

## **Legislative bases and problems of forest harvesting in the Russian Federation**

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In accordance with the Constitution of the Russian Federation land and other natural resources are used and protected in the Russian Federation as the basis of life and activity of peoples inhabiting a certain territory. The issues of ownership, use and disposal of land, bowels of the earth, water and other natural resources; delineation of state property; land, water and forest legislation, legislation on bowels of the earth and environment protection are under joint control of the Russian Federation and the entities of the Russian Federation.

All forests on Russia's territory, except for the forests situated on lands used for defense purposes and on lands occupied by human settlements, as well as the lands of the forest fund which are not covered by forest vegetation (forest and non forest lands) make up the forest fund of the Russian Federation with the total area of 1 173 million ha or 69 percent of Russia's dry land together with internal water pools. Forest covers the total area of 772 million ha, while the total volume of timber in Russia's forests amounts to 81.5 billion cubic meters, including mature and over mature stands 44.0 billion cubic meters where coniferous trees' reserves amount to 34.5 billion cubic meters.

The Constitution of the Russian Federation, as well as the Civil and Forest Codes of the Russian Federation regulate ownership of forest resources. The forest fund of the Russian Federation is owned by the state.

The Forest Code of the Russian Federation (RF FC) does not allow dealings with the forest fund, buying or selling deals, mortgages or other operations, which can result in alienation of parts of the forest fund. In accordance with the provisions of the Forest Code of the Russian Federation dealings with plots of land within the forest fund except for cases established by the federal legislation are restricted although timber logged are subject to civil dealings, where the relations among their parties are regulated by the Civil Code of the Russian Federation. Currently the right of tenure and disposal of the forest fund belongs to: the Ministry of Natural Resources of Russia 96.1 percent of the forest fund lands; the Ministry of Agriculture of Russia 3.4 percent; Ministry of Defense of Russia 0.4 percent, Ministry of Education of Russia 0.1 percent. . In accordance with the Forest Code of the Russian Federation (Article 79) forest use is conducted in compliance with the following basic requirements:

- Provision of continued, non-depleting and sound use of forests in order to meet the demand of economy and the population in forest resources;
- Conservation and strengthening of environment forming, water protection, protective and other functions of forests with the aim of protecting people's health, improvement of natural environment and development of economy;
- Setting the terms of forest use depending on forests' designation and functions performed by them, their location, as well as natural and economic conditions;
- Provision of conditions for forests reproduction;
- The principle of payment for forest use;
- Compliance with scientifically justified norms of forest use.

The Forest Code provides (Article 80) for the following types of forest use:

- Timber harvesting;
- Collection of soft resin;
- Collection of secondary forest resources (logs, bark, birch bark, etc.);
- Side use (hay collection, pasturing, hive and apiary installation, trees' sap collection, collection of wild fruit, berries, nuts, mushroom, other food forest resources, herbs and technical raw materials, collection of moss, forest cover and fallen leaves, reed and other types of forest side use, the list of which is approved by the federal forestry management body);
- Use of sites of the forest fund for the needs of hunting industry;
- Use of sites of the forest fund for scientific and research purposes;
- Use of sites of the forest fund for cultural, recreational, tourist and sport purposes.

Currently logging is the main type of forest use. According to the Forest Code of the Russian Federation (Article 113) logging in forests is carried out as a result of harvest cutting of over aged and

ripe trees. Logging is also carried out during intermediate cuttings (forest cleaning, selective sanitation, reconstruction and other cuttings connected with disposal of low value trees as well as cuttings of trees and bushes type vegetation that loses safety, water protective and other functions) as well as certain other cuttings.

In doing so logging in the course of harvest cutting (RF FC, Article 117) is regulated in terms of allowed cutting area, which is determined for the territory serviced by every logging enterprise by the federal forestry management body according to the groups of forests and types of enterprises. Logging in the course of harvest cutting in the amount in excess of the allowed cutting area is forbidden. The volume of logging during intermediate cutting (RF FC, Article 118) is determined in the course of forest management activities proceeding from the state of trees, established cleaning cuttings standards, selective sanitation cuttings and reconstruction cuttings and is approved by a relevant office of the federal forestry management body.

