

DYNAMICS OF FOREST RESOURCES IN RUSSIA AND RELATED CHANGES IN FOREST MANAGEMENT AND POLICIES — FOCUSING ON THE KHABAROVSK REGION

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1. DETERIORATION OF FOREST RESOURCES

The most significant feature of Russia's forest resources is their sheer volume. Russia leads the world in forest resources, accounting for over 20% of the Earth's forest area and over 60% of its coniferous forest area.

Table 1 gives a trend of Russia's forest resources. The total forest area stands at slightly above 110 million ha, with approx. 74 billion m³ of this as growing stock. Neither of these parameters has experienced significant fluctuations. Shrinkage in area and stock resulting from conversion to other land use or from forest destruction, which is widely observed in tropical forests, has not happened to Russian forests.

Table 1 Trend of forest resources of Russia

	1966	1973	1978	1983	1988	1993	1998
Area of forest fund (million ha)	1105.6	1103.4	1123.0	1119.7	1115.8	110.5	111.1
Area of closed forest (million ha)	657.5	678.9	694.3	708.5	713.5	705.8	718.7
Area of coniferous forest	488.2	508.3	519.2	526.5	526.0	507.7	508.7
Growing stock (billion m ³)	73.5	74.0	74.7	75.4	74.6	73.0	74.3
Growing stock of coniferous forest	61.2	61.0	61.2	61.3	60.1	57.7	57.8
Growing stock of mature forest	52.8	52.5	51.5	49.1	46.3	42.0	41.5
Growing stock of coniferous mature forest	45.6	44.6	43.8	41.8	38.9	34.2	33.4

Source : Shvidenko and Nilsson

A closer look at these forest resources, however, exposes various issues. The percentage of conifers in the forest stock has been declining. The rate of decline in stock is especially high for mature forests, particularly for mature coniferous forests. This suggests that in Russia, deterioration of forest resources appears to be in progress, especially for mature forests and most notably for mature coniferous forests, which are economically valuable.

The qualitative deterioration of forest resources described above has not been progressing at an equal rate across Russia. For forest stock per unit forest area, increases are seen in areas west of the Ural Mountains, whereas the Russian Far East is experiencing decreases. Siberia,

between these regions, remains more or less flat. While reasons for the regional difference are unclear, forest fires are considered to play a significant part. They will be described in the next section. The important thing here to understand is that forest deterioration is most significant in the Russian Far East.

The Russian Far East can be characterized by the following, all of which have contributed to forest deterioration in that region: The percentage of nonforest land is significantly higher than in other regions; the age structure of forest is rapidly becoming younger; the percentage of soft broadleaf trees, which are pioneer species, is growing; and the percentages of Korean pine, spruce, fir and hard broadleaf trees have been declining due to heavy logging for utilization.

2. CAUSES OF FOREST DETERIORATION AND CURRENT STATUS OF FOREST MANAGEMENT

Let us now look at what is causing the forest deterioration described above.

Logging is one cause. Prior to the current economic crisis, Russia was the second-largest timber producer in the world, turning out nearly 300 million m³ of timber annually in the 1980s. While production stayed within the permitted logging limits, logging and transportation involved substantial waste and illegal logging was rampant, leading to forest deterioration that was greater than the official timber production figures would lead one to expect. Since the 1990s, economic disruption has been causing rapid decline in logging, which in turn has reduced the “quantitative” pressure on forests. At the same time, easily accessible forests have been subjected to intensive logging for export to earn foreign currency. On top of this, illegal logging has been rampant, and this has been attracting growing international attention in recent years. In the Khabarovsk Region, areas in which logging started earlier are now facing so much resource depletion that logging cannot be continued and efforts are being made to seek out new resources. This indicates that forest resources have not been managed in a sustainable way in the region.

A second cause is forest fires. These occur at much higher rates in the Russian Far East and Siberia, which are closer to Japan, than in other regions. Fires there are thought to be contributing more than logging to forest deterioration. In 1998, for instance, a dearth of precipitation combined with other factors to produce a major forest fire in the Khabarovsk Region, which devastated over 2 million ha of forest. It is presumed that 70% to 90% of forest fires are attributable to bonfires not extinguished completely or to other human error, with the rest thought to be spontaneous in origin.

