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The Russian-Chinese Timber Trade: Export, Supply Chains, Consumption, and Illegal Logging



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List of abbreviations and Russian terms

Abbreviations

CEPI	Confederation of European Paper Industries	Ha	hectare
CIF	Cost, Insurance, Freight	HCVF	High Conservation Value Forest
Cu. m	cubic meter	kW	kilowatt
DV	Dalniy Vostok	RF	Russian Federation
FLEG	Forest Law Enforcement and Governance	RFE	Russian Far East
FMU	Forest Management Unit (<i>leshkhov</i>)	RMB	Renminbi
FSC	Forest Stewardship Council	Sq. km	square kilometer
G-8	Group of Eight	Sq. m	square meter
GFTN	Global Forest and Trade Network	US	United States
GOST	<i>Gosudarstvennyy Standart</i> (state standard)	WWF	World Wide Fund for Nature

Russian Terms

Kray/oblast administrative region

leshkhov forest management unit

Executive Summary

Fueled by a domestic logging ban in 1998 and by rising domestic consumption and exports of manufactured products to other countries in the world, China has rapidly emerged as the world's largest importer of wood products, with Russia by far its most important supplier. A growing chorus of research institutes and non-governmental organizations has correlated this skyrocketing import with sharp rises in illegal logging (and associated corruption, tax and customs violations, etc) in Russia, as opportunistic, shadowy companies rush to meet this demand. The demand will continue to increase. WWF, the global conservation organization estimates that China will need to import 125 million cu. m of timber by 2010, up from 50 million cu. m. in 2004.

Using statistical data from Russian government agencies and academic institutions, and field data and research by a great number of organizations, this report provides a comprehensive overview of the Russian-Chinese timber trade and illegal logging in Siberia and the Russian Far East (RFE). The report is part of a series of analyses and case studies prepared by WWF-Russia devoted to these issues. The report is based on data collected from 2002 to 2004. The text was finalized at the end of 2006, before the new Forest Code was enacted.

The report is divided into five sections so readers may quickly find topics of interest. Section I briefly overviews timber resources and forestry in Siberia and the RFE. Although the massive size of Russian forests is often highlighted in publications, it is less well-known that economically viable forests, in Eastern Siberia and the RFE, are confined to the southern stretches along the Chinese border and near the Sea of Japan coastline. This section also draws attention to the fact that even though the timber industry has rebounded (largely due to demand in China), wood processing capacity remains far below that found in even the early Soviet period.

Section II provides an overview of the Russian-Chinese trade, highlighting how China has depleted the commercial wood volumes in its own forests and introduced the *Natural Forest Protection Programme*, which aimed to restrict the domestic timber harvest, and has become an important factor leading to the sharp rise in imports. It documents how Russia grew from China's third largest supplier of roundwood (logs) in the mid-1990's to providing almost 64% of China's total roundwood imports in 2004. China's sawnwood imports from Russia are

also rising rapidly, from 4.3% of total sawnwood imports in 2000 to 11.3% in 2004. However, Russia remains primarily a roundwood exporter to China, with 87% of the roundwood in the form of coniferous logs. Two major drivers are behind the emergence of Russia as China's most important wood supply source: price and the similarity of species used. The section also highlights the major exporting regions to China. Seven administrative regions — Krasnoyarskiy, Irkutskaya, Buryatia, Chintinskaya, Amurskaya, Khabarovskiy, and Primorskiy — made up 90% of total Russian export in 2004. More than 80% of this goes by rail by ship (14.6%) and truck (1.6%). Finally, this section discusses the explosion in the number of both exporters and importers involved in the trade. Nevertheless, the report also points out that the top twenty roundwood exporters make up 25% of the total export, while the top five importers account for 18% of total imports. This provides evidence that there are some dominant players in the industry and provides hope that if these key actors improve their selling and purchasing practices that illegal logging and trade can be reduced. The section concludes by profiling some of the largest exporters and importers, with flow charts of their respective wood supply chains.

Section III overviews how Russian timber is distributed in China. This includes where it is processed, what products are made from it, and where these products are consumed. The report identifies and describes first-level, second-level, and third-level timber markets. These markets play a central role in the import of the timber and its distribution to other parts of China. The first-level markets are major processing centers, mainly for sawnwood, while second-level markets, such as Dalian, in addition to processing of sawnwood also produce solid-wood furniture and flooring. Most of the coniferous timber is used in the domestic construction industry and for interior decoration. In contrast, hardwood timber is used primarily to produce solid-wood furniture and flooring, much of it for export. Chinese companies are quickly expanding operations to seize upon these rapidly growing export industries and Russian hardwood is essential in providing the raw material necessary to do so. Third-level timber markets, meanwhile, are small-scale retail markets scattered throughout the country and focus on providing customized, semi-processed products for local consumers. These markets are particularly prevalent in small- and medium-sized cities, as many builders in rural areas still use wood for doors and window frames.

Section IV, the largest section in the report, focuses on illegal logging and trade in Eastern Siberia and the RFE. Illegal logging in Russia results in direct losses of over US\$1 billion annually and it is particularly pronounced in export-dependent administrative regions such as those that border China. The underlying causes for illegal logging and trade in Russia are multifaceted and complex, but many stem from weak state control over the sector. The report elaborates on how imperfect legislation and forest policy, poor enforcement, and inadequate wood processing contribute to illegality. The section documents the extent of illegal logging in High Conservation Value Forests (HCVFs) in the southern RFE and its ecological, social, and economic impacts. The section also describes the two prevalent timber chain models (commercial harvester ® importer; and harvester ® intermediary ® importer) and what aspects of these models allow for the infiltration of illegally logged timber into the chains and make them susceptible to graft and corruption. Finally, the section discusses what political measures and industry initiatives are underway to address illegality in the sector.

Section V provides concrete measures that industry and government should undertake to address both illegal logging and trade and rising demand for wood in China. Due to the interdependent nature of these problems, many of the suggested measures recommend collaborative efforts between the relevant Russian and Chinese actors. The recommendations can be summarised as follows:

- Government and aid agencies should improve forest sector governance in Eastern Russia;
- Russian producers should demonstrate a commitment to responsible forestry by joining the Association of Environmentally Responsible Timber Producers of Russia, which is the association member of the Global Forest and Trade Network, and by adopting systems to verify the legality and/or sustainability of their operations;
- End-users of Chinese manufactured products (in Europe, North America, Japan and elsewhere) should adopt and implement policies to ensure the wood in those products is responsibly sourced;
- Companies manufacturing or sourcing wood and paper products in China should ensure they come from legal and sustainable sources;
- The Russian and Chinese Governments should enhance bilateral cooperation to combat illegal trade by enforcing forest legislation, strengthening inter-agency cooperation in both countries, and promote legality verification of timber product export and import.

Introduction

Since late 1990s, Russia has answered China's skyrocketing demand for wood products and paper with a massive increase in the export of logs and pulp.

WWF conducted a series of research initiatives on illegal logging in Eastern Siberia and the RFE [1-3].

In addition to WWF many international and regional nongovernmental organizations, such as the Bureau for Regional Outreach Campaigns, Friends of the Earth-Japan, Pacific Environment, , Forest Trends, and Greenpeace have drawn attention to how this massive increase in export is a tied to sharp rises in illegal logging.

This report was prepared by WWF-Russia, in cooperation with WWF China. It continues the series of analyses and case studies prepared by WWF-Russia devoted to the issue of illegal logging and trade in the Russian forest sector. The report combines official information from the Russian authorities, independent expert data, field studies and research of many organizations. The report is based on data collected from 2002 to 2004. The text was finalized at the end of 2006, before the new Forest Code was enacted.

I. FORESTS AND FORESTRY IN SIBERIA AND THE RUSSIAN FAR EAST

The richest timber resources in the Russian Federation are concentrated in Eastern Siberia and the southern Russian Far East (RFE). Table 1 provides data on the forest area and timber resources (in cu. m) for key administrative regions in the Siberia and RFE administrative regions. Irkutskaya Oblast has the largest volume of timber resources (9.1 billion cu. m), followed by Krasnoyarskiy Kray (7.8 billion cu. m), and then Khabarovskiy Kray (5.2 billion cu. m). The southernmost parts of Eastern Siberia and the RFE are the main timber-producing regions for export to the neighbouring countries of Northeast Asia, including China, Japan, and the Republic of

Table 1.

Forest Area and Timber Resources in the Far Eastern and Siberia Federal Regions

	Forest area, million ha	Total volume of timber resources, billion cu. m	including: mature and overmature, billion cu. m	including softwood species, billion cu. m
Far Eastern Federal District	280.5	20.6	11.8	10.1
<i>Including:</i>				
Khabarovskiy Kray	52.1	5.1	3.0	2.7
Primorskiy Kray	12.5	1.9	0.9	0.5
Amurskaya Oblast	23.3	2.0	1.0	0.9
Siberia Federal District	273.6	33.3	19.2	15.5
<i>Including:</i>				
Krasnoyarskiy Kray	52.2	7.8	4.9	3.9
Irkutskaya Oblast	61.7	9.1	5.3	4.6

Korea. Figure 1 shows the rough dividing line, drawn along the western border of Krasnoyarskiy Kray, between western and eastern flow of Russian timber export. This figure also illustrates the northern border of economically accessible harvesting areas.

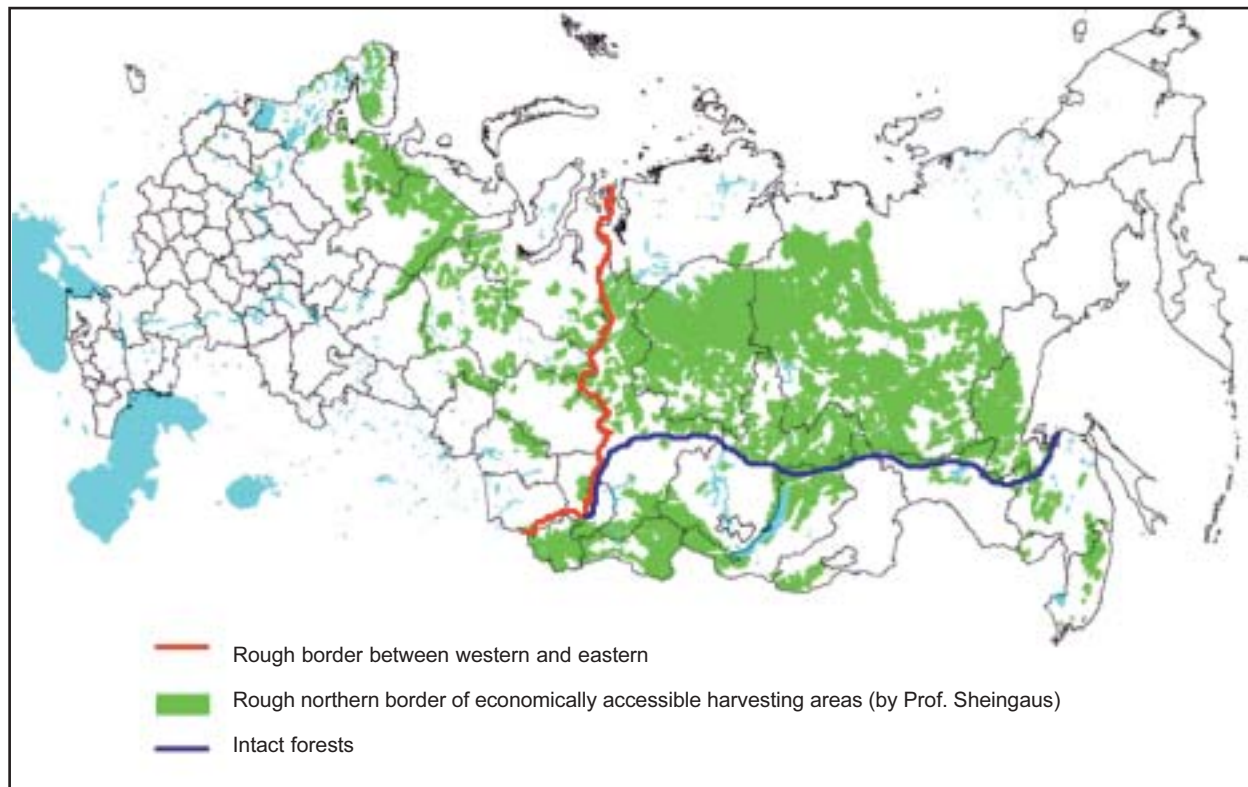


Figure 1. Intact Forests, economically accessible forest harvest areas, and the border between Western and Eastern flows of Russian timber exports [20].

Boreal forest comprises over 70% of Eastern Siberian and RFE forests, which are relatively simple in composition, dominated by a few coniferous species such as larch, spruce, fir, and pine. Birch is the dominant broadleaved species. These vast boreal forests play a vital role as a carbon sink and in the mitigation of global warming. Biodiversity-rich, temperate, deciduous, and broadleaved forests are located in areas contiguous to Northeast China and the coastal zones of the Sea of Japan. These forests have one of the most diverse assemblages of plant and animal species of any temperate zone on the planet [4]. A mixture of boreal, temperate and subtropical tree species is seen here. The forests are rich in Korean pine and hardwoods, which have the highest commercial value in the nearby Northeast Asian markets. Due to the lack of developed infrastructure, vast areas of boreal *taiga* to the north remain inaccessible. Here, permafrost constrains construction and maintenance of a road network. To the south, inaccessible areas in mountainous regions, such as the Altay-Sayan and Sikhote-Alin Mountain Ranges, have some of the last remaining intact conifer-broadleaved forests[5].

Production of forest products

Since 1998, the timber industry in Eastern Siberia and the RFE has gradually rebounded and forest resource use has intensified. There are a number of factors behind this rebound, including restructuring of the industry after the Asian financial crisis and the rise in exports to China and Japan [6]. Initially, the Russian timber industry, local workers, and the regional administrations cheerfully anticipated this recovery and the concomitant improvements in social and economic standards for forest-dependent regions. But this rebound has resulted in the rapid depletion of commercial timber stocks and widespread environmental degradation – especially in regions bordering China or those in close proximity to railways and seaports. In return, only paltry revenues have trickled back into the local economies.

Furthermore, the economic rebound has not led to significantly increased ‘value-added’ in the sector. The Far Eastern Federal District, which comprises the RFE, remains the most undeveloped when compared to other Russian federal districts. The RFE has very limited paper and cardboard (0.3% of total production), chipboard (0.5%) and fiberboard (2.4%) production, and no production of veneer at all. Production of similar products is obviously underdeveloped in the Siberian Federal District as well (see Table 2). During the Soviet Era, wood processing in the RFE was much more developed. Table 3 shows how radically production of sawnwood, veneer, chipboard, fiberboard and pulp decreased in Khabarovskiy Krai, the largest producing region in the RFE, between 1990 and 2004.

Table 2.

Wood product production in the Siberian and Far Eastern Federal Districts, 2004.

	Siberian Federal District	Far Eastern Federal District
Roundwood, mln cu. m	28.5	14.3
Sawnwood, mln cu. m	6.0	1.1
Veneer, 000 cu. m	165.4	0.5
Chipboard, 000 cu. m	389.5	19.3
Fiberboard, 00 cu. m	255.9	28.1
Paper and cardboard, thousand tons	497.7	21.2

Liberalization of the industry also led to an influx of Chinese timber merchants who arrived in depressed Russian towns seeking to buy timber largely with cash. Shadowy businesses emerged, which supplied timber through a dubious mix of illegal logging and corruption. This has fostered a critical situation in Russian regions bordering China because uncontrolled logging, especially of valuable species, led to the devastation of large forest stands. A detailed analysis of illegal logging in Siberia and the RFE is provided in Section IV.

Table 3.

Wood Processing in Khabarovskiy Krai, 1990 and 2004.

	1990	2004
Sawnwood, 000 cu. m	1,899	500
Veneer, 000 cu. m	5	-
Chipboards, 000 cu. m	52	10
Fiberboards, 000 cu. m	22,188	-
Pulp, thousand tons	264	-

II. THE RUSSIAN-CHINESE TIMBER TRADE

China's economic liberalization has introduced market forces to its domestic timber market, fostered trade with other countries, and encouraged foreign investment in processing and manufacturing. At the same time China's *Natural Forest Protection Programme*, enacted in 1998, has led to sharp reductions in domestic timber harvest [7]. This Programme imposes logging bans forests of the upper and middle reaches of the Yellow River and the upper reaches of the Yangtze and reduces logging in state-owned forests in northeastern China. The Programme can be seen as an instrumental component of Chinese policy to limit domestic harvest while encouraging imports to make up for the shortfall [8]. In 2003, Chinese forests and plantations produced about 79 million cu. m of wood for industrial use, less than half of the 173 million cu. m that China consumed. China's domestic demand was approximately 138 million cu. m, while Chinese factories consumed the additional 35 million cu. m to manufacture products for export.

Although maturing plantations may provide for some of the shortfall, China's timber deficit continues to increase, especially for large-diameter logs [9]. From 1996 to 2004, China's total imports of logs increased sharply from 3.19 million cu. m to over 50 million cu. m – an increase of 17 times. By 2010, WWF estimates that China will need to annually import a massive 125 million cu. m (in round wood equivalent) to meet its wood and fibre supply gap [8].

Russia has emerged as China's largest supplier

Russia has quickly become by far China's largest supplier of wood-based products (round wood, sawnwood, pulp and paper). Roundwood exports dominate this trade, rather than more financially lucrative products such as sawnwood, furniture, and so on. In the mid-1990s, the leading sources of China's roundwood imports were Gabon and Malaysia; Russia was the third. Since then, the import of Russian roundwood has increased rapidly, from just 529,000 cu. m in 1996 to 15.4 million cu. m in 2004; the average annual index increased above 54%. The market share of Russian roundwood in Chinese total roundwood imports increased from 16.6% to 64.7% (see Figure 2).

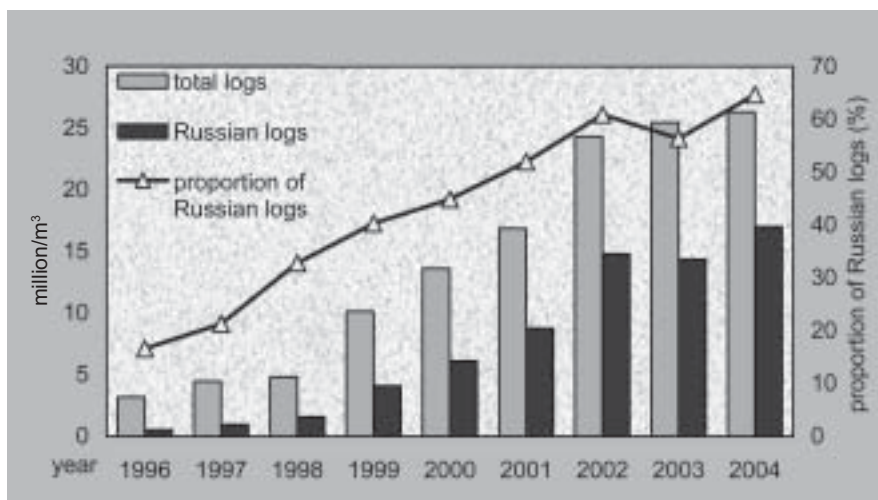


Figure 2. Chinese import of roundwood, 1996–2004.

It should also be noted that China has emerged as the major export market for roundwood for Russia as well. In 2004, 37.2% of all Russian roundwood exports went to China and in 2005 this increased to 39.1%. Most of these exports are coniferous logs (87%), with hardwood logs making up the remainder (13%). Figure 3 illustrates the species composition of Chinese imports of Russian roundwood in 2004.

Chinese imports of Russian sawnwood are a distant second (by volume) to roundwood. But as with logs, Russia's market share in Chinese sawnwood imports has increased rapidly. As Table 4 shows, from 2000-2004 total sawnwood imports increased by 1.9 times, whereas import of Russian sawnwood increased 5.1 times. In 2004, Russian sawnwood made up 11.3% of total Chinese sawnwood imports, up from 4.3% in 2000. Nevertheless, the percentage of Russian sawnwood imports in the total import mix remains relatively insignificant.

Two major drivers are behind the emergence of Russia as China's most important wood supply source: similarity of species used and price. The softwood species imported from Russia are similar to species traditionally sourced from Northeast China and Inner Mongolia (e.g. Scotch pine, Korean pine, larch and fir). Chinese

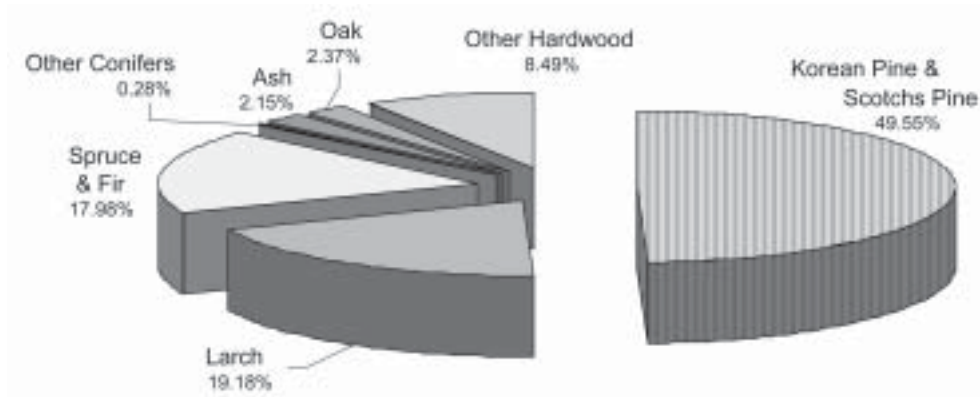


Figure 3. Species composition of China's imports of Russian roundwood, 2004, by percentage.

manufacturers are therefore familiar with these species and aware of their wood properties, processing technologies, and utilization. The same may be said of Russian hardwoods (e.g. oak, ash, birch, and linden). These species are used in the production of high-quality furniture, parquet and flooring, veneer, and moulding. The price of Russian timber is comparatively low, partially because the timber is transported over relatively short distances when compared to distances between China and other major timber producers. In 2004, the mean CIF (Cost, Insurance, and Freight) of Korean pine and Scotch pine was only US\$73.33 per cu. m, while the price of New Zealand Radiata pine was US\$92.62 per cu. m and its quality was lower. The prices for Russian hardwood are also far lower than for North American hardwood and European beech.

Finally, this rapid growth in Russian timber exports to China coincided with a decline in timber prices on the Chinese market, which were much steeper than declines in other Northeast Asian markets (See figure 4). Two major reasons account for this trend. The first is a classic economic scenario whereby supply outstrips demand, fueled by the explosion in the number of Russian exporters. Most of these small exporters have no significant production and export infrastructure. Instead, they act as intermediaries, relying on large Chinese trading companies to back them. Small exporters and private companies are interested in quick profits, and are generally not concerned with environmental and social issues. The surge in supply from predominantly unprofessional Russian exporters, and the business skills of the relatively experienced Chinese importers, has combined to drive down the prices for Russian timber since 1999. The second is the coordinated price policy of major Chinese importers and the aggressive business tactics of Chinese traders in Russia.

Lately, prices for roundwood have increased somewhat, which can be explained by the unabated increase in demand for high-quality large-diameter roundwood on the Chinese market. In 2002, the price for one cu. m of roundwood imported by China was US\$53.3, whereas in 2004 it was US\$59.9. However, Russian exporters to some extent influenced these prices.

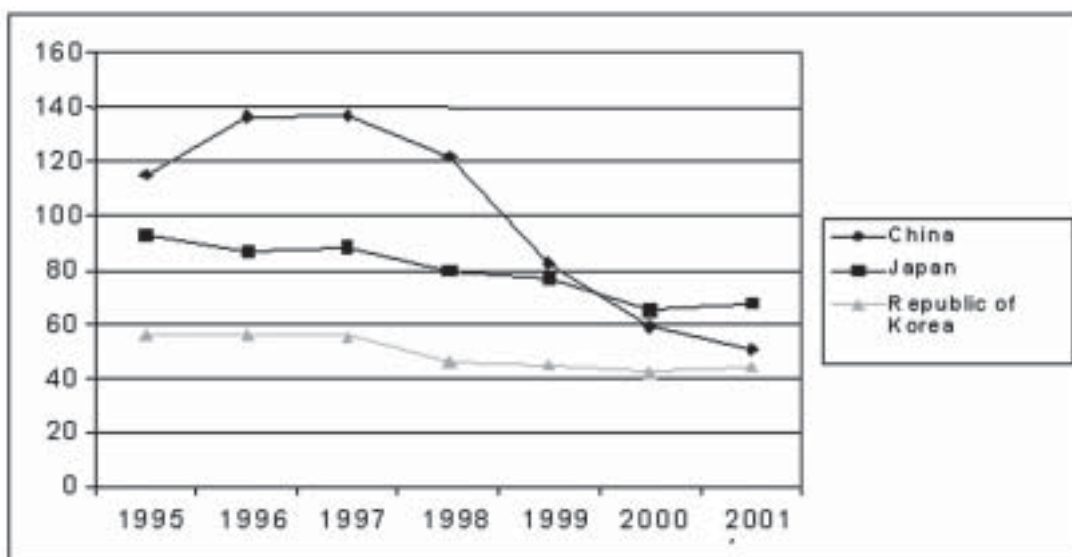


Figure 4. Price trends for Russian timber in selected Northeast Asian countries (\$/cu. m).

Table 4.

Chinese import of Russian sawnwood, 2000-2004, (000 cu. m³)

Year	Total Sawnwood import	Russian sawnwood	Russian market share(%)	Russia Rank
2000	3,636	158	4.3	7
2001	4,040	308	7.6	5
2002	5,396	552	10.2	4
2003	5,512	561	10.2	4
2004	7,134	806	11.3	3

Timber producing regions and key transport routes

In 2004, twenty-six Russian administrative regions exported forest products to China. According to data from the State Customs Committee of the Russian Federation, seven regions — Krasnoyarskiy Kray, Irkutskaya Oblast, Buryatia, and Chitinskaya Oblast in Eastern Siberia and Amurskaya Oblast, Khabarovskiy Kray, and Primorskiy Kray in the RFE — made up 96% of the total Russian timber export to China. In regions bordering China, including Chitinskaya and Amurskaya Oblasts and Jewish Autonomous Oblast, over 98% of their total roundwood export goes to China. In 2004, 787,100 tons of pulp was exported to China, mostly from Irkutskaya Oblast. Export of paper and cardboard was negligible – 243,800 tons, including 19,000 tons of newspaper, 13,100 tons of kraft paper, 185,500 tons of kraft-liner and 20,400 tons of cardboard.

According to 2002 Chinese customs statistics, about 83.4 percent (12.04 million cu. m) of the timber imported from Russia was by railway, with the remainder by ship (14.6% or 2.1 million cu. m) and truck (1.6% or .23 million cu. m). Timber is collected from across Central Russia, Siberia and the RFE and exported to China via three railway routes. The RFE route (33.7% of total rail export to China) collects timber from vast areas of Eastern Siberia, the Transbaikal Region, and the southern RFE. The main export point is via the town of Gorodekovo in Primorskiy Kray and then via the Chinese border city of Suifenhe in Heilongjiang Province. The Zabaikalian route (32.6% of the total) exports timber from regions north and east of Lake Baikal, including Irkutskaya Oblast, Buryatia, and Chitinskaya Oblast. This route crosses the border at town of Zabaikalsk, enters China's Inner Mongolia (city of Manzhouli), and then continues on to Heilongjiang Province or southward. The Siberian route (14.8% of total exports timber from Central Russia and Western Siberia, including Krasnoyarskiy Kray, Irkutskaya Oblast, and Buryatia. The timber is exported via the town of Naushki in Buryatia, across Mongolia, and then to the city of Erlianhot in Inner Mongolia before moving further into central

Table 5.

Destination of timber imported from Russia in 2004 (cu. m)

Chinese Province	Sawnwood	Roundwood	Total	Proportion of Russian Imports
Inner Mongolia	487,557	8,571,998	9,059,555	50.85%
Heilongjiang	194,208	7,001,608	7,195,816	40.39%
Jiangsu	402	680,509	680,911	3.82%
Liaoning	93,440	254,232	347,672	1.95%
Shandong	12,531	198,110	210,641	1.18%
Zhejiang		118,545	118,545	0.67%
Xinjiang	5,834	103,832	109,666	0.62%
Shanghai	3,677	68,571	72,248	0.41%
Jilin	1,978	16,835	18,813	0.11%
Guangdong	1,325	1,926	3,251	0.02%
Tianjin	173	115	288	0.01%
Beijing	84	67	151	0.01%
Shaanxi		56	56	0.01%
Total	801,209	17,016,404	17,817,613	100%

Chinese provinces. Pulp is primarily exported from large Russian pulp and paper mills located in Eastern Siberia and Northwest Russia. It is delivered mainly by rail, through Zabaikalsk and Naushki customs. It should be noted that, although the Chinese imports of Russian timber are concentrated in Suifenhe, Manzhouli, and Erianhote, these railway points are not final consumption areas. Thirteen provinces and municipalities directly imported Russian timber in 2004. The top five were Inner Mongolia, Heilongjiang, Jiangsu, Liaoning, and Shandong. As Table 5 shows more than 91% of the timber was exported to two provinces: Inner Mongolia and Heilongjiang.

Russian timber imported by ship goes to the following coastal cities – Taicang in Jiangsu Province (3.1% of the total import), Dalian in Liaoning Province (1.9%), Yantai in Shandong Province (0.9%), Ningbo in Zhejiang Province (0.5%), and the Shanghai Municipality (0.4%)[5]. Most of the timber exported by ship is from RFE ports; with only about 6% is delivered via seaports in Northeast Russia.

Key exporters and importers and their supply chains

A wide network of logging, timber processing and silvicultural enterprises in Khabarovskiy Kray, Primorskiy Kray and Amurskaya Oblast characterizes the wood supply chains of major RFE exporters. The largest enterprise is Primorskiye Lesopromyshlenniki (Primorslesprom), which includes 16 logging and 27 timber-processing companies. All companies have long-term leases to forest lands. At the same time, the low level of timber processing in these companies has to be considered. There are no facilities for production of fibre or chipboard and veneer.

Of the top twenty Russian roundwood exporters to China, 14 are from the RFE and 6 are from Eastern Siberia (Figure 5). In total, they comprise about 25 percent of the Russian roundwood export to China. Only about one-third is traders; the rest are logging companies.

As a rule, major exporters are either the former large state timber companies, which were subsequently privatized, or companies with considerable foreign investment. Most of them also previously specialized in exporting timber to Japan but recently transferred their business to the Chinese market, due to more competitive prices and greater flexibility with timber export requirements and quality. With the exception of traders, they all have long-term timber leases and processing facilities. They also have skilled staff and have developed long-term relationships with government agencies and customs authorities. In addition to their own sorting yards, storage sites, and railway or port terminals, these companies also export on behalf of other harvesters and small traders.

Prior to 1998, there were just a few Chinese importers. Now there are hundreds of private Chinese companies involved in the trade. The number of Chinese importers as declared by Russian exporters increased 2.5 times, from 190 in 1998 to 475 in 2002 [3]. Most importers emerged from state-owned trading companies or were created by provincial or local governments. Although most of these traders are ostensibly private, with limited

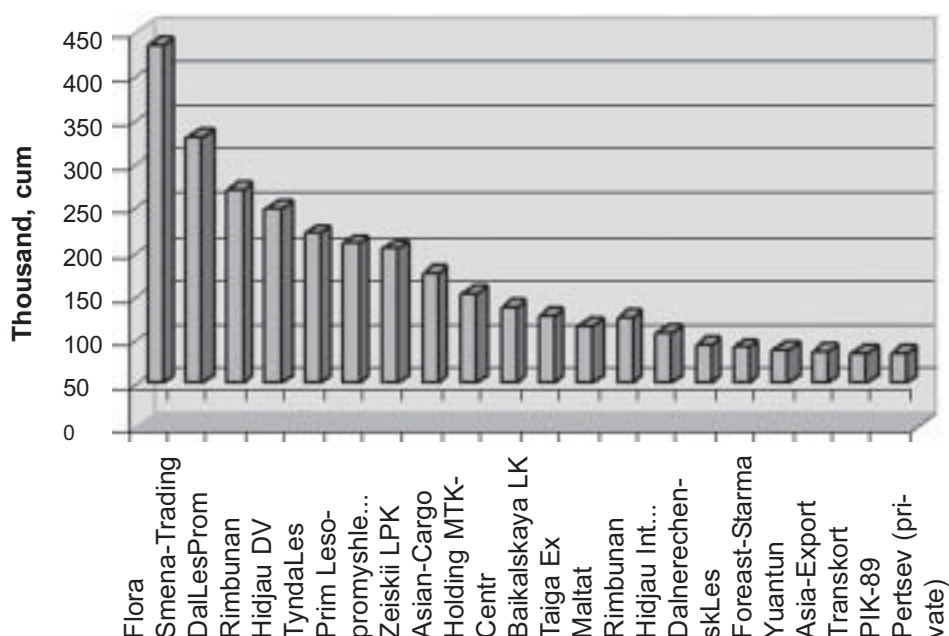


Figure 5. Top 20 Russian roundwood timber exporters to China, 2003.

liability, most remain under state control through shares owned by provincial or local governments. Some of them represent big trading associations for smaller companies working in a particular geographical location (e.g. Suifenhe Longjiang Shanglian Import-Export Co. Ltd). In 2004, the amount of logs imported by private companies amounted to 85.3% of the total import, for sawnwood – about 70%. State-owned companies made up 11.8% and 14%, respectively (Table 6 and Figure 6).

Table 6.

Importers, by ownership and timber transported, 2004 (cu. m).

Ownership	Logs		Sawnwood		Total	
	Volume (cu. m)	Number of importers	Volume (cu. m)	Number of importers	Volume (cu. m)	Number of importers
Private	14,507,916	281	562,859	166	15,070,775	307
State owned	2,006,309	109	110,738	52	2,117,047	122
Collective	443,359	17	21,188	9	464,547	18
Joint venture	51,125	10	34,007	16	85,132	20
Foreign	7,695	9	46,122	22	53,817	28
Cooperative	-	-	26,295	3	26,295	3
Total	17,016,404	426	801,209	268	17,817,613	498

Chinese importers can be classified into two groups. The first group includes traders purchasing timber in Russia and transporting it to border points for wholesale. Such companies are small and medium-sized. The second group are companies, which have processing mills as well as trading capacity. These are usually large companies with headquarters located in border cities, such as Suifenhe and Manzhouli. Some of these companies establish processing mills in Russia. For example, Suifenhe Longjiang Shanglian Import-Export Co. Ltd established a large processing zone in Suifenhe and several processing plants in Russia (in Primorskiy and in Khabarovskiy Kray).

Approximately 60 trading companies in NE China fully control over 80% of the Russian-Chinese timber trade, while the top 5 companies – Shengyuan Import and Export Trading Company (including former Huaqiang) of Manzhouli, Yunchou Economic Trading Company, Ltd. of Manzhouli, Jintai Trading Company, Ltd of Erliahot, Longjiang Shanglian Import-Export Co. Ltd of Suifenhe account for 18% of the total Russian timber import. The top 20 importers of Russian timber in 2004 are shown in Figure 7. Judging from the names of Chinese importers, it is clear that nearly all of them are intermediaries or traders. Of the estimated 500 Chinese importers operating as of 2003, less than 20% of them can be identified as industrial consumers.

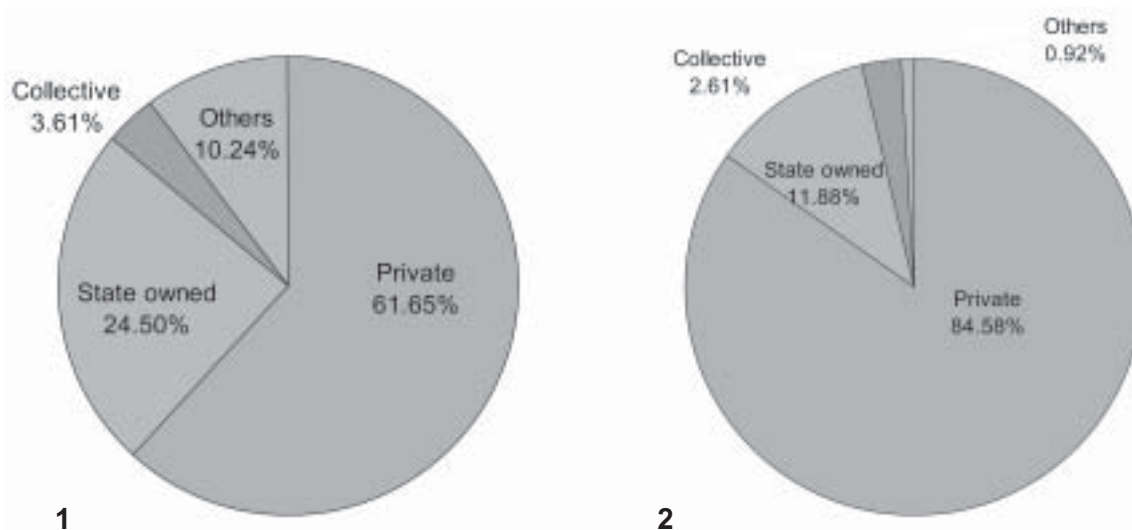


Figure 6. Ownership structure of Chinese importers, 2004 (1 – by number, 2 – by volume).

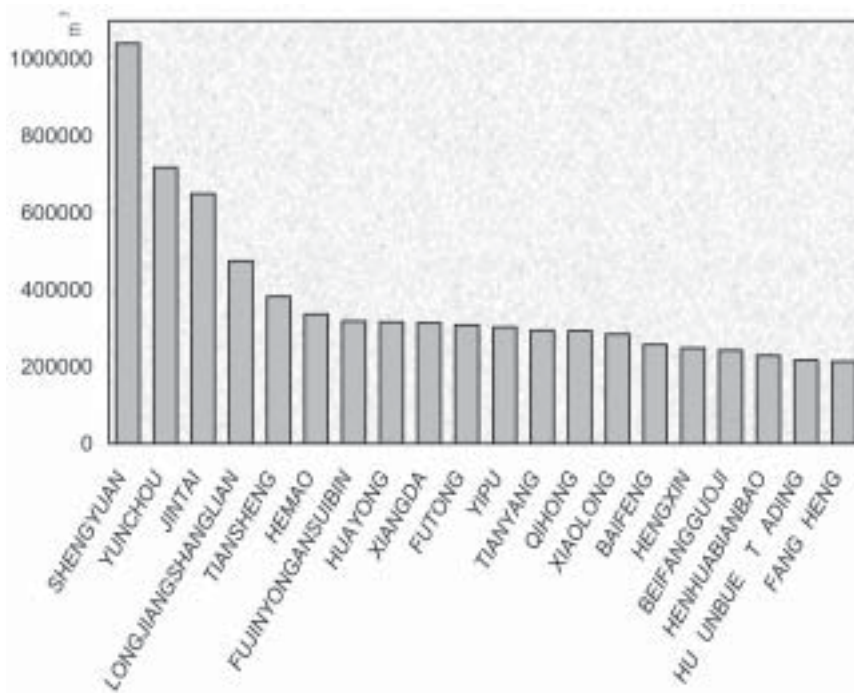


Figure 7. Top 20 Chinese importer of Russian timber, 2004.

Collectively, Chinese importers control the timber trade and set prices, and it is very difficult for Russian timber exporters who deliver timber through continental border gateways to do business directly with the end-users of their timber. There are no avenues for Russian exporters to enter the NE China timber market directly. At present, Russian exporters cannot supply timber to China without a Chinese trading company being involved.

Wood supply chains of selected Russian exporters

There are a number of major Russian exporters. Flora, based in Khabarovskiy Kray, is a large trading company that trades on behalf of more than 20 logging companies in the Komsomolskiy and Solnechniy Regions of Khabarovskiy Kray. Flora also has forest leases totally 17,000 cu. m and logging facilities. Smena-Trading is one of the RFE's largest timber trading companies. Its suppliers are mainly state forest management units and leaseholders in Khabarovskiy Kray. Rimbunan Hijau consists of two companies – Rimbunan Hijau DV and Rimbunan Hijau International. These companies are working with Chinese partners but harvest in different areas of Khabarovskiy Kray (367,000 and 151,000 ha of leased forests, respectively). Rimbunan Hijau also controls the company Forest-Starma. Tyndales operates in the northern part of Amurskaya Oblast (RFE), which borders Heilongjiang Province. Primorskiye Lesopromyshlenniki (Primorlesprom) produces over 35% of the total timber harvested in Primorskiy Kray. The major affiliated companies and their logging areas (in forest management units), as well as the overall wood supply chain, is shown in Figure 12. The wood supply chains of these respective companies are provided in Figures 8-12.

Wood supply chains of selected Chinese importers

The wood supply chains of Chinese importers are spread over large territories both in China and in Russia. There are at least 275 Russian enterprises and 150 individual businesspeople based in Krasnoyarskiy Kray, Khabarovskiy Kray, Primorskiy Kray, the Republic of Buryatia, Chitinskaya Oblast, Irkutskaya Oblast and Amurskaya Oblast working with these Chinese importers. Customs statistics provide us with basic information about which Russian companies these Chinese importers buy timber from, but little is known about to whom, in what forms, and where these importers are re-selling the timber in China. It should be pointed out that Russian exporters have some investment in these companies. The share ranges from 4.3% in Longjiang Shanglian to 24.7% in the Yunchou Trade Industrial Company.

The companies described in the pages that follow all have large capitalization. These companies are all major importers of Russian timber and each have the capacity to produce sawnwood, furniture, and other wood products, for the export market, including the US, Germany, Great Britain, Japan, South Korea and other countries. Companies have their representative offices mostly in Khabarovsk, Vladivostok, and Nakhodka and they have highly qualified personnel.

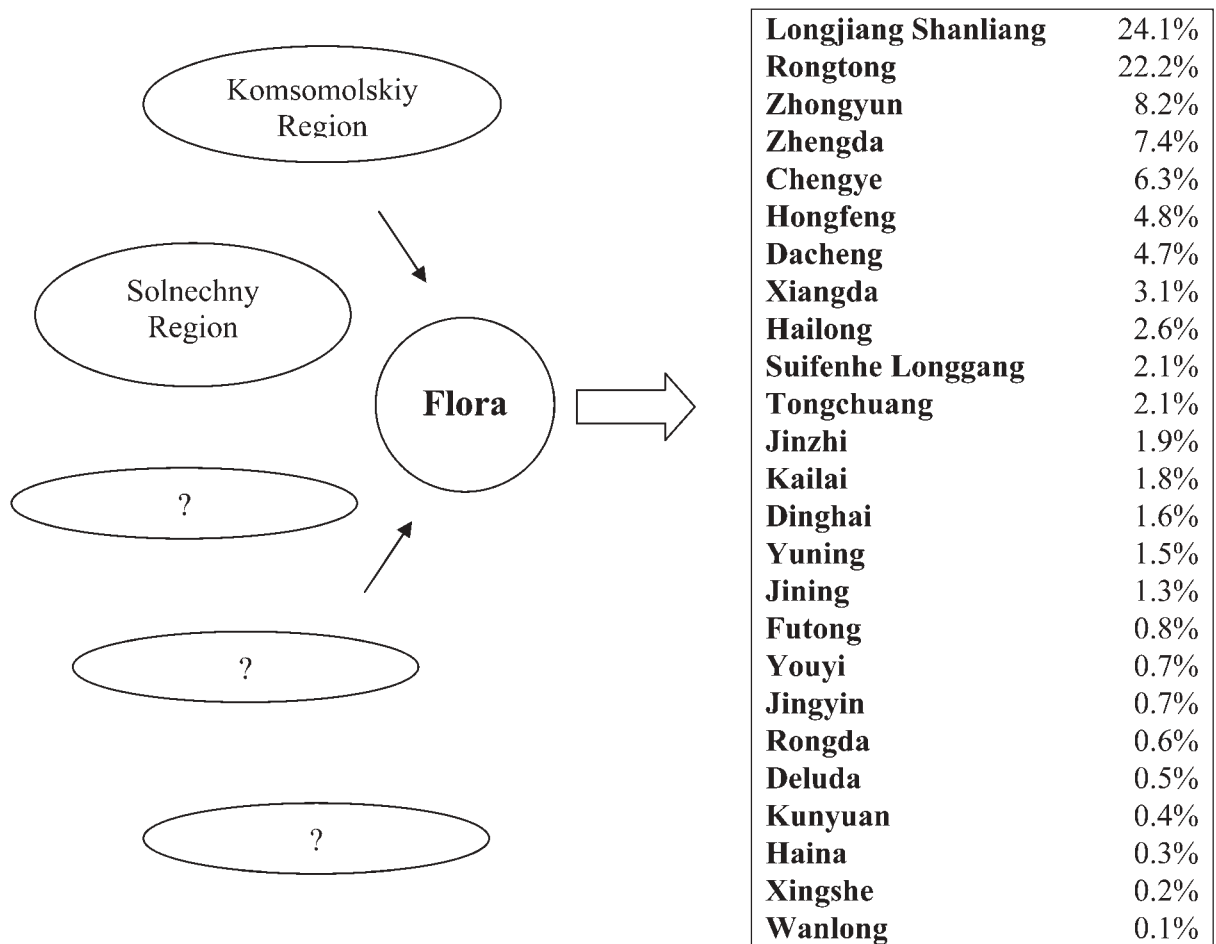


Figure 8. Wood supply chain of Flora.

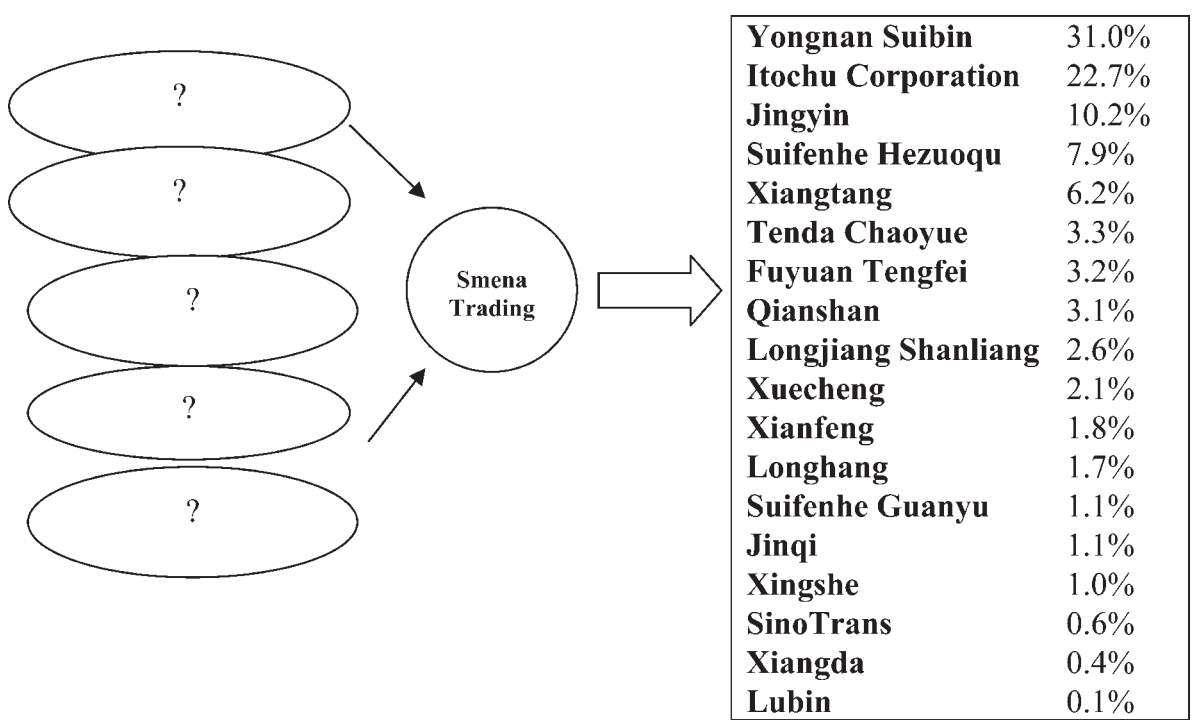


Figure 9. Wood supply chain of Smena-Trading.

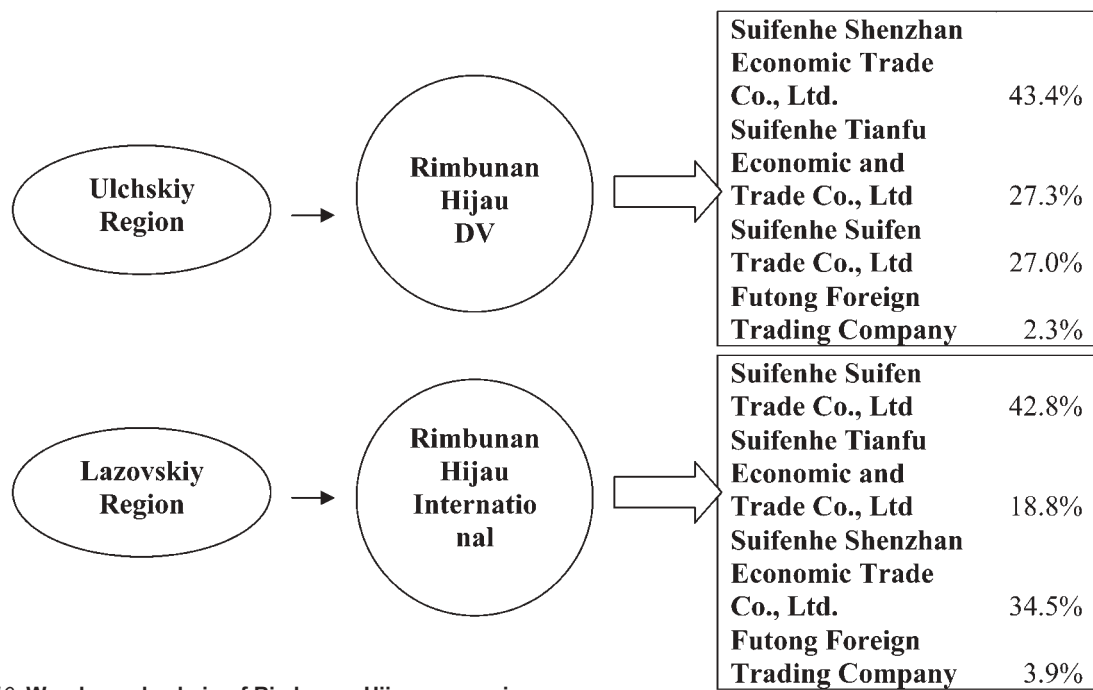


Figure 10. Wood supply chain of Rimbunan Hijau companies.

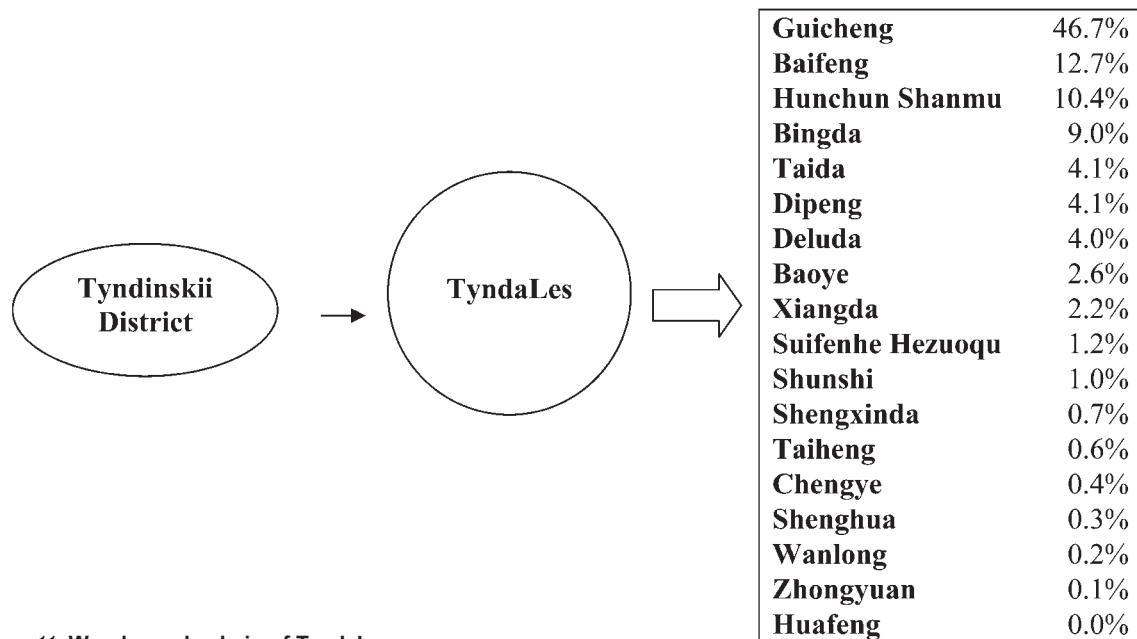


Figure 11. Wood supply chain of TyndaLes.

Suifenhe Longjiang Shanglian Import-Export Co. Ltd

Established in August 1998 and registered in the city of Suifenhe (Heilongjiang Province), Longjiang Shanglian is a private enterprise with rights to import and export. The authorized capital is RMB 55.55 million. The real capital is over RMB 100 million. The company has become a leader in the Russian-Chinese timber trade and general forest sector-related cooperation with Russia. The company has a number of divisions in its Suifenhe headquarters, including Domestic Trade, Foreign Trade, Railway Import-Export, and Road Trade.

The company has a number of divisions, including Domestic Trade, Foreign Trade, Railway Import-Export, and Road Trade. The company also has offices in Manzhouli, Vladivostok, Nakhodka, and Khabarovsk. It indirectly leases forests in Khabarovskiy and Primorskiy Krays. The company owns or co-owns three wood processing mills in Russia, specifically the cities of Iman (Dalnerechensk), Khabarovsk, and Orika. Most employees at these mills are Russians and they can produce a total capacity of 50,000 cu. m. The major product is sawn-wood, most of which is sold to companies in Shanghai.

The facilities in Suifenhe total 60,000 sq. m, with 1.35 km of railway, and storage for 50,000 tons. There are several subsidiaries, mainly wood processing mills. One of these subsidiaries, Suifenhe Zhaofeng Wood Co.

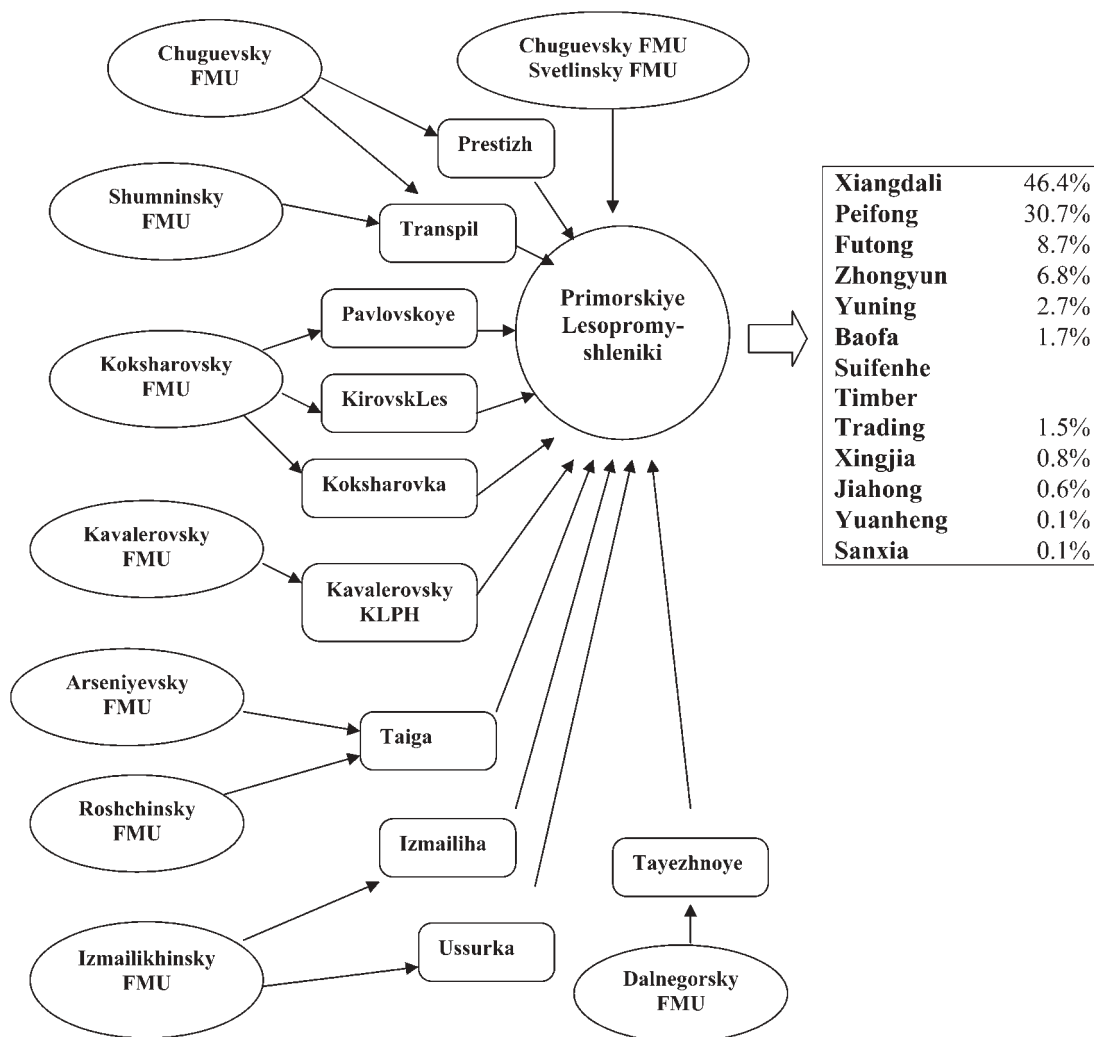


Figure 12. Wood supply chain of Primorskiye Lesopromyshlenniki.

Ltd was established in September 2002. The authorized capital is RMB 8 million and the real capital is RMB 20 million. The company has two laminated sawnwood production lines with a capacity of 1,500 cu. m. It also manufactures furniture components, decorative boards, and mouldings; the production capacity for these products is 1,300 cu. m. The company has established long-term trade relationships with 35 mills in China. Products are sold to Japan and Korea as well. In 2004, Longjiang Shanglian imported 473,200 cu. m of logs and 11,900 cu. m of sawnwood from Russia, accounting for 2.77% and 1.49%, respectively, of China's total import. Compared with import volumes in 2003, log imports increased 40.9% and sawnwood import increased 12.3%.

Suifenhe City Boundary Economic Cooperation Region Guangyu Economy and Trade Co., Ltd

Established in 1994, this private company mainly engages in the import of Russian timber and the export of other products. The company has five subsidiaries, including Suifenhe City Friendship Woodwork Co., Ltd, Suifenhe City Five Ocean International Goods Transportation Agent Co., Ltd, and the Suifenhe City Jinyuxing Electronic Industry Co., Ltd. It also has two affiliated companies, has set up three offices in Vladivostok and Khabarovsk, and has established a large wood-processing mill in the Iman region of Primorskiy Kray. It has sales offices in the cities of Dalian, Yantai, Shanghai, Lianyungang, Guangzhou, and other places in China. The company has 460 employees with an authorized capital of RMB 18 million and it annually imports 300,000 cu. m of timber. Annual sales total RMB 210 million.

Subsidiary Friendship Woodwork Co., Ltd began operations in 2001. The company occupies an area of 36,000 sq. m with buildings totalling 9,000 sq. m. It has 5 sawmills (3 are in foreign countries), 2 planer mills, 2 finger-joint mills, 30 drying kilns with a capacity of 100 cu. m each, 2 air-dry warehouses with a capacity of 1,700 sq. m each, a 500 kW box-type substation, a 300 kW transformer, 2 sets of 3 ton timber loading machines, and 4 sets of 3 ton forklift trucks. The company's authorized capital is RMB 5.1 million. RMB 23 million has been invested in capital construction, and circulating funds total RMB 25 million. The company has 320 administra-

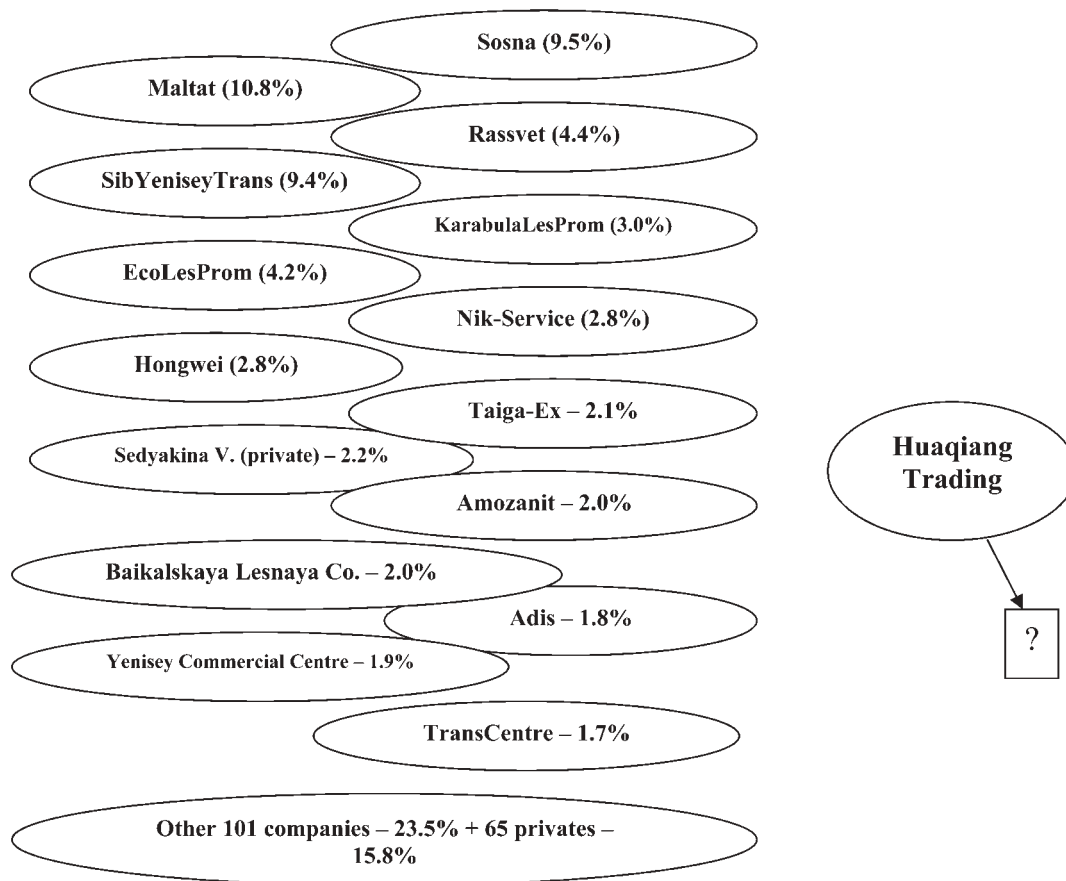


Figure 13. Wood supply chain of Huaqiang Foreign Trade Company.

tive employees and workers, including 17 managers, 4 timber engineers, 2 mechanical engineers, and 2 electrical engineers. The company has 8 production lines for wood processing, 2 lines for planed timber, and 2 lines for finger-joint timber. The company's integrated production capacity is 50,000 cu. m, mainly processed timber, finger-joints, and planed oak and ash timber. The company also can process Scotch pine, larch, white pine, and linden. The company exported 1,300 cu. m of wood products in 2002. Export increased to 2,610 cu. m and 8000 cu. m in 2003 and 2004, respectively, mainly to the US and Canada.

Suifenhe Ilsin Wood Industry Co. Ltd.

Established jointly by Suifenhe Yiheng Economic Trade Co., Ltd. and New Zealand Furniture Co., Ltd. in 2002, the company's authorized capital is RMB 1.4 million. It owns an area of 46,000 sq. m, of which buildings total 6,000 sq. m and workshops totalling 4,000 sq. m. There are 350 employees, including 26 managers. The company has more than 200 pieces of equipment. The main products are solid-wood furniture and other wood products made from Scotch pine and white pine. The estimated annual output is 100,000 sets of solid-wood dining tables and chairs a year. Most products are exported to the US, Germany, UK, Malaysia, and other countries through IKEA, which is a long-term partner of the company.

Lianfa Industrial Co., Ltd (Lianfa Wood Industry)

Established in 2002 and put into operation at the end of 2003, this company is located in Manzhouli. It was established and is run by Hong Kong-based Lianfa Company. With a capacity of 600,000 cu. m, the company produced only about 30,000 cu. m of sawnwood in 2004 and consumed 100,000 cu. m of logs. Output is expected to increase considerably in the next few years. Raw materials are imported directly from Russia, purchased in Manzhouli, or logs are processed for Japanese merchants using their own supplies. The company has more than 200 employees. Products produced by the company are mainly exported to Japan.

Huaqiang Foreign Trade Company

Huaqiang Foreign Trade Company is based in Manzhouli and buys timber mainly from suppliers in Krasnoyarskiy Kray, Irkutskaya Oblast, and the Republic of Buryatia. The company controls timber flows coming from Naushki, Russia, by rail through Mongolia. The company also has a subsidiary in Manzhouli.

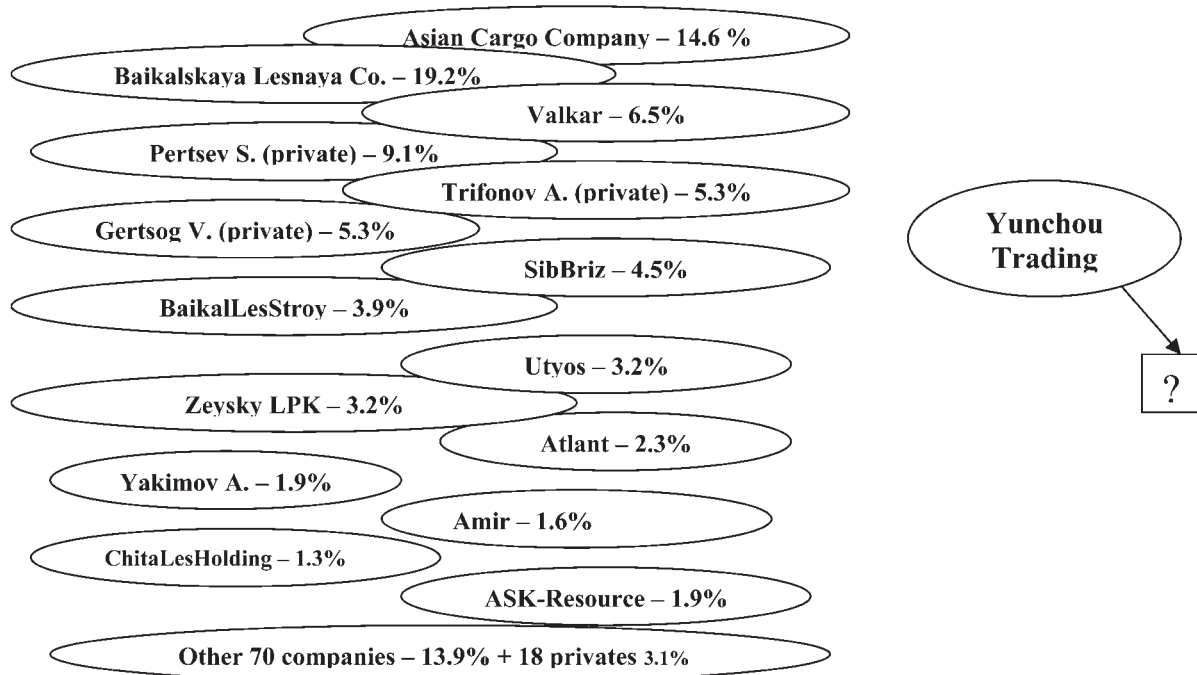


Figure 14. Wood supply chain of Yunchou Trade Industrial Company.

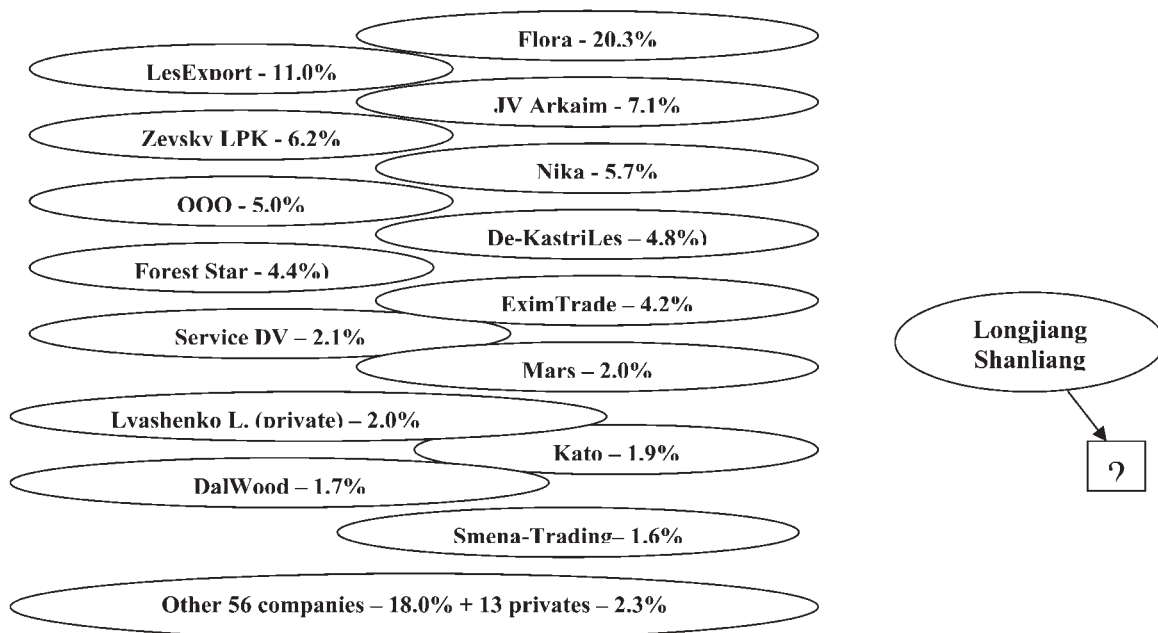


Figure 15. Wood supply chain of Longjiang Shanliang Foreign Trade Company.

Longjiang Shanglian Foreign Trade Company

Longjiang Shanglian is one of the largest importers of RFE timber.

Futong Trading Company

Futong Trading Company is the second-largest importer in Suifenhe.

Jintai Trading Company

Jintai Trading Company is based in Manzhouli. The wood supply chains of these respective companies are provided in Figures 13-17.

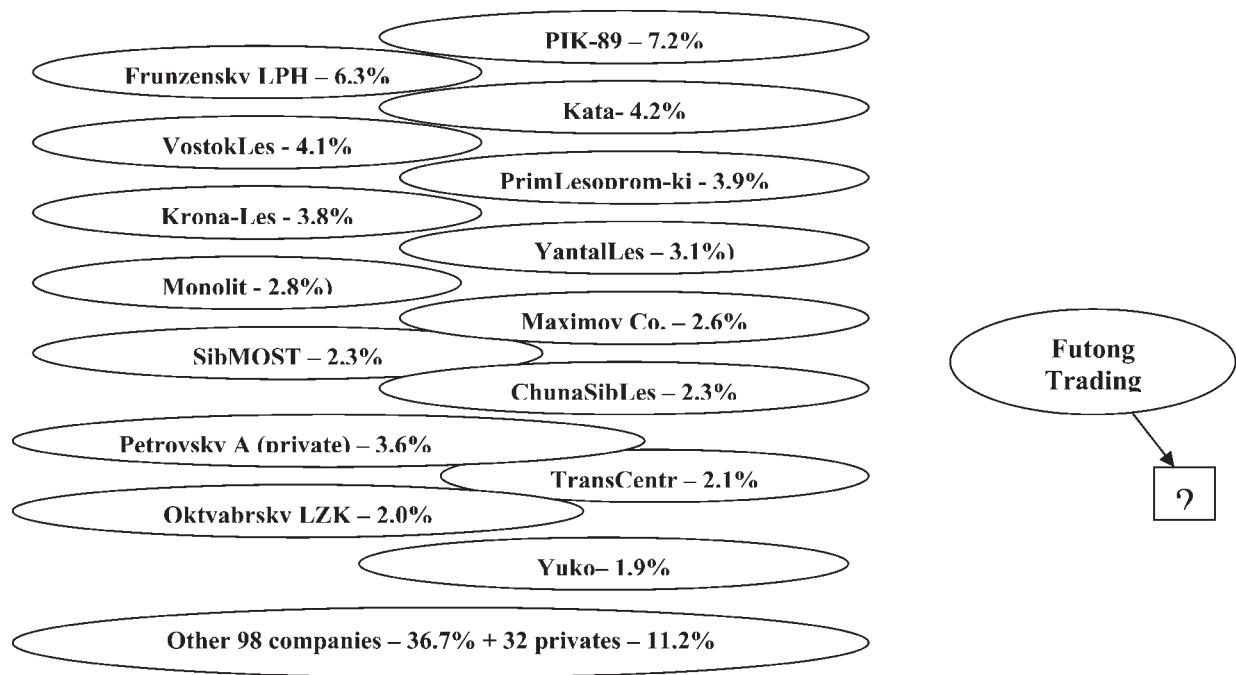


Figure 16. Wood supply chain of Futong Trading Company.

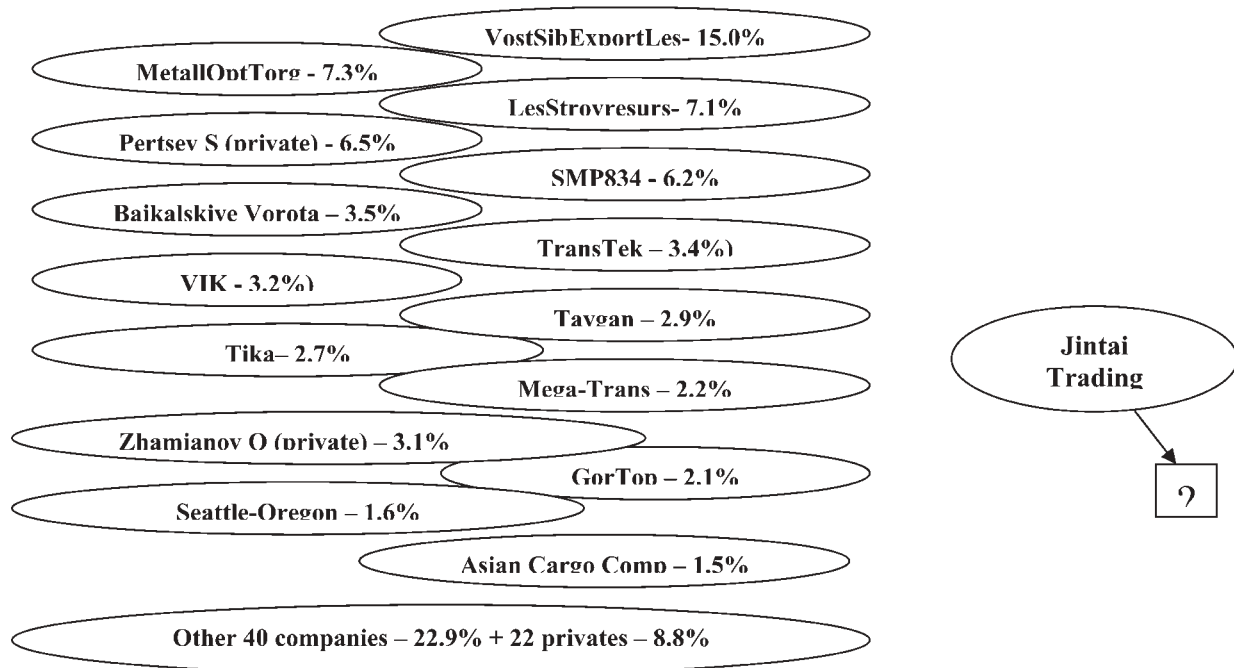


Figure 17. Wood supply chain of Jintai Trading Company.

III. RUSSIAN TIMBER IN CHINA: DISTRIBUTION, PROCESSING, AND CONSUMPTION

Generally, the imported Russian timber passes through three nodes, what may be termed as first, second, and third-level markets, before reaching the final consumers (Figure 18). First-level markets are mainly in cities along the Russian-Chinese border such as Suifenhe, Manchouli and Erlianhot. Second-level markets are large timber distributing centres and are based in provincial centres and trading hubs such as Dezhou in Shandong Province, Dalian in Liaoning Province, and Taicang in Jiangsu Province. Third-level markets are small timber retail markets located near these major distribution centres.

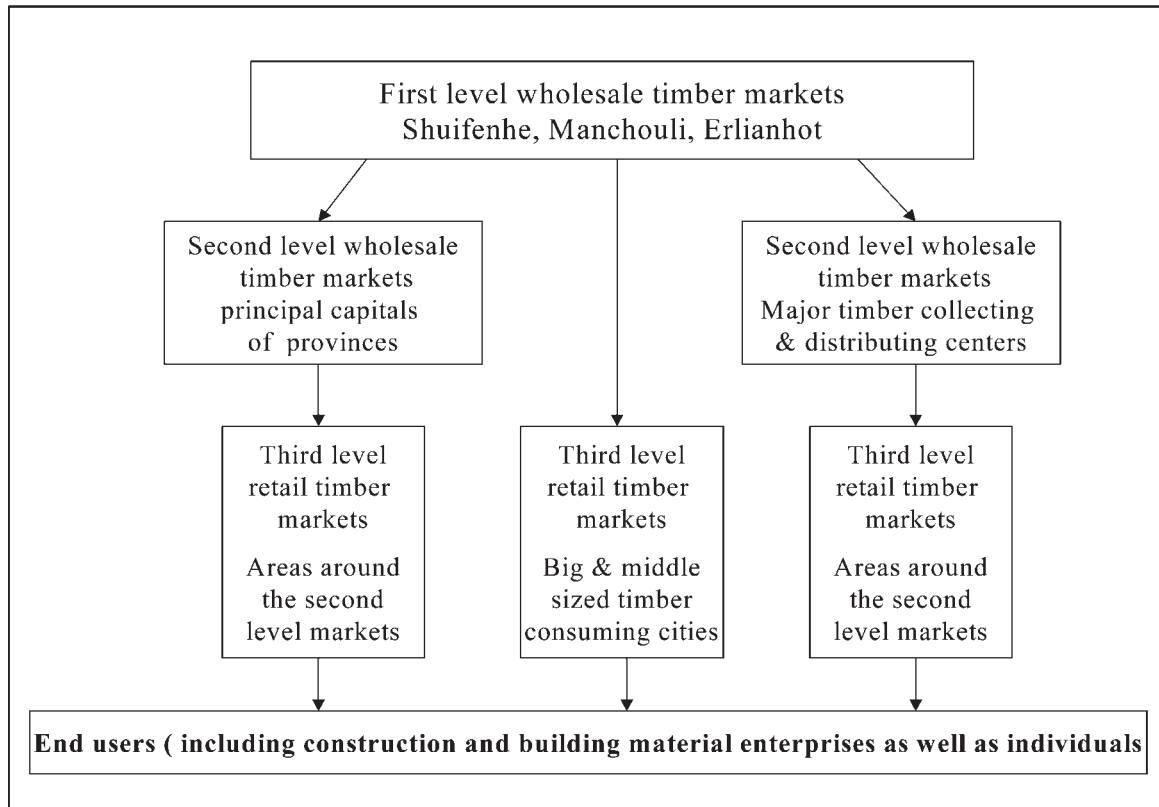


Figure 18. Distribution of Russian timber in China.

First-level timber markets

Enterprises in first-level markets import timber directly from Russia, using three major modes of operation. One mode is to lease forest areas in Russia and undertake logging and exporting themselves. The second mode is to establish purchasing offices (rather than leasing the forests) and then oversee the export process. The third mode is a hybrid of the first and second: holding leasing rights to smaller forest lands and also purchasing timber from other companies. Few Chinese importers have the capacity and capital to lease forests, so the second mode of operation is the most prevalent.

According to the general manager of the Suifenhe-based Friendship Timber Company, which leases forest areas in Russia, Russian forest regulations are adhered to, such as logging only allowed species and strip-cutting rather than clear-cutting to facilitate natural regeneration. He maintains that if they did not follow the regulations their leases would be rescinded. The company recruits local Russians to do the logging and transport the logs to the loading yard as it is more convenient and cost effective than using Chinese workers. The cost to do this logging and transporting the timber costs about US\$12 per cu. m.

Companies operating under the second mode purchase timber from local Russian logging or trading companies. Chinese companies under this model includes the Suifenhe-based Sanxia Economic and Trade Company, Ltd., which has established 7 offices in Russia with a staff of about 50 persons who oversee the timber purchasing, loading and exporting.

The main feature of the first-level markets is that they only operate on the wholesale level. The trading unit is the train wagon: each wagon holds approximately 65–70 cu. m of timber. Transactions are done at the railway station. When a timber train arrives, purchasing staff rush to the station to inspect and purchase logs. These purchasing staff is primarily domestic, second-level market wholesale merchants. After the timber is purchased,

they transport it by rail to major timber collection and distribution centres for wholesale. In recent years, due to the growth of timber processing enterprises at border cities, in addition to importing timber directly from Russia, some enterprises also purchase timber locally.

As stated earlier, Russian timber is imported into China via railroad at three major points: the cities of Suifenhe, Manzhouli, and Erianhhot. These are the first-level markets and each is structured differently to take advantage of their respective geographic locations and distribution networks.

Suifenhe market: Suifenhe imports more Russian timber than any other city in China (Table 7). In 2004, 5.92 million cu. m of logs and 101,100 cu. m of sawnwood was imported, accounting for 34.8% and 12.6% of China's total imports of Russian timber, respectively. One important characteristic of Suifenhe is that it imports a lot of Russian hardwood. According to Suifenhe customs statistics, in the first half of 2004, hardwood timber imports totalled 880,000 cubic meters. In 2004 according to Russian statistics, China imported 2.22 million cu. m. of Russian hardwood timber in total, making Suifenhe by far the largest import point for Russian hardwood.

Suifenhe also has a relatively developed processing industry. Almost half of all timber imported to Suifenhe is processed locally before being distributed in the form of sawnwood, laminated lumber, unfinished floor and solid-wood furniture (mainly softwood dining tables and chairs) to other parts of the country. Initial investigations indicate that most of the timber from Suifenhe flows to the northeast (especially the port city of Dalian), the north and coastal areas of eastern China, and only small volumes to other regions. Much of the timber sent to Dalian is processed further to produce products such as solid-wood furniture and flooring and exported to foreign countries.

Manzhouli market: Manzhouli ranks second to Suifenhe in Russian timber import volumes. In 2004, this totalled 5.8 million cu. m, of which, including 5.45 million cu. m of logs and 349,900 cu. m of sawnwood, accounting for 34.1% and 43.7%, respectively, of total Russian timber imports. The timber processing industry of Manzhouli is less developed than in Suifenhe, but growing quickly. Nevertheless, about 90% of the timber exported from Manzhouli is roundwood. It mainly goes to northeast, north, east and central China, with only small volumes to the south and southwest regions (Figure 19).

Erianhhot market: Erianhhot ranks third after Suifenhe and Manzhouli in terms of import of Russian timber. In 2004, 2.2 million cu. m of logs, and 109,200 cu. m of sawnwood was imported, accounting for 13% and 13.6%, respectively, of total imports. This is mainly Mongolian Scotch pine (75%), spruce (16%), and larch (4.7%), and birch (only 56,000 cu. m or 2.5%). Since Erianhhot is located in the western part of Inner Mongolia, comparatively close to northwest and southwest regions, the timber is sold directly (via railway) to Baotou, Yinchuan, Lanzhou, Xining, Xi'an and the southwest (Sichuan and Chongqing) regions, with only small volumes to Hebei and Beijing.

Table 7.

Russian tree species imported through Suifenhe, first half of 2004.

Species	Import volume (cu. m)	%	Import value (\$)	%
Amur cork-tree	14	0.01	770	0.01
Scots pine	791	0.03	125,417	0.05
Maple	849	0.03	67,980	0.03
Beech	884	0.03	253,168	0.10
Manchurian walnut	2,433	0.09	284,744	0.12
Korean pine	30,783	1.13	2,714,377	0.12
Siberian elm	63,343	2.32	6,172,951	2.55
Poplar	87,835	3.22	5,135,725	2.12
Fir	10,021	3.67	6,790,993	2.81
Linden	141,441	5.19	17,473,949	7.23
Birch	167,104	6.13	11,150,207	4.61
Xylosma	193,211	7.08	38,598,765	15.96
Ash	228,699	8.38	43,074,663	17.81
Mongolian pine	376,337	13.80	25,558,045	10.57
Larch	607,834	22.28	36,988,906	15.30
Spruce	726,092	26.62	47,442,653	19.62
Total	2,727,671	100	241,833,313	100

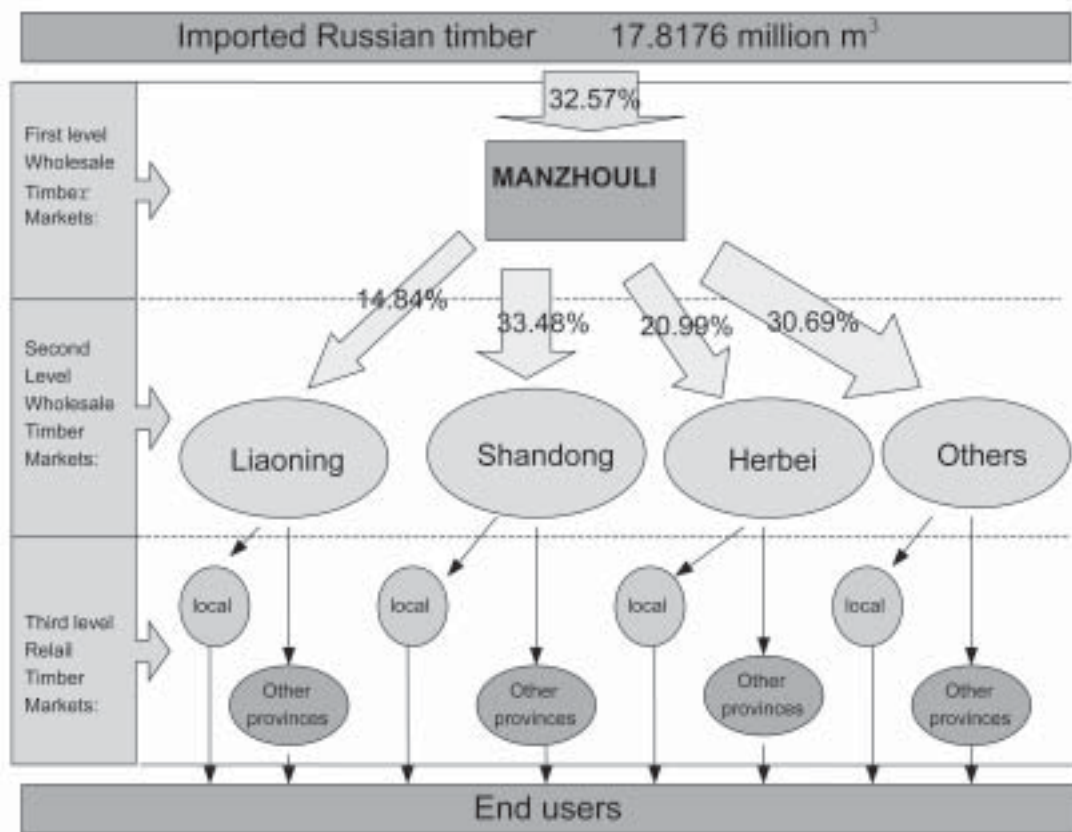


Figure 19. Russian timber flows through Manzhouli, 2004.

Second-level timber markets

Second level timber markets are large-scale timber collecting and distribution centres scattered throughout the country. Every province has this kind of distribution centre, usually in the provincial capital, but some centres extend across the provinces, such as the Dezhou Timber Market in Shandong Province. This market is situated where the Shijiazhuang-Dezhou Railway meets the Beijing-Shanghai Railway, on the border of Hebei Province. The Dezhou Railway station is a vital southern terminal station of the Beijing Railway Bureau. Timber coming from the north must pass through here to go to the south. Since the era of planned economy, the city of Dezhou has been a timber distribution centre for the Shandong, Henan, Hebei, Jiangsu, and Zhejiang provinces. Prior to reform, Dezhou was a consolidation and distribution centre for timber harvested in northeastern China and since reduction of harvest levels in that region it has become a major distribution centre for Russian timber.

The Lubei Company, controlled by the General Company of Shandong Timber Group, and the provincial Dezhou Timber Market are large state-owned enterprises subordinate to the provincial government and responsible for log trading. The market located in Dezhou city proper occupies an area of 21.3 ha and has well-developed infrastructure. The market area has 1,417 m of leased railway line with annual handling capacity of more than 1 million cu. m. The market provides free housing and temporary storage and also handles paperwork for its clients. At present, more than 200 clients could be served by the market simultaneously. According to the director of the market, the timber handling capacity was 1.3 million cu. m in 2002, with a profit of 5.97 million RMB.

There are 13 big and small sized timber markets in Dezhou with an annual timber handling capacity of 1.5 million cu. m. The Shandong Timber Market represents about 50% of this total handling capacity. The market is a state-owned enterprise, subordinate to the General Timber Company of Dezhou. Its business scope is the same as any of the provincial timber markets. It occupies an area of 100,000 sq. m with 450 m of leased railway line. The annual handling capacity is 500,000 million cu. m. Actual transaction volumes in 2002 and 2003 were 240,000 and 280,000 cu. m, respectively. The rest timber markets are small in scale with monthly transactions of only 8 to 10 railway wagons.

Like the first-level market, the second-level market is a wholesale market with no retail business conducted. In recent years, due to higher gas prices and a ban on overloading, transportation costs have climbed steeply. Hence, to lower operational costs, a number of timber traders and buyers who originally depended only on the

second-level market have started to go to the first-level market to purchase timber. Thus, volumes at these second-level markets have declined over the last couple of years.

Dalian, located at the southern tip of the Liaodong Peninsula, has the largest ice-free port in northern China. Railways connect Dalian to Suifenhe and Manzhouli. Timber can be transported via ship to economically developed areas of eastern and southern China. Dalian was an important distribution centre in northeast China for domestically-produced timber. Now Russian timber accounts for about 80% of the total volume. When the Dalian Timber Market was formally established in 1995, there was only one market, now it has expanded to three markets. Before 2000, the volume of timber arriving to this market was 25,000 train wagons, equal to about 1.5–1.7 million cu. m of timber. Recently, due to competition from first-level and some second-level markets, the volume has been decreasing. According to estimates by local traders, yearly volumes have decreased to about 1 million cu. m. In addition to import by rail, some timber is shipped to Dalian from RFE ports. But the amount totals just slightly more than 100,000 cu. m per year.

Unlike at the Dezhou Timber Market, the processing industry near Dalian is quite developed. Finished products (such as furniture, floor, mouldings, etc.) and semi-finished products (such as sawnwood, laminated lumber, decorated veneers, etc.) are shipped to eastern, northern and southern China, and especially overseas. According to rough statistics, the volume of sawnwood shipped to Shanghai, Shandong and Ningbo from Dalian in 2004, amounted to some 400,000, 200,000, and 150,000 cu. m, respectively. A small amount of timber entering Dalian was not processed locally with the logs being shipped directly to port cities in eastern and northern China.

Third-level timber markets

Third-level timber markets are small-scale retail markets that service the end users; they are scattered throughout the country. Most were set up in county government centres (townships) near second-level markets, some were even established adjacent to second-level markets and undertake on-the-spot retail business after wholesale purchase. All third-level timber markets process timber for the client, but the equipment is crude. Only semi-finished products can be processed.

Processing of Russian timber in China

Most timber imported from Russia is processed within China. Although there are more than 200 enterprises involved in the Russian timber business, very few enterprises have established processing plants in Russia. According to statistics for Russian timber imports in 2004, about 17.82 million cu. m of Russian timber was imported, of which, only 801,200 cu. m was sawnwood, representing only 4.5% of total import. There are approximately three types of processing facilities in China. The first is on-the-spot processing in first-level markets, the second is individual processing in the third retail markets, and the third is processing by end-users (including timber processing enterprises).

Most enterprises that have the capacity to process logs are large and medium-sized furniture and building enterprises. These enterprises need large volumes of timber, they have abundant funds, and they possess advanced milling and drying equipment. The timber processing mills set up in the timber markets do not meet their quality standards.

Processing at first-level markets

In recent years, to develop the local economy, the governments of Suifenhe, Manzhouli and Erlianhot enthusiastically invested in timber-processing zones. Suifenhe has made the most progress in this regard and has set up 4 timber processing zones: South Timber Processing Zone, Jianhua Processing Zone, Kuanxiang Processing Zone, and Sunjiaxiang Processing Zone. These zones occupy an area of 3.37 sq. km and have 303 timber processing enterprises. Of these enterprises, 18 have an investment over 10 million RMB each. The total annual processing capacity is about 3 million cu. m and drying capacity is 500,000 cu. m. In 2004, timber imports totalled 5.91 million cu. m; this means that 50% of Russian roundwood could be processed on the spot. For the survey we conducted for this report we visited a number of processing enterprises. Some have their own leased railway lines and modern processing equipment, including equipment from Japan, Italy, Germany and Taiwan Province.

They have an annual processing capacity of between 100,000 and 300,000 cu. m. The number of employees for each enterprise was 300 to 400. The products include square-edged lumber, laminated lumber, flooring blocks, sawn and peeled veneer, decorative moulding, semi-finished furniture and solid-wood (Scotch pine) dining tables and chairs. Currently most products are semi-finished products as higher-end products are still only produced in small amounts.

The Manzhouli Imported Resources Processing Park Zone was built in 2003 on the east side of the city, adjacent to Binzhou Railway, and totals 18.61 sq. km. The zone has become an investment hot spot for both domestic and foreign investors. At present, 17 wood processing plants are in the park with a total investment of 1 billion RMB. Eight enterprises totalling an investment of 200 million RMB are operational. It is predicted that the annual production capacity will reach 1 million cu. m.

The first phase of the project of the Manzhouli Lianfa Wood Industry Company, with investments totalling 560 million RMB by Hong Kong-based Lianfa Group, has been put into production. This is so far the biggest wood-processing enterprise in China. 7,600 sq. m of factories with fully automated product lines have been built, using Russian timber as the prevalent raw material. The annual capacity is projected to be 400,000 cu. m of wood-based panels and 2.2 million cu. m in log processing.

Processing in Suifenhe, Manzhouli, and Erlianhot will continue to expand. Because large volumes of timber are concentrated there and transportation costs are low, it is economical to establish large-scale modern processing facilities. In addition to the construction sector, much of the processed wood products in these areas are for the export market. In fact, except for the home market, a significant portion of the products processed on the spot in the first-level market is for export. Developing processing will promote economic prosperity and development of these border cities, creating jobs and generating revenue. Ten years ago, Suifenhe was an obscure township. Now border trade and wood-processing factories have turned it into a prosperous city.

Processing at second-level markets

As mentioned earlier, China's second-level timber market engages primarily in consolidating and selling timber on the wholesale market and to processing enterprises situated near these markets. Some of these enterprises are quite large, as in the case of Dalian. The processing industry in Dalian includes more than 100 different enterprises, with drying and sawmilling as the primary activities. But there is also a robust furniture industry. According to the Dalian Furniture Association, the city has 550 furniture and flooring enterprises, including large-scale solid-wood furniture enterprises, such as Chinese-owned Dalian Huafeng Furniture Company, Ltd. (annual timber turnover of 300,000 cu. m) and foreign-owned (which account for one-third of all furniture enterprises in Dalian) Global Wood Company, Ltd. and Maluni Timber Company, Ltd. In 2004, the total export value of the furniture produced in Dalian amounted to US\$560 million. Dalian specializes in solid-wood furniture, producing more than half of China's total output. The raw material is primarily RFE hardwood, with only small amounts either domestic timber or hardwood from other countries.

Processing at third-level markets

Under the planned economy timber processing, like harvest and transport, was centrally organized. All large- and medium-sized cities established state-owned sawmills. The capacity of these mills was quite large, with large-scale mills reaching 1 million cu. m annually. After economic reform about 90% of these sawmills either ceased production or dramatically changed their production lines. They have been replaced by the tens of thousands of individual processing mills set up in timber retail markets. Individuals own these mills and they often involve several staff using simple and technologically crude equipment. These small mills are flexible and able to adjust to the needs of the buyer on the spot. This pattern is now quite prevalent throughout China, even in Beijing, as it is convenient, the costs are low, and wood can be processed according to a buyer's needs. But the processing quality is low and the methods wasteful. This development pattern is particularly prevalent in small and medium-sized cities, because many rural users still use wood as a building material (mainly for doors and window frames).

Consumption of Russian timber in China

About 87% of China's import of Russian timber is coniferous softwood, with hardwood making up the remainder. In China, coniferous timber is seldom used for furniture but rather in the building industry and for interior decoration. According to our survey, in the building industry, Russian timber is used to make wooden doors, planks for construction sites, cement forms and supporting material, and for interior decoration. In addition softwood is used for inner and outer materials for solid-wood furniture and upholstered furniture, solid-wood packing materials, transportation brackets, decorative materials for landscaping, and to refurbish old buildings. Small quantities are used to manufacture wooden toys, stationery, as well as core material for some kinds of floors. As for the third-level timber retail markets in counties and townships, the main consumers of Russian softwood timber are local farmers, who use it to build houses. At present, China's rural houses are mainly brick and wood. But use of wood to frame houses is declining and it is increasingly used for doors and window frames.

In 2003 and 2004, China imported 1.78 million and 2.22 million cu. m of hardwood respectively, representing only about 12.4% and 13% of total log imports. The major species were oak, ash and birch. Large-diameter high-quality logs are favoured and the prices are moderate, making Russian hardwood logs in high demand in China.

Export of products manufactured from Russian timber

With development of processing zones in cities such as Suifenhe, more and more processed products are exported. Most enterprises located in these zones produce sawnwood. In 2004, in Suifenhe, about 150,000 to 160,000 cu. m of sawnwood was exported abroad. Enterprises in Suifenhe also exported limited quantities of solid-wood dining tables and chairs, decorative wooden lines and solid-wood flooring. Sawnwood and laminated lumber were mainly exported to Japan and the United States, with solid-wood dining tables and chairs purchased by IKEA.

Enterprises in Dalian export mainly sawnwood (laminated lumber and solid-wood flooring) and solid-wood furniture, and small amounts of office furniture, upholstered furniture and cabinets. According to Chinese customs statistics, the total value of sawnwood and other wooden products exported from Dalian was US\$254 million (excluding furniture) and it spanned 21 countries. Japan accounted for US\$241 million, or 94.9% of the total export value, South Korea accounted for US\$6.3 million, or 2.5%; the USA accounted for US\$1.21 million, or 0.5%; Indonesia accounted for US\$1.1 million, or 0.4%.

Dalian Huafeng Furniture Company is constructing the New Earth American Furniture Industrial Park, which occupies 4.5 sq. k with investment totalling nearly 4 billion RMB. Huafeng anticipates production will begin in 2007. The yearly production capacity of Huafeng will reach 10 million pieces (sets) and a large proportion will be exported to the US market.

Summarizing data on processing and use of Russian timber in China we come to the following conclusions:

- China primarily imports roundwood from Russia. Volume reached 15.4 million cu. m in 2004. Most of this roundwood, especially coniferous wood, is used in the construction sector in China.
- At first-level markets (e.g. Suifenhe, Manzhouli, Erlianhot) modern wood processing facilities are being built to produce high-quality sawnwood. These mills contribute significantly to the economic prosperity of these border cities.
- At second-level markets, along with sawnwood production, the solid-wood furniture sector is highly developed;
- At the third-level markets small-scale entrepreneurship prevails, particularly in small and medium size towns;
- Lately, due to development of modern wood processing enterprises in border regions, China has greatly expanded exports of sawnwood, solid-wood furniture and other forest products to Japan, the US, South Korea, and the EU.

IV. ILLEGAL LOGGING IN EASTERN SIBERIA AND THE RUSSIAN FAR EAST

A global problem

Illegal logging and illegal activities in the forest sector have become recognized as an international problem affecting most countries worldwide and is drawing increasing attention from Russian government officials at the federal and regional levels as well among the public and mass media.

The issue was first publicly and officially expressed at the Birmingham G-8 Summit in 1998, and again at the G-8 Summit in Okinawa in 2000. In 2001, participants of the Asian Ministerial Conference on Forest Governance and Law Enforcement (held in Bali, Indonesia) agreed on the necessity to jointly address the issue. A similar conference was held in Africa in 2003, which also contributed to increased awareness. In 2002-2005, various international organizations held fora on these issues. Governments, nongovernmental organizations, and private businesses are finally researching these issues in earnest [8-12].

There remains insufficient information on illegality in the forest sector at both the global and regional scale. However, experts concur that illegal logging has deleterious economic impacts. Research by international organizations provides some idea of the scale of the problem (Table 8).

Russian and international experts have differing definitions of the terms 'illegal logging' and 'unlawful logging.' Some use the term 'illegal logging' to describe activities which violate national and sub-national laws. The Confederation of European Paper Industries (CEPI) states "illegal logging takes place when timber is harvested in violation of national laws."

At the Sixth Conference of the Parties to the Convention on Biological Diversity (2002), the term 'unauthorized logging' was used. The term 'illegal forest activity' has a broader meaning than 'illegal logging' as it includes issues of timber transportation, processing, and associated trade. As discussed at the Conference, illegal (unlawful) logging includes:

- logging protected species;
- falsifying logging permits;
- damaging trees to obtain legal rights to cut them;
- contracting companies to log protected areas;
- logging outside concession's boundaries or on lands where logging is prohibited, such as steep slopes, river banks, watersheds;
- obtaining concessions through bribes;
- intentional arson of forest areas;
- illegal transportation and timber trade;
- illegal financial operations associated with logging, transportation and trade.

Table 8.
Illegal logging levels in selected countries and regions, 2004.

Country/Region	Illegal Timber as a percentage of total turnover
USA and Canada	<1 (up to 10 for imports)
Japan	3–5 (>20 for imports)
EU	<3 (80 for imports of tropical timber)
EC new members	10–50
Brazil	>20
China	25–35 for imports
Russia	10–20
Western and Central Africa	30–70
Indonesia	70–80

Illegal logging exists mainly due to weak state control in the forestry sector. However, responsibility also rests on the shoulders of logging and trading companies. In private conversations with managers of Russian exporting companies, timber is often paid for in cash. Under the control of specialized intermediaries, this timber is then sold to legal timber exporters. WWF believes that all enterprises in the forest sector have to make every effort to provide transparent information on the timber's origin (see Annex 3). Profits made on illegal timber are laundered during the transport and export of timber. These activities are often closely connected with other illegal activities, such as:

- mislabeling timber quality to avoid taxation (e.g. sawnwood declared as pulpwood);
- producing double invoices and agreements to avoid taxation: one set has the real price for customs officials, while the other has much lower prices indicated for tax officials;
- unregistered trade in foreign currency;
- understating the cost and volume of exported timber in 'official' agreements to hide profits. The difference could be paid by a client in cash or through a secret bank account;
- obtaining permission to transport timber via 'one-day' firms or exporting using false papers;
- understating the volumes of exported products by bribing customs officials.

Illegal logging is a clear barrier to sustainable forest management. Indeed, illegal trade threatens the reputation and very existence of legal trade. International experts stress the necessity to cease illegal logging as it undermines the trust of consumers in the legality and sustainability of products they are paying for. See below for definitions of illegal logging.

Illegal Logging and Forest Crime – WWF definition:

"Illegal logging occurs when timber is harvested, transported, processed, bought or sold in violation or circumvention of national or sub-national laws."

WWF Position Paper on Illegal Logging and Forest Crime, April 2002

Illegal Logging – decision of the Supreme Court of the Russian Federation:

"Illegal logging is harvesting of trees, shrubs, and lianas without a felling license/order; or logging with a felling licence/order issued in violation of the standing felling rules; as well as logging in prohibited areas, or outside the boundaries of permitted regions; logging in excess of the allowed volume; logging of prohibited species or trees, shrubs, and lianas prohibited for harvesting..."

Ruling of the Plenum of the Supreme Court of the Russian Federation, "On Court Application Practice of Laws Concerning Liability for Environmental Offences," No. 14 of 5.11.98.

Ecological problems

Illegal logging has severe impacts, both direct and indirect, on the environment. Some issues associated with this include:

1) *No royalties, taxes, or other premiums are paid by logging companies for illegally harvested wood.* Therefore, forest management units do not obtain sufficient funds to properly manage forests. The financial shortfall to implement forest management measures is 1.5 billion roubles annually. The Chamber of the Russian Federation noted in its report in 2000, "Efficiency of Forest Resource Use of the Russian Federation," that control of incomes generated from forest use was very ineffective. As of January 1, 2001, forest users had evaded 1.3 million roubles in fees. In Russia, nearly 20 million out of 80 million ha of exploitable forest are not properly reforested. As a result, structure of the forests degrades, high quality timber stands decrease and low quality stands increase.

2) *Illegal logging results in degradation of the most ecologically valuable stands.* In Eastern Siberia and the RFE, these are intact forests, which are essential for the maintenance of ecosystem functions, the conservation of rare species, the protection of biodiversity, etc.

3) *Timber poachers take only commercially valuable timber, leaving unwanted wood on site, which is fuel for forest fires and pests.*

In boreal forest regions, the main problem of illegal logging in Russia is not poachers, but legal logging companies that log in excess of limits allowed by logging licenses, that log outside established logging areas—including in protected areas—and, that log species protected from harvest.

Illegal logging in High Conservation Value Forests

Both the Khabarovskiy and Primorskiy Krays border China and over half of their exports go to China. According to official statistics and customs data, in Khabarovskiy Kray the deficit between legal industrial roundwood production and domestic consumption and export was 1,874,000 cu. m in 2003 (Figure 20). This means that at least 25% of all logs exported from Khabarovskiy Kray are of illegal origin. In 2002, WWF-Russia published the report “Illegal Logging – a Real Threat for Far Eastern Forests: A Case Study of Illegal Logging in Primorskiy Kray” [13]. The report concluded that: “Illegal timber volumes in Primorskiy Kray, by a conservative estimate, total between 1.5 to 1.9 million cu. m per year. This includes just high-quality timber. At least 200,000 to 300,000 cu. m of timber is left at logging sites. Thus actual annual logging volumes in Primorskiy Kray can reach 5.5 million cu. m. Overall illegally logged timber in Primorye totals US\$150 million in domestic market prices or US\$300 million in foreign market prices. This figure is comparative to the annual budget for the entire Kray”.

Figure 21 illustrates the varying assessments of legal and illegal timber volumes in Primorskiy Kray in 2000.

The most serious problems are related to logging and export of timber from Korean pine–broadleaved forests, some of the most biodiverse forests in all of Russia and located along the Russia-China border and the coast of the Sea of Japan. These forests are in close proximity to settlements and a relatively developed road network and are of great commercial logging value. They are therefore exposed to heavy logging pressure due to the growing demand for hardwood in neighbouring China [14]. According to Russian logging regulations, the most valuable and rare forests, such as Korean pine forests and forests in riparian areas, are protected as Group I forests. Thus, they are prohibited for commercial logging, but open to thinning (salvage cutting, anti-fire measures, etc.) or preparatory cutting (road building, etc). Hence, thinning becomes a loophole for legalizing the export of rare Korean pine, although its commercial logging is severely forbidden by federal law [5].

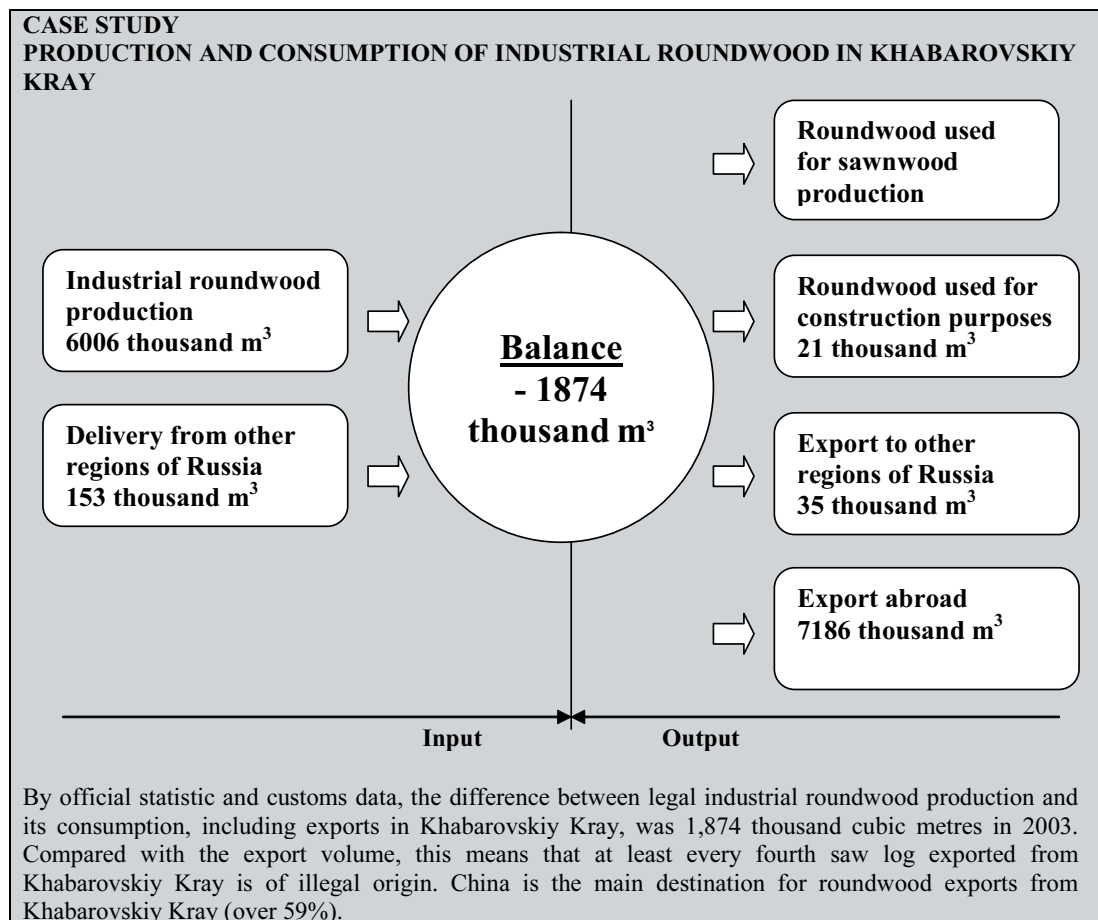


Figure 20. Comparing wood production and consumption figures in Khabarovskiy Kray.

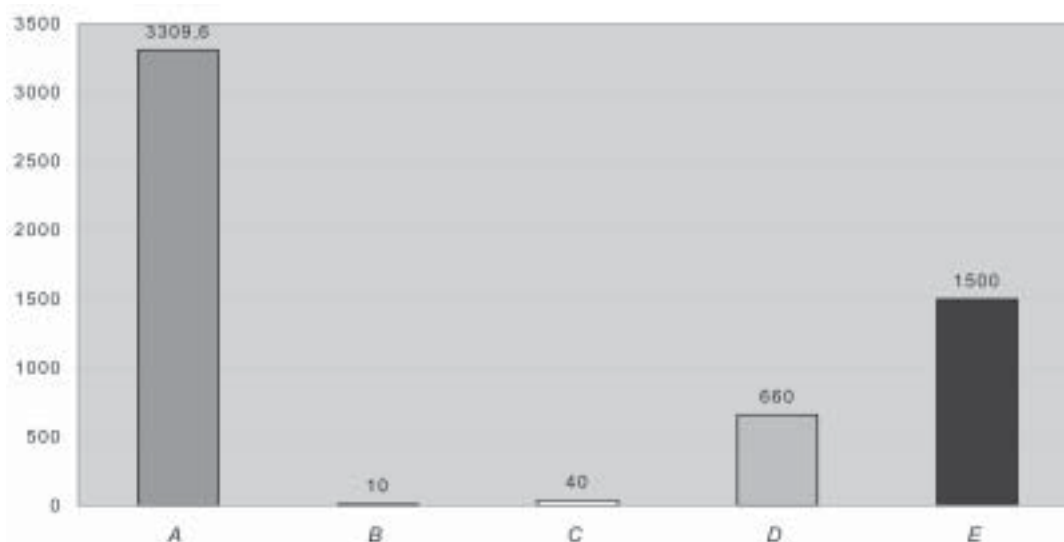


Figure 21. Estimates of legally and illegally logged timber in Primorskiy Kray in 2000, (000 cu. m) (11):

A – total cutting volume; **B** – illegally logged timber volume according to the Kray Administration (data includes logging without a license; **C** – illegally logged timber volume estimated by the regional UVD (during 9 months); **D** – illegally logged timber volume estimated by Greenpeace; **E** – illegally logged timber volume estimated by WWF.

According to Russian forest regulations, thinning, or “maintenance” cutting is intended to improve quality of forests by removing old trees, sick trees, and trees that pose a fire threat. Forest management units (*leskhoz*s) conduct this kind of cutting themselves or contract local companies to do the logging. This kind of cutting, allowed within protected areas, is exempt from lease payments and stumpage fees. Actually, this maintenance cutting or sanitary logging has been converted into “income” logging in forests to increase volumes of healthy high-grade commercially valuable trees for export.

Commercially valuable tree species are the main logging targets for illegal loggers. Since the accessible resources of large high-quality oak and ash logs have been exhausted in parts of the southern RFE, intense illegal logging has begun in the remaining protected and reserved areas. Forest industry experts believe that over 70% of the 1st grade oak and ash roundwood exported from the southern RFE is harvested in violation of thinning regulations or from illegal harvest. Attractive prices for valuable hardwood, paid in cash by Chinese traders at the border encourage illegality, thus significantly damaging the forests and habitats of many species.

The following rare and valuable tree species in RFE are major targets in maintenance and illegal logging:

1. Korean pine (*Pinus koraiensis*) – completely forbidden for commercial harvesting;
2. Oak (*Quercus mongolica*) – allowed for commercial harvesting, although its commercially valuable resources are almost exhausted, except for those in protected riparian zones and Group I forests;
3. Manchurian ash (*Fraxinus mandshurica*) – the same as oak;
4. Elm (*Ulmus japonica*) – the same as oak and ash;
5. Linden (*Tilia amurensis*) – completely forbidden for commercial harvesting in Primorskiy Kray and Amurskaya Oblast and partly allowed for cutting in some areas of Khabarovskiy Kray and Jewish Autonomous Oblast;
6. Nut tree (*Juglans mandshurica*) – completely forbidden for commercial harvesting;
7. Amur cork tree (*Phellodendron amurense*) – Included in the Russian Red Data Book (List of rare and endangered species), any logging is completely forbidden.

According to the Primorskiy Forest Service, 2,960,000 cu. m and 989,600 cu. m were harvested by commercial logging and thinning, respectively, in Primorskiy Kray in 2003. This means that sanitary logging makes up 27% of the total volume of logging. However, the largest quantity of valuable tree species like Korean pine, oak and ash is logged using sanitary logging licenses[15].

The Primorskiy Forest Department reported that 365,600 cu. m of oak and 191,000 cu. m of ash were harvest-

ed in 2003. These quantities include roundwood and pulpwood. In addition to the exported amounts, we should add domestic consumption to these figures (furniture production, doors, etc.), to be assessed at 10 to 20% thus, 30,000 cu. m of oak and 20,000 cu. m of ash in Primorskiy Kray.

Exports of Korean pine and Siberian pine are understated because timber companies disguise their exports by listing the species on customs and port documents as “pine”, which usually refers to Scotch pine or, simply, “coniferous”. In some documented cases, exporters have declared shipments of Korean pine to be ‘Korean spruce’ and the shipments were cleared by RFE customs officers. This may be due to poor training in species identification, but there are undoubtedly other reasons. The practice of labelling high-grade timber as lower quality timber or pulpwood to reduce the official contract price and to minimize taxes and duties on the Russian side is widespread.

As a rule, logging of rare and valuable tree species is done via environmentally destructive and badly managed sanitary logging operations or, in many cases, by means of illegal logging. The most alarming cases involve the export of large-diameter high-grade timber, supplied by traders and not by the long-term leaseholders. This timber is most likely of illegal origin.

At present, most of the timber China imports come from natural (rather than plantation) forests. How much of the timber comes from legal versus illegal logging operations is difficult to judge. For those Chinese officials and traders trying to act responsibly there is no means to assess the conditions under which the timber was sourced. Many traders have a vested interest in not asking too many questions, and in general, the environmental awareness and other aspects of responsible trading is very low. It is certain that a significant proportion of Russian timber imported to China is coming from illegal felling, even if exact volumes are difficult to estimate.

Timber export from Russia and wood commodity chain models

The timber production process in Russia can be divided into three main phases: 1) harvesting/logging; 2) transportation to wholesalers (traders) or processors; and 3) customs clearance and transportation abroad. Figure 22 shows this process. Major actors involved in this production process include commercial harvesters (long-term lease holders), non-commercial loggers (short-term or one-time lease holders), illegal loggers (no lease at all), traders and processors, and export agents and authorized export carriers.

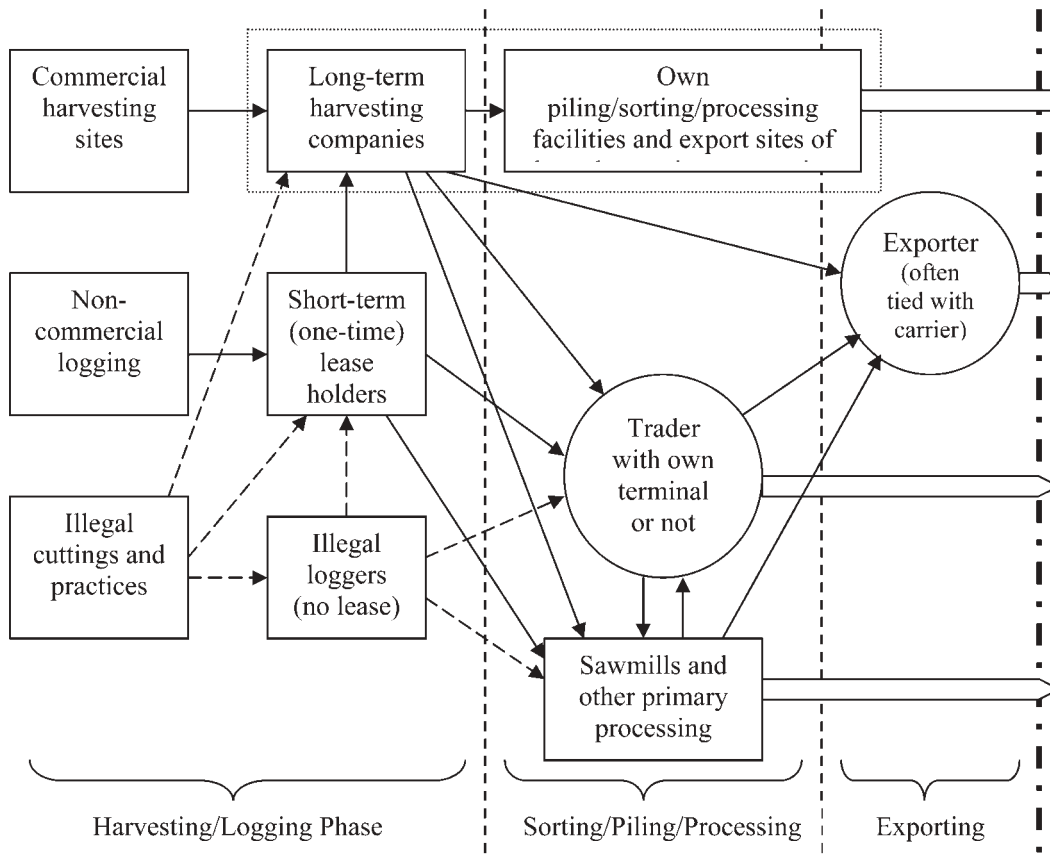


Figure 22. Predominant wood chains in the RFE timber trade.

Taking into consideration the major actors mentioned above, Russian timber export to China follows two major timber chain models:

I. Direct chain: *Commercial Harvester* → *Importer*

This is the simplest and most transparent scheme making it easier to control production costs, export volumes, and revenue generation. This scheme is most common for large timber harvesters and processors and pulp and paper companies with long-term timber leases. Usually, it involves export of softwood in Eastern Siberia and the northern areas of the RFE (Khabarovskiy Kray, Amurskaya Oblast). Except for companies in distant hinterlands, many large harvesters or producers are also registered as exporters with relevant licenses from the Russian Ministry of Economic Development and Trade. They usually lease large forest areas and contribute significantly to the economic and social infrastructure of forest communities. These harvesters can buy illegally harvested timber from elsewhere, but they also admit to illegal logging on their forest lands. Their main infringements are related to hiding actual volumes of harvesting and processing to keep production costs low and to minimize taxation. This is estimated at 10% to 30% of total export revenues. Most regional and federal authorities favour these large harvesters, while insisting that they develop processing as a pre-condition for leasing new forest lands. Since links between transporters and importers are rather common, we have chosen not to focus on this chain in this report.

II. Intermediary Chain: *Harvester* → *Intermediary* → *Importer*

Intermediaries are very numerous and play an influential role in the Russian-Chinese timber trade, especially in border areas. While large harvesting and processing companies export the bulk of timber, intermediaries, including numerous private persons and small firms, also play an influential role, particularly for smaller timber companies. Of course, such intermediaries can play positive roles in the market. They can consolidate lots and assortments and make links with consumers, which is important to expand markets for sawnwood. However, to date, most intermediaries have sought quick profits at the expense of long-term sustainability. Income for intermediaries greatly depends on the ability to gain access to sorting, storing and transport infrastructure. With proper infrastructure, intermediaries can facilitate transfer from the log yard to the export point. Without necessary facilities, they contract outside carriers. Intermediaries play a critical role in laundering illegally harvested timber. By so doing, intermediaries can retain from one-third to two-thirds of the final revenues from export. In many cases, this timber is impossible to trace. These intermediaries are necessary when:

- Short-term or one-time lease loggers, principally small companies or private persons, have no relevant export infrastructure (to sort, store, transport, develop links with foreign importers, follow proper export formalities, etc.). These loggers will sell their timber to the nearest larger, more experienced, better-known company, or ask the company to serve as an export agent.
- There is a different type of intermediary from the type that can offer infrastructure services. This intermediary is a foreign trade association and it is still commonly used in remote areas. The harvester focuses on timber harvesting, while the association studies the export market, sets prices, and seeks out reliable trading partners. These traders also provide logistical support. Traders at these associations often enter into long-term supply contracts with commercial harvesters and may use the harvester's available infrastructure.
- Intermediaries can also assist with rudimentary processing, which serves as a means to avoid official regional demands on the development of wood processing or to legalize illegally harvested timber.
- Illegal loggers can only sell illegally harvested timber only to other commercial harvesters, traders or processors, who legalize it under the guise of logging tickets or rudimentary processing. The carrier can also export illegally harvested timber by misclassifying or underdeclaring volume, or by bribing customs officials and smuggling.

Table 9 shows the summarized data on exports of rare and valuable species from the RFE to China for the RFE provinces.

Private intermediaries and Chinese firms with both legal and illegal Chinese investment play a considerable role in the turnover and export of rare coniferous and valuable hardwood, especially in border areas adjacent to China. Rudimentary processing of such species, in most cases, is a way to avoid customs export controls. This is of great concern with regard to trading companies or processing companies with Chinese investment. Aside from stimulating illegal logging of rare and valuable tree species, such rudimentary processing does not bring economic or social benefits to timber-dependent communities.

Table 9.

Export of valuable tree species to China from selected RFE regions, 2003.

Regions	Primorskiy Kray	Khabarovskiy Kray	Jewish AO	Total roundwood	Primorskiy Kray	Khabarovskiy Kray	Jewish AO	Total Sawnwood, cu. m
Species	Roundwood				Sawnwood			
Korean pine	32,446	41,708	380	74,534	45,208	12,084	1,795	59,087
Oak	118,441	121,438	2,886	242,765	28,647	5,924	1,981	36,552
Ash	82,346	190,236	3,023	275,605	4611	699	113	5,423
Ulmus	71,175	18,325	349	89,849	1878	474	2,172	4,524
Tilia	7,695	259,718	18,772	286,185	711	447	219	1,377
Juglans	1,639	3,423	-	5,062	81,487	19,680	6,086	107,253
Cork tree	29	14	-	43				
Total	313,771	634,862	948,633	974,043	162,542	39,308	12,366	214,216

Customs infringements in Russian-Chinese trade

The RFE customs division analyzed export transactions and customs infringements, concluding that increased export volumes of logs and sawnwood to China have been accompanied by increased customs violations. As of December 1, 2002, roundwood exports through RFE customs points totalled 10,560,000 cu. m, and exports of lumber totalled 399,000 cu. m. In 2001, for a similar period, 9,341,000 cu. m of roundwood and 332,000 cu. m of sawn wood were exported. In 2002, customs violations totalled 471 cases and only 394 cases in 2001. Twenty criminal cases were brought to court in 2002. The overall value of confiscated timber, illegally transferred across the Russian-Chinese border, was over 143 million roubles.

For 2002, following a detailed analysis of infringements in Russian timber export rules the RFE Customs department cited the following violations:

- 333 cases that violated Article 273 of the Russian Customs Code and Article 16.17 section 1.2 of the Russian Administrative Code.
- 88 cases that violated Article 279 section 1 and Article 282 of the Russian Customs Code and 16.2 sections 1 and 2 of the Administrative Code.
- 29 cases that violated Articles 276–278 of the Customs Code and Article 6.1 of the Administrative Code
- 21 cases that violated other Articles.

Eighty-six percent of these violations took place on the Russian-Chinese border – 52 in Vladivostokskaya, 56 in Blagoveschenskaya, 46 in Grodekovskaya, 5 in Khasanaksya, 6 in Birobizhanskaya, 1 in Nakhodkinskaya, 4 in Amurskaya, and 3 cases initiated by RFE Operative Customs. Russian and Chinese statistical data are provided at the Figure 23.

The Russian Customs Department determined that non-standardized technical specifications (requirements), which differ from GOST (state standards), allowed exporters to understate export volumes by up to 20%, i.e. about 1.8 million cu. m of unaccounted for roundwood totalling US\$36 million [17]. During the same period, customs officers initiated 1,672 administrative and criminal cases regarding offences against customs rules. The bulk of these cases involve repatriation of currency revenues, estimated at US\$20.5 million. Among the examined regions, the largest sums of non-repatriated currency were revealed in Primorskiy Kray (US \$6.7 million), Irkutskaya Oblast (US\$1 million), and Khabarovskiy Kray (US\$0.7 million). Non-repatriation of currency revenues, or breaking the terms of such repatriation (within 90 days), make up 70% of all infringements. Analyses of these cases show this infringement is caused primarily by so-called “one-day” firms (firms registered specifically to export timber without paying export duties, firms that use fake documents, etc.), including firms established by foreign citizens or with foreign investment. For instance, in 2002, Ussuriyskaya Customs initiated 28 administrative cases for failure to properly remit currency revenues to authorized banks, or disregarding the terms of such remittances against the Ussuri and Phoenix companies, which have 100% Chinese investment.

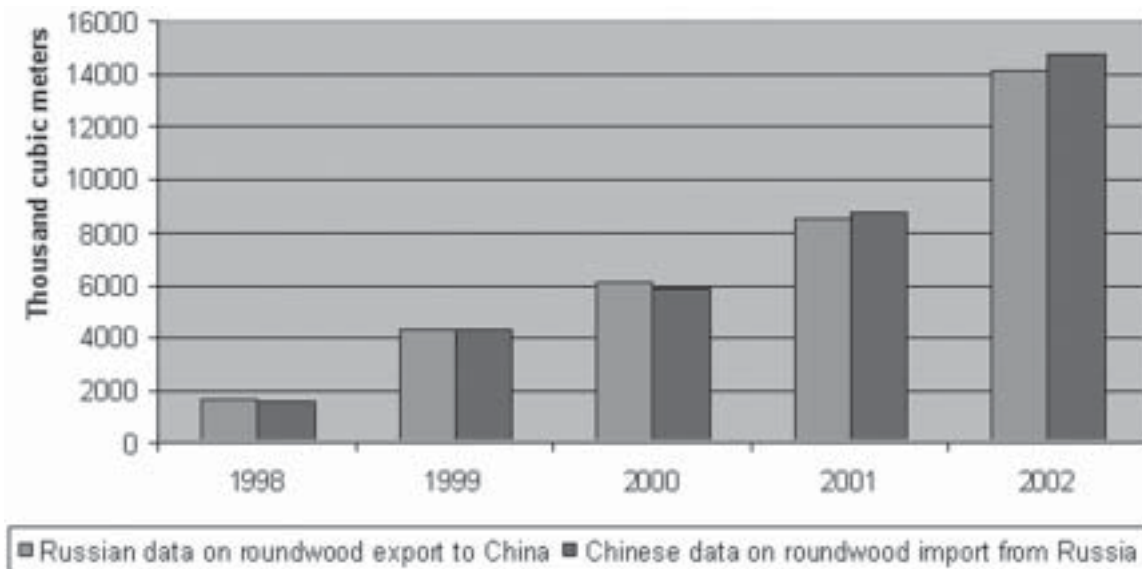


Figure 23. Discrepancies between the Russian and Chinese customs statistics.

According to results of an examination in 2003-2004 of RFE Customs by experts from the Russian Federation Auditing Chamber, the customs officers in some RFE seaports formally checked the export consignments of big RFE exporters – especially for third-grade roundwood, pulpwood and sawnwood – via papers alone, and not on the spot. Further, cases of undergrading and understating in exports to China and Japan were revealed. Misclassifying species was rarely done, largely when a particular species is prohibited from logging and therefore needed be misclassified. Velvet tree is an example of this sort of species. Understating the export volumes or under-grading the wood is clearly done to avoid duties.

In summary the major violations in the export of timber to China are as follows:

1. Failure to properly remit currency revenues to authorized banks
2. Breaking the terms of repatriation of currency revenues
3. Submitting false documents or documents obtained illegally (licenses from RF Ministry of Economic Development and Trade, and so on)
4. Failure to declare or properly declare shipments (understating, under-grading, misclassification of species)
5. Breaking the terms of barter contracts

Since January 1, 2004, according to the new Russian Customs Code, the exporter must submit nothing more than an export license and a trade contract, as documents for export. The exporter is not required to confirm the origin of the timber being exported. To export, one needs a contract, but not a logging license.

Causes of illegal logging

Many different actors, ranging from large logging companies to local citizens, commit logging crimes. The illegal logging crisis in Russia cannot solely be attributed to poachers, but also larger logging companies that log in excess of amounts permitted, outside permitted felling areas, and locally protected species. Major causes of illegal logging include:

- Imperfect legislation and lack of adequate state forest policy to combat illegal logging;
- A low standard of living and high unemployment in wood-producing areas;
- High and steady demand for inexpensive timber;
- Ineffective law-enforcement authorities;
- Low salaries and technical support for forestry staff and rangers;
- High levels of corruption;

- Lack of a uniform approach for exporting and importing countries to measure timber exports.

Some of these causes are elaborated in more detail below.

Flawed legislation and forest policy

There are several inconsistencies and gaps in the current legislation and policy regarding forests and forestry in Russia. A few examples of the flawed legislation and policy are:

- *1. Conflict of interest. Leskhoz*es (state forest management units) used to have both control forestry and perform actual timber-harvest functions before the new Forest Code was put into force. *Leskhoz*es often thinned forests in a way similar to commercial logging. Since it was the *leskhoz*es themselves that controlled the thinning, excessive thinning was poorly enforced.
- *Issuing short-term forest concessions.* Despite the fact that it is possible for forest authorities to lease forest areas for up to 50 years to logging companies, short-term leasing (3-5 years) prevails due to gaps in the law. Short-term concessions result in very intensive logging activity to “mine” all forest resources within the short leasing period. Longer leases would promote more sustainable forest exploitation.
- *Tax-free wood for local needs.* The current law allows for tax-free use of forest resources by local people for local needs. However, timber traders often buy such wood to export it, thereby avoiding taxes.

The Russian government recently adopted a comprehensive revision of the Federal Forest Code to ensure coherent and efficient forest management in the country. As this code gives significant power to the regional governments, each regional administration will need to develop region-specific codes that adhere to this code, which will take time. The hope is that a more robust and less contradictory Code can reduce the gaps and inconsistencies that make it difficult to judge whether a particular forestry operation is legal or illegal.

Inadequate control of forest operations

Illegal logging can, to a large extent, be explained by weaknesses in state control of forestry operations. In principle, all forest operations are controlled by *leskhoz*es, even in the areas that are leased to companies for commercial logging. Logging is allowed only through logging licenses, issued by *leskhoz*es. Logging must be performed according to terms specified in the license, and *leskhoz*es control all steps of harvest, from the assignment of logging areas to their subsequent reforestation. However, the *leskhoz*es often did not adequately fulfil these functions, mainly due to the lack of sufficient funding for control of forestry operations. Forestry control operations are funded primarily through royalty payments and other forest charges. This means that evasion of forest charges may result in less effective control and, therefore, more illegal logging.

Inadequate wood-processing

Exporting processed wood products rather than roundwood is more profitable for national economies. Increasing processing would raise export revenues and create jobs. Improving the low standard of living in many wood-producing areas in Russia may reduce levels of illegal logging. Also, trade in roundwood in Russia is the most criminal sector of the forest industry, so decreasing exports of roundwood could reduce illegal logging.

Opportunities to combat illegal logging

Described below are some opportunities to address illegal logging in Russia.

Political measures

Outcomes from the Forest Law Enforcement and Governance (FLEG) process in Europe and North Asia has the potential to reduce illegal logging and trade in Russia and elsewhere. In November 2005, Russia hosted the Europe and North Asia FLEG Ministerial Conference in St. Petersburg and delegations from 45 countries participated. The declaration from the conference stressed concern that forest crime, including illegal logging, trade, and corruption is negatively affecting the region and undermining moves towards sustainable forest management. These activities, it was noted, are also affecting other sectors of the economy by: weakening the rule of law; reducing revenue for governments, the private sector, and local livelihoods; degrading forest ecosystems, biodiversity and wildlife habitat; increasing the incidence of forest fires; reducing carbon stocks in forests; and generally threatening conservation, management and sustainable development efforts in forest regions (Annexes 1 and 2).

On September 6, 2005 a meeting was held in Khabarovsk to address illegal logging and trade in Khabarovskiy and Primorskiy Krays. The meeting included representatives of federal and regional governmental bodies, timber companies, WWF, and the World Bank. The participants signed an action plan developed by *Rosleskhoz* (Federal Forest Service) and other department representatives. The action plan includes activities related to forest certification, timber transport, and tax revenues from timber companies. Other measures include increased enforcement of export points, ensuring transparency in the industry, and prosecuting violators under the Criminal Code of the Russian Federation.

As a result, an interagency committee approved an action plan to combat illegal logging and trade. Priority measures include:

1. remote monitoring of forest operations in Khabarovskiy Kray, Primorskiy Kray, Krasnoyarskiy Kray, Amurskaya Oblast and Chitinskaya Oblast;
2. improving the forest inventory system at logging sites;
3. developing and implementing accurate reporting of actual logging volumes, including sanitary logging by *leskhoz*es; and
4. supporting voluntary forest certification for both the harvest and export of timber [18].

This policy work needs continued development, including strengthening legal, economic, and management measures to address the issue. It is necessary to develop a strategy, legal acts, and a suite of economical, financial and management measures aimed to eliminate illegal logging and associated trade. It is necessary to strengthen cooperation of roundwood importing and exporting countries to monitor trade flows and develop standardized (and transparent) customs procedures.

Forest business

Importers of Russian wood products contribute to illegal logging if they do not ensure that the wood products they buy are legal. If suppliers cannot supply credible documents guaranteeing the legality of wood, then it should be assumed such products are illegal. This practice of not providing info of wood origin is particularly prevalent for those who buy timber with cash, which makes it easier for the seller to avoid paying taxes. These practices are especially common in the RFE. Joint efforts by importers and exporters are required to remedy the situation.

Timber harvesters must follow national legislation. Wood-processing and exporting companies should introduce procedures to trace the origin of wood to make their business more transparent (examples of wood origin tracking are provided below). Companies producing or purchasing timber and pulp products can require that it come from legal and sustainable sources. Retail chain stores, architects, construction companies and producers which purchase or produce timber and pulp products in China can adopt responsible purchasing policies. Companies, seeking technical support and recognition for adopting such policies can join the WWF Global Forest and Trade Network (GFTN).

Internal system of tracing the origin of timber from suppliers

Currently there is only one known timber trading company in RFE and Eastern Siberia that has implemented an internal system for tracing the origin of timber from its suppliers. Thomesto Company, based in Nakhodka, Primorskiy Kray, which is a trade agent of the Thomesto Company (Metsaliito Group) working in the Japanese market, requires that its suppliers in Siberia provide information on the origin of every shipment of timber by filling out a relevant checklist. This checklist identifies the State Forest Management Unit and the specific parcels where the harvesting took place. Information submitted by suppliers is subject to auditing by experts within the Thomesto Company. The checklists are compiled into one database, so every shipment sold by the Thomesto Company can be easily identified.

Implementation of Forest Stewardship Council Chain of Custody (CoC) certification (external auditing)

At present only TerneyLes in Primorskiy Kray plans to implement full CoC FSC certification in its supply chains. This is in addition to forest management FSC certification, which was carried out by the SGS Company in June 2004. Terneyles only works with Sumitomo Corporation. Nevertheless, some affiliated timber companies export timber to China as well.

As of 2006, the GFTN currently consists of 19 regional Forest and Trade Networks active in nearly thirty countries, mainly in Europe and North America. There are also networks in Japan and East Asia (Hong Kong, China and South Korea). More than 800 companies (forest owners, timber processors, construction companies, retailers, investment agencies) and local authorities are now members of GFTN. Members are committed to gradually producing, trading, and sourcing independently-certified forest products.

The Association of Environmentally Responsible Timber Producers of Russia is the newest member of GFTN. It was established in 2000 to assist Russian timber producers in improving forest management standards and achieving independent certification. Members must sign onto the Association's principles (Annex 3). Non-certified members of the Association are required to demonstrate legal origin for their timber prior to joining. In addition, members are regularly monitored by independent auditors to ensure they demonstrate sustained progress towards certification within a defined time period. In return, the Association provides a range of benefits, including information and training for certification, and established links to foreign markets. The Association can provide foreign buyers with credible information on members, enabling them to purchase from producers who demonstrate legality of timber origin and clear progress towards certification. The Chinese Forest and Trade Network (CFTN) was recently established and it is successfully developing now in close cooperation with the Russian FTN.

V. RECOMMENDATIONS

WWF recommends the following measures to reduce illegal logging and trade and corruption associated with the Russia-China timber trade. Because the underlying causes of these problems in the RFE are complex and multifaceted, the recommendations will require the concerted effort of different actors within Russia, China, and other countries to which China exports wood and paper products.

- **Government and aid agencies should improve forest sector governance in Siberian and the Russian Far East.** Measures should be taken to: increase the efficiency of administrative systems; reform legislation to eliminate loopholes and ambiguities; improve the collection and analysis of information (e.g. maps, remote sensing imagery, harvest permits and licenses, and transportation documents) needed to detect forest crimes; publicly disclose information on harvesting permits to increase transparency; encourage domestic wood processing facilities with capacity matched to the sustained yield cutting limits in the relevant timber supply area; build enforcement capacity in all relevant agencies, including forest authorities, police, the judiciary and customs; build capacity through institutional reform, inter-agency co-operation and training in forest-related laws and regulations; and ensure that major actors who facilitate, organise, finance and benefit significantly from forest-related crime are arrested and vigorously prosecuted.
- **Russian producers should demonstrate a commitment to responsible forestry by joining the Association of Environmentally Responsible Timber Producers.** The Association is the Russian chapter of WWF's GFTN. Members must commit to following the Association's "Ecological Policy Principles" (see Annex 3). Uncertified members of the Association are required to demonstrate legal origin of their timber prior to joining. They are also regularly monitored by independent auditors to ensure they make clear, sustained progress towards certification within a defined time period.
- **Russian producers must adopt systems to verify the legality and/or sustainability of their operations.** Timber companies can use forest certification (a process that leads to the issuance of a certificate by an independent auditor, attesting that an area of forest is managed to a defined standard) to verify their forests are well-managed and in compliance with the law. Some certification schemes include chain of custody requirements that oblige certificate holders to track all logs from certified forests, and also to track the products made from those logs. In the case of the Forest Stewardship Council (FSC) certification system, a link to the market is created through a product label, which warrants that the timber or wood product originates from well-managed forests. Some certifying bodies also provide services to verify legal compliance only (i.e. without also assessing the environmental and social impacts of the management).
- **The Chinese government should support domestic FSC certification to further develop sustainable national production, thereby encouraging environmentally sound and efficient wood and fibre production in China [19].**
- **Companies manufacturing or sourcing wood and paper products in China should ensure it comes from legal and sustainable sources.** Retailers, architects, builders, and manufacturers can adopt responsible procurement policies. These policies should include refusal to purchase products containing illegally sourced timber, and development of a preference for wood and fibre sourced from well-managed forests. Companies who wish to receive technical support and recognition for their efforts to source wood responsibly can join GFTN.
- **The Chinese government should introduce policies and regulations to prevent the import of products containing illegally-sourced wood.** Chinese government agencies could adopt procurement policies that favour wood from legal and sustainable products, thus excluding illegal timber. In addition, the Chinese government could introduce legislation to prohibit the import of products containing illegally-sourced wood. Proposed European Union legislation could serve as a model. Under this model, Russian authorities would have to ensure that consignments are accompanied by verification, subject to third-party monitoring, that the wood has been legally harvested.
- **The Russian and Chinese governments should enhance bilateral cooperation to combat illegal trade.** For example, in a Memorandum of Understanding signed with the government of Indonesia in 2002, China made in-principle commitments to curb imports of logs sourced illegally. A similar agreement could be struck between China and Russia and then implemented through a concrete plan of action. In addition, the Chinese government could review its "temporary" half-tax policy on border trade in timber.

Annex 1.

St. Petersburg Declaration
Materials of the Ministerial conference on Forest Law Enforcement and Governance in Europe and North Asia (ENA FLEG) November 22-25, 2005

We, the representatives of the Governments¹ from Europe and North Asia (ENA region countries) and from other participating countries as well as the European Commission present at the Ministerial Conference on Forest Law Enforcement and Governance in St. Petersburg,

1. Underlining that countries are responsible for sustainably managing their forests and enforcing their forest laws and that good governance and law enforcement are prerequisites of sustainable forest management;
2. Further underlining that, while taking into account their international obligations, all countries have the sovereign right to manage and utilize their forest resources to meet their national policy objectives, and that forest law enforcement and governance are internal matters for each country;
3. Recognizing that forest law enforcement and governance issues have local, national, transboundary, regional and global implications;
4. Convinced that all countries that export and import forest products, including timber and timber products, have a shared responsibility to undertake actions to eliminate the illegal harvesting of forest resources and associated trade;
5. Emphasizing that within the Region, forest law enforcement and governance is a cross-sectoral, complex as well as an economically, environmentally, socially and politically sensitive issue, requiring effective cooperation amongst many government agencies and other stakeholders;
6. Recognizing that the forests of the ENA-Region, comprising more than one-third of global forest cover, are of global importance and constitute a significant component of the Regional and global life support systems;
7. Deeply aware that in this Region, forests are directly as well as indirectly critical to the livelihoods of hundreds of millions of people, provide long-term economic, social, cultural and environmental benefits, and play a vital role in meeting the energy needs of local populations;
8. Conscious that good governance fosters a positive business investment climate for social and economic development and responsible private sector actors;
9. Emphasizing the fundamental role of governments to provide effective governance, including laws, policies and institutional capacity to enforce those laws, in order to eliminate illegal logging, associated trade and corruption in the forest sector;
10. Deeply concerned that crime related to forests is a significant problem in many countries in the Region, undermining efforts towards sustainable forest management;
11. Recognizing that the scale of illegal logging activities ranges from unauthorized extraction of fuel wood by the rural population to illegal commercial timber harvesting operations to supply domestic and international markets;
12. Further recognizing that the unauthorized extraction of fuel wood in some countries in the Region, especially by the rural poor, is often related to lack of adequate social and economic provisions or lack of access to appropriate resources and over regulation in a situation where the rural people have little or no alternative sources of affordable energy;
13. Profoundly concerned about criminal actions, including corruption within and impacting on the forest sector, that are having significant negative impacts including: a general weakening of the rule of law; loss of revenue to governments and the private sector and local livelihoods; the degradation of forest ecosystems, biodiversity

¹ Albania, Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Bosnia and Herzegovina, Canada, China, Croatia, Denmark, Estonia, Finland, Georgia, Germany, Greece, Hungary, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Former Yugoslav Republic of Macedonia, Republic of Moldova, Mongolia, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uzbekistan, and the European Commission.

and wildlife habitat, including in protected areas; and increased incidence of forest fires and loss of carbon stocks;

14. Noting that illegal forest-related activities also impact negatively on the contribution of forests towards the fulfillment of internationally agreed development goals aimed at enhancing human well-being by reducing poverty;

15. Conscious of the development of market economies, changes in energy supply arrangements and the changing role of public and private sectors in many countries in the Region that bring new challenges for institutions responsible for forest management and often require a review and adjustment of their policy, legal and institutional frameworks;

16. Considering that effective forest law enforcement requires that information on forest management, policies and legislation, and their implementation, be readily available and communicated to the public;

17. Aware that many countries in the Region have inadequate capacity to enforce their existing forest laws and forest policies and face a challenge to review and update their present legislation and strengthen their institutions and administrative systems which allocate forest resources and monitor and control their utilization;

18. Convinced of the urgent need to secure high-level political commitment and support which is critical to combat illegal logging, associated trade and corruption in the Region and trade beyond the Region;

19. And further convinced that cooperation among countries between their judicial, law enforcement, forest, trade, customs and development authorities, is essential to strengthen the effectiveness of forest law enforcement and governance in the Region;

20. Underscoring the urgent need by countries to undertake collective actions to combat illegal logging, associated trade and corruption;

21. Recognizing opportunities for significant synergies of the ENA FLEG process with other regional FLEG processes and with international forest-related institutions and forest policy processes;

22. Conscious of the critical contribution that the private sector and civil society can make to address the FLEG-related issues;

Hereby affirm and declare that we will:

Nationally, within the ENA region

1. Mobilize high-level political commitment and establish Forest Law Enforcement and Governance (FLEG) as an area of concern within the broader national governance and development agenda;

2. Review and as needed update forest legislation and regulations, ensuring their coherence and harmonize these with legislation and policy in natural resource management and with relevant obligations under international agreements;

3. Strengthen, as needed, inter-agency cooperation as well as human and institutional capacity, particularly among law enforcement and judicial authorities to enforce forest-related legislation;

4. Assess, identify and develop strategies to address the underlying causes of illegal logging, associated trade and corruption, the unauthorized extraction of wood for local consumption as well as the unauthorized exploitation of protected forest areas, threatening biodiversity;

5. Formulate, within a reasonable timeframe, concrete actions under clearly defined targets, including monitoring of progress in implementation, e.g. by taking into account the recommendations of this Ministerial Declaration and annexed indicative list of actions in the national forest programmes or equivalent frameworks;

6. Recognize the rights of forest dependent communities by taking into consideration customary laws and practices, and the respect of their traditional knowledge, and encourage and promote the participation of indigenous people and the local population in the management of forests with the objective of providing for rural socio-economic and cultural development and the protection of their natural resources;

7. Engage stakeholders, including indigenous people, local communities, private forest owners, NGOs and the industry, in formulation of forest laws and policies and in their implementation through an open and partic-

ipatory process, thereby promoting transparency, reducing corruption, facilitating equity and minimizing undue influence of privileged groups;

8. Develop and implement anti-corruption tools dealing with corruption in and impacting on the forest sector in line with general anti-corruption efforts, including codes of conduct and best practices, and professional responsibility, and apply internationally recognized principles to combat organized crime;

9. Collect and disseminate transparent information on forest resources, their allocation and exploitation, in a form readily accessible to the public;

10. Monitor and disclose data on domestic and international trade flows of timber and timber products and promote, as appropriate, the establishment of third party audited traceability systems;

11. Inform and engage all stakeholders to enhance public awareness on the scope, scale and significance of illegal logging, associated trade and corruption, and their negative impacts on the benefits forests provide to society;

Internationally,

12. Strengthen cooperation, using as much as possible existing structures, for forest law enforcement and governance and timely exchange of information and experience among countries, in particular, those involved in exports and imports of timber and timber products;

13. Encourage cooperation and strengthen national capacity in monitoring trade in timber and timber products;

14. Support cooperation to combat poaching and illegal trade in wildlife associated with illegal logging, including through cooperation with CITES;

15. Integrate within existing mechanisms the systematic monitoring, assessment and reporting of progress on FLEG;

16. Promote and develop cooperation and partnerships with and among the private sector and civil society in order to effectively combat illegal logging, associated trade and corruption;

17. Give priority to and strengthen transboundary cooperation between countries with border areas which require coordinated actions and effective control in order to combat illegal logging and associated trade;

18. Enhance international capacity for monitoring, assessing and reporting on areas such as trade flows and customs data to increase transparency on trade activities and to promote trade in legally harvested timber;

19. Strengthen international cooperation to build and enhance national institutional and human capacity as well as to facilitate technology transfer and information sharing to combat illegal logging and to promote trade in legally harvested timber;

20. Enhance awareness of information about legality of products including their origin through means such as voluntary chains of custody and forest certifications systems, so as to promote marketing of legally harvested timber

21. Cooperate with civil society including the private sector to inform consumers of the problems caused by illegal logging, associated trade and corruption;

22. Work with other regions and with multilateral instruments and processes on FLEG related issues.

Hereby further affirm that we:

23. Endorse the indicative list of actions associated with this Declaration which sets a framework of possible actions by Governments as well as civil society, including the private sector, to implement the intentions expressed in this Declaration;

24. Urge relevant international and regional organizations, institutions and processes, and scientific organizations, as attached (Annex I), to support the St. Petersburg Declaration, consistent with their mandates, and the implementation of the indicative list of actions;

25. Invite the International Steering Committee (ISC) to extend its role in facilitating the ENA FLEG Process by focusing on implementation of the St. Petersburg Declaration and the indicative list of actions;

26. Request the World Bank to continue its important role by facilitating the implementation of the St. Petersburg Declaration and its indicative list of actions;

27. Agree to meet at the appropriate level, together with civil society including the private sector, within two to three years to exchange experiences on implementation and lessons learned and to identify areas where further actions and cooperation are needed;

28. Agree to convene the next Ministerial Conference within five years to assess progress made in forest law enforcement and governance including the implementation of the indicative list of actions and decide on further actions needed;

29. Invite other countries to associate themselves with the Declaration and to support the implementation of the indicative list of actions.

This Declaration is accepted by Acclamation by: Albania, Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Bosnia and Herzegovina, Canada, China, Croatia, Denmark, Estonia, Finland, Georgia, Germany, Greece, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Former Yugoslav Republic of Macedonia, Republic of Moldova, Mongolia, the Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Ukraine, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Uzbekistan and the European Commission.

St. Petersburg, Russia

November 25, 2005

Annex 2.

Indicative List of Actions (ILA) for the implementation of the St. Petersburg Declaration Materials of the Ministerial conference on Forest Law Enforcement and Governance in Europe and North Asia (ENA FLEG) November 22-25, 2005

This indicative list of actions (ILA) is intended to serve as a general framework for possible actions to be undertaken by governments as well as civil society (including NGOs and private sector). The choice of the elements would depend on the specific areas of priority concern in a country. The elements of this ILA would also facilitate the mobilization of support from donors and multilateral organizations.

National Level within the ENA Region

Policy framework

- Formulate and implement in a reasonable timeframe national plan of actions¹ that is integrated in the national forest policy framework and comprises clearly defined targets, activities and indicators of success to address the issues identified in the Declaration;
- Establish a national mechanism for effective interagency, cross-sectoral and multistakeholder cooperation to develop and implement the national plans of actions in a structured and transparent manner;
- Periodically report nationally on progress according to agreed targets and indicators;
- Based on the agreed targets and indicators, implement a baseline assessment so that the first assessment will be available in 2010 for the next Ministerial meeting to be held for assessing in a participatory manner the effectiveness of the implementation of national plans of actions;
- Identify development and implementation of national plans of action as priorities in national requests for assistance from international financial institutions and other international organizations and bilateral donor agencies;

(ii) Legislation System

- Develop a common understanding of the concepts, definitions and terms related to FLEG among various stakeholders;
- Review and update, as appropriate, the forest law and related legislation to combat illegal logging and corruption and build, as necessary, appropriate capacity to effectively implement and enforce such legislation. Consider, in this respect, the risks of “perverse incentives” by raising too much the costs of “legal” forest products; and the need to ensure access of rural populations, especially the rural poor, to basic