According to the Forest Code of the Russian Federation (Article 62) the cutting area is determined during forest management in every logging enterprise by the federal forestry management body separately depending on the type of forest used (coniferous, soft-leaved and hard-leaved) within groups of forests proceeding from the principle of sound, continuous and non depleting use of the forest fund. The allowed cutting area for each entity of the Russian Federation is determined as the sum of allowed cutting areas approved in accordance with the established procedure for relevant logging enterprises of the federal forestry management body. This means that no compensation of allowed cutting areas excessive cuttings by logging enterprises within the territory of the entities of the Federation is allowed through their insufficient use in other logging enterprises of the same entities.

The Russian system of forest use regulation is one of the most strict in the world. There are over 300 legislative documents regulating forest use, reforestation, protection and conservation. In general, the forest legislation allows performing sustainable forest management and guarantees forest preservation. Recently forest cutting regulation become more rigid (Table 1).

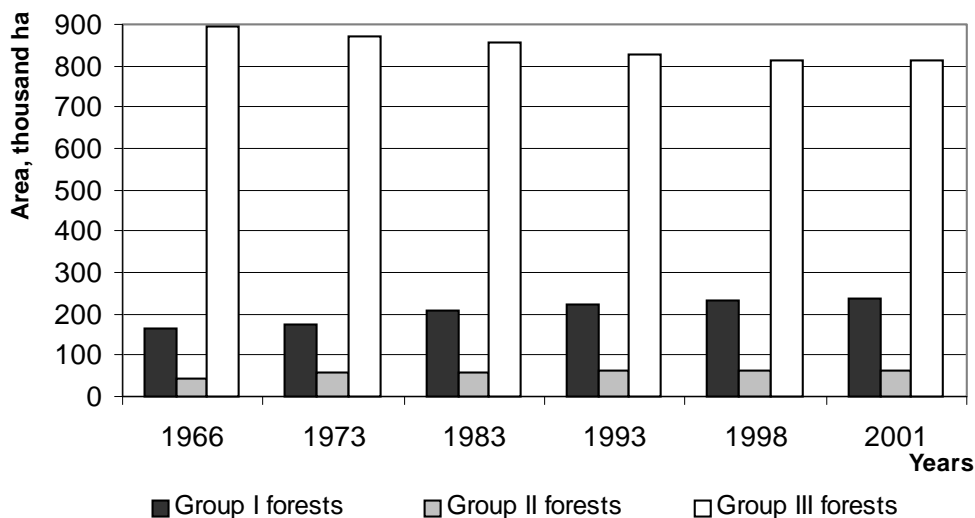
**Table 1. Parameters of harvest (final) cutting according to Normative of cutting 1994 (numerator) and 1980 (denominator) [by Suchich, Zhirin, 2003]**