3. CURRENT FOREST POLICIES

The 1997 Forest Code forms the legal basis of forest management. The gist of the code can be summarized as follows.

① The ownership of forest resources is declared to reside with the federal government. Portions of those resources can be transferred to local governments. In that case, the owner local government shall bear related financial burdens.

- ② Local governments shall be responsible for formulating basic forest policies, distributing forest use rights, supervising forest protection and use practices, and the like for forests in their regions.
- ③ The code introduces the principle of competition to the allocation of forest use rights, offering three types of competition: concession by the federal government, leasing by the local government, and short-term use by the local government.
- ④ The code establishes a method of distributing forest use proceeds, clearly stipulating that set portions of proceeds shall be reallocated to forest management.

It is clear that the Code basically aims to decentralize forest management, replacing the resource-allocation system based on a planned economy with that based on market principles.

In line with this, some local governments have been refining their own forest policies. One of the most advanced in this area is the Khabarovsk Region, which in the late 1980s started moving to establish its own forest policies by setting up a forest use committee to distribute logging rights based on open application. In 1999, the Khabarovsk government enacted a local forest law. Not all of the key forest regions have local governments as devoted to forest management as the Khabarovsk government, with some managing their forests mostly on federal government initiative.

Let us now look at the central government administration that was responsible for forest policies and management as of 2003. As explained earlier, forest management falls under the responsibility of the Ministry of Natural Resources. Responsibilities of the Ministry include managing mineral and water resources, for which the Ministry has been responsible since its foundation, as well as managing forest resources and implementing environmental protection, responsibilities that the ministry has inherited from the Forest Service and the Environmental Protection Committee, respectively. (The Forest Service and the Committee were disbanded in administrative reforms.) Under the Ministry, departments were established to manage four areas: mineral, water, forest, and environment. The Ministry has divided Russia into seven regions and has established a branch in each of the regions. The Natural Resources Department of the Russian Far East is responsible for the entire Russian Far East. In addition, The Department established local committee for the local levels, and for each local committee there are four district offices for the four types of resources just as the four central departments are assigned to the four different resources. Forest management in the field is run by *leskhoz* (the district office of the Regional Forest Department), which belongs to the Forest Management Department of the regional committee. In the Khabarovsk Region, where the Natural Resources Department of the Russian Far East is located, the *leskhoz* directly reports to the Forest Management Department of the Natural Resources Department of the Russian Far East.

Many local governments have set up bureaus responsible for forest policy. As explained earlier, these bureaus' activities vary widely by region. Some local governments, like the Khabarovsk government, have established their own system of forest use-rights allocation. As described above, however, forest management is performed by federal organizations, which limits the authority of local governments.

The central governmental organization described earlier was devised as part of administrative streamlining and centralization programs, efforts that have brought a wide range of problems in resource management. First, administrative reform and related reorganization and staff reduction have rendered the current system inoperative as a management tool. The creation of the Ministry of Natural Resources in 2000 was accompanied by substantial reduction in staff involved in forest management and environmental protection as well the firing of those critical of government policies. This resulted in a substantial decline in administrative capabilities. The ongoing reorganization is also helping to make things worse.

Second, coordination between the central and local governments has stalled. In the past, the Forest Service and the Environmental Protection Committee had branches in each region. Opinions of local governments were reflected in the selection of heads of these branches. The branches also reported to local governments. This formed the organizational basis for “joint central-local supervision,” ensuring certain levels of coordination between the regional branches of the federal government and the local governments. The current centralization has largely eliminated this link and, with it, local governments have lost their opportunity to have a say in resources management policies.

Observation of the current situation reveals that the reorganization of resource-management administration has brought huge confusion as well as a decline in management levels. The ongoing political upheaval in Russia is heavily affecting the natural resource-management system and related policies.

4. STATUS OF FOREST MANAGEMENT

This section describes current forest management activities. As previously explained, in Russia the *leskhoz* is responsible for forest management in the field. Its key activities are summarized below.

