russia that forestry is determined as commercial activity in the new market economy environment. The draft national forest policy for example is putting as its goal the full self-financing and gradual increase of forest revenues. This suggests that forestry should act in lines with commercial operations.

Relationship Between Forestry and the Forest Industry

In Finland, economic development led to close cooperation between forestry and the forest industry, with an understanding that industry is central to the sector and that industry is forestry's lumber customer. Forests owned by mills are treated as separate departments which also sell lumber to the industry. In Finland, harvesting lumber generates 90% of total forestry revenues. In privately owned forests, wood-processing companies and mills are harvesting too, but the activities are based on the deals with the forest owner and related agreements. Thus harvesting decisions are made by the forest owner.

In the Soviet Union, forestry was subordinate to the forest industry, and the situation remains the same in Russia today. The harvesting industry is considered as one of the sectors of forest industry, and the industry received and still receives to a certain extent the right to utilize forest in exchange for modest forests fees or lease. The relationship between forestry and the forest industry has to be clarified, and it would be logical to accept forestry as a commercial activity which comprises the whole chain from forest reproduction through major cutting. It doesn't exclude that cutting is conducted by the forest industry on the grounds of the land lease or sale agreement.

Silviculture Tasks

In Russia, the silviculture tasks of maintaining forest coverage and valuable species of trees have been viewed as important, while improvement and development of forest stands has not been viewed as being of the same level of importance. Many resources have been devoted to the important tasks of protecting forests from fire and other damage. In the new understanding of tasks, forest reproduction and other major forest maintenance have to be viewed as commercial cost of forestry, and forest protection tasks viewed as public forestry functions.

The major actors in the forest sector among which tasks should be divided are: general managers of forests, commercial forestry organizations, and forest industry.

The general forest management is part of general state governance conducted separately and independently from commercial activities. The higher the quality of forestry, the easier it is to manage the regional forest departments. The specialized organizations for forest protection could act as part of general forest management. Most of Russia's forests resources are located where the commercial forestry activity is impossible, for example, near tundra forests. They could be departments of public forestry subordinate to general forest management. In these forests, lumber could be sold for local use, but this is not a commercial activity of forestry.

Commercial forestry organizations could act in those regions where ecology and lumber demand allow commercial forestry. Commercial activities in forestry can be conducted by the owner (state) or by an organization to which the owner delegated the necessary rights. Possible actors are:

Leaseholder or concessionaire whose status has to be altered from forest user to forest operator. The lease agreements have to be long enough and the leaseholder has to feel the same sense of responsibility for the leased land as the owner.

Commercial departments of the owner could act in those forests which are not leased but in which there are grounds for commercial activity. They can conduct all forestry works and sell lumber as well as short-term rights for forest utilization.

The forest industry could lease forests directly or through companies. The forest industry can also buy lumber and short-term right for forest utilization from commercial departments of the owner and from other leasing companies.

Scandinavian experience proves that efficiency and productivity of forestry as commercial activity can be improved by subcontracting the cutting and other works mainly to companies specialized on these tasks. Russia has to develop the market for subcontractors, especially for harvesting.

Conclusion

Though the conditions vary greatly, it is useful for Russia to take into account the experience of activities in state-owned forests of small Baltic and Scandinavian neighbors. State-owned forests give the society many material and non-material benefits and services. In a market economy environment, it is vital to determine what

functions are commercial functions, and what functions are public ones. The forestry conducted as commercial activity is a special commercial activity wherein management requires more detailed instructions than other industries to achieve public and ecological goals. The separation of management and commercial activities in forestry is a clear issue which in practice must be very flexible with regard to regional specifics. In Russia, modernization of leskhoz must be based on practical experience received in pilot projects.

CHAPTER 8: THE SWEDISH CASE

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For more than 100 years, Sweden has been highly dependent on income from its forest sector. In 2001, forest product exports contributed US\$10 billion to Sweden's national income, three times more than any other product.

There are many actors involved in the forest sector – the government, private forest owners, industry, contractors, NGO's, and more. To assure the sector functions well, there are three major requirements that must be fulfilled:

- **Rules and regulations:** all stakeholders have to know the rules and regulations of the game;
- **Transparency:** everybody must be able to see the wood chain from the standing tree to final product; and
- **Predictability:** planting trees or building a sawmill are both long-term investments and the outcome of these investments should be predictable.

When investments in the forest industry started to grow in Sweden, we realized that the relationship between wood producers and consumers was somewhat unbalanced. Following the wood chain backwards, the industry made quite a lot of money and the middlemen operating on the timber market also did well, but the forest owner supplying the raw material received little revenues. In the long run, such circumstances are unviable since the producer and consumer are dependent on one another given that the producer (forest owner) must invest in regeneration and silvicultural operations to secure the future flow of raw material.

Russia is facing a similar situation insofar as the relationship between the producer and consumer must be brought into balance. Perhaps Sweden's experience can provide insights on how to achieve a more balanced relationship. In Sweden, two independent bodies, Timber Measurement Associations and the Forest Administration, were established, both having a board of governors, with representatives for sellers, buyers and public interest groups.

All timber harvested in Sweden is measured in quantity and quality by a Timber Measurement Association. This guarantees that no one will be cheated, including the government and its tax interests, and serves as a means to track timber flow. The main task for the Forest Administration is to secure the implementation of the forest code and forest policy set by parliament. It also provides extension services to encourage ongoing improvement of forest management. Neither of these organizations is involved in timber price setting. Prices are set through direct negotiations between

sellers and buyers. Through this arrangement for forest management, Sweden achieved the three fundamentals: rules and regulations, transparency and predictability.

CHAPTER 9: MANAGING CHANGE: THE AUSTRIAN FEDERAL FORESTS EXAMPLE

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The prevailing European forest sector is changing with increasing speed. The most important change drivers are changes in the business environment, such as globalization of markets, changes in the customer structure, drastic changes in the national economies or privatization, and second changes in the attitude of owners who are increasingly aware of improving efficiency, increasingly focused on the potential of unused forest resources as a basis for a national timber/pulp/paper industry, and increasingly concerned about social, cultural and environmental benefits of forest ecosystems.

These change drivers have resulted in numerous change and transformation programs in the forest sector of European nations, especially within the last ten years. However, change does not always come easy, and most attempts at change do not meet their ambiguous goals. Historically, only 50% of all change attempts (Alexander 1985) and only 30% of all reengineering and transformation projects were considered successful. The most important obstacles to change are due to internal rather than external factors: 76% of all Change programs took more time and resources than originally allocated; 66% had problems with ineffective co-ordination of implementing activities; and 63% reported that the capabilities of employees involved in the implementation were not sufficient.

The Experience of the Austrian Federal Forests

The Austrian Federal Forests (ÖBF AG), a 100% state-owned joint-stock company, was detached from the national budget and transformed from a ministerial unit into a joint stock company in 1997. This step was accompanied by a fundamental transformation program focusing on the strategy, structure and corporate culture of the organization. Through a “change journey” over the last five years, performance and productivity was strengthened substantially. The company started from a negative estimated budget of €-2.3 million in 1996 and developed a positive estimated budget of €24.5 million in 1999. Since the detachment from the national budget, payments totaling more than €100 million have been contributed to the national budget as usufruct payments and dividends. Tax payments were substantial. In addition, non-economic targets were followed consequently. Four national parks have been established in Austria within the last few years and ÖBF AG has played an active and leading role in their establishment. Nature protection and conservation has developed into a key area of competence and the company is actively investing in silviculture, the enhancement of biodiversity, and its natural heritage.

Strategic Change Management

One key difference from organizations which considered themselves as successfully changed and those which did not, was a strategic change management approach. Change management is a systematic approach to dealing with change from the very beginning of a change program and during all planning modules as well as implementation stages. Change management is uniting the perspective of the organization with the perspective of the individual employee. A key element of change management is the people factor of an organization and often big changes are not foreseen nor welcomed. A good strategy and structure is not enough for success, people must align with the new direction, bring life into the new structures and commit to strive for new goals. Change management is an integral approach to increase the speed of implementation of a change project and to decrease the costs.

Five Prerequisites for Change

Research on numerous change cases world-wide (Stickland 1998) indicates that there are at least five prerequisites for a promising start to a change journey. Neglecting even one often results in unforeseeable obstacles in a later stage of the change program.

1. Pressure for change: On the outset of a fundamental change program it has to be explained why a change process is necessary and what negative effects are foreseen if nothing is done. This is essential first for those who are supporters of the process and second for the people of the organization.

2. Owner's commitment/political commitment: political commitment has to be assured on a very official and high level, and the basic political opinion forming process has to be finished prior to the start of a change program. But political commitment needs to be reassured from planning modules through implementation. In most change cases, a so called "valley of despair" occurs. In general, at the outset of a change journey, public opinion is high, but during the later planning stages and especially during the first stage of implementation it becomes clear some of these expectations cannot be fulfilled. In addition, "negative" effects, such as changed structures, changed responsibilities and losers in the change process become visible and there is a risk of failure. It is exactly during this valley of despair when political commitment is needed most. After the first tangible results and successes become visible, the situation improves and the valley of despair is left behind.

3. A clear and shared vision: It is not enough to define the problem, it is essential – for all stakeholders – to see the desirable picture of the future. A successful change journey is changing people and they have to see that the pain of change is worth the gain.

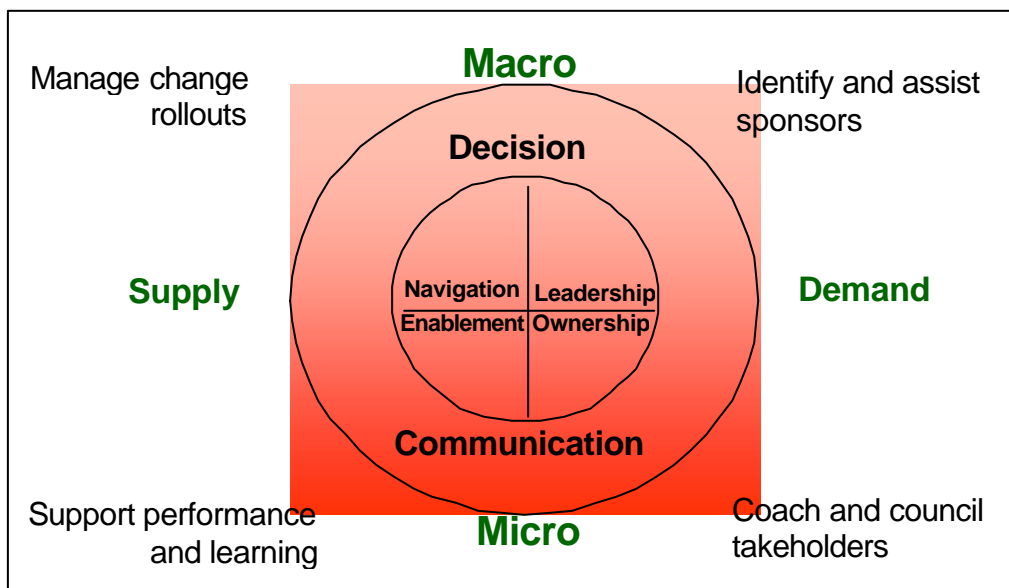
4. Capacity for change: Capacity for change means not only financial resources but also human resources. There are questions such as: what talent and know-how do I need for the change process; who has the potential to act as change agents; and what do I need from external resources.

5. Actionable first steps: Before the start of the implementation it is necessary to know projects which most likely will be success stories. This gives needed evidence that the new direction can work, and this evidence is needed by all participants of the process from the political supporters to the individual employee.

Change Wheel

The “change wheel” is a tool for change management, based on the four key elements of a change process: navigation, enablement, leadership and ownership. *Navigation* is concerned with all project and process management tasks of the planning and implementation modules. *Enablement* is focused on support of the people of the organization, human resource development, training programs and the issue of knowledge transfer and learning. *Leadership* is a central component to identify, assist and reassure internal as well as external sponsors. *Ownership* means commitment by the relevant stakeholders – foremost the owners representatives, the employees and the customers – and the process to counsel and coach them.

FIGURE1: CHANGE WHEEL



During the phases of a change journey — analysis, model development, implementation and operation — different focus has to be given to the four components of the change wheel to best support the change process and avoid the “valley of despair.”

Lessons in Change Management

Finally, there are some important lessons learned in terms of change management from numerous change journeys in forest organizations.

- the transformation process needs leadership, top level management commitment, and broad-based stakeholder participation;
- implementation of change should be carried out through an independent and influential change team/steering committee;
- structure follows strategy: careful planning should set the foundation, but determination and speed are necessary for success during implementation;
- “quick win” achievable sub-targets help to create and maintain momentum;
- people must be actively engaged to build ownership from the very beginning of the change journey;
- second and third level Management are key to success; and
- professional communication and information are essential for both internal and external audiences.

A strategic change management approach is a valuable investment into the future of your organization. It has the potential to decisively support the implementation of the change targets, to save time and resources at the bottom line and to steer the change process to a success.

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CHAPTER 10: FOREST TENURES AND CONCESSION EXPERIENCE IN CANADA AND SELECTED OTHER COUNTRIES

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Introduction

Forest concessions have been the predominant form of forest tenure and the primary mechanism for the allocation and utilization of forest on public lands in many developing countries and in a number of developed countries, particularly Canada. However, forest concessions have not been without considerable problems. This paper reviews forest concessions and other forms of forest tenure in Canada and other countries.

Forest Concessions Defined

Forest concessions are a form of forest tenure. Forest concessions involve a contract between the forest owner and another party giving rights to harvest specified resources from a given forest area (forest utilization contracts) and/or a contract to manage given resources within the specified forest area (forest management services contracts). Forest concessions in most countries involve both types of contracts; granting harvesting or use rights, but also requiring forest management and other obligations as part of the contract. In most cases forest concessions are long-term contracts of 10-50 years.

Forest tenures involving forest utilization contracts granting rights to harvest timber without forest management obligations are often termed forest leases or timber sales. They usually involve short term contracts of one to five years, occasionally longer. However, even these may require some forest management obligations - forest fire protection, or reforestation following logging.

Forest concession contracts can be between a government, as owner of public forest land, or a private forest land owner on the one side; and a private corporation, private individual, government agency or corporation, community, or co-operative on the other side.

The forest concessions and other forest tenures discussed here involve public forest lands. In most cases they involve contracts between the government, as owner of public forest lands, and private sector corporations or individuals. However, the

concession contracts or other forest tenures can sometimes be with state organizations, communities, or aboriginal groups.

Canadian Forest Tenures - The Legislative and Institutional Basis

Under the Canadian Constitution, the provinces own the natural resources within their area. Thus forests, forest legislation, forest tenures, and forest management are under provincial jurisdiction. The provinces therefore collect the forest revenues from stumpage fees, royalties, and other charges.

Over 90% of forest land is under provincial ownership, with only 1-2% under federal ownership. In most provinces private forest ownership is not significant – 1-2% in the western provinces and Newfoundland; and 10-11% in Québec and Ontario. Only in the three smaller maritime provinces of Nova Scotia, New Brunswick and Prince Edward island does private forest ownership rise above 50%. Municipal forest lands are a tiny percentage.

The federal government controls and manages natural resources on federal lands, the northern territories, and offshore, but with provincial and territorial input, or delegation. Aboriginal land claims currently under negotiation may change forest ownership and forest management jurisdiction, giving aboriginal groups ownership of forest lands and a greater role in forest management.

The legal framework for forest tenures and forest management involves a variety of instruments: forest acts in each of the ten provinces, provincial forest regulations, and an array of guidelines, standards and manuals. Thus among them there are ten different sets of forest acts, regulations, guidelines, etc. Forest management guidelines, policy manuals, and forest practices codes can be extensive. For example the British Columbia Ministry of Forests Policy Manual is two large thick volumes, the British Columbia Forest Practices Code and Guidebooks run to several metres of shelf space and provides an example of the regulatory approach. It is criticized by the forest industry as “over-regulation.” The industry claims the Forest Practices Code adds substantial costs to forest operations.

Provincial forest management is subject to other legislation: provincial land use planning (although most provinces lack a comprehensive land use planning system), provincial environmental legislation, federal environmental legislation, and the federal fisheries act and fisheries regulations.

Forest tenures in Canada involve a variety of tenures including short-term timber sales, longer-term area-based and volume-based forest concessions with varying degrees of forest management responsibilities. Given the diversity of forest tenures and the differences among the ten provinces in forest tenure conditions and forest management arrangements, Canada’s forest concession experience, the problems, conflicts and difficulties provide a rich experience and some useful lessons for other countries.

Canadian Forest Concession Experience - Overview

In Canada, long-term forest concessions involving both forest utilization contract rights to timber and forest management services obligations are of two types: long-term area-based concessions, and long-term volume-based concessions.

Long-term area-based concessions

Long-term area-based concessions grant forest harvesting rights over a given area in exchange for undertaking forest management obligations. They are a major instrument for allocation of forest cutting rights in nine out of the ten provinces and go under a variety of names, with slightly differing terms and conditions in each province. In most provinces, area-based concessions are granted for 20 or 25 years (in Nova Scotia it is an exceptionally long 50 years). Concession agreements in almost all provinces require a review every 5 to 10 years and, if approved, an extension for a further 5 to 10 years.

Under these area-based concessions, the concessionaire is responsible for forest management planning, reforestation, silvicultural operations, fire protection, road construction and maintenance, either funded by the concessionaire directly or from a forest renewal fund paid for by an additional stumpage charge.

Long-term volume-based concessions

Long-term volume-based concessions grant harvesting rights to a given volume of timber or a proportion of the annual allowable cut. In a number of provinces they are called Timber Quotas. Some provinces have more than one volume-based concession. For example, British Columbia has Forest Licences of 20 years duration and Pulpwood Agreements of 25 years duration. Most volume-based concessions are renewable or replaceable. Volume based concessions differ from area-based concessions in the degree of forest management obligations required.

Problems in Canadian Concessions

Although forest concessions procedures in Canada have functioned better than in most countries, there are problems and weaknesses in the process, opportunities for improvements, and lessons for other countries.

The first problem is that forest concessions in Canada have been allocated by negotiation rather than being auctioned. Decisions on the allocation of forest concessions are made behind closed doors, with little transparency and with the potential that political influence and persuasion, bribery or corruption could affect the decision. Forest fees may not fully reflect the value of the forest involved. If concessions are allocated by competitive bidding the process would be freer of influence and interference, the potential for bribery and corruption is reduced, the value of the concessions would be reflected in the bids, and forest revenues would be increased.

A second problem is that in Canada forest concessions are tied to a wood processing plant. This has discouraged the development of log markets which would more efficiently direct the species and logs to their most valuable and appropriate use.

This leads to a third problem. Because concessions have been tied to an individual wood processing operation in many cases they have not been able to utilize all additional species, volume-based concessions have been allocated for underutilized species which overlap the existing area-based concessions. In British Columbia volume-based Pulpwood Agreements have been established overlapping both area-based concessions and other volume-based Forest Licences. This has created confusion about who is responsible for forest management and reforestation obligations, and conflict among concessionaires. Similar types of volume-based agreements have been established in Manitoba for hardwood species to support a medium density fibreboard plant overlapping existing volume-based and area-based concessions.

Finally, in some provinces concessionaires are responsible for reforestation but are reimbursed for the cost from a reforestation fund. Under this arrangement the concessionaire has no incentive to reforest efficiently or to keep costs down. In other provinces the concessionaire are fully responsible for reforestation and the cost of reforestation. This provides an incentive for efficiency in reforestation and cost control. For example, under Alberta's volume-based Timber Quota tenure concessionaires are required to undertake reforestation or pay a reforestation fee to cover the cost of Forest Service replanting. Most choose to reforest themselves.

U. S. Forest Concession Experience

Forest ownership in the United States includes: (i) private forest lands across the country, primarily in the East; (ii) federal forest lands, mostly in the West, under the jurisdiction of several federal agencies (primarily National Forests under jurisdiction of the US Forest Service, Bureau of Land Management (BLM) lands under the jurisdiction of the BLM; and (iii) State forest lands under the jurisdiction of the individual states.

In some western states National Forests, BLM forest lands, and other federal lands under federal jurisdiction cover three-quarters or more of the state. The federal agencies are responsible for managing these federal lands, generating conflicts with state legislatures and state governors, who see themselves with little control over the use of these federal lands while receiving little or no revenue from federal lands.

National Forests, BLM forest lands and state forests are managed by the respective federal and state agencies. Short-term timber sales are the dominant forest tenure on federal forest lands, and almost the only form of forest tenure in state forests.

Long-term forest concessions are an anomaly in the United States. Two 50-year Long-term timber sales were granted in Alaska in the 1950's to support two pulp mills. One of the Long-term timber sales was revoked in 1994, the status of the other is uncertain. A few long-term forest concessions termed "Federal Sustained Yield Units" were established in the states of Washington and Oregon in the late 1940's and early

1950's, but are no longer in operation. Thus long-term forest concessions in the United States are now of little importance.

Alternative Forest Tenures: Experience from Selected Countries

This section reviews alternative forest tenures drawing on the forest concession experience of Canada, the United States and other countries. It identifies and reviews nine main types of forest tenures, from short-term timber sales with government management of the forest, through privatization of forests and forest lands, to state forest enterprises and joint-ventures. Some forest tenures are more appropriate for countries with well developed forest access and transportation networks, or for countries with a well developed, well equipped, technically trained, and capable forest service, with good field capability.

Short-Term Timber Sales—Short-Term Tenure for Standing Timber

Timber sales of standing timber provide the buyer with tenure rights to the trees only, not to the forest land or to the future timber crop. Tenure rights are for a specific volume of timber, for trees of certain species or diameters, or perhaps for marked trees only. The rights to the timber are only for a limited time, the length of the timber sale. Timber sales can be one, two, three or five years, occasionally longer. Timber sales do not include rights to future crops of timber, or to any guarantee of future timber supply.

Under short-term timber sales the forest agency retains responsibility for management of the public forest, for surveying boundaries, inventorying, and selling blocks of timber. The forest agency is also responsible for supervising logging, and for regeneration afterwards.

Short-term timber sales are commonly sold in competitive auctions, by open auction, oral bidding, or sealed tender. To achieve bid prices that reflect the value of the timber, it is important that the forest service set appropriate “upset prices” (starting prices for the bidding), and encourage adequate competition among bidders (Klein 1998; Elyakime and others 1997). Timber sales may sometimes be allocated administratively at fixed, volume-based stumpage prices. However, this usually generates less revenue and the timber is used less efficiently.

As mentioned above, short-term timber sales are well developed and widely used in the United States by the U.S. Forest Service on National Forests, by the U.S. Bureau of Land Management on BLM forest lands, and by a number of the states on state forest lands. The U.S. Forest Service, Bureau of Land Management, and state forest services have the staff, funding, and field capability to manage public forests and supervise logging operations. And there is usually sufficient competition to ensure bidding and reasonable stumpage price bids.

Short-term timber sales are also used in several Canadian provinces – British Columbia, Alberta, Manitoba, and Ontario, for example. Forest tenures and forest

management arrangements differ among the ten provinces and two territories (Haley and Luckert 1990). As well, a number of the provinces have several different types of forest tenures. British Columbia, for example, has ten different types of forest tenures, representing many of the alternative tenures discussed here, including a couple of forms of long-term forest concessions.

Malaysia, among developing countries, has made successful use of short-term timber sales. In Peninsular Malaysian states, timber is now commonly sold under competitive timber sales contracts achieving a five-to-six-times increase in stumpage revenue. Peninsular Malaysia has a good transportation network and a well developed, well staffed, well trained, field capable forest service. The forest industry of Peninsular Malaysia consists of a number of independent logging companies, and a separate processing industry without a captive timber supply. As a result, competition for logs and timber is well developed (Vincent and Ali 1997).

In Latin America, Honduras provides another example of timber sales. A system of timber sales has been developed for the pine forests managed by the State Forest Development Corporation (COHDEFOR) and introduced in 1995 (Gray and Hägerby 1997; Ryburn 1997). Timber sales contracts are of two years duration. The forest road network in Honduras is well developed, better than in many developing countries; the forest administration, COHDEFOR, is staffed and field capable.

Limited use has also been made of timber sales in West Africa and South East Asia, but mostly for plantation timber. In Gabon, per-tree timber sales contracts were provided for in the legislation, but the system could not be implemented because the forestry department was not able to mark the trees, or control the cutting (Grut, Gray and Egli 1991).

Long-Term Timber Sales – Long-Term Tenure for Standing Timber

Long-term timber sales are similar to the short-term timber sales described above but extend for longer terms, of 10 to 20 years. They often require the timber sale holder to undertake some forest management activities such as forest planning, road construction, forest management, and reforestation, but otherwise are similar to short-term timber sales. A few examples are found in the United States and in a number of Canadian provinces. If harvesting planning, silviculture and reforestation are carried out by the government forest agency, then a well-developed government forest service is required.

Sale of Felled Timber at Roadside or at Central Log Yards

Instead of selling the standing timber, the government forestry organization may decide to undertake the logging itself and sell the public timber as logs, at roadside or at a central log yard. When the forestry organization sells felled timber from public forest lands, either at the roadside or at central log yards, the organization is responsible not only for managing the forest and allocating areas for logging, but also for the logging operation. Logging operations may be carried out by the forestry agency itself, or by contractors hired by and supervised by the forest agency. If forest agencies sell public timber at a central log yard, they are responsible for transportation

of the logs to the central log yard, usually using contract truckers. Timber sold at roadside or at central log yards is usually sold in lots, at set prices, by oral bidding, or by sealed tender auction. The sale of felled timber at roadside or central log yards is used in several European countries and, to a limited extent, in a few developing countries.

Organizing and supervising logging operations, as well as forest management, requires a very well developed, field capable, and well financed forestry organization. Sale of logs at roadside or at a central log yard also requires a developed forest industry composed of a number of processing plants if competitive bidding for logs is to be achieved and competitive log prices realized.

Long Term, Area Based Forest Concessions

Long-term, area-based forest concessions are the major forest tenure system in Canada. They provide rights to the annual allowable cut of the geographically defined forest area (Ross 1995). Tenure rights are for a specified length of time, commonly 20 to 25 years. The licensee has rights to the volume of timber equal to the annual allowable cut at specified forest fees. The standing timber remains the property of the government, as owner, until approval of the annual cutting plan and logging begins. In exchange for the security of timber supply, the licensee agrees to undertake forest management and forest renewal activities, either with or without compensation for the costs incurred.

In Canada, long-term area-based forest concessions in various forms and under differing names are the major form of forest tenure in nine out of the ten provinces (Ross 1995). In British Columbia they are Tree Farm Licenses, in Alberta Forest Management Agreements, in Saskatchewan Forest Management Licenses Agreements, in Manitoba Forest Management Licenses, in Ontario Sustainable Forest Licenses, in Québec Contrat d'Approvisionnement et d'Aménagement Forestier (CAAF), in New Brunswick and Newfoundland Crown Timber Licenses, and in Nova Scotia License and Management Agreements (Ross 1995). The basic form of the agreement is similar in all nine provinces, but with significant differences in specific aspects among the provinces.

These long-term, area-based forest tenures have the following major characteristics in common:

1. They all involve a negotiated agreement between provincial governments and a large forest company;
2. In most cases, agreements are negotiated privately by the minister, at the minister's discretion, and approved by cabinet. In a few cases, potential areas have been advertised and offers invited but competitive auctions have not been used;
3. Almost always the agreement is linked to the construction and operation or supply of a major wood processing plant (a pulp or paper mill, large sawmill, plywood or board plant);
4. Most agreements contain renewal provisions, under which they are reviewed at 5 to 10 year intervals and extended by another full term;

5. Tenure holders are granted exclusive rights to harvest timber on the area, within the limits of the sustained yield, and subject to the restrictions agreed on, at stumpage prices established by the agreement, or at stumpage prices levied on other tenures;
6. Tenure holders are given extensive responsibilities for reforestation and management of the lands for timber production on a sustained yield basis. In some provinces and some cases tenure holders are reimbursed for reforestation and forest management costs, in other provinces and other cases they are fully responsible for these costs (Ross 1995).

In almost all provinces, the licensee is subject to a performance review and the license is renewable periodically, at five-year intervals in most provinces, ten-year intervals in others. Review and renewal provides a continuing incentive for performance of the required forest management activities. The licensee, who values the security of timber supply, is willing to undertake forest management and regeneration in order to preserve this security of supply. With satisfactory forest management performance, tenure becomes continuing tenure, almost perpetual. However, in almost all provinces there are provisions to allow withdrawal by the government of up to 5 or 10 percent of the area at the review, for specific alternative land uses, such as parks or reserves.

Forest management and reforestation expenditures are handled differently among the nine provinces. In some provinces, companies are reimbursed, in others they are required to pay for reforestation and forest management. Other features of the forest management license arrangements vary among the nine provinces and provide a rich experience and an opportunity for comparison and evaluation.

The Canadian experience with long-term area-based forest concessions is far from perfect. The granting of licenses has been by negotiation without an open and competitive process. They have been criticized for encouraging deforestation and over cutting, for not incorporating non-timber uses and environmental values into forest management planning or operations, for ignoring indigenous peoples' use of the forest, among other things (WRI 2000). Nevertheless the Canadian experience with forest management licenses spanning 40 to 50 years can provide useful lessons for developing countries. The successes, the failures, and the imperfections can provide lessons in designing forest concessions and strengthening existing forest concession arrangements.

Volume-Based Forest Concessions — Timber Quotas Guaranteeing Future Timber Supply

With volume-based tenures, concessionaires do not have forest tenure rights to any specific area of forest. Instead, volume-based tenures provide a timber quota giving the right to cut to a specified annual volume of timber from larger managed forest, or to a specified proportion of the annual allowable cut of the managed forest. The volume-based timber quota can be in terms of a total volume, for certain species (coniferous, deciduous, etc.), or for specified types or qualities of timber (sawtimber, pulpwood, etc.). Often volume-based timber quotas overlap other forest tenures, sometimes adding complexity and confusion to forest management.

Only a few countries have had experiences with volume-based forest tenures. Canada provides a number of examples of volume-based tenures. Eight of the ten provinces have experience with volume-based tenures extending over several decades. Volume-based forest tenures include British Columbia's Pulpwood Agreement and Forest License, Alberta's Timber Quota Certificate, Saskatchewan's Term Cutting Agreement, Manitoba's Timber Sale Quota, Ontario's Forest Resource License, New Brunswick's Crown Timber Sub-License and Crown Timber Permit, Nova Scotia's Forest Utilization License, and Newfoundland's Timber Sale Agreement (Ross 1995).

The names differ and the specific rights, terms, and conditions vary considerably, but they all involve a volume-based guarantee of timber supply. Tenure lengths vary among provinces, between 5 and 20 years (25 years for British Columbia's Pulpwood Agreements). In most provinces the quotas are for 10 to 20 years. Most of the volume-based agreements are renewable or replaceable, but often with less certainty than for the area-based tenures. For some of these volume-based tenures, the volume is reduced if the timber quota has not been fully used. Provincial governments retain considerable discretion to modify the terms and conditions at renewal.

Most volume-based agreements are granted within managed public forests on which allowable cuts have been established. However, some volume-based tenures have granted overlapping rights within area-based tenures or other forest tenures. British Columbia's Pulpwood Agreements cover smaller, pulpwood size timber within tree farm licenses or provincial managed public forests (timber supply areas). In New Brunswick, Crown Timber Sub-Licenses are granted within area-based Crown Timber Licenses. In Alberta, Saskatchewan, and Manitoba, when area-based tenures were granted, volume-based quotas were granted to companies that had traditionally logged within the area (Ross 1995).

Obligations for forest management, planning and for reforestation on volume-based tenures vary widely among provinces. In most provinces the forest is managed by the forestry department rather than by the tenure holders. In a few provinces and for some volume-based tenures, timber quota holders are required to undertake forest management planning. Reforestation responsibilities also vary. In most provinces reforestation is done by the provincial forest service. In other provinces and on some volume-based tenures timber quota holders are required to reforest. In other cases, timber quota holders pay reforestation fees on the timber cut (Ross 1995).

Government Forest Enterprises

Government forest enterprises – state owned enterprises that undertake forest business operations – represent another form of forest tenure to public forests. Government forest enterprises may be involved in logging operations, or in both logging and wood processing, and in forest management.

State enterprises have been widely criticized as being unprofitable, inefficient, and wasteful. Commonly government enterprises have suffered from overstaffing, lack of a clear mandate and mission, shortage of capital for reinvestment with no authority or ability to raise the capital themselves, and political interference in operational policies, all of which have prevented them from achieving efficiency and profitability. In the

present era of privatization and tight government budgets, state forest enterprises may not be politically popular. Governments may be more interested in selling public enterprises and assets, than in investing in improving efficiency and profitability of state enterprises.

Where state enterprises have been given a clear, direct mandate, independence from government interference in operations, the ability to raise capital and retain and reinvest profits, and authority to control staffing levels, and can operate independently under strong management, then government enterprises have demonstrated an ability to function efficiently, generate profits and modernize. If state forest enterprises have a clear mandate and independence and are properly capitalized, they may be in a position to manage public forests efficiently and on a long run sustainable basis. State forest enterprises may be able to take a longer-term view than private sector companies, and operate with a lower interest rate in evaluating investments.

However, state forest enterprises need to be given the right performance incentives if they are to manage forests sustainably. State forest enterprises should still pay stumpage and other forest fees for the timber and meet environmental standards. If they pay no fees, they will treat the timber as a free good and use it inefficiently and wastefully.

Privatization of the Forest but not the Land

Privatization of the forest excluding the land involves the sale of the existing forest crop and future crops for a specified time period, one or more additional rotations, or perhaps forever. This policy was adopted in New Zealand for the sale of that country's exotic plantation forests – primarily radiata pine, *Pinus radiata* (Hall 1995). The plantations were sold in lots, by sealed tenders, and under international bidding. The sale was for the existing crop of trees, plus the land use rights to grow a second forest crop on a 35-year rotation schedule. Had it not been for the legal challenge of Maori land claims, the New Zealand government might have sold the land as well. Bids were for an initial payment with no further fees on timber harvested. In spite of high expectations, the initial auction was not successful. In the first round auction, held in July 1990, most sealed bids were rejected as too low. Only two bids, covering 15 percent of the forest area advertised, were accepted by the government. The government then moved to sell the remainder by negotiation.

Privatization of forests can be appropriate for fast-growing plantation forests, but not for slow-growing boreal or tropical natural forests that generate additional non-timber benefits. Plantation forests involve large initial capital investments. Security of tenure is required to allow recovery of the investment. Plantations produce primarily market outputs of wood or other products. Non-timber outputs and non-market environmental values are usually of much less importance than in natural tropical forests. For plantation forests these non-timber and non-market values can often be protected by contract clauses, easements, or by separate land use legislation.

Privatization of Public Forests and Forest Lands

Because the performance of forest concessions has been disappointing in many countries (Grut, Gray and Egli 1991), and with the current fashion for privatization, some countries have seen privatization of public forests and forest lands as an alternative to forest concessions. The last decade has seen increased private sector participation in the forestry sector, in forest ownership, forest utilization, and forest management (Landell-Mills and Ford 1999).

Privatization of forests and forest lands was undertaken by the British Forestry Commission in selling a portion of the Commission's forest plantations from 1981 until 1997 when a temporary moratorium on privatization was introduced (Landell-Mills and Ford 1999). It was also the approach taken in Chile in the sale of the country's forest plantations, and more recently in the sale of Chile's natural forests.

However, privatization of slow growing boreal and tropical natural forests is likely to be a serious and irreversible mistake (Gray 1997a). First, the rate of growth in both boreal and tropical natural forests is too slow to make sustainable management attractive to private sector investors. Private sector investors are more likely to practise liquidation forestry, mining the forest for its timber, and reinvesting the proceeds elsewhere, where they can earn a higher return (Walker and Smith 1993). Private management of forests will only be financially profitable if the growth rate in value of the forest biomass (the growth rate in volume of the stand multiplied by the price per cubic meter) is greater than the rate of return the private sector can earn elsewhere (Gray 1994). If the growth rate in value is less than the rate of return the private investor can earn elsewhere, the private investor's financial choice will be to liquidate the forest, taking all merchantable trees and abandoning the residual stand to nature. Growth rates of physical biomass of 1 to 3 percent per year, combined with the growth in real value per cubic meter of 1 to 2 percent per year (relative to other prices and inflation as a result of increasing scarcity of timber), would yield a combined growth in value estimates of from 2 to 5 percent per year. This is well below the rates of return on alternative investments for private sector firms in most countries.

Secondly, both boreal and tropical natural forests provide a wide range of non-marketed forest products, collective benefits, and beneficial externalities: non-timber forest products, watershed benefits, erosion control, ecotourism and recreation benefits, biodiversity benefits, and so forth. These important non-marketed outputs and values provide benefits to individuals, communities, and the country, but generate little or no monetary return to private owners.

Joint Ventures and Partnerships with Private Sector Corporations

Joint ventures or partnerships between the government or a state enterprise and private sector corporations for the management and operation of public forests represent a final tenure alternative for public forests. Joint ventures have been used to attract the capital, corporate management skills, forest management expertise, and product marketing connections for the development of public forests. A number of developing and developed countries have experience with joint ventures in the forest sector. There are examples of government joint venture companies in other natural

resource sectors; in mining, petroleum and fisheries. Under the joint venture arrangements, governments often contribute the forest resources, the private sector partner the capital, management, and marketing. The government hopes to capture a proportion of the value of the timber (the economic rent) as its share of the profits of the joint venture.

There are advantages in joint venture arrangements, but also important cautions and some significant dangers. The advantages are the opportunity to harness the strengths of each partner – the finance, business management, forest management, and marketing skills of the private sector company, with the public forest resource assets of the government. But there are significant dangers in joint venture arrangements. The government must also have the necessary financial and business management expertise and forestry management expertise to be an equal partner, to oversee and evaluate the operations of the joint venture.

Transfer pricing presents an important concern for government participating in joint ventures. Through transfer pricing, the private sector partner can sell the joint venture machinery and equipment, materials and other inputs, or various types of management or marketing services at prices above market prices, thereby transferring profits to the private partner's subsidiary company providing the goods or services. Similarly, by selling the logs or processed products to another company or to a marketing subsidiary at prices below international market prices, the private sector partner can transfer profit to the other company, and perhaps out of the country. Inappropriate transfer pricing and other problems are hard to detect without expert business knowledge of the company and industry.

Joint venture forest enterprises should still pay forest fees that reflect timber values. The government should not depend on its share of the joint venture profits to capture the value of the timber harvested. The government receives only a proportion of joint venture profits, so it will receive at most only a percentage of the value of the timber in profits. In addition, if joint ventures pay no forest fees, or pay low fees, they will treat the timber as a free good or low valued input and use it inefficiently and wastefully.

Note: The paper is drawn in part from a World Bank study, from papers presented at workshops in Bélem, Brazil, Georgetown, Guyana, and Rio de Janeiro, Brazil; and from my involvement in projects in Central America, South America, West Africa, and South East Asia. The World Bank study:- John A. Gray (2002) *Forest Concession Policies and Revenue Systems: Country Experience and Policy Changes for Sustainable Tropical Forestry*. (World Bank Technical Paper No. 522). Washington: World Bank. (ISBN: 0-8213-5170-2) can be downloaded from the World Bank web site as a pdf file at:

[http://lnweb18.worldbank.org/ESSD/essdext.nsf/14DocByUnid/812B80EC470DE9ED85256C0F00762BB4/\\$FILE/forest.pdf](http://lnweb18.worldbank.org/ESSD/essdext.nsf/14DocByUnid/812B80EC470DE9ED85256C0F00762BB4/$FILE/forest.pdf)

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CHAPTER 11: IMPLEMENTING FOREST CONCESSIONS POLICIES AND REVENUE SYSTEMS: EXPERIENCE AND LESSONS FROM COUNTRIES AROUND THE WORLD

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Introduction

Forest concessions have played an important role in allocating harvesting rights and in managing public forest lands in many countries, particularly in tropical countries, but also in temperate countries, most notably Canada.

This paper reviews experience with forest concessions in a number of forest rich countries around the world, both tropical and temperate, and addresses the following questions:

Is there a role for forest concessions in the utilization and management of public forests?

What is the legal, regulatory, institutional, and operational framework for forest concession management?

What can Russia and other countries learn from the extensive experience with forest concession in countries around the World, and from the failures and few successes?

How can forest concession procedures be strengthened to achieve the sustainable forest management and environmental management of public forests?

In spite of the differences among the countries in forest types, levels of development, and institutions, the major issues are often similar. Much can be learned from their shared concession experience. Based on these experiences, the issues and problems identified; steps and procedures are proposed for strengthening concession policies. These include: (i) changes in concession terms and conditions; (ii) changes in the way in which forest concessions are allocated; (iii) introduction of competitive allocation; (iv) changes in the forest management requirements; (v) introduction of performance incentives; and (vi) arrangements for monitoring and enforcement of the performance conditions. The proposals incorporate a number of performance incentives, both economic and procedural, to encourage compliance and performance, reduce the incentives for graft, corruption and illegal activities, and increase transparency. However, for the proposals to be successful in improving forest concession

operations and management it is necessary that the government be committed to dealing with graft and corruption, and to increasing transparency of concession allocation, operation, supervision and monitoring. Without this commitment, improvements will fail.

Forest Concessions Defined

A forest concession is a form of forest tenure. It involves a contract between the forest owner and another party giving rights to harvest specified resources from a given forest area (forest utilization contracts) and/or a contract to manage given resources within the specified forest area (forest management services contracts). Forest concessions in many countries involve both types of contracts; granting harvesting or use rights, but also requiring forest management and other obligations as part of the contract. In most cases, forest concessions are long-term contracts - 10 to 50 years. Forest tenures involving forest utilization contracts granting rights to harvest timber with no forest management obligations are called forest leases or timber sales in many countries. They usually involve short term contracts of 1 to 5 years, occasionally longer. However, even these may require some forest management obligations - forest fire protection, or reforestation following logging.

Forest Concessions around the World

West and Central Africa

Forest concessions of various types are the dominant form of forest tenure in almost all forest countries of West and Central Africa: Liberia, Côte d'Ivoire, Ghana, Cameroon, Gabon Congo, the Democratic Republic of the Congo, and the Central African Republic (Grut, Gray and Egli 1991). In Gabon, for example, logging concessions covered 56% of the forest area of the country (WRI 2000a). In Cameroon logging concessions covered 76% of the forest area, with over half of the area in abandoned concessions (WRI 2000b).

Southeast Asia

Forest concessions are the dominant forest tenure in Cambodia, Indonesia, Malaysia (Peninsular Malaysia, Sabah and Sarawak), and Papua New Guinea. Cambodia has 24 concessions, covering about 44% of Cambodia's forest. Concessions cancelled for non-performance covered an additional 20 % of Cambodia's forest. In Indonesia the 427 forest concessions active in 1998 covered 52.3 million ha and produced 53% of the total official harvest (World Bank 2000a).

Latin America

Forest concessions are the dominant forest tenure in Bolivia, Guyana, Nicaragua, Suriname, and Venezuela. Peru has developed forest concession procedures for a planned auction of 20 concessions in the Biabo Forest in the Amazon (Toledo 2000).

Brazil is moving to adopt a forest concession system drawing on the experience of other countries. Brazil auctioned a first concession in the Tapajós region of the Amazon.

North America

Canada has a variety of types of forest concessions and other forest tenures: area-based and volume-based concessions, tree farm licences and other licences, short and long-term timber sales. These forest tenures differ among 10 provinces and two territories; each of which has its own forest legislation and administration, providing a diverse portfolio of forest management experiences. These tenures cover 77% of the commercial forest area and account for 83% of the annual allowable cut (Haley and Luckert 1990; Ross 1995; and WRI 2000c).

Europe

Although public forest lands are managed under a variety of tenure arrangements, forest concessions are not common. Russia established the policy basis for forest concessions in its 1997 Forest Code (World Bank 1997). Concession legislation has been drafted for implementation, but operational procedures and the organizational structures to manage forest concessions will need to be developed to implement concession policies.

Key Issues from Experience around the World

A survey of forest concession experiences of tropical and temperate forest countries around the World reveals a surprising similarity of issues and problems, and provides opportunities to identify solutions to strengthen concession procedures. This is in spite of vast differences in forests and forest conditions. For example, Canadian concession experience provides ideas for improving forest concessions in tropical countries, and tropical country experiences provide insights for strengthening Canadian concession procedures. Canadian boreal forests may be very different from the multi-species tropical natural forests, but both are slow growing (1-2 cubic metres per year), with low growth rates per hectare and managed over an extensive area.

Issue 1: Public or Private Forest Ownership and Management

Issue: Many countries have chosen to keep public forests in public hands. Certainly for Canada and many tropical countries, and likely for Russia too, privatization of public forests would not be accepted. However, the difficulties for many countries in government supervision and control of concessions have raised the issue of privatization of concessions and public forest lands.

Answer: There are strong arguments against privatization of slow growing forests, both tropical natural forests and the slow growing boreal forests of Canada or Russia. It has been demonstrated that for slow growing forests the incentive for private sector firms will be to liquidate the forest and invest the proceeds elsewhere at a higher rate

of return (Boscolo and Vincent 2000; Gray 1994; Vincent 1990; Walker and Smith 1993). In addition, tropical and boreal natural forests generate many environmental and non-timber public benefits. Private forest owners are not be able to capture and collect revenue from non-marketable, non-priced, non-timber and environmental benefits. Thus they have no incentives to manage forests for these values. Privatization is therefore appropriate only for fast growing forest plantations with minimal non-timber and environmental values, not for slow growing tropical or boreal forests.

The alternative is to strengthen forest concession contracts and procedures, support forest management with economic incentives, ensure concessionaires undertake forest management activities, and strengthen supervision and monitoring of concession management. Proposed improvements are presented below. Some forestry activities, supervision and monitoring operations can be contracted out.

Issue 2: Concession Legislation, Procedures and Organization

Issue: Many countries have quite detailed forest legislation and detailed forest concession legislation. Much effort and thought is put into drafting, revising and passing the legislation. But forest and concession legislation is just the start. Many countries fall down on the implementation of the legislation: on designing concession allocation procedures, concession operation policies and procedures, procedures for supervising and monitoring concession operations; and on designing, building and staffing the organization to implement and manage concessions. Passing concession legislation does not ensure the legislation will be followed.

Answer: Well-designed forest concession legislation is the foundation for a well functioning forest concession system, but it also requires procedures for: (i) allocation of concession areas, including perhaps competitive bidding procedures, (ii) design and implementation of concession contracts, (iii) supervision, monitoring and auditing of concession operations and performance; as well as the organization, staff, and expertise to design and implement the procedures. An outline of the steps for each of these is presented below.

Issue 3: Length of the Concession Agreement

Issue: It is often argued that longer, more secure concession tenures provide the incentive for sustainable forest management. However, where growth rates of forests in volume and value (of 1% to 5% per year) are below the rate of return from other investments in other sector (often 10% to 15% per year or more), concessionaires will have no incentive to manage the forests, even under long-term, secure tenure (Boscolo and Vincent 2000; Gray 1994; Vincent 1990; Walker and Smith 1993). Concessionaires will liquidate the forests to invest the proceeds elsewhere at a higher rate of return.

Answer: Concessions under short-term tenures that are renewable based on demonstrated forest management performance may provide stronger incentives for sustainable forestry than longer-term concessions or privatization. Boscolo and Vincent (2000) demonstrate that performance based renewal conditions provide a powerful incentive for reduced impact logging and better forest management, even under short-term concession agreements. Longer term concessions which are subject

to renewal and can be terminated for non-compliance may provide similar incentives, although legal challenges to termination can weaken the incentive.

Issue 4: Concession Size

Issue: Forest concessions among countries as well as within countries vary enormously in size; from a few hundred to tens of thousands of hectares (Grut, Gray and Egli 1991). In some cases concessions are too small to support viable silviculture, logging and transport units. More often concessions are too large, well beyond the needs of concessionaires. Concessionaires often acquire large forest areas, more for future "insurance" purposes, or speculation, leaving large areas of forest locked-up and public forest resources idle. Large concessions with excess timber supply have little incentive to utilize the timber efficiently, or to practice more intensive forest management. "High-grading" or "creaming" and wasteful logging is encouraged.

Answer: Low forest fees and low fees on the area of the concession provide an incentive for companies to acquire large concessions, beyond their abilities to utilize the area. In many countries annual per hectare area-based fees on forest concessions are low, or zero. Thus there is little or no cost to acquiring and holding a large area, with little or no incentive to relinquish excess area.

Instead, annual area-based fees at a significant level can provide incentives to utilize and manage concessions more efficiently, and an incentive to relinquish excess forest area for reallocation to other uses, protection, or conservation. In 1996 Bolivia introduced an area charge of US \$1.00 per hectare per year on the country's forest concessions. As a result 17 million ha. were relinquished (Hardner and Rice 2002).

Issue 5: Non-Timber Environmental Values Local Community Benefits

Issue: Natural forests, both tropical and temperate produce a diverse set of outputs and values: (i) non-timber products like fuelwood, resins, game, herbs, medicines, rubber, fruits and nuts, etc. harvested by people from communities in or adjacent to the forest; (ii) forest outputs such as recreation and tourism; and (iii) forest outputs such as watershed benefits (water supply, erosion control, flood control, and water quality), biodiversity, climate effects, and carbon sequestering, which generate public (or collective) benefits locally, regionally, nationally, or internationally. Unlike timber values, realized only at harvest time, non-timber values are annual and continuing. Forest communities are both producers and users of non-timber forest products and of many environmental services such as wildlife, watershed benefits, and biodiversity.

Forest concession agreements in most countries, tropical and temperate, are based on timber production. As a result, concessionaires have had little incentive to manage forests for non-timber and environmental benefits, or for the interests of forest communities. Forest communities get few benefits and little revenue from forest concessions.

Answer: Forest concession agreements need to be redesigned to incorporate non-timber forest products and environmental values, to require concessionaires to manage the forest for non-timber and environmental values, to incorporate

community forest uses and increase community benefits from concessions, and to provide incentives (both positive and negative) to manage the forest for these values. There are also opportunities to design community forest concessions, as in Cameroon, for timber, non-timber forest products and other forest outputs.

Issue 6: Forest Fees and Forest Revenues on Concessions

Issue: The forest fees on timber and concessions can have significant incentive or disincentive effects on forest management and the performance of forest concessions. In many countries forest fees are low, well below the value of the timber (Gillis 1992; Repetto and Gillis 1988; WCFSO 1999). In many countries forest fees were set years ago and fixed in legislation that is not easily changed. Until 2002 Gabon had not changed its forest fees for 25 years (WRI 2000a).

Low forest revenues can result from: low forest fees, weak and inefficient fee collection systems, bribery, corruption, or illegal logging.

Low forest fees on timber and concessions provide the wrong incentives. Low forest fees on timber make commercial logging and processing profitable and attractive for entry and expansion, encouraging wastage of valuable timber, over-cutting and depletion of the forest, an encourage over-expansion of forest concessions into marginal areas more appropriate for non-timber uses or as protection forests (Karsenty 2000).

Stumpage fees (based on the volume of timber cut) are the major forest revenue source in most countries. They are often difficult to administer and collect, subject to widespread evasion and abuse through corruption, side payments, bribery, and illegal logging. Area based fees on forest concessions and other forest tenures are easier to administer and less subject to avoidance and abuse. However, they have not been widely used, or have been at very low rates. Thus they have generated little revenue, only 1-2% of total forest revenues in most countries (Grut, Gray and Egli 1991). However, recently Cameroon, the Democratic Republic of Congo, and Gabon have introduced or raised their area-based forest fees to significant levels to become a significant source of forest revenue.

Answer: Forest fees on timber cut along with area fees and other fees on forest concessions – set at levels that reflect the value of the timber and the value of concessions can provide incentives for efficient utilization and management. They can: deter over-exploitation of the forest and wastage of timber; encourage more efficient utilization; provide incentives to support sustainable forest management; and generate revenues to finance forest management and regeneration, making forestry both financially and economically sustainable.

A more significant share of forest revenues could be generated through easier to collect concession fees. Concession fees can include one or a combination of the following: an initial licence fee; an annual fee based on the concession area, or on the inventory volume or annual allowable cut; and bonus bids where concessions are allocated competitively by oral auction, or sealed tender. The recent experience of Cameroon, the Democratic Republic of Congo, and Gabon in raising area fees so that

they will generate a significant share of forest fees provides and example of what can be done.

Concession fees, properly designed, can serve a number of forest policy objectives. First, concession fees based on the area or productivity of the concession are much easier to collect than stumpage fees based on the volume of timber cut. Second, annual area-based concession fees set at a significant level can discourage acquisition of overly large concession area and speculative acquisition of concessions, as well as encourage more intensive forestry within concessions and more efficient utilization of the forest. Third, concession fees can serve to reflect the security value of timber supply, or the insurance value of a guaranteed timber supply. Finally, concession fees can discourage non-productive efforts (lobbying, persuasion, influence, or bribery) in obtaining a concession ("rent seeking").

Issue 7: Bidding on Concessions and Transparency in Concession Allocation

Issue: In most countries, concessions are allocated administratively with many administrative hurdles that invite "facilitation payment," bribery, and corruption. In such cases the value of the concession and the timber is dissipated in inefficiencies and such unproductive "rent seeking" activities by individuals and companies seeking concessions. Persons with little knowledge of the forest industry, or no intention of entering it, are sometimes awarded concessions that they sell or contract out (WRI 2000a).

Answer: If competition among bidders can be encouraged, concessions can be allocated transparently through bonus bidding (a bonus in addition to normal forest fees). Bonus bidding on concessions avoids administrative decisions in choosing among competing applicants and reduces the potential for bribery and corruption. Bidding allocates concessions to firms that can offer the highest prices and can use it most efficiently. Finally, bidding generates revenue for the government as the forest owner. Concessions sold by bidding can also indicate the level to set forest fees for concessions in areas where competition is not possible (Gray 1983; Gray and Hadi 1990).

The prices bid for concessions also provides a market-based indicator of whether other forest fees – area-based concession fees or volume-based stumpage fees on timber cut – are at the right level. If area-based fees or stumpage fees are low, profits from harvesting timber will be large financially attractive concessions, and the "bonus prices" bid for concessions will be high. If area-based fees or stumpage fees fully reflect the value of the standing timber, then bonus bids will reflect only the value of the security of timber supply.

It is recommended that competitive allocation by sealed tender be applied first to new concessions in accessible areas of the country where timber values are high and competition can be expected. Competitive bidding could also be used in reallocating concessions returned, expired, not renewed, or cancelled for non-performance.

Allocation of concessions by competitive bidding has been recommended by several authors (WCFSD 1999; Karsenty 2000; Klein 1998; Laarman 1999). Competitive bidding has been used in allocating forest concessions in Venezuela, a number of

peninsular Malaysian states, as well as in Sabah and Sarawak, Ghana, Côte d' Ivoire, and the Congo (Gillis 1992; Grut, Gray and Egli 1991). Cameroon initially had disappointing success with auctioning concessions starting in 1996 (World Bank 2000b). Honduras has used auctions in the sale of pine timber under short term timber sales (Ryburn 1997). However, improved transparency acceptance of the auction process and other changes brought about improvements in the bidding and substantially increased revenues (see Box below).

Cameroon: The Path to Improved Forest Governance (Drawn from the *World Development Report 2003*)

Cameroon's executive branch brought to parliament a new Forestry Law in 1994, providing for the auction of forest concessions on the basis of per-hectare bids by pre-qualified bidders. The law also required management plans and allocated half the revenues to local governments and communities.

The first round of concession allocations, in 1997, was flawed and drew criticism from the World Bank and from local and international NGO's. Consultations among stakeholders intensified, and transparency increased: newspapers publish details of companies authorised to operate in which location, helping local residents to identify illegal operators. Also important was the widespread formal use of independent observers. Respected Cameroonians were hired to observe the concession allocation process. Cameroonian and international NGOs' were contacted to assist in verifying concessionaire compliance, by on-the-ground inspection and by the use of satellite imagery.

Progress so far:

- Improved transparency - Global Forest Watch Cameroon concluded that the concession allocations were far more transparent than those of 1997 and in compliance with government guidelines.
- Improved forest revenue - The annual area fee increased from \$0.14 per hectare in 1996 to \$6.00 per hectare in 2002. Annual forest revenues increased from less than \$3million in 1995 to more than \$30 in 2001.
- Clarification and simplification of forest management regulations - The resumption of field inspections and prosecuting illegal logging.
- Gradual exit of short-term speculators and increase in long-term investors with increased value-added industry and local employment.
- Introduction of the legal framework for community forestry
- Stronger commitment to biodiversity conservation, including new protected areas and the opportunities for conservation concessions.

Source: World Development Report 2003, page 144.

Bidding procedures need to be well organized to ensure that bidding is competitive and concessions awarded impartially to the highest bidder. To ensure impartial independence the auction process could be carried out or supervised by an independent organization as auctioneer. Auctioning of concessions should be applied first in accessible areas of the country where the value of the forest is high and

competition can be expected. Bidding conditions can be tailored to the country's industrial strategy by pre-qualification conditions.

Issue 8: Concession Management Incentives and Performance Incentives

Issue: Incentives can be used to support the regulation and management of concessions. These can be positive incentives – payments or reduced fees based on performance; or negative – penalties or loss of deposits for non-performance. In most countries concession agreements do not provide the right incentives for forest management, nor do they include measurable performance requirements.

Answer: The granting of interim concession licenses that are converted to an operating license upon demonstrated performance can provide a strong incentive for performance. It puts the responsibility on the concessionaire to demonstrate forest management performance.

Performance deposits or performance bonds can serve as a strong incentive for compliance with concession terms and requirements, in forest management, and for adoption of low impact logging (Boscolo and Vincent 2000). Performance deposits can be required at various stages in the concession application, approval and granting. However, for performance deposits or performance bonds to work concessionaires need to be confident of the return on their deposits.

Concession renewal provisions at 5 or 10 year intervals are another example. Performance based renewal conditions can provide a strong incentive for compliance. The level and structure of forest fees can have important incentive effects on concession performance, logging methods, adoption of low impact logging, compliance with diameter limits, utilization of species, etc. (Gray 1983; Grut, Gray and Egli 1991; Boscolo and Vincent 2000; Karsenty 2000). Prepayment of forest fees will ensure that concessionaires are up-to-date with payment of their fees. This is now in place in Cameroon.

Issue 9: Inspection, Monitoring and Audit of Forest Management

Issue: Monitoring and supervision of concession performance is often weak or non-existent in many countries. Most forestry departments and ministries are under funded and ill equipped to supervise and monitor logging activities and management on forest concessions, with little field capability for on-the-ground verification (Grut, Gray and Eli 1991; Hardner and Rice 1999).

Forestry staff in many countries are under-trained, and under-paid. Salaries are commonly so low that people must work at other jobs to survive. Salaries are viewed as retainers rather than as payment for performance. Under such circumstances, staff are vulnerable to bribery to approve logging plans, certify logging or forest management performance, or approve scaling records and timber volumes without field inspection. Forestry staff often have little or no incentive to go into the field. In some cases, daily subsistence allowances are not sufficient to cover even the cost of

food and accommodation, expenses may not be fully reimbursed, re-payment may be delayed, or may never materialize.

Answer: To improve concession management, logging operations, and forest management, it is important to strengthen the field capability of forestry agencies, provide incentives and training to staff for field work, and take steps to strengthen their independence so that they are less vulnerable to bribery. An increase in forest fees or an improvement in revenue collection can help to finance the strengthening of field capacity, especially if a proportion of the forest revenues are allocated to a fund to finance field operations and inspections.

Contracting out monitoring and supervision to independent (public or private) organizations is an alternative. Independent auditing of concession operations, logging performance, and forest management is proposed to strengthen performance incentives for concessionaires, and to provide performance incentives for forest agencies. The Cameroon experience above provides an example.

Making Forest Concessions Economically and Environmentally Sustainable

There are opportunities to make forest concession management more effective and concessions more sustainable. Most countries already have concession legislation and procedures, although in many cases the regulations and procedures are more on paper than in practice.

Countries need to build the capacity to carry out the concession policies proposed: to evaluate potential concessionaires; carry out auctions of concessions; negotiate with powerful and experienced forest companies; and to carry out the monitoring and supervision of forestry and logging activities on concessions; or delegate monitoring and supervision to an independent organization. The concession steps and procedures proposed are intended to focus on implementation, on performance and performance incentives, and on “on-the-ground” concession supervision and monitoring.

The steps below are illustrative of those involved in the design of concession allocation, supervision and monitoring procedures.

Concession Allocation Steps and Procedures

Step 1: Ensure the Area is Not Encumbered by Other Land Ownership or Land Use Restrictions: Before proceeding, it is important to ensure that land claims are settled and that tenure rights to both the land and the timber are clearly defined and understood.

Step 2: Initiation of Proposed Forest Management Concession: The concession allocation process should preferably be initiated by the government or government agency responsible for administration of state forest lands, rather than by concession applicants.

Step 3: Advertise the Areas and Invite Expressions of Interest: Once land and forest tenure rights are settled, and the concession area defined, the next step is to invite expressions of interest from potential concessionaires. Concession conditions, rights and obligations should be specified at this point.

Step 4: Pre-Qualification of Applicants: Companies interested in the concession area would be asked to submit materials for pre-qualification of applicants. The conditions for pre-qualification should be stated in the application package.

Step 5: Approval of Qualified Applicants: The agency responsible for forest administration would have a limited time to evaluate the pre-qualification materials and notify qualified applicants.

Step 6: Time for Applicants to Evaluate the Area and Timber, and to Prepare Proposals: Qualified applicants would be eligible to inspect the area and undertake a reconnaissance inventory. Bidders would be required to submit the details of their inventory methods and results along with their bids. Alternatively, the government could undertake the inventory and make it available to bidders as part of the bidding package.

Step 7: Submission of Proposals or Bids: Allocation of concessions by bidding is recommended wherever there are sufficient applicants. It is suggested that bidding be by sealed tender. The deadline for receiving bids should be strictly observed to avoid later legal challenges. If there are not sufficient bidders the government may choose to negotiate the concession terms with the interested firms.

Step 8: Selection of the Winning Applicant or Bid: For transparency, tenders should be opened publicly. It is suggested that bidding be based on bonus bids – bonus payments in addition to the normal stumpage prices, area fees and other charges. The recommended form of the bonus bids would include: (1) an annual bonus payments per hectare on the entire concession area; and (2) a lump sum bonus paid upon signing the contract.

Step 9: Concession Contract and Signing: The forest management concession contract would cover the concessionaires rights and obligations, conditions for the management and operation of the commercial forest lands within the concession, as well as for the protection and management of non-timber producing areas within the concession. Contract conditions should follow a standardized form applicable to all concessions, with special conditions, rights and obligations for the area in question in a separate annex.

The Forest Concession Contract: Forest Management Conditions, Steps and Staged Approvals

To be effective, the forest concession contract must provide certainty of rights and obligations for the concession holder. Contract performance conditions need to be specified with clear steps and staged, and include strong incentives for compliance with the management obligations by the concessionaire. Contract conditions should

emphasize “on-the-ground” performance and conditions that can be monitored and verified. “Paper plans” are often only that – just on paper!

Proposed contract performance steps are:

Step 1: Boundary Marking: Clear and permanent definition of the concession boundary is an important and practical first step to forest management.

Step 2: Mapping of the Concession Area: Mapping of the concession area is an important pre-requisite for a reliable forest inventory, reliable forest management planning, and well designed, efficient, and environmentally appropriate logging planning and road layout.

Step 3: Access Control: The concession holder would be required to control access. Access control is important in maintaining the integrity of the forest estate and preventing incursions and the conversion of productive forest land into marginal agricultural and grazing land.

Step 4: Forest Inventory and Environmental Inventory: The forest inventory should be completed and approved before full scale harvesting is allowed.

Step 5: Forest Management Plan and Environmental Management Plan: Tropical and boreal forests provide a range of forest products and a diversity of non-timber and environmental benefits. Thus, both a forest management plan and an environmental management plan are suggested. Both should be brief, focussed on implementation, and verifiable on the ground. Silvicultural systems, logging systems to be used, and low impact logging methods should be specified and in verifiable terms.

Step 6: Road Plan: Roads can have significant environmental effects. The road plan should also be focussed on implementation, and with on-the-ground verification.

Step 7: Forest Utilization Plan: Where the concession involves a processing plant, a forest utilization’s plan should be required, specifying the location, capacity, description on equipment, employment, etc. of each processing plant

Step 8: Social and Community Development Plan: The community and social development plan should document commitments on the part of the concession owner to community and social development.

Step 9: Initial Annual Operating Area Plan: The initial operating area plan should include: (i) a logging plan layout on the ground, with roads, landings, and skid roads marked out on the ground to guide construction prior to the start of logging; and (ii) the marking of trees where required by the management plan. Concession owners, rather than the concession administration agency, should be responsible for marking trees to be cut. The operating area would then be inspected and checked by the forest agency (or an independent inspection organization) before logging commenced.

Supervision, Monitoring and Auditing of Concession Operations

On the ground supervision and monitoring of performance of concession management steps is essential. On-the-ground inspection of forest boundaries, layout of roads and road plans, logging plan layout and marking of trees, and logged areas following logging is key monitoring components.

Unless field inspection capabilities can be strengthened, granting further concessions would be dangerous. Where the agency is not equipped, staffed and financed to carry out on-the-ground inspection of concessions, an alternative is to contract out on-the-ground inspections to reputable, impartial private sector firms with the ability, capacity, and trained staff to carry out the work accurately and conscientiously.

Review and Extension of Concession Licenses

As demonstrated, long-term secure tenure does not provide sufficient incentive to encourage sustainable management on tropical forest concessions. Performance based renewal conditions combined with performance bonds provide better, more powerful performance incentives (World Bank 1997). It is suggested that concession terms be relatively short, perhaps 10 to 12 years, with renewal based on an unbiased and independent performance evaluation (or audit). To ensure independence the performance evaluation (or audit) might be done by an external, internationally recognized forestry organization.

Suggested Forest Pricing Policies

The forest pricing policies and forest fees suggested are intended to improve forest concession performance, improve sustainable management of forests on concessions, and increase the financial viability of forest management by: (i) raising fees to reflect the value of the forest, (ii) structuring fees to provide incentives for improved utilization and forest management, and (iii) providing the revenue to finance improved forest management and making forest management a worthwhile investment for governments. The proposals include the following elements:

- **Annual Concession Fees:** Annual area-based concession fees are recommended at rates that generate a significant proportion of forest revenues and provide incentives for forest management. Annual concession fees should become a major revenue source and supplement, or partly replace difficult to collect volume-based stumpage prices and export taxes.
- **Initial Concession Fees:** A modest initial concession fee is recommended, designed to generate sufficient revenues to cover administrative costs in granting concessions, and to discourage frivolous or speculative concession applications or acquisition of concessions.
- **Bidding on Concessions:** Where competition can be achieved, it is recommended that concessions be allocated by bidding (preferably by sealed-tender) based on a per hectare bonus bid payable annually on the total area of the concession. The auction process needs to be carefully designed and impartially

administered. To ensure success, bidding should be initially introduced on a limited basis in situations where there will be competition. Bonus bids would reflect and capture the "security value" of the secure timber supply provided by the concession, and, in addition, a share of the value of the timber that is not reflected in other forest fees.

- Minimum Volume-Based Stumpage Prices: Minimum volume-based stumpage prices are recommended. These should be high enough to reflect: (i) the administrative costs of supervision, inspection, forest renewal and forest management, scaling and collection of revenues; and (ii) the environmental and other non-market values, the "opportunity cost" values that are precluded by harvesting the timber. Minimum volume-based fees can prevent "below cost" or "below opportunity cost" harvesting and thus improve the overall efficiency of forestry.

- Minimum Area-Based Forest Concession Fees: Minimum area-based forest concession fees are recommended to reflect the environmental and non-market "opportunity cost" values of alternative forest land uses that are involved in the allocation of forest areas to timber production.

- A Fund to Finance Forest Management, Supervision and Monitoring of Concessions. It is recommended that a substantial proportion of the forest revenues from concessions be allocated to a forest management fund and used to finance the supervision and monitoring of logging and forest management activities on concessions.

Note: The paper is drawn from a World Bank study, from papers presented at workshops in Bélem, Brazil, Georgetown, Guyana, and Rio de Janeiro, Brazil; and from my involvement in projects in Central America, South America, West Africa, and South East Asia. The World Bank study:- John A. Gray (2002) *Forest Concession Policies and Revenue Systems: Country Experience and Policy Changes for Sustainable Tropical Forestry*. (World Bank Technical Paper No. 522). Washington: World Bank. (ISBN: 0-8213-5170-2) can be downloaded from the World Bank web site as a pdf file at:

[http://lnweb18.worldbank.org/ESSD/essdext.nsf/14DocByUnid/812B80EC470DE9ED85256C0F00762BB4/\\$FILE/forest.pdf](http://lnweb18.worldbank.org/ESSD/essdext.nsf/14DocByUnid/812B80EC470DE9ED85256C0F00762BB4/$FILE/forest.pdf)

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CHAPTER 12: CERTIFICATION REQUIREMENTS FOR CONCESSION-BASED FOREST MANAGEMENT: INTERNATIONAL EXPERIENCE

Markku Simula

Indufor Oy¹

Introduction

Certification is driven by a variety of interests. For industry and trade, it is an instrument for environmental marketing. For buyers and consumers, it provides information on the impacts of products they purchase. For forest owners and managers, it is a tool for market access, gaining market advantage, or perhaps capturing price premiums. It is also a way to demonstrate responsible forest management through independent third party certification regardless of what the market wants. For environmental movement, it is a means to influence how production forests are managed. For governments, it is a soft policy instrument to promote sustainable forest management, sustainable consumption patterns as well as a variety of environmental and social goals. For investors, it can help in risk mitigation. Others may see additional benefits or interests in forest certification.

Forest certification remains one of the most contentious issues in the international forest policy as it is a trade-related instrument and countries feel that it could influence their competitiveness and market access. Many producers see certification as yet another market requirement imposed by importers which is difficult to meet leading to a barrier to trade, rather than helping suppliers to promote their exports.

As long as the certification system of the Forest Stewardship Council (FSC), which started its operations in 1993, was the only operational scheme, the international debate focused on FSC's general acceptability and its implications for forest owners, managers, industry and trade. The emergence of other schemes has raised the issue of comparability and eventual mutual recognition between individual schemes. The crux of the international debate centers on credibility criteria for certification schemes, and whether or how cooperation between individual schemes should be arranged (if any). More deeply, it is a question about who should define forest management standards and how this takes place. In the Russian Federation the development of forest certification has been slow in spite of the country's huge resources and pivotal role in the international timber trade. Mandatory arrangements put in place by the government were thought to be sufficient and only slowly has voluntary certification started to make progress in the country. This paper is an attempt to provide an

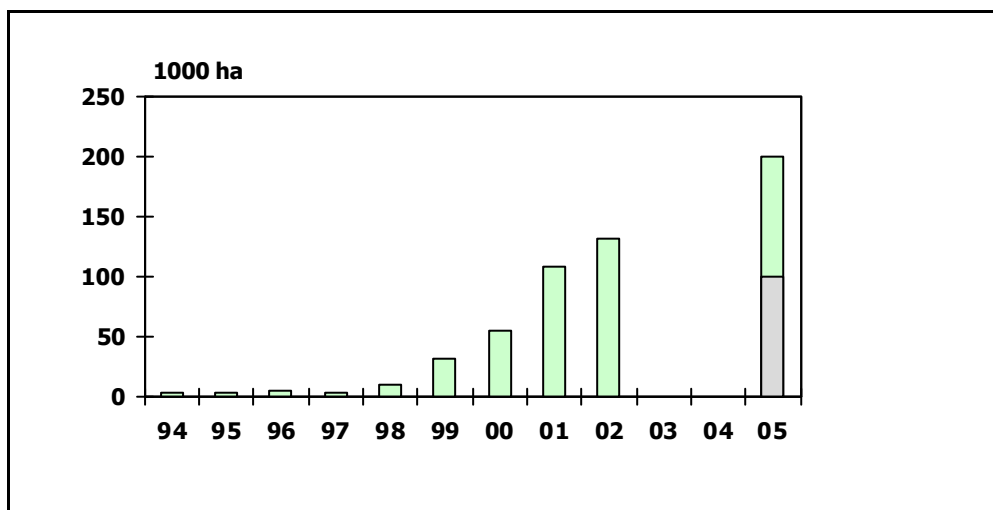
¹ Indufor Oy, Töölönkatu 11 A, 00100 Helsinki, Finland; e-mail: indufor@indufor.fi; Internet: <http://www.indufor.fi>

overview of the global situation in certification and to explore some aspects related to implementing this complex instrument in the Russian conditions.

Overview of the Global Situation

Forest certification is rapidly expanding and the growth has been exponential during the last two years. The current certified area is estimated at 132 million hectares (January 2003). This is almost five times higher than three years ago and 30% more than a year ago (Figure 1). The total figure includes third-party audited area under the two international systems (Forest Stewardship Council and Pan European Forest Certification), national schemes (Canada, Malaysia and the United States) as well as the forests which have been issued a Keurhout declaration (Dutch hallmark system).

FIGURE 1 WORLD CERTIFIED FORESTS IN 1994-2002 AND WB/WWF TARGET 2005



Geographically, the total area is unevenly distributed: about half is located in Europe, and 43% in North America. The developing countries account for no more than 6% of the total.

Only 3% of the world's total area has been certified (Figure 2). In North America the certified forests account for 12% of the total area and in Europe 6%. In the Russian Federation the voluntarily certified area is still marginal, covering only 0.2 million hectares (Table 1).

**FIGURE 2 CERTIFIED FORESTS OF TOTAL FOREST AREA
JANUARY 2003**

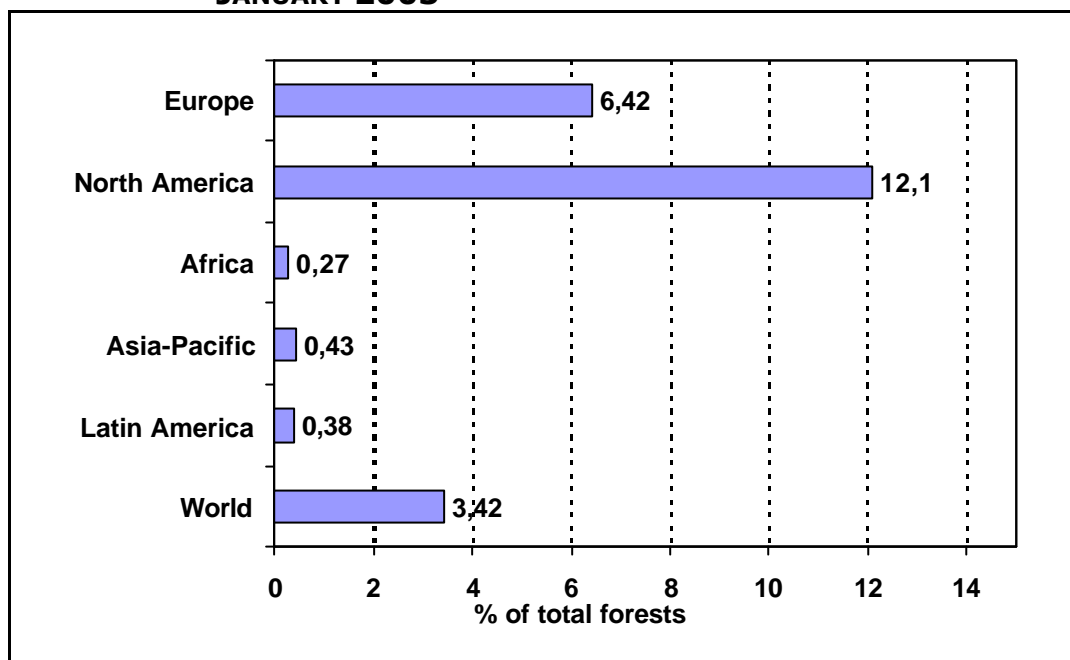
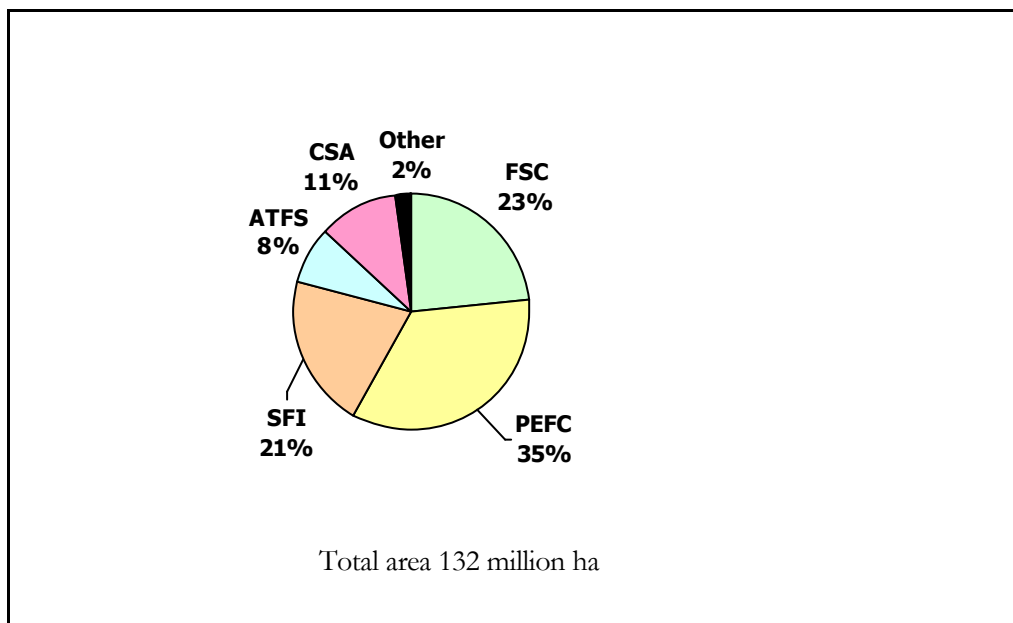


TABLE 1 FSC CERTIFIED FORESTS IN RUSSIA (FEBRUARY 2003)

Russia			
Client	Location	Certification Body	Area (ha)
Dvinscoi LPH OAO and Bobrowski Reid - owned by Holz DAMMERS GmbH (Germany)	Arkhangelsk	IMO	65 905
Kosikhinsky Forest Enterprise	Kosikha Forest	Soil Association	32 712
Koverninskij Leskhoz		GFA	116 368
Madok GmbH - owned by Holz Industries Leitinger (Austria)	Kashirskoye/ Vereb'inskoye, Sovkhoz, Dvorishchensky/Burgnsk oye	SGS	31 200
Total			246 185

When a few years ago, all the world's certified forests were registered under FSC, the scheme's current market share is 23%, falling well behind PEFC (35%) (Figure 3). The national schemes in North America (SFI, ATFS and CSA) account for 40% of the world total. It should, however, be noted that the certified area is only one indicator of the significance of various schemes in the market.

FIGURE 3 CERTIFIED FORESTS SCHEME IN JANUARY 2003



International Requirements

What constitutes a 'credible'/'acceptable'/'reliable' certification standard or scheme still remains undefined through an inclusive process at an international level. Several parties have attempted to define such requirements but there is no consensus on them, and there is no identified forum which would have a mandate to undertake this task. The World Bank/WWF Alliance requirements for forest certification schemes are listed as an example in Box 1 and the parties are in the process of developing indicators for them.

Box 1 WB/WWF ALLIANCE REQUIREMENTS FOR FOREST CERTIFICATION

- 1) Institutionally and politically adapted to local conditions
- 2) Goal oriented and effective in reaching objectives
- 3) Acceptable to all involved parties
- 4) Based on performance standards defined at the national level that are compatible with generally accepted principles of sustainable forest management
- 5) Based on objective and measurable criteria
- 6) Based on reliable and independent assessment
- 7) Credible to major stakeholder groups (incl. consumers, producers and conservation NGOs)
- 8) Certification decisions free of conflicts of interest from parties with vested interests
- 9) Cost effective
- 10) Transparent
- 11) Equitable access to all countries

In its Forest Strategy, the World Bank has accepted the principle of independent monitoring of forest operations. However, the Bank has not endorsed any particular certification system but will assess particular approaches in relation to their compliance with these principles and criteria. The Bank recognizes the on-going “mutual recognition” debate in the international community to harmonize acceptable standards and approaches. It is further stated that planning is needed to produce equitable outcomes and raise the overall social value of forests. In some cases, the need for greater transparency and accountability at the local level will require the use of stakeholder assessment as an alternative to third-party assessment of commercial-scale operations. The Bank will encourage national governments to develop standards for natural forest management and forest restoration that are both locally relevant and meet internationally recognized principles and criteria for SFM. The Bank will also provide support to national governments to create representative, multistakeholder, independent forest monitoring bodies.

Demand, Supply and Public Procurement

The demand for certified forest products can be characterised as follows:

- Demand for certified products exceeds supply in some European markets;
- Buyers’ Groups have had an essential role as demand drivers;
- Demand is driven by marketing factors, not by consumers;
- NGOs have seen certification as an important market-based instrument and are promoting FSC-based certification;

- Some buyers are supporting suppliers to achieve certification (e.g. German and Austrian buyers/investors have financed certification in Russia);
- Buyers’ current purchasing policies reflect supply constraints in terms of which systems are recognized and the time period needed for achieving 100% supply from certified forests; and
- Public procurement is a growing factor for demand creation.

The potential supply from certified forests can be roughly estimated to be in the range of 300 million m³ of certified roundwood. However, most certified products are sold without reference to certification: suppliers claim “lack of demand for certification” in many end uses, and market segments. Not all import markets specifically demand for certified products.

On the other hand, some suppliers have seen opportunities in improving their market share through sales of certified products. A growing interest in chain-of-custody certificates can be observed by many traders to reap public image benefits. As a result, some new trade flows have emerged to match certified demand and supply. The impact on the supply chain will take some time but it will be far-reaching. For example, China is now facing certification requirements in its exports of further processed products to the European market, which will influence sourcing of the country’s imports.

Some large buyers (IKEA, Home Depot, etc.) have realized that it is impossible to reach 100% certified supplies in the short run, which has led to the development of phased approaches. These have a number of common elements:

- Legality has to be proved as a minimum requirement;
- Consequently, the origin of wood has to be known;
- Phase-out criteria have been introduced referring to forests from which the buyer cannot accept any supply (e.g. timber harvested from protected areas, high conservation valued forests, endangered forests, etc.); and
- Final stage: full certification required.

Already, in 2000, the G8 countries made a commitment to procure only from “legal and sustainable sources.” This has resulted in the development of requirements related to timber supplies to give preference in government procurement to legally (and sustainably) produced timber. It is still under debate whether such criteria can be used at the award stage of public procurement contracts in importing countries, or whether these criteria would only serve as additional information. Anyhow, some arrangements are likely to be established for public procurement rules of timber and timber products. A minimum requirement for using forest-related criteria is their application in a transparent and non-discriminatory manner. The most advanced country is the United Kingdom where the Government has been developing a stepwise approach to public procurement (Box 2).

Box 2 PUBLIC PROCUREMENT: UK GOVERNMENT PROPOSAL

Stepwise Approach

1) Legal

- a) the producer has legal usage rights to the forest
- b) the producer complies with the laws and codes of practice of the country that are relevant to the management of forests and the mitigation of the impacts of forest management on people and the environment

2) Legal and Progressing toward Sustainable

3) Legal and Sustainable

Certification is a possible means for proving legality in public procurement. However, it requires that legality is defined as an explicit criterion in the certification standard. This is a common characteristic in almost all certification systems. However, suppliers will also have other means to prove that their products meet the legality criteria if they are not certified. This is likely to involve separate certification/verification of legality.

It is unlikely that a reference to specific schemes can be applied in public procurement under the EU law and WTO rules, but the criteria to be met by verification/certification systems may be defined.

Certification of Long-term Forest Concessions

More than 30% of the world's certified forest is state-owned. For example, in Canada certified forests are managed by the private sector as forest concessions. Only few concessions have so far been certified elsewhere.

Certification is a fixed cost and there are strong economies of scale. Therefore, large forest areas, often managed by strong organizations using effective management systems, can be relatively easily certified in a cost-efficient manner. However, the tenure rights and obligations of the concession holder with regard to forest management, environmental conservation and social issues need to be adequately defined.

Certifying long-term concessions has a number of advantages compared to short-term leases. The differences between the two situations are summarized in Table 2.

TABLE 2 CERTIFICATION OF FOREST CONCESSIONS AND SHORT-TERM LEASES

Selected aspects	Concessions, long-term leases, leskhoz own management	Short-term leases
Responsibilities of actors	Long-term integrated responsibility for forest management and harvesting	Separated responsibilities between resource owner and lease holder
Basic certification requirements	Tenurial rights, boundary demarcation, management plan (strategic), operational plans, biodiversity surveys, socio-economic aspects, internal monitoring and control systems, etc.	
Possible role of certification	Certification can be a concession agreement condition	Compliance with relevant parts of the certification standard in lease agreement
Certificate holder	Concession holder	Resource holder (leskhoz, state enterprise, etc.)

It would be “easier” and more cost-effective to apply certification in forest concessions than in the case of short-term leases. However, certification can be applied in the latter case as well, if the responsibilities are clearly defined and the standard requirements are identified both for the resource holder and lease holder.

Mandatory vs. Voluntary Certification

The Russian Federation is the only country in the world, which has developed a mandatory certification system. It is, however, possible that some other countries will also refer to certification standards or third-party auditing in their legal requirements. The latter approach is already taken by some developing countries.

Mandatory and voluntary certification are compared in Table 3. They have a number of differences such as:

- The purposes are different: the mandatory certification is aimed at ensuring legal compliance while voluntary certification is targeted at market communication;
- The scope and level of requirements are therefore different;
- Auditing bodies can be different (in the former case government bodies and in the latter case independent third parties);
- Claims and certificates are also different.

There are number of issues to be considered in this context:

- What is the added value of mandatory certification;

- Costs (direct and indirect costs) of overlapping implementation;
- Compatibility of requirements of the two approaches;
- Government recognition of voluntary certification.

The two instruments can, however, be complementary as legal compliance in forest management is a basic certification requirement. Verification of chain of custody is included in both approaches. Furthermore, if mandatory certification is carried out by independent, recognized verification bodies, the difference is only in the scope of audits.

TABLE 3 COMPARISON OF MANDATORY AND VOLUNTARY CERTIFICATION

	Mandatory	Voluntary
Purpose	Verification of legal compliance in forest management	Verification of compliance with voluntary SFM standards and market communication
Requirements	Legal compliance	Legal compliance + voluntary standards which are broader and more demanding than regulation
Development of requirements	Government-led process	Standard setting through an independent transparent process with participation of stakeholders
Certification bodies	Public-sector assigned bodies or, if outsourced, private third-party certification bodies	Private third-party certification bodies

Governments are not supposed to be directly involved in market-oriented, third-party certification. However, they have an important role in promoting certification as a tool for sustainable forest management, including:

- Creation of enabling conditions for SFM, incl. adequate and consistent legal, social and political framework;
- Ensuring the long-term secure tenure of forests;
- Definition of necessary legal requirements for forest management;
- Effective enforcement of rules and regulations;
- Provision of support and incentives for implementing SFM and its certification, and removal of possibly existing disincentives;
- Application of public procurement criteria which may make provision for phased approaches.

Conclusions

Voluntary schemes are market driven and it appears that a number of parallel schemes will likely remain in the international market. It can be expected that differences between standards and schemes will be gradually reduced. Mutual recognition between schemes is foreseen but, due to competition reasons, not all schemes are likely to participate in such arrangements.

Market demands for certification vary by region, and will take time before certification becomes a basic requirement in all major import markets. However, Russian suppliers will be increasingly facing demands for certification.

Experience in other countries suggests that it is possible to develop a Russian approach to certification, which meets international requirements. However, it is important that these requirements are duly considered and close cooperation is established with international schemes from which endorsement may be sought in due course.

In view of the vastness of resources and diversity of situations, it appears that regional standards are likely to be required in Russia. A common national framework would be useful for eventual regional standards. All stakeholder groups should participate in the standard development process. This is a major challenge for the development of certification in the country.

Detailed examination of the costs and benefits of mandatory certification is needed. If mandatory certification continues to be implemented, it should probably be by a third party if market recognition is the goal. Other purposes of certification (e.g. enhancing legal compliance) should be considered in this context.

CHAPTER 13: HOW TO BUILD PUBLIC SUPPORT AND CREATE VALUE FOR FORESTS – THE SWEDISH FOREST INDUSTRIES FEDERATION’S PERSPECTIVE

Jan Eklund

Swedish Forest Industries Federation

Building Public Support and Consumer Confidence

Forest industry in any country is a part of a “global business,” using raw material from the world’s forests to produce products for everyday use sold to consumers that are often concerned about the global environment and forests. It follows that the future of the forest industry is highly dependent on consumers trust in our use and management of the forests.

In Sweden, consumer confidence has been increased through transparency in the sector, independent auditing and certification, cooperation with stakeholders and public relation efforts:

Transparency: Information regarding forest ownership, forest management and wood trade is fully transparent and made available to the public.

Third-party independent auditing and certification: Certification is probably the most convincing and also the most effective way to communicate with the public.

Cooperation with stakeholders: People use forests for a lot of purposes: recreation, picking berries and mushrooms, hunting and fishing and a lot of other activities. An ongoing dialogue with stakeholders provides information on planned forest operations and also provides an opportunity to get information from stakeholder groups.

Public relations: Outreach efforts are undertaken to provide basic information on the use of forests for production of everyday products, forest management, and the economical contribution of the forest sector to the national economy in accessible and engaging language and formats.

How to Create Value of Forests

The value of forests can be described in several ways, such as: a part of the ecosystem that provides air, water, and food; livelihoods for local people such as fuel wood and food (berries and game); and a part of the economical system including raw material base for forest industry, financial value and employment.

Regarding the term “stumpage price,” I prefer the term “stumpage value” to describe what is left of wood value after that cost for forest operations and transport has been paid. Wood value is normally limited by world market prices for forest industry standard products such as market pulp, newsprint, and sawn wood. Due to that, there are only a few ways to increase the stumpage value: by decreasing the cost for forest operations, transport and production costs in industry; or by producing forest industry products with higher market value than standard products. The decision on which approach to take and the subsequent process must be made in cooperation between forestry, forest industry and forest authorities. In sum, authorities cannot set a stumpage price, but the forest industry and authorities must together create a stumpage value.

CHAPTER 14: "FOREST INSTITUTIONS IN TRANSITION COUNTRIES" – OVERVIEW OF AN ONGOING WORLD BANK REGIONAL ANALYSIS

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Background and Objectives

The World Bank's Europe and Central Asia (ECA) Region is conducting a review of forest institutions, financing mechanisms and reform processes across Europe in order to facilitate ongoing and future reforms in transition countries. The study aims to disseminate lessons learnt from previous experiences and to assist decision-makers in managing the change process. The aim is for the study to be practical and to be used by World Bank client countries as they go through institutional reforms. The content of the study is two-fold:

- to identify the institutional and forest financing options that can best serve the multipurpose functions of forests in European transition countries (Where to go?); and
- to shed light on the institutional change process and to disseminate lessons learnt in order to help countries conduct successful reforms (How to get there?).

Most ECA countries are in the process of adjusting their institutions to a new economic, political and social environment. Assisting countries in re-building sound institutions and financing frameworks has reached center-stage in the World Bank's forestry agenda in the ECA Region. Forestry is considered here in a broad sense including natural habitats and conservation of biodiversity. The overall rationale is to ensure sustainable management of forests as renewable resources and natural ecosystems, and to optimize their contribution to economic growth and improvement of living standards.

The study will carry out a comparative analysis with West-European countries, Canada, USA and New Zealand. Although the study focuses on European countries in

transition, it will also take into account other ECA countries facing similar transition challenges.

Task 1: Analysis of forest institutional and financing options

This task aims at providing an overview of the available range of organizational options and to show how these different options can best serve multipurpose forest management in ECA countries. This task focuses on the substance of the reform. It is aimed at answering the question: “Where to go?” and includes the following steps:

1. Description of current institutional and financing frameworks in place in each country, and assessment of strengths and weaknesses. This country-by-country analysis will focus on the public-private balance in general and within the public sector on: Organizational structures of public services, legal and regulatory framework, private- and public-forest ownership, sources of financing and public expenditures and human resources management. It will use quantitative or qualitative indicators comparing institutional soundness and performances between countries;
2. Identification of the transition challenges currently faced by ECA countries, at the regional scale or by group of countries and a description on how more developed Western countries have addressed, or are addressing, such challenges;
3. Grouping of institutional and financing mechanisms into a limited number of patterns, and presenting them as a range of options and alternatives available to transition countries. Show strengths and weaknesses of various models with respect to the transition challenges and multipurpose forest management in ECA countries;
4. Lessons learnt from the technical point of view, for broad goals for reforms for ECA countries, at the regional level or by groups of countries. These recommendations will point out preferred scenarios, “second bests,” and subsets or alternatives.

Task 2: Analysis of the reform process

The “people factor” is central to making institutions work, and change management theory puts people at the center-stage of the reform process. This task is to interpret institutional dynamics and the behavior of actors along the course of a change journey, in order to help decision-makers design and carry out successful reforms. This task focuses on the process of reform. It is aimed at answering the question: “How to get there” and includes the following steps:

1. Description of past and ongoing efforts to reform forest institutions in each country: what are the objectives and the latest developments? What are the achievements, the risks and the major factors? Positioning the country on the “Pyramid” as a planning tool for good forest governance;

2. Analysis of selected examples that are of interest at the regional level. This analysis will extract and illustrate guiding principles and main factors that have an impact on the reform process. Success factors will be sought within the dynamics of the organization and within the country environment, as well as in connection with the global environment and the support by international organizations. Factors will be prioritized and positioned along the timeline of a change journey. The analysis will highlight phases and logical sequences, pre-conditions, triggers and enhancing factors, as well as risks and possible mitigation or alternative measures. To the extent possible it will use comparable quantitative or qualitative indicators to detect activation of positive or negative factors. This step should provide decision-makers with a roadmap to manage the change process and to monitor progress;
3. Lessons learnt and recommendations: (a) to transition countries decision-makers on how to manage the change process from the early stage of designing a realistic agenda up to the implementation in the field; and (b) to the World Bank on how to provide efficient support to client countries through various instruments. These recommendations will be formulated at the regional scale or by a group of countries, with specific examples for selected countries or selected Bank operations.

Content of the Study on Task 1: Analysis of forest institutional and financing options

The overview on different options to organize public institutions and financing mechanisms will focus on the following topics:

Public – Private balance

The study will give a broad picture of the functions that need to be fulfilled in the forestry sector, and will describe the distribution of these functions between public and private operators. Basically, the study will answer the following questions: What are the core responsibilities of the public sector and which functions could be shared, delegated or handed over to private sector? The study will pay particular attention to the positioning of the State regarding emerging challenges such as certification in private and public forests. Processing industry and marketing functions are also covered by the study.

Within the Public sector, the analysis will look at:

*** Organizational structure of public services.** The study will look at the public institution and state-owned enterprises in place. How do they interact with transversal institutions such as the Ministry of Finance? What are their respective mandates and the disconnection with the actual performance? Where are duplications and/or the gaps of responsibilities, and what is the scope for improvement? To what extent regulatory and supervisory functions are split from commercial and management activities?

* **Legal and regulatory framework.** The study will make a brief assessment of the sector's legal and regulatory framework and point out what the major strengths, weaknesses and/or missing parts are. It will provide clear definitions of the legal statutes of current institutions, show which alternatives are possible or not within the existing legal framework, and outline the areas for improvement.

* **Private and public forest ownership.** The study will describe various categories of public- and private-forest ownership (state, municipalities, individuals, communities, industry). It will examine separately the missions of the state with respect to these categories, and assess the expectations of private sector with respect to delivery of public sector services: extension, technical advise, oversight, financing, etc.

* **Sources of financing and public expenditures.** The study will carefully analyze the systems in place for generation of revenues from the forest, for allocation of resources to forest institutions, and for execution of public expenditures, as well as the flow of resources within forest institutions. Are state services self-supporting or subsidized? What is the role of extra-budgetary funds within Ministries? What are the implications of current budgetary mechanisms on institutional performance? What forest functions should be publicly funded? What level of public budget support should be directed to private forest owners (if any) for what functions and how should it be channeled? What are the taxation system and other mechanisms for pricing access to forest and forest products?

* **Human resources management.** The people factor is central to make institutions work. The study will look at human resources management (HR development systems, status of civil servants) to understand how it influences staff performance and willingness to change. The study will explore obstacles that should be removed, and accountability arrangements and positive incentives that should be introduced in order to improve service delivery.

* **Interactions with private sector/civil society.** Although the study focuses on public institutions, it will also look at the interactions between public sector reform and private sector/civil society development. What is the level of readiness of the private sector (e.g. forest industry) and rural communities (e.g. new small-holders) to take on new responsibilities arising from privatization and land restitution? What are the constraints to fair competition among private operators, such as over-regulations *versus* lack of enforcement, remaining monopolies and privileges, or lack of transparency? In Russia for instance, the privatization of large-scale forest industries has had limited impact on the processing sector, which is still dominated by inefficient inter-related and monopsonic holding companies. Furthermore, privatization of harvesting and processing industries has not led to efficiency improvements.

Concept for Comparison and Innovative Solutions

Types of state forest institutions categorized by tasks

The concept for the worldwide comparison is based on defining the state forest institutions by their multiple tasks. The tasks can be categorized into both tasks of

public authority within the forest sector and tasks of management of the state-owned forests.

A key authority task is regulation that means the implementation of forest-related laws in the entire forest of the country. The regulation is supported by forestry planning which can be conducted on the statewide, regional or local level. In most former centrally planned countries the planning by state forest institutions is still rather intensive and often restrictive for local or private activities in forestry. In addition to the implementation state forest institutions play a major role in the formulation of forest policy and in designing the forest laws. Such activities are informal to a reasonable degree but nevertheless of high importance for the forestry sector.

Whenever there is private forest ownership in a country or privatization takes place, the authority functions increase. New private forest owners or small private forest owners have a big need for extension, financial and technical support in order to achieve a good standard of sustainable forestry. The combination of regulatory means with financial incentives and extension is the secret of success of a modern forest authority.

The management task comprises the responsibility for the ownership of the state forest, the management of the state assets and the management of forestland. Additionally, the management of wood processing or processing of non-wood products can be done by the state forest service. Privatization is most successful in wood processing and processing of non-wood products. Beside that the management of the state forests and of the state assets can gain economic strength by using private management procedures.

Among the different countries there are many options to distribute the responsibility for the different tasks among different state institutions. E.g. in Bavaria and up to now in Russia a single state forest institution handles all tasks whereas in Austria the authority is strictly separated from the management of the state forests. The analysis will describe the different state institutions and their tasks as a basis for comparison.

Performance of the state forest institutions

The performance of the state forest institutions has to be evaluated following clear standards that are relevant for all countries. Four general goals are highly relevant for all forest institutions:

1. Securing the ecological potential of the forest

The forest is the basis of the survival of forest institutions. Any forest institution that destroys the forest will not be durable. This knowledge is as old as the principle of sustainable forestry.

2. Serving the demands of forest users

Forest institutions cannot live from the forest alone, they need additional support from the users of the forest. Therefore forest institutions have to be sensitive for the different users, get in contact with them, build up partnerships and gain the confidence of the users or win them as customers on markets for wood or non-wood

products. Serving the demands of users is only partly done by following the demands of markets. Important forest users merely gain free human consumption, e.g. fuel wood, mushrooms, berries or recreation and nature conservation values. In addition some very important uses are public goods like protection against erosion or CO₂ sequestration. The state forest institutions are responsible for all demands exceeding by far the market-driven profitable production.

3. Democratic decision-making in forestry

Forestry is affected by changes in the political, social and economic framework. Forest industry, changes in land use patterns, rural development or pollution of air cause strong impacts on forestry. Therefore active state forest institutions try to play an important role in discussing and formulating the social and political framework. They seek partnerships with different stakeholders, identifying their adversaries and organizing alliances to support forest goals.

4. Economic fitness

Economic fitness is the basis for survival within a competitive environment. No state forest institution will be stable as long as other institutions can do the same job in an economic way more efficient.

Organizational elements to secure a strong performance

The four goals will be used to evaluate the performance of the different state forest institutions. None of the institutions is best in pursuing all four goals. E.g. a state forest institution that focuses on the management of the state-owned forest can only be strongly oriented toward economic fitness. Such an institution is able to maximize profits by making use of all chances the market offers for wood and non-wood products from the state forest. In contrast to this, a state forest institution, which is responsible for the management of the state forest and simultaneously pursues the task of the authority, has to serve many more users. Public goals for environmentally friendly forestry formulated in public programs will have the same weight as the goals of maximizing profits. The whole organization will be more balanced between ecological and economic goals for forestry.

The comparison will ask the additional question which the organizational elements within the specific state forest institutions are that cause a specific performance and contribution in fulfilling specific goals. The same approach will be used with regard to the goals user demands, democracy and economic fitness.

E.g. the institution type 1 has a better performance than the institutions type 2 in securing the ecological potential of the forest. Different innovative solutions can be identified within the organization type 1 which causes the good performance. For instance such organizational elements can be a specific public program securing expertise and budgets for ecological measurements. Another element is participative planning which is able to balance all forest users. The state forest institution could get a strong position as a mediator among the different conflicting interests in the forest.

The different innovative organizational solutions build up a forest institution type 1 with a strong ecological performance. An interesting option is to take specific

innovative solutions from type 1 and apply them to type 2 in order to improve its ecological performance. The existing forest institutions can be improved by applying specific organizational elements from models of other countries. By identifying innovative organizational elements the project will provide the practice with organizational elements they can adapt from other countries. Focusing on specific innovative organizational elements will facilitate learning from the experiences of other countries. It will not be necessary to change the whole institutional setting because the institution can be improved step by step.

CHAPTER 15: WORKSHOP CONCLUSIONS AND RECOMMENDATIONS

Gerhard Dieterle, World Bank

Conclusions

The workshop participants, including government officials, leaders of forest management agencies from countries of Eastern Europe and the Commonwealth of Independent States (CIS), representatives of forest industry and nongovernmental organizations, international agencies and prominent experts from around the world have identified and discussed the following six factors that are driving the processes of institutional reforms in the forest sector of countries with transition economies:

1. Business environment for forest management and forest industries has changed dramatically in the last decade

Institutional adaptation processes have been initiated in most European (including CIS) countries. Key drivers for change are the following: (i) Global or international competition is becoming an increasingly important factor for forest management systems in countries with transition economies. Demand-driven global markets require increasingly transparent production processes, accountability for social and environmental impacts and forest certification; (ii) Increasing competition and decreasing profit margins require business to be more efficient, less wasteful and planning oriented; (iii) Decreasing public funding of forest planning management in many countries can create a serious risk for sustainability and the provision of social, cultural and environmental benefits of forests. Insufficient funds for supervision and control of forest operations can encourage illegal activities and problems in governance.

2. An unfavorable investment climate is still a major obstacle for development of forest industries in the countries with transition economies

A major problem preventing foreign and domestic investments in forest industries is the uncertainty about secure and long-term access to forest resources. Key factors of a good investment climate that influence the willingness of foreign forest industries to invest in the near future are not primarily related to costs and site conditions, but more to the existence of an enabling institutional, legal and policy framework such as: (i) a conducive political environment; (ii) equitable legal and revenue system with clear property or tenure rights; (iii) a taxation system promoting efficiency and wealth generation; (iv) ability to repatriate profits; (v) sufficient instruments to mitigate risks; and (vi) transparency and effective participation of all legitimate stakeholders, which includes availability of information on investment decisions. It is hence clear that

confidence in the administrative system and good governance are key factors for successful industrial development.

3. Forest tenure systems need to be flexible as well as site- and situation-specific

Forest concessions and long-term lease agreements seem to work best in areas where growing stock is rich and potentially profitable. However, local forest management units (such as leskhozoes) should have enough flexibility to choose from a mix of other forest management options for achieving silvicultural and management objectives and their long-term financial/economical viability. Rights and obligations of forest management license holders should be clearly defined and performance should be reviewed periodically. Long-term sustainable practices should be encouraged and disincentives for short-term exploitation of forests put in place. Long-term (50-100-year) licenses should be renewed based on good performance in 5-10-year intervals to be verified and assessed objectively. Integrated landscape-based management planning, sustainable forest management practices and state-of-the-art regeneration should be integral conditions for long-term management licenses.

4. Appropriate resource rent capture/ taxation systems and sound financing of forest management

They are key elements in maximizing benefit from forests. In most of Eastern-European countries only a small part of the potential rent is captured. In the case of Russia the envisaged reform of taxes on natural resources is therefore of key importance for the future of the forest sector. Taxation as a tool for collecting resource rent should be limited, with greater emphasis placed on competitive resource allocation, which, among others, encourages sustainability of forest management, promotes efficient use of raw material, mitigates environmental damages of resource extraction and yields social benefits. Of key importance, especially in over-harvested areas, is that a defined share of the revenues from forests is directly used for re-investment and improvement of forest resources through activities such as rehabilitation, tending, thinning, planning, social services, etc. This is of special importance in some areas in Northwest Russia where increasing productivity of forests is a key factor for ensuring competitiveness.

5. Forest certification

Forest certification has become an established tool for securing access to environmentally and socially sensitive markets in Western and Northern Europe, the United States and, increasingly, Japan. It has also high potential to be a cost-efficient tool for improving governmental oversight/control over forest concession or lease areas. It is clear that only voluntary, independent third-party, chain-of-custody certification schemes can balance consumer, producer and conservation interests and include effective involvement of civil society. Forest certification needs an enabling legal, institutional and policy framework based on principles of good governance. In Russia, under present lease-holding arrangements, close collaboration of forest

industries and forest service is required as they share responsibility for management of forests.

6. Institutional change processes

Institutional change processes have been initiated in many European countries to respond to the needs of a market economy and increasing competition. Countries which plan to initiate such processes should learn from experience in countries with completed or on-going reforms. There is a general trend towards separation of state authority and commercial management functions. It is sometimes assumed that this alone will increase efficiency of public administration, encourage transparency, improve governance and reduce corruption. However, experience shows that change processes are only successful if based on: (i) careful analysis and development of various options for reform (i.e. avoidance of “one-size-fits-all” policy impositions); (ii) political commitment and strong leadership (“champions”) for reform, which are important for leading through the process and implementing the reform; (iii) participatory and inclusive processes which meet the needs of all administrative levels and create ownership. For the CIS countries, success in institutional forest reform will largely depend on defining proper enabling working and financing conditions at the local (leskhoz) level.

Recommendations (for Countries in Transition and for Russia in particular)

1. Russia has enormous potential to increase benefits from forests for economic growth, social services and the preservation of global values. However, if increased forest production is pursued without proper planning and safeguards, the effect could be devastating. The Workshop presentations and discussion indicate that critical issues in the proposed reorganization of forest management in Russia are:
 - Building a clear contractual framework between the owner and users of state forests that defines economic and ecological rights and obligations of both parties;
 - Separating administrative and implementation functions among public sector entities for management of forests that remain outside the owner-user contracts. Administrative functions include supervision and control of forest management; and
 - Securing financing for the state forest service for all forest management and forest protection activities in non-conceded forests, for planning, supervision and control of all operations.
2. If the revised Russia Forest Code is to be passed, major implementing regulations should be prepared simultaneously to ensure its practical implementation. Further analytical work and public debate are needed in the following areas to prepare actual implementation of the revised law:

- Institutional and financial restructuring to guide conversion of local forest management units (leskhozoes), to maximize use of their existing social capital;
 - Comprehensive economic review to rationalize taxation, define forest use fees, promote private investments and set up a financing framework of forest institutions;
 - Market based instruments and efficiency.
3. The World Bank-financed Sustainable Forestry Pilot Project can help carry out such reviews in several participating regions. Activities planned under the Project should be aimed at developing options, considering stakeholders' views and helping Government make decisions.
 4. While leading the change process, the following aspects should be given particular attention to:
 - Horizontal dialogue: between federal ministries (Natural Resources, Economic Development and Trade, Industry, Finance, Agriculture) to ensure intersectoral coordination and cooperation and to avoid multiple and diverging leadership;
 - Vertical dialogue: between the Federation and Regions to increase understanding and acceptability of the new policy by local stakeholders, and to improve the quality and feasibility of the new policy through feedback from the field. Regional consultations could be conducted and the Sustainable Forestry Pilot Project can help in the participating regions.

Such dialogue should address overall objectives, policies, and responsibilities with all legitimate stakeholders.

5. The regional study of forest institutions in transition launched by the World Bank for the Eastern European and Central Asian Region builds upon the worldwide experience of forest management and provides a valuable self-diagnostic and learning tool that can be used by public authorities in the process of designing and implementing institutional reforms in the forest sector. The study should be continued and its results widely disseminated. Under the subsequent phases of this study, multi-stakeholder working groups should be proactively used to engage relevant government officials, industry and civil society representatives in the target countries in the participatory process of identifying options and developing recommendations for most appropriate institutional adjustments in the forest sector.
6. Bilateral and multilateral aid institutions, including specialized agencies of the United Nations have provided, and should continue to provide, valuable project support to the processes of development, testing and implementation of institutional changes in the transition countries. Large-scale projects (such as those of the World Bank or UNDP) should be designed with a built-in flexibility to allow for timely and adequate adjustments in project components

and activities in response to sometimes rapidly changing policy and legal environments in transition countries.

7. In larger countries (such as Russia, Ukraine, Kazakhstan) diversity of geographic and socioeconomic conditions should be carefully considered before selecting any individual approach to institutional change. Different models need to be piloted in different regions and the legal and regulatory framework needs to be adjusted to allow a variety of forms of forest administration and management. Where conditions are appropriate, new legal and financial models could be tested for provision of forest management functions directly by government agencies, contractors, or private lease/concession holders.
8. Lack of properly qualified personnel at all levels of forest management remains a significant obstacle to successful design and implementation of institutional changes. The World Bank Institute (wbi.worldbank.org) and the Global Development Learning Network (www.gdln.org) should be invited to develop partnerships with the leading forest management training institutes in the Region and support appropriate curricula development and training/learning activities.
9. Special programs on facilitation of policy dialogue and policy development, such as the World Bank's Program on Forests (www.profor.info), the FAO National Forest Program Facility (www.fao.org/forestry) and the United Nations Forum on Forests (www.un.org/esa/forests) should be encouraged to organize and support specialized international workshops and exchange programs customized to the needs of the transition countries.
10. Quick successes should be achieved in the participating pilot regions of the World Bank's Sustainable Forestry Pilot Project so as to demonstrate feasibility of the proposed reforms and create confidence in change.
11. World Bank's support to Russian forest sector reforms would be optimized by combining the whole range of the World Bank Group's instruments:
 - World Bank loan (Sustainable Forestry Pilot Project): Part A – support to forest management reforms, regional consultations; Part B – testing for improved forest utilization in participating regions;
 - Region-wide study of forest institutions: facilitate knowledge exchange, public debate, participatory process and communication;
 - Forestry Sector Guarantee, MIGA, IFC, Forest Investment Forum and World Bank-WWF Alliance: promote private sector investment, sustainable management and certification;
 - GEF and Biocarbon Fund: mainstreaming of biodiversity conservation in productive landscapes and strengthening of non-timber values and provision of global environmental services;
 - Macroeconomic dialogue and policy consultations: with support from PROFOR and World Bank Institute (WBI), support and promote multi-

sector reforms and ensure consistency between sector-specific and overall reform agendas.

12. This Workshop was an important step in the longer-term support of the reform agenda. Working groups representing an array of stakeholders from the center and the regions should be organized to meet at regular follow-up workshops to monitor progress and stimulate further exchange. Thematic meetings should be planned, such as on concession management etc., to be combined with study tours to other countries.

Next Steps

Workshop participants welcomed the opportunity for exchange and learning across the CEE and CIS countries and recommended the following next steps:

- Organize further thematic workshops with support by the WBI and PROFOR on concession management, illegal logging and governance, certification, financing of forests, carbon trading/sequestration etc.;
- Undertake study tours to Finland, Sweden, Canada and the Baltic countries;
- Organize a special event on institutional reform in Russia at the World Forestry Congress in Québec, Canada in September 2003;
- Finalize the World Bank regional institutional analysis;
- Immediate launching of studies on institutional and financial reform in Russian Forestry under the World Bank Sustainable Forestry Pilot Project

ANNEX 1: WORKSHOP AGENDA

International Workshop on Institutional Change in Forest Management in Countries with Economies in Transition

Co-Chairs: Prof. Anatoly Petrov (Russia) and Mr. James Douglas (World Bank)

9:30 - **Registration and Coffee**

10:00 - **Welcome and Opening Remarks**

by Mr. Valery Roshchupkin, First Deputy Minister of Natural Resources, Russia; and Mr. Julian Schweitzer, Country Director for Russia, World Bank

10:15 - **“Key Tasks of Forestry Reform in Russia”**

by Prof. Anatoly Petrov (Russia)

10:40 - **“Forest Reforms in East-European Countries – Overview and Lessons Learnt”**

by Mr. Markku Simula (Finland)

11:10 - **“Old and New Features in Forest Management in the Ukraine”**

by Mr. Nikolay Kolisnychenko (Ukraine)

11:30 - **“New Forest Policy of the Kyrgyz Republic”**

by Mr. Turatbek Musuraliyev (Kyrgyz Republic)

11:45 - **“The Baltic Panel – A Set of Case-Study Presentations”**

Latvia – by Mr. Otto Žvaginš (Latvian State Forest Service)

Estonia – by Mr. Anders Talijärv (Association of Estonian Timber Industry)

Finland – by Mr. Pertti Veijola (Embassy of Finland)

Sweden – by Mr. Bert-Åke Näslund (Swedish National Board of Forestry)

12:40 – 14:00 **Lunch for Participants**

13:00 - **Press Conference of Workshop Organizers and Participants**

- 14:00 - **“Managing Changes in Forest Institutions”**
by Mr. Michael Sutter (Austria)
- 14:30 - **“Canada: Forest Policies and Institutions in a Large-Scale Federal Country”**
by Prof. John Gray (Canada)
- 15:00 - **“Forest Concessions Policies and Revenues Systems: a Worldwide Overview”**
by Prof. John Gray (Canada)
- 15:30 - **“Certification Requirements for Concession-based Forest Management: International Experience”**
by Mr. Markku Simula (Finland)
- 16:00 - **“The Stakeholder Panel – Views of Private Sector and Civil Society”**
Dmitry Chuko, Ilim Pulp Enterprise (Russia)
Jan Eklund, Swedish Federation of Forest Industries (Sweden)
Alexey Grigoriev, Socio-Ecological Union (Russia)
Igor Chestin, WWF Russia (Russia)
- 16:50 - **Coffee Break**
- 17:20 - **“Forest Institutions in Transition Countries” – Overview of the World Bank Regional Analysis**
by Prof. Max Krott (Germany)
- 17:30 - **Feedback and Workshop Recommendations – Open Discussion Session**
Co-chaired by Prof. Anatoly Petrov (Russia) and Mr. Gerhard Dieterle (World Bank)
- 18:15 - **Workshop Wrap-Up and Closing**
by Ms. Irina Osokina, Deputy Minister of Natural Resources of Russia, and Mr. James Douglas, World Bank

ANNEX 2: LIST OF PARTICIPANTS

Russian Federation Ministry of Natural Resources

ROSCHUPKIN Valery Pavlovich	First Deputy Minister, Head of the State Forest Service
OSOKINA Irina Evgenievna	Deputy Minister
SHUVAEV Yuriy Petrovich	Deputy Minister
KAMENSKY Vladimir Georgievich	Department of International Cooperation and Intergovernmental Programs in the Field of Nature Use/ Head of division
SHEBINA Nadezhda Vyacheslavovna	Department of Legislation and Regulations Activities/ Head
NEFEDYEV Viktor Viktorovich	Forest Use Department/ Head
KLEYMENOVA Nadezhda Borisovna	Public Relations and Mass Media Office/ Head
TTTOVA Larisa Pavlovna	Forest Fund Department/ Deputy Chief
GAVRILYEVA Valentina Sergeevna	Department of the Draft Legislation and Regulatory Activities/ Head
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LEBED Oleg Stanisavovich	Main Directorate for Natural Resources and Environmental Protection for St-Petersburg and Leningrad oblast / Head
SOLDATOV Vladimir Vladimirovich	Krasnoyarsk Center for Forests Protection/ Head
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Bilateral Agencies, International and Non-governmental Organizations

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SHVARTS Evgeny	WWF Russia
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PROVOTOROVA Elena	Interpreter
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SUCHKOVA Anna	Team Assistant

ANNEX 3: WORLD BANK EUROPE AND CENTRAL ASIA FOREST PORTFOLIO NOTE

New Forest Policy and Strategy

In the decade up to 2002, the World Bank policy and strategy in the forest sector had led the Bank into a risk-averse, do-no-harm approach which in fact marginalized the organization in many countries from any effective involvement in forests. In October 2002, following a very extensive consultative process of policy and strategy development, the Executive Board of Directors of the World Bank approved a new forest policy for the Bank and endorsed a new strategy which supports that policy.

This new approach is a major change in direction for the Bank in forests. It focuses on three broad objectives:

- Harnessing the potential of forests to reduce poverty;
- Integrating forests in sustainable economic development;
- Protecting vital local and global environmental services and values.

The Bank will pursue these objectives through a proactive re-engagement in the sector, in ways that deal effectively with the basic realities confronting forests and the people who depend upon them for livelihood. We recognize that protection and use of forests must be pursued as complementary objectives, not conflicts. We accept that forests of high commercial value should be used – in some cases intensively so – to alleviate poverty, and to contribute to sustainable economic growth. In implementing the new approach, we will place very high standards on the sort of management in forests the Bank will support, and we recognize that, in many places, local communities must be given a significant role in decision making on forest use, and a meaningful share in the benefits of doing so.

The Bank's new approach also deals more directly with the large question of how forest issues and concerns should be integrated at all levels of Bank activity - recognizing that in many cases, what the Bank – and others – do outside the forests sector itself can have major impacts on forests, and those who depend most upon them.

In Eastern Europe and Central Asia (ECA) the Bank is supporting improved forest management in Russia, Romania, Bosnia, Croatia, Albania, Georgia and Armenia, with operations under preparation in Bulgaria, Kazakhstan and Azerbaijan, and recently completed investment support in Belarus and Poland. In addition, several of our rural credit operations especially in the Baltics but also in Georgia have supported small scale timber processing.

Our Forest Strategy Priorities in Eastern Europe and Central Asia (ECA) Region

In all countries, the Bank supports development of transparent policy, institutional and legal frameworks that can provide the basis for good governance, investment and sustainable development. We also support improved management regimes providing for sustainability, development of landscape-based approaches to forest management planning, involvement of local communities in the planning process, and conservation of critical ecosystems. We support increasing use of independent certification as a means for verifying sustainable management

We support improved fire and pest management, improved approaches to regeneration based on natural systems, and better designed, less environmentally damaging forest roads, both for forest protection, and in forests designated for sustainable production management.

Growth in timber processing industries can increase value added from forest products, and provide jobs and income opportunities for citizens. We support environmentally sustainable private sector investment in forest processing; private industry, the IFC and investment guarantees all have a role to play in development of the sector.

In countries whose forest resources are degraded and face pressure from local people for fuelwood, fodder and subsistence purposes, we need to focus on community based, participatory approaches to forest and land management which will help local communities balance their requirements for livelihoods in the short run, with sustainable natural resource management in the longer run. Mountain forests require a specific approach.

Furthermore, the Bank support enhancement of the ‘non-timber’ values of forests, including watershed protection, ecosystems conservation, sustainable management for tourism and recreation, and harvesting of non-timber forest products.

Countries where a substantial portion of forests is being returned to small private owners require a special approach so that these new owners manage the resource sustainably. Former collective farm forests and farm shelter belts also require specific measures, and more broadly we need to integrate woodland and forest management into sustainable farm land and pasture management.

Finally, the Bank needs to help ECA countries meet their commitments to global environment conventions, through use of such instruments as the GEF and the carbon sequestration opportunities.

Our ECA strategy is differentiated geographically

In the “forest-resource-rich” countries of Russia, Ukraine, Belarus and the Baltics, most of the Balkans and Georgia we will focus on improved public sector management, fire and pest management, sustainable approaches to forest land restitution and an enabling environment for sustainable private sector investment.

In the “forest-resource-poor” countries of Turkey, Armenia, Azerbaijan, Central Asia and Moldova we will focus on community-based natural resource and watershed management, forest protection and rehabilitation.

In all countries we will support participatory approaches to protected area management and to “mainstreaming” biodiversity conservation into forests that are managed for sustainable production.

LIST OF ECA FOREST PORTFOLIO

Country	Project	Fiscal Year	Total Project Costs (US\$ Million)
Albania	Forestry	1996	17
Belarus	Forestry	1994	47
Bosnia	Forestry	1998	20
Bosnia	Forestry TA	2003	5
Bulgaria	Forestry	2004	40
Croatia	Coastal Forest Rehabilitation	1997	67
Georgia	Forestry	2003	20
Georgia	Protected Areas Development (GEF)	2002	12
Kazakhstan	Forestry Rehabilitation	2004	35
Moldova	Afforestation & Soil Conservation	2004	10
Romania	Forestry Development	2003	40
Romania	Biodiversity (GEF)	1999	9
Romania	Prototype Carbon Fund Afforestation	2003	10
Russia	Amur Sakhalin Eco. Fire (GEF)	2004	8
Russia	Khabarovsk Habitat Conservation	2001	1
Russia	Sustainable Forestry Pilot	2000	75
Russia	Biodiversity Conservation	1996	20
Russia	Coal and Forestry Sector Guarantee Facility	2001	200
Turkey	Biodiversity (GEF)	2000	9
Turkey	Forestry Development	2005	50

Key Issues in Russia’s Forests

Russia’s forests cover some 760 million hectares (about 23 percent of the global forest area). They account for 55 percent of the world’s growing stock of coniferous species. They play a major role in preservation of planetary biodiversity and amelioration of the global climate through carbon sequestration. Up until the late 1980’s Russia ranked second in the world after the USA in forest production. The size and potential contribution of Russia’s forests to economic development and to protection of the global environment have been well documented.

After the 1998 financial crisis, the timber-based industry has begun to recover. In 2002, timber production was up to 180 million m³ and exports to \$4.5 billion. Further growth is envisaged, based on continued increase in domestic and international demand on forest products. Domestic forest product consumption is estimated to

grow from 80 million m³ of industrial roundwood (IRW) equivalent in 1994 to about 125-165 million m³ by 2010. Roundwood exports to Nordic countries have been growing rapidly. Exports to the Pacific Rim countries alone (mainly China, Japan and South Korea) could feasibly rise to 30–35 million m³ of IRW equivalent by 2010.

Nevertheless, formidable legislative, institutional and fiscal policy problems could prevent this positive economic trend in the forest sector from turning into visible improvements in both the livelihoods of local forest-dependent communities and the public and private sector capacity for future forest conservation and sustainable development. Revenues from increased forest utilization do not adequately contribute to the treasury and, correspondingly, to sustainable public financing of improved forest management and protection. Partly due to lack of fire protection measures, forest fires annually affect some 1.5 million hectares with tremendous economic social and global environmental losses. Economic pressures of deregulated forest trade, combined with weakened management and administrative capacity at the local (*leskhoz*) level, have encouraged widespread illegal logging. Over-cutting of more accessible forests is leading to ecological degradation of forest habitats and increased risks of extinction of some endangered plant and animal species. Rapidly rising market demands could easily translate into a social and ecological disaster, unless the forest policy problems can be overcome.

Initial steps in addressing these issues are already being supported through the projects financed by the World Bank Group, including the Environment Management Project (which has allocated \$55.4 million worth of investments in environmental modernization of several pulp-and-paper enterprises and \$5 million in forest pest management), the Biodiversity Conservation Project (grant of \$18 million equivalent), the Sustainable Forestry Pilot Project (\$60 million loan) and the Coal and Forestry Sector Partial-Risk Guarantee Facility (\$200 million guarantee). A follow-up biodiversity conservation project identified in collaboration with WWF, is also contemplated in the current strategy of cooperation between the World Bank and Russia. The International Finance Corporation (IFC) has already invested \$58 million in private sector projects and is developing a much larger portfolio of investment projects in the Russian forest-based industries. Important public-private forest partnerships are also supported under the framework of the Global Alliance for Forest Conservation and Sustainable Use between the World Bank and WWF.

Overall projected investment requirements for the Russian forest sector between 2006 and 2010 have been estimated at about \$24 billion, of which the Government is seeking to secure about 80% from the private sector, including international investors. The interest being shown by some major international corporations suggests that, given implementation of legal and other reforms such as those the Government is pursuing, substantial private investment could be forthcoming.

The operational forest policy note prepared by the World Bank at the request of the Government further elaborates on some of the ideas explored in this paper (see Annex 4). The IFC and the World Bank, in collaboration with other agencies mentioned above, would proactively explore emerging private sector investment opportunities for the Russian forest sector, including the forest investment fund mentioned above.

ANNEX 4: ISSUES IN FOREST POLICY REFORM IN THE RUSSIAN FEDERATION

World Bank Discussion Note¹

Laurent Debroux, Gerhard Dieterle, Andrey Kushlin

Introduction – Objective

Russia's forests are attracting growing interest from domestic and international stakeholders. Forests have now reached center-stage of Russia's reform agenda, and the Government is remodeling the institutional and economic framework of the sector. The new vision is reflected in the newly approved 2003-2010 Concepts for Forest Industry (December 2002) and for Forest Development (January 2003) as well as in a wave of new legal instruments under preparation (three draft Laws on Forests, Forest Charges, and Concessions). In November 2002 the Government also launched the World Bank-financed Sustainable Forestry Pilot Project, and requested further support through non-lending advisory services.

In response to the Government's request, the present policy note conveys the World Bank's understanding on the major orientations of the current forest reform agenda, as reflected in the above-mentioned Concepts and draft laws. It expresses Bank's views on opportunities and risks associated with this reform agenda. It emphasizes key safeguards and accompanying measures that are necessary to mitigate these risks and secure successful implementation of the new policies in the field. This note also identifies key-choices that need to be made, and options to be considered, to ensure consistency in re-organizing the forest sector.

This policy note builds on experiences and lessons learnt from other transition- and forest-rich countries across the world; in particular those presented during the International Workshop "Institutional Changes in Forest Management in the Countries with Transition Economies: Problems and Solutions" (Moscow, February 25, 2003, All-Russian Foresters Congress).

This Note is being prepared in collaboration with national agencies in charge of forest management, and in the framework of the World Bank regional study on "Forest Institutions in Transition Countries".

Three cross-cutting ideas underpin the present Policy Note:

¹ This note was officially submitted by the World Bank to the Russian Government on March 31, 2003.

- **Inter-connections** between forest management, financing mechanisms, public institutions and industry should be enhanced. For example, to date, inadequate funding of local forest services (leskhozoes) leads to deficient law-enforcement (illegal logging) and mismanagement of forest resources (excessive sanitary cuttings); but increased budget allocations to public services depend to a large extent on increasing economic benefits from the forest to the nation (revenues, employment); which in turn requires efficient mechanisms for pricing forest rights (transparent bidding) and a more incentive framework to attract new investments (secured long-term access to forest).
- **Improved governance** is critical for sustainable management of forests. Mismanagement of public goods, such as forests and forest revenues, keeps their contribution to national economy far below potential and reduces national interest for long-term conservation of such public goods. Clear distribution of responsibilities, rights and obligations, simple procedures and removal of economic distortions must be given priority, as well the search for pragmatism and simplicity rather than technical perfection.
- **Extra-sectoral factors** such as domestic business environment, judicial and banking systems, public sector reforms, social and political priorities, as well as international markets, often overwhelm technical aspects of forest management. Russia's forest reform agenda needs to follow national orientations for public sector reform and management of public goods.

A. Ownership and Forest Uses

The recently-approved Concepts and the current draft laws foresee that the Forest Fund will remain under ownership of the **Federal authority** (92% of Russian forests). Other forests will remain under ownership of the Subjects of the Federation (Regions and Municipalities) or other public authorities.

Those documents also indicate that sustainable management of forests will increasingly rely on **contractual relationships between Owner and User** of the forests. In accordance with civil law principles, these "user contracts" will set the rights and obligations of both parties. The overall orientation is to delegate management operations and market activities to forest users while focusing the role of public services on strategic and regulatory core-functions. The forest user should then take responsibility for implementation of sustainable forest management plans and payment of rental fees in exchange of secured access to the resource; while the administration will focus on law enforcement. Such orientation relies on a clear demarcation between public and private mandates, and is in line with the disengagement of the State from production and commercial activities, as applied in other sectors. Four categories of such "user contracts" or "delegation

contracts”² are being set up by the current draft laws: concession, lease, non-timber lease, and short-term use. Through those contracts, parcels of the Forest Fund will be rented, not sold. It is important that ownership of the forest remains with the public authority.

However, the Bank also understands that the public authority will continue to **directly manage** a significant part of the Forest Fund. Not all forests can fall under user contracts because they would not, or not yet, be profitable from a private-sector point of view or because they have a protection status. Consequently, direct management should focus progressively on protection forests, young or depleted stands, forest reserves, and too fragmented or inaccessible areas.

In conclusion of the above analysis the Bank understands that forest management in Russia within the next 10-20 years will eventually fall under two main systems corresponding to two subsets of the Forest Fund:

- **Under user contract management**, forests will be managed by forest users under the supervision of the forest administration according to the provisions of “delegation contracts”. This system will progressively become regular practice for most production forests (Group III-B of the Law).
- **Under direct management**, forests will be managed by the forest administration through its execution body. This system will focus on non-production forests (Groups I, II and III-A of the Law) and on production forests where concessions and other user contracts are not, or not yet, viable. Ultimately, no “final harvesting” will be conducted in these forests. In the short-term however, final harvesting in these forests will remain necessary as part of a transition period.

In each district, a **forest land-use planning operation** should map all forest areas of the Forest Fund according to their classification in groups I, II and III of the Law (sustainable production; environmental protection; others). Such forest zoning should be conducted by the forest administration through a participatory process including all interested stakeholders. Through this participatory process, the government as owner of the forest will determine which areas will be allocated under user contracts or remain under direct management. The forest zoning will also show the size and boundaries of proposed concession areas, and set the timeframe for their gradual allocation overtime (10-20 years).

The Bank recommends that the setting up of an improved framework for concession and other user contracts follows the key-principles outlined below:

- Concession and other user contracts should spell out rights and obligations of both parties (owner and user). In particular the concession

² Since the term “concession” is often understood *sensu stricto* by opposition to “lease” and “short-term use”, we will here use the term “user contract” or “delegation contract” to cover all four categories in a broad sense.

holder or other user should receive not only the right to harvest timber but also the obligation of **comprehensive sustainable forest management** of area. This includes silvicultural and regeneration operations together with infrastructure investments and maintenance, as well as biodiversity and social measures. In this respect “concessions” (which imply a comprehensive coverage of sustainable management operations) should prevail on “leases” (which imply a narrow set of management operations, sometimes limited to harvesting only). In that sense, the “short-term use” contract should not be regular practice because they are not easily compatible with implementation of long-term forest management plans by the forest user.

- Concessions and other user contracts should be allocated through a **transparent market-based mechanism** (auctions) following a two-step selection process: pre-selection of acceptable candidates based on technical criteria, and selection of the final winner based on financial offers. The selection should be open to all interested operators (no monopoly or a-priori discrimination).
- The selection process should be conducted by an **inter-ministerial committee** (Ministries of Natural Resources, Economy, Industry, Finance, Agriculture) including representatives of federal and local governments. Specific clauses of the contract should be published in advance and should not be negotiated after the selection so as to secure equality of chances among bidders. For transparency it may also be that the selection process be done by an independent body, or with the participation of independent observer.
- The winner’s financial offer should determine the rate of the **area fee to be paid annually** as a share of the forest rent (non-tax rental fee) for each individual concession (see Pricing and Revenue policies in Section C).
- Concessions should be **long-term**, in order to secure industrial investment and to provide incentive for sustainable forest management. Duration of 10-20 years, and up to 49 years, are usual practice in many countries. However, in addition to the formal duration of the contract, the real key-issues seem to be: (a) the **renewal** of the contract upon satisfactory fulfillment of environmental, social and economic obligations at the end of the concession period; and (b) the early **termination** of the contract in case of non-compliance by the forest user, requiring permanent monitoring by the forest administration. In any case, long-term user contracts should include a 3-5 years **probationary period** after which verification of performance will trigger conversion into longer-term contract. Concessions should be transferable (under conditions clearly spelled out in the initial concession contract).

- **Size and location of concessions**, as well as timing of allocation, should be carefully designed through the regional forest zoning conducted by the forest administration (Figure 1) in order to make concessions attractive for investors and to optimize competition among potential bidders. Areas to be offered for concession in a given region can be designed large (up to 1 million hectares) or small (a few thousands of hectares) depending on the size of the likely bidders in this region. On one hand, excessively large areas may encourage extensive rather than intensive forestry and inefficiency in utilization; on the other hand excessively small areas may render sustainable management more costly and difficult.
- **Capacity of public institutions** in charge of forest management need to be strengthened in two key-areas: (a) control of compliance with environmental obligations in the field; and (b) collection of forest revenues. In both areas, in order to reduce arbitrary considerations, law enforcement should first focus on well-defined easy-to-detect rules and parameters, such as geographical boundaries of the annual harvesting area and payment of area-based fees, rather than complex silvicultural prescriptions or profit-based taxes. Focus should be placed on results and performance outputs rather than inputs, and on easy to measure on-the-ground measures. Trade-off between complexity of the rules and actual enforcement capacity will be a motto when defining new forest regulations and concession contracts. Capacity-building efforts (training, communication and dissemination, equipment) should follow the same focus.
- It is worth noting that the civil-law-based contractual framework is also applicable to **community-based forest management**. Rights and obligations can be delegated by the public authority to local communities through a concession-type contract for a given area and a given period of time. Specific procedures for allocation such contracts would need to be designed.
- Similarly, concession-type contractual agreements can also be applied to non-timber functions through **conservation concessions** or **carbon concessions** for example.

The contractual framework described above, if carefully and gradually applied, has the potential to secure sustainable management of production forests and contribution of those forests to the national economy, as well as to secure long-term private sector investment in the timber industry (in addition to the removal of other extra-sectoral economic distortions such as excessive import taxes).

B. Organization of Public Services

In line with the overall organization of public administration and distribution of power between federal and regional level in the Russian Federation, the Bank understands that: (a) there will be one single **Federal Forest Administration**, with regional and district offices reporting to the federal level; and (b) the Subjects of the Federation will share some authority with this federal forest administration through regional regulation-making bodies; but (c) regional regulations would be enforced through the Federal Forest Administration and the Subjects of the Federation would have no forest offices in the field.

Consistent with the forest use strategies discussed in Section A, the Bank understands that two different sets of public functions will eventually need to be fulfilled at the district level, and they call for two different sub-bodies of the forest administration:

- **Strategic and regulatory functions** to monitor and check compliance of forest users in forests placed under user contracts, and to oversight the execution of works in the forests remaining under direct management by the State. Such law enforcement mandate should be the core-function of the forest owner in the field, and should be performed by the **district-level office of the federal administration**. This mandate also encompasses strategic activities such as forest land-use planning, and monitoring of forest fires and diseases at a district or regional scale.
- **Implementation of forest operations** in areas remaining under direct management. This mandate will consist primarily in protection and prevention activities such as fire-fighting and pest-management, silvicultural operations such as thinning and sanitary cuttings, and biodiversity and social measures. These functions should be performed by the **district-level forest executing agency**. This entity should have the flexibility to carry out the forest works on its own, or to contract them out to private firms against payments. Contracting out should progressively be given preference, depending on availability of private operators to carry out these works.

Regarding the statute of the forest executing body, two options are to be assessed. This executing body could be either:

- (a) a public (non-commercial) **agency**; or
- (b) a publicly-owned privately-run (commercial) **enterprise**.

Both options need to be carefully assessed. However, the Bank's analysis is that most valuable production forests are likely to progressively come under user contracts and that areas remaining under direct management would be those requiring more protection and consequently being financially less profitable. With respect to those forests, the functions of forest services consists primarily in taking

care of the Forest Fund as a public good. The public good functions would prevail. In consequence the State should accept that the cost of protection activities exceeds the revenues (those arise mainly from thinnings and sanitary cuttings). Consequently, the statute of a non-commercial public **agency** rather than a commercial enterprise appears more appropriate for this part of the Forest Fund. At the federal level, this forest implementation agency should be subordinated to the federal forest administration.

The evolution of the existing leskhozoes still seems unclear. It seems that the analysis of options is still underway but does not follow a systematic approach. There are approximately 1800 leskhozoes; one per district; representing approx. 200,000 workers. Our analysis is that three options can be contemplated:

- (a) Leskhozoes could specialize to strategic and regulatory functions described above; or
- (b) Leskhozoes could specialize in direct management of forests not under user contracts as described above.

In these two options a new entity would need to be created to fulfill the alternate function.

- (c) The third option would be for leskhozoes to split into two separate entities with the first being in charge of strategic and regulatory functions and the second being in charge of direct management of forests.

Advantages and feasibility of the three options still need to be carefully assessed. Careful and comprehensive restructuring plans will also need to be developed later on in order to take best advantage of the social and technical capital of the leskhozoes. The final restructuring pattern may vary from place to place across the Federation, in order to take into account the initial situation of each leskhoz and the scope for regulatory and implementing services that are needed in each district (depending on areas to be transferred under user contracts).

In any case, analysis of organizational options should follow a set of **guiding principles and criteria** such as: (a) clear separation of public and private functions and disengagement of the State from production and market activity; (b) separation of regulatory functions from execution functions within public institutions; (c) creating incentives for performance and sound management for private and public actors; (d) consistency with overall public reforms; (e) best possible use of the human capital accumulated in existing institutions, and mitigation of negative social impacts.

In a time perspective, the Bank's understands that the balance between management of the Forest Fund based on user contract and management of the Forest Fund performed directly by forest administration will progressively evolve overtime. Steps are likely needed to improve the direct management of forest as well as introducing concessions and other forms of user contract. In the current situation and short-term future, direct management prevails since concessions will

be allocated very gradually. It is likely that direct management will gradually reduce over a 10-20 years period as fast as new long-term concessions are allocated to forest users (evaluated and deemed to be functioning properly or changes made to correct problems that are revealed). In the meantime, in forests remaining under direct management, protection works will be more and more frequently contracted out to private work enterprises as fast as such private business capacity emerges. Ultimately, at the end of a 10-20 years evolution period, direct execution of forest operations by public services will become more restricted in terms of geographical coverage, and will focus on a limited range non-contractable works in primarily protection forests. Direct management rather than being totally abandoned, should however be continuously improved to fulfill these core-public goods functions.

C. FINANCING MECHANISMS

The Bank understands that the Government intends forests to become a **net contributor to the national economy**. Such positive balance should be reflected in terms of revenues from - and expenditures to - the forests (while preserving long-term and global environmental values). Contrary to present situation, a positive balance from forests would stimulate national interest and political commitment for forest conservation.

The Bank's analysis is as follows:

- On one hand **forests under user contracts** are expected to yield a net positive balance, since these contracts will be granted through competitive bidding (increased revenues) and responsibility for forest operations will be transferred to the user (reduced costs). The owner's burden will be limited to control and monitoring functions which are rather un-expensive.
- On the contrary, **forests under direct management** are likely to result in a negative balance on the State's budget, due to the nature of these forests (protection, regeneration, etc). As production forests will be progressively allocated under user contracts, the public functions in the remaining areas will increasingly focus on protecting the Forest Fund as a public good. Consequently, the State should accept that the cost of protection activities exceeds the revenues (which arise mainly from thinnings and sanitary cuttings). In the short-term however, significant revenues are likely to accrue from final harvesting in these forests as part of a transition period.
- **Overall**, it is expected that the financial revenues from forests under user contracts progressively overrun the cost of taking care of the forests not placed under user contracts. This **overall positive balance** will of course depend on many things, including how well user contracts and concessions can extract the value of the forest resource in higher fees bid, the strength and degree of bidding, the efficiency of forestry operations

and the efficiency of the supervision and monitoring operations. It is expected also that some Regions of the Federation will compensate others within the overall federal budget. Ultimately, at the national scale, the budget cycle: (a) will probably not allow allocations to forest services to be higher than net revenues from forests; but (b) should ensure that funding to forest services in the field is adequate to fulfill their mandate, and is proportional to performance so as to provide positive incentive.

On the revenues side (pricing policy), the Bank suggests that the following key-principles should underpin the new forest taxation regime:

- Forest revenues should increasingly arise from rental fees based on the area placed under user contract and paid in return to access to this forest area (sharing the forest rent).
- In order to increase forest revenues, priority should be given to **securing the collection** of forest charges rather than increasing the rates or creating new taxes. The number of forest-related charges and the number of collecting institutions should be reduced (“single window” system).
- Rates of forest fees should be through an open **market-based mechanism** rather than by the State through administrative calculations. Different types of auctions and bidding systems can be envisaged. Auction-based rental fees will reflect the actual market value of forests better than rates calculated by the administration, while also keeping in line with users’ willingness to pay. Key-tasks for the administration then consist in setting minimum prices (floor prices) and in securing transparency and competition in the bidding process. Securing transparency and competition is among the key-challenges when it comes to implementing the reform.
- **Annual area fees, with rates determined through auctions**, should become a major component of the forest charges. Auction-based area fees can provide the optimal combination of specificities of each parcel (timber quality, accessibility, cost of management operations) with the specificities of each user company (technological efficiency, market opportunities). Auction-based area fees also discourage the waste of raw material, and encourage high value-added industry and technological investments. Area-fees are easy to collect, and thus give little room for fiscal evasion.
- The total forest charge should be a combination of Area fee for the total concession area (A) with Stumpage fee based on volume of wood cut (S). The total Revenue (R) accruing from a concession would then equal: $R = s \cdot V + A$. (with V - annual harvested volume in cubic meters).
- In **forests remaining under direct management**, some revenues will be generated by direct sales of products from thinning and sanitary cuttings. Such sales should be conducted through auction. Sales of timber from

final harvesting, which will continue to take place in the directly-managed forests during the transition period, should also follow secured auction procedures.

- Forest charges from forests under user contracts, as well as proceeds from direct sales in directly-managed forests, will flow according to the **Budget Code** (check new 2003 budget law). A percentage of revenues should flow to the forest administration at central and district levels, either through the budget cycle, and/or directly through a federal or regional forest fund managed by the Forest Administration.

On the expenditure side, the Bank suggests that the financing of forest services should follow the lines:

- **The Federal Forest Administration** and its **executing agency** should be financed through a mix of: (a) federal budget allocation through regular budget cycle; and (b) direct transfer of a share of forest revenues through the Forest Fund. The first part (federal budget allocation) would cover fixed costs of law enforcement in forests under user contracts and the cost of direct management in the remaining forests. The second part (direct trans through the Forest Fund) would cover variable costs such as performance-based premiums and additional protection activities in directly-managed forests. Such mixed financing framework would provide an incentive to forest services to increase their performance in forest management and collection of forest fees.
- **It is likely that forests remaining under direct management** will absorb the largest proportion of the total forest budget, to cover the costs of forest protection works or to contract out these works to private firms (through open procurement procedures).
- The new budget code has removed the incentive for leskhozoes to conduct excessive **sanitary cuttings** (since proceeds from sales now accrue to the federal budget) but inversely this new rule now leads to artificially low sale prices (since the field units have no interest in the proceeds from the sale). Direct interest of field offices for good management of forests as public goods should be restored, and the Forest Fund described above is one possible option to restore such incentive. In addition, transfer of budget allocations to field units should be timely to give forest services the means to act in field in a timely manner.
- **Performance-based premiums** (on top of regular salaries) should be put in place to improve governance in forest management. Such incentive should be part of the government's forest reform agenda, and should be set up for both regulatory and executing bodies, regardless their status of office, agency or enterprise. Lack of such incentive would undermine success of the government's new forest policy.

D. Technical Tools for Forest Management

The Bank understands that a set of technical tools will be created/updated to improve management of the Forest Fund and facilitate control in the field: Forest inventory / Forest Account / Forest cadastre / Forest monitoring. The following three instruments should also be developed as part of a comprehensive foundation for sustainable forest management:

- Concessions and other user contracts should be based on **comprehensive forest management plans** which entails not only the right to harvest timber but also the obligation to execute the whole set of pre- and post-harvest operations (renewal, thinning, protection, development and maintenance of infrastructure, detailed mapping and inventory, as well as biodiversity and social measures). Forest management plans should be drawn up and implemented by concession holders; subject to approval and control by forest services. The concession contract would then comprise not only harvesting areas, but also regeneration and protection areas. According to the forest regeneration cycle and the duration of the contract, the management plan should determine and map **annual harvesting areas** as only a minor fraction of the total concession area. Approximately 1/30th to 1/50th of the total area would be open to harvesting annually.
- The forest user should provide **contract bonds** (through bank deposit) to be returned upon satisfactory completion of management operations. Inversely, investors should also be able to secure their long-term access against non-commercial political risks (through private **insurances** or state-issued **guarantees**).
- Independent and internationally recognized **third-party certification** should become a standard requirement as part of the concession contract for big areas. Certification standards should be defined at the national level by working groups involving all stakeholders.

E. Change Management

Public debate and participation of stakeholders such as forest staff, industry and civil society, is key to develop a strategic vision and analyze potential options for change. Also crucial is a **strong leadership** in initiating the change process and driving the preferred option into real practice. Consistency with overall public reform and macro-economic agenda is a third factor to ensure success.

While leading the change process, in addition to stakeholders participation, special attention should be given within public authorities to:

- (a) **Horizontal dialogue:** between federal ministries (Natural Resources, Economy, Industry, Finance, Agriculture) to avoid multiple and diverging leadership in the design of new policies.
- (b) **Vertical dialogue:** between Federation and Regions to improve quality and feasibility of new policies as well as acceptability by local stakeholders.

Early successes achieved in **pilot regions** are key to demonstrate feasibility of the proposed reforms and create confidence in change.

F. Addressing Possible Risks – Key-Points For Immediate Attention

The analysis of Russia’s forest reform agenda shows that two critical issues for re-organizing the sector are:

- (a) **Building the contractual framework between the owner and the users** of the State forests. Set forth economic and ecological rights and obligations of both parties; introduce market-based pricing mechanisms and ensure implementation of sustainable forest management plans by the users. The general principles outlined in Section A of the present Note should be tested and then refined to fit with Russia’s specific context and diversity of situations.
- (b) **Separating administrative and implementation functions** among the public institutions for the management of forests that will not fall under owner-user contracts. Set up adequate financing mechanisms and incentives for forest services at the bottom level. Options identified in Section B of the present Note should be carefully assessed, tested in the field and then refined to fit with Russia’s specific context and diversity of situations.

The draft laws under preparation (Forest Code, law on concession, law on forest charges) should be submitted to open technical debate before their submission to the Government and to the Assembly, so as to reflect the views of all stakeholders of the Russian society and to take into account lessons learnt from other countries. A joint working group (MNR-MEDT) should be set up to ensure consistency with overall reform orientations.

Major implementation decrees and operational procedures should be prepared simultaneously to facilitate and speed up their implementation in the field. Analytical works and public debate are urgently needed in the following areas to prepare the new regulations and action plans for their field implementation:

- (a) **Institutional reforms**, to analyze the options outlined in Section B above; guiding conversion of leskhozoes into new forest administration and making best use of leskhozoes’ important social capital;

- (b) **Economic reforms**, to promote private sector's investments, rationalize the forest taxation regime and pricing mechanisms and secure collection of revenues, and setting up financing framework of forest institutions.

Analytical work under Government's leadership should compare **various options**, stimulate **public debate** and stakeholders participation, and help Government make decisions. Such analytical work should first **review the present systems**, identify problems and possible improvements, and start from the present systems to gradually improve them rather than importing or inventing radically new solutions.

Testing in pilot regions. Improved management systems based on user contracts arrangements should first be tested in pilot regions. Pilot experiences can help refine regulations and operational procedures strengthen institutions and train staff before extending the new systems to other areas. In particular, user contracts should be piloted in areas where competition is strongest and where they are most likely to be successful. The following roadmap is proposed:

- (a) Forest land-use planning should be conducted in pilot regions in order to demarcate areas devoted to sustainable production, protection and conservation and identify which forest will be put on for rent and according to what time schedule (see Figure 1);
- (b) Assessment of the demand by forest companies and correction of possible economic distortions (verify that conditions for actual competition are met);
- (c) Definition of transparent bidding procedures and publication of standard-contracts announcing in advance rights and obligations of the User for each concession (no one-on-one negotiations);
- (d) Allocation of a very limited number of concessions on a pilot testing basis. These pilot concessions should be designed (location, size, quality of forest) in such a way that they will generate strong demand from a sufficient number of companies. Accessible areas are likely to attract more competition among potential bidders and thus should be used for piloting. Institutional strengthening may be needed to accompany such test-cases to ensure that user contract can effectively be monitored by forest administration

This piloting course of actions would help the Government and concerned stakeholders detect possible mistakes, and figure out **necessary safeguards and accompanying measures**, when bringing the policy into practice in the Russian context. It would help optimize the positive outcomes of these new policies and gradually apply them in full national scale. Implementation of user contracts should be closely monitored in order to learn from early experiences and permanently improve and refine the regulations, operational procedures, and adjust capacity of public institutions.

Capacity of the forest administration to supervise forest users in the field should be strengthened in two areas:

- (a) Improve the capacity of forest services to monitor and control compliance of forest users with environmental obligations and sustainable forest management in the field;
- (b) Improve the capacity of forest and fiscal administrations to collect revenues from forest users, to reduce the scope for fiscal evasion.

Training programs, equipment, improved working environment and information systems are key-elements of such institutional strengthening efforts. Performance-based remuneration schemes should also be put in place.

Capacity of the forest agencies in charge of direct management of the parts of the Forest Fund that do not, or not yet, fall under user contracts should be strengthened in the same way. Training, equipment and incentives should focus the public goods functions to be fulfilled in those forests. In the meantime, mechanisms for selling the timber from final harvesting (at least for the transition period) and from sanitary cutting should be secured.

World Bank is ready to assist in addressing the key-points raised above. Such assistance can be optimized by combining the whole range of World Bank Group instruments:

- (a) IBRD Sustainable Forestry Pilot Project: support to reforms through analytical works and participatory process (Component A); and testing new policies and strengthening capacity through training in pilot regions (Component B)
- (b) Regional Study on Forest Institutions, PROFOR and World Bank Institute: facilitating exchange of knowledge with other transition and forest-rich countries,
- (c) IBRD Coal and Forestry Sector Guarantee, MIGA, International Finance Corporation (IFC), Global Environment Facility (GEF) and Global Alliance with the World Wide Fund for Nature (WWF): promoting integration of private industrial investments together with sustainable management and certification in pilot regions;
- (d) Presidential Initiative: integrating World Bank Group, bilateral donors and international NGOs into a consistent framework for mainstreaming biodiversity conservation on production forests in pilot regions.
- (e) Bio-Carbon Fund: rewarding non-timber environmental values, and offering alternative to timber-based development of forest areas.
- (f) Support to, and consistency with, macro-economic and overall public sector reforms through a holistic approach to sector-specific reforms, coordinated with policy advice in other sectors of the economy.

Table 1. Organization and ownership of Forest lands (as proposed in the draft legislation)

<p>Category</p>	<p>FOREST FUND (92% of all forests) All forests, except those that are not part of the Forest Fund, Also includes lands not covered with forest vegetation, but that is intended for forest restoration, for the need of forestry, and other lands unsuitable for use.</p>			<p>FOREST NOT PART OF THE FOREST FUND Forest located within the borders of closed administrative territorial entities, as well as urban forests, defense and security lands.</p>	<p>TREE/SHRUB VEGETATION Trees growing on agricultural lands, transport lands, and lands of the Water Fund</p>
<p>Ownership</p>	<p>Russian Federation</p>			<p>RF: defence and security lands as well as forests within the borders of closed administrative territorial entities Urban Forests: RF or SRF or Municipal</p>	<p>Owner of the land on which tree and shrub vegetation is located: RF or SRF or Municipal entities</p>
<p>Sub-level 1</p>	<p>GROUP I – 23% Forests designated mainly to perform water conservation, protective, sanitation, health improvement and protected natural areas</p>	<p>GROUP II – 8% Forests in densely-populated areas with well-developed infrastructure, that perform water-conservation, protective sanitation, health improvement, and which are at the same time of limited timber-production significance, and forest in areas with insufficient forest resources whose preservation makes it necessary to restrict the forest use regime</p>	<p>GROUP III – 69% Forest of forest-rich regions which are important primarily for timber production</p>		

Sub-level 2	Divided into 20 protection categories: forest belts along river banks, anti-erosion forests, scientific importance, nut-harvesting areas, state national parks, etc.		EXPLOITED FORESTS	RESERVED FORESTS (those that are not to be exploited in the next 20 years)		
Objective/ Authorized Forest Uses	Forests intended for the implementation of nature-protective, recreational, sanitary functions	Forest with limited importance for exploitation	Concession / Lease / Short-Term		Lease / Short-Term Use	

Annex A: Investment safeguards for forest management and wood procurement

These investment safeguards apply strictly to forest management and wood procurement, which are but one element of forest industry operations. They are intended to guide companies investing in forest industry development to pursue environmentally sustainable and socially responsible policies in their forest-related operations. The proposed guidelines are based on the following principles.

- (i) Forests managed by the Company are certified
- (ii) In non-certified forests, the Company will secure environmental and social sustainability of forest operations on the wood procurement site and in wood transport; the Company will adhere to legal standards defined in national legislation, and relevant international agreements such as the ratified ILO Conventions; higher standards may be applied on a voluntary basis
- (iii) The Company will assist in efforts to promote sustainable forest management in non-certified forests from which its supplies come from.

Specific criteria

- *Sound forest stewardship:* The Company has made a commitment to sustainable forest management, and formulated a sound forest management policy for its forest-related operations.
- *Management of company forests.* The forests managed by the Company are certified under a credible and internationally recognised certification scheme. Where these forests are not yet part of such schemes, the Company has prepared a stepwise approach with verifiable milestones that leads to certification.
- *Procurement of wood from other forests.* (i) The Company prioritises certified forests as other sources of wood. (ii) For procurement of wood from non-certified forests, the Company establishes an effective monitoring procedure including a feed-back mechanism to ensure that forest management as well as harvesting and transport operations in these forests meet relevant forest management standards. The monitoring system applies to all operations carried out by the Company and includes, as a minimum, checks (including field checks) on the elements listed below. The Company takes appropriate measures to ensure that its subcontractors and service providers comply with the same requirements.

1. Forest management

- Forest manager has property or forest use rights to the site, from which wood is procured, and that his/her use rights do not infringe the legal and customary rights of indigenous/local peoples to own, use and manage their lands and resources
- Forest manager has a forest management plan and a monitoring system appropriate to the size, scale and nature of the operation; monitoring system includes checks on management and utilization of forest resources (wood, non-wood products), environmental values and their protection as well as social issues.

2. Wood harvesting

- The Company refrains from procuring wood from sites which have been identified as possibly holding high conservation values until their status has been confirmed, and they have been administratively designated as areas where wood procurement is allowed; identification of such sites must be based on a scientifically sound methodology and they should be mapped; in the absence of adequate regulations stakeholder consultations and use of relevant guidelines¹ are useful approaches to define areas, which should be left out of wood procurement
- Threatened, endangered and vulnerable species and their habitats and other biologically valuable habitats are protected
- Waste associated with harvesting and on-site processing operations and damage to other forest resources is minimised
- Appropriate measures for erosion control and protection of water resources are taken
- Fuels, lubricants and other chemicals are used and disposed of in a manner that does not harm environment
- Sites of special cultural, ecological, economic or religious significance to indigenous people are protected

3. Wood transport

- The Company puts in place a management system for tracking of all wood (chain of custody)

¹ For instance, the HCVF toolkit developed by WWF could be used as a research methodology

4. Legal issues

- Harvesting and transport operations are carried out based on necessary licenses and in compliance with other legal requirements
- Minimum wages paid to workers employed in forest management, harvesting and transport operations meet the legal standards
- Income tax and social charges on worker's wages are paid according to legal requirements
- Work environment meets standards defined in national legislation and Core ILO Conventions regarding occupational health and safety
- Workers' rights to organize are guaranteed as provided for in national legislation and Core ILO Conventions
- *Involvement of stakeholders.* The Company has established a method for two-way communication with parties that are potentially affected by its forest-related operations as well as a procedure to consider their views concerning these operations.
- *Promotion of sustainable forest management.* The Company provides support to promotion of sustainable forest management in wood supply areas not managed by it complementing efforts made by other parties (e.g. by strengthening private forest owners' organisations, promoting certification including group certification, including conditions in wood supply contracts encouraging sustainable forest management etc.).

ANNEX B: RUSSIA FORESTRY: SOME FACTS AND NUMBERS

Resources:

- Harbors 764 million ha of forest (22% of the world's forest area)
- Account for 15 % of the global carbon terrestrial pool
- Timber stock: 81 billion m³ (21% of world's timber stock)
- Economically accessible forests with existing infrastructure = 142 million ha
- Official annual allowable production equals over 513 million m³ of which 300 million m³ coniferous
- Actual cutting in 2001 equals 25% of allowable cut (not counting illegal logging).
- Objective of the Forest Strategy: 200 million m³/year
- Share in world paper and wood trade is only 3%.

Economic importance:

- In 1990, forest industry generated 2% of GDP and employed 1-2 million (=3-7% of total employment).
- Manufacturing of forest products currently occupies the 5^h place in the Russian economy in terms of GDP and the 4th place in terms of exports.
- In 45 regions forest industry amounts 10-50% of the total value of industrial production.
- Estimated 10 million people depend on logging and wood processing; many forest enterprises located in "one-industry towns" in remote areas; e
- In 1995 average stumpage fee is less than US\$ 1 per m³ whereas under auction the stumpage fee in some neighboring countries are over US\$ 10 per m³.
- Value of timber and pulp on international market:
- Potential tax revenues from the forest sector is estimated US\$2.5 to 5.5 billion per year.
- In 2001, Russia's timber and paper exports were worth \$4.1 billion and forest industry accounts for 4% of the total outputs and exports of Russia. Most of Russia wood export is raw material.
- Forest industry comprises some 3,000 major and mid-sized companies of which over 95% have been transferred into joint stock companies.

Early 1990's collapse and Ongoing recovery:

- Until 1990: second only to USA as an industrial wood producer with 375 million m³ annual production. Production fell down to 100 million m³ in 1996. Between 1994 and 1998, federal allocations have declined by more than half.
- Positive growth in the forest industry became evident only in 1999 when the growth rate was 118% as compared with 1998.

Institutions:

- 1996 law: Federal forest Service (FFS) with 81 regional forest committees and 1740 district forest committees. Other organizations reporting to FFS include schools, research institutes, forest inventory and planning enterprises.
- Logging and wood processing enterprises have mostly been privatized. State Committee for Forest, Pulp and Paper, and Woodworking Industries was established in 1996 to help enterprises restructure and promote investment.

Forest conservation:

- Network of protected areas: 51 million ha.
- 2 million ha of forest damaged annually because of inadequate management of fires, pests and diseases. Year 2002: 14 millions hectares damaged by fires.

ANNEX C: REFERENCES

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