Parameters of harvest (final) cutting	Coniferous forests			Soft-leaved forests		
	Use category of forests (Group of forests)					
	I	II	III	I	II	III
Plain forests of European part of Russia						
Width of cutting area	$\frac{50-100}{50-150}$	$\frac{100-200}{100-500}$	$\frac{300-500}{200-1000}$	$\frac{100-150}{200-300}$	$\frac{100-250}{200-500}$	$\frac{300-500}{500-1000}$
Square of cutting area	$\frac{5-10}{5-15}$	$\frac{10-20}{10-50}$	$\frac{30-50}{20-200}$	$\frac{5-15}{5-15}$	$\frac{10-25}{20-50}$	$\frac{30-50}{100-200}$
Time of abutting	$\frac{4-8}{4-5}$	$\frac{4-8}{2-4}$	$\frac{4-8}{3}$	$\frac{2-5}{3-5}$	$\frac{2-5}{2}$	$\frac{2-5}{1}$
Plain forests of Eastern Siberia						
Width of cutting area	$\frac{50-100}{50-150}$	$\frac{100-200}{100-500}$	$\frac{300-500}{250-1000}$	$\frac{100-150}{250-300}$	$\frac{250}{250-500}$	$\frac{500}{500-1000}$
Square of cutting area	$\frac{5-10}{50}$	$\frac{10-20}{25-100}$	$\frac{30-50}{50-200}$	$\frac{10-15}{50}$	$\frac{25}{25-100}$	$\frac{50}{200}$
Time of abutting	$\frac{5-6}{3-4}$	$\frac{4-6}{3}$	$\frac{4-6}{1-3}$	$\frac{2}{2}$	$\frac{2}{3}$	$\frac{2}{1}$
Mountain forests of Eastern Siberia						
Width of cutting area	$\frac{50}{100}$	$\frac{70-200}{100-500}$	$\frac{200-500}{250-1000}$	$\frac{100}{100-150}$	$\frac{150-200}{250-500}$	$\frac{350-500}{500-1000}$
Square of cutting area	$\frac{5}{50}$	$\frac{7-20}{25-100}$	$\frac{20-50}{50-200}$	$\frac{10}{50}$	$\frac{15-20}{25-100}$	$\frac{35-50}{100-200}$
Time of abutting	$\frac{5-6}{3-4}$	$\frac{4-6}{3}$	$\frac{4-6}{3}$	$\frac{5-6}{2}$	$\frac{2}{2}$	$\frac{2}{2}$

All the forests are divided into three groups according to their economic and environmental functions. Group I forests (20%) carry out protective functions with restricted usage regimes. Group II forests (6%) are located in the areas of high population density and/or low forest resource potential, and maintain strict forest use practices. These forests also carry out protective functions, having limited usage regimes. Group III forests (73%) are located in the forest abundant regions of Russia and are of commercial value. These forests are meant to meet economic needs on a constant and sustainable basis by providing timber and at the same time, not undermining forest protection functions.

During the last decades, a clear tendency of the Group I forests increase has been established (fig. 1). This process demonstrates that the state priorities have been maintained, while aiming at further development and preservation of the protective functions of the forests.

**Fig. 1. Dynamics of Forest Fund Area by Groups of Forests**



The major tree species that make up the forests in the Russian Federation are larch, pine, Siberian pine, spruce, oak, beech, birch, aspen and others. The above species constitute some 90% of all the forested area of the Russian Federation. Other tree species (such as pear, chestnut, and walnut) occupy an area of less than one mill. ha and shrubs (such as *Pinus pumila* and *Betulaceae*) cover the remaining area. All of the forests forming species are clustered into three groups: the coniferous group (79%), hardwoods (2%), and softwoods (19%).

Within the coniferous group, the greatest area of land and growing supply belongs to the Larch predominant stands of Siberia and the Far East (more than half of the total area of the coniferous group). Pine trees occupy 23% and spruce trees 15% of the area. Taken as a whole, these areas, which are covered by these major tree species, have remained quite stable during last decades. Certain changes in the coniferous group area were mainly caused by new measurement regulations adopted in 1985 and 1994. The decrease in forest area for Oak seedlings in the European-Ural part of Russia is the only exception. The increase in area for softwoods is a negative tendency caused by low demand. The annual allowable cut is steadily decreasing in all regions of the Russian Federation and birch and aspen are becoming predominant among the softwoods.

More than half of all the forests in the Russian Federation are growing on the permafrost soils of Siberia and the Far East, which is a fact that contributes to the rather low productivity of timber-producing areas of the forests. Only 55% of the total forested area of the Russian Federation is considered to be potentially accessible ecologically or economically. A major part of these forests are located in the North European region and along the Trans-Siberian railway. These are areas that already were intensively logged during the past decades.

According to the 2001 state Forest Fund account, the growing stock of major tree species, which make up the forests in the Russian Federation, is 74.5 bill. m<sup>3</sup>, including 41.5 bill. m<sup>3</sup> of mature and over-mature stands with an average growing reserve of some 137 m<sup>3</sup> per hectare. In the forests of potential exploitation (remote areas), the growing reserve is higher and makes up to 167 m<sup>3</sup> per hectare. The annual mean volume increment for the total forested area of the entire Russian Federation is estimated to be 871.45 mill. m<sup>3</sup> (1.34 m<sup>3</sup> per hectare).

The so-called commercial forests are designated to meet the needs of timber for commercial purposes only. Forest management and planning operations for commercial forests have been finalized taking into account their geographic characteristics as well as their economic accessibility for the upcoming 10 years (table 1).

**Table 1. The development of forest area available for timber production**

Indices	Year of account					
	1978	1983	1988	1993	1998	2001
Lands covered with forest vegetation, thous. ha	657647.4	670182.7	676173.7	705789.2	718662.1	722189.3
Forests suitable for exploitation: area, thous. ha	326440.8	367690.4	388452.5	351095.9	331461.0	331708.5
Share of lands covered with forest vegetation, %	49.6	54.9	57.4	49.7	46.1	45.9

Scientifically grounded Annual Allowable Cut (AAC) defines reasonable volumes of final fellings in mature and overmature stands. At present, AAC is over 500 mill. m<sup>3</sup>, including 300 mill. m<sup>3</sup> of the coniferous species. Despite the fact that there is a pattern of increasing harvesting volumes, only 20% of AAC has been actually harvested (Table 2).

Forest abundant areas of Siberia and the Far East are under harvested simply because giant logging and wood processing enterprises of the Soviet era turned out to be unclaimed due to the undeveloped markets. The European part of Russia provides more optimistic picture: about 60 – 90 % of the AAC has been harvested here (Severny, Severo-Zapadny, Tsentral'ny, and Volgo-Vjatsky economic regions)

**Table 2. Annual allowable cut dynamics (ACC) over period between 1970-2001**

Year	AAC, mill. m <sup>3</sup>				Actual harvest, mill. m <sup>3</sup>				ACC realization, %			
	Total	Including			Total	Including			Total	Including		
		Conifers	Hard-leaved	Soft-leaved		Conifers	Hard-leaved	Soft-leaved		Conifers	Hard-leaved	Soft-leaved
1970	605590	388092	13725	203773	325676	252092	6394	67187	53.8	65.0	46.6	33.0
1975	620445	398109	12537	209799	335552	256817	5513	73222	54.1	64.5	44.0	34.9
1980	618938	395558	12656	210724	309586	230454	5054	74078	50.0	58.3	78.6	35.2
1985	617224	390134	12983	214106	302711	219796	5035	77880	49.0	56.3	38.8	36.4
1990	602390	381639	12127	208624	283205	204292	4088	74825	47.0	53.5	33.7	35.9
1995	546094	317917	7408	220769	134081	93080	1613	39388	24.5	29.3	9.9	17.8
1996	541549	313741	6986	220823	110457	78714	1386	30357	20.4	25.1	19.8	13.7
1997	541818	312261	6560	222998	103377	75015	1072	27291	19.1	24.0	16.3	12.2
1998	541363	311194	5971	224197	98048	67550	958	29540	18.1	21.7	16.0	13.2
1999	544612	309688	5862	229062	121649	84625	940	36083	22.3	27.3	16.0	15.8
2000	511200	311225	n/d	n/d	118000	92623	n/d	n/d	23.6	29.8	n/d	n/d
2001	509800	308783	n/d	n/d	115000	89470	n/d	n/d	23.1	29.0	n/d	n/d

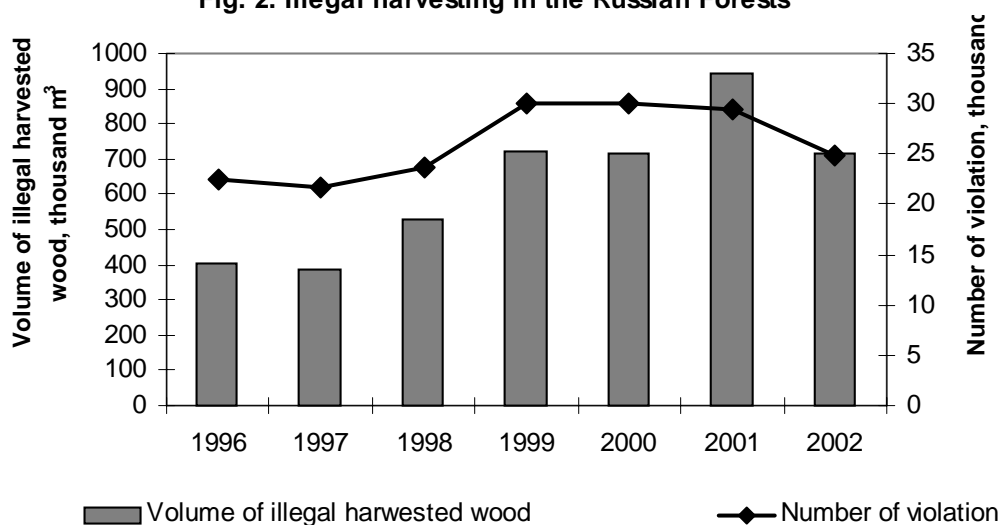
n/d – no data available

The Program of Action on Forests adopted by the Big Eight is carried out by experts from the eight major industrially developed countries of the world (United States, Canada, Japan, Germany, France, Great Britain, Italy, Russia). At their last meeting (Divon-le-Ben, France, 2003) experts discussed the issue of illegal cuttings of forest. The Russian Federation supported the EU proposal on illegal cuttings control and launched an initiative of establishing a system of forest cutting and illegally logged timber trafficking control based on supervision over every link of the chain: from timber logging to its supply to the customer.

Illegal cutting of forests and illegal trafficking of timber logged in that way cause considerable damage to the national economy. This illegal cutting of forests and related offenses result in the loss of income for budgets of different levels and deterioration of the image of the Russian forest industry. Illegal cutting of forests leads to the loss of balance of the forest ecosystems. Cuttings are carried out in disregard to the established ecological forestry requirements which results in the deterioration of the qualitative state of timber and reduction of its productivity, changes in variety and age structures of forests, soil erosion and consequently to deforestation of the territory and degradation of forests.

At the same time the growth of illegal logging at a scale, which in recent years has increased considerably, cannot be ignored (fig 2). Illegal cutting is concentrated mainly in the territories occupied by particularly valuable timber varieties located near communication lines and sales markets.

**Fig. 2. Illegal harvesting in the Russian Forests**



There are two main sources of illegal timber supply of the market:

1. Illegal logging conducted with authorizing documents inside the cutting areas (excessive cutting, logging outside the boundaries of the allowed cutting areas).
2. Logging conducted without authorizing documents or using false authorizing documents outside the cutting areas (illegal cuttings).

Timber arrives at the market either without required documents or under false documents, often at a lower price. Such timber can be easily bought both at the domestic and foreign market due to the lack of adequate control on the part of law enforcement agencies. A part of this timber under false documents passes customs while the rest is transported illegally, by passing transit points at the state border. Increased demand and uncontrolled consumption of this timber create conditions and encourage illegal logging contributing to the establishment of the market of illegally logged and illegally purchased timber.

The problem of illegal cuttings in Russia does exist and is most pressing in the border regions of the Far East, Siberia and the North West. In order to address this problem it is necessary to develop a whole set of measures in the economic, political and social spheres and as a matter of priority:

1. To elaborate and harmonize uniform definitions of illegal cuttings and related terms and definitions at the international level.
2. To improve the customs' and border control treatment of timber products and to develop coordinated international requirements on its legalization and documentation.
3. To strengthen legislation in terms of liability for illegal logging of timber and other forest resources, sale and purchase of illegally logged products.
4. To establish a procedure of on site acceptance of forest products logged and the system of control over their movement from the cutting area to the customer.
5. To introduce a system of voluntary forest certification as widely as possible.
6. To involve public, non-state organizations to forest users' activities control.