- ① Forest protection: Protecting forests from fire, disease and insects
- ② Supervision of forest utilization: Signing a contract with the user every year on logging and other use plans based on the relevant forest use rights, and supervising the execution of the contract.
- ③ Forest regeneration and tending: Afforesting and tending stands that have been logged or lost in forest fire, or doing these on other substandard stands.
- ④ Other: Blazing and maintaining forest paths, maintaining nurseries, raising operating funds by selling timber obtained by sanitation cutting, thinning, and the like

The biggest problem facing the *leskhoz* is a lack of funds, which prevents it from conducting effective forest management. In the days of the Soviet Union, the federal government covered a large but inadequate portion of forest management costs. With the current financial crisis, however, the allocation of federal funds to forest management organizations has been cut substantially. At one forest management organization in the Khabarovsk Region, for instance, federal funds cover less than 30% of operating costs.

As a result, forest management organizations are prevented from conducting effective

forest management. They are deprived of the means to adequately conduct stand tending and other operations as well as to satisfactorily prevent and extinguish forest fires, a serious issue for the region. In addition, it has been rumored that the *leskhoz* is earning its operating funds not only by systematic illegal logging but also by allowing loggers to log illegally in exchange for bribes.

As explained earlier, while forest resources have been under substantial negative-pressure such as uncontrolled logging and disturbance caused by forest fire, forest management organizations cannot efficiently address these problems and they are, in effect, abetting in the deterioration of their own forests.

5. STATUS OF THE FOREST INDUSTRY

Following the demise of the socialist system, Russia fell into serious economic crisis. Like other industries, the forest industry saw production decline. This was especially evident in the Russian Far East, where paper and other products that require a high degree of processing were severely devastated. The following is the background behind this.

First, the Russian Far East has been producing timber in excess of the limited regional demand that accrues from the smallness of its local population. Therefore, the region has served as a source of timber to central Asia and other regions where local production does not meet regional demand. The demise of the Soviet Union meant the loss of these markets for the forest industry of the Russian Far East.

Second, since the days of the Soviet Union, forestry-related investment has been primarily concentrated in the heavily populated western part of Russia, where there are many large cities including Moscow. The Russian Far East has been low on the investment list. While the Japanese consider Siberia and the Russian Far East to be the center of the Russian forest industry, these regions in fact produce less timber than the western part of the county. Moreover, paper, plywood and other products that require a high degree of processing are mostly produced in Western Russia. The Russian Far East has poor infrastructure and dilapidated production facilities, which have made the region highly prone to the vicissitudes of the economic crisis.

Seriously damaged by the economic crisis, the forest industry saw the export of forest products as its last resort. Even poorly equipped producers like those in the Russian Far East can quickly earn foreign currency by selling logs in export markets. Export of forest products has become an important segment of the regional economy.

The volume of exports for Russian forest products dropped in the first half of the 1990s due to economic disturbance following the collapse of the Soviet Union, but every product has recovered since then, and the substantial fall in the value of the ruble following the ruble crisis of 1998 has provided further impetus for the export of timber.

Russia's vastness means that the export destinations for forest products vary widely depending on the region. As export sources, Russia can be roughly split into Western Russia and the Russian Far East, the former exporting to Europe and the latter to East Asia. Exports to Europe differ greatly from those to East Asia. While most of the exports to East Asia are

sawlogs, exports to Europe are mostly pulp logs and lumber. In any event, the fact that export of forest products is rising despite the rapidly declining production suggests a growing importance of export for the forest industry. For instance, there are items such as plywood and paper whose export shot up in the early 1990s and now more than half of these items produced are exported. The importance of export will grow further as the domestic economy remains in critical conditions with shrinking consumption and payments in arrears.

One thing that should be noted is that, in recent years, export of timber to China has been growing rapidly. The Russian Far East borders China. Russia exports timber to China, where timber is in short supply. In exchange, China exports to Russia those items that are in short supply in Russia such as foods and other consumer goods. In China, demand for timber has been growing while domestic production has been checked by forest deterioration. In addition, the Chinese government has introduced a natural forest protection policy following floods. This has led to the export of timber from Russia to China in great volumes, which in 1997 totaled less than 1 million m³ but in recent years has topped 10 million m³, far exceeding the export to Japan. It is said that export to China in most cases involves underground economy and illegal logging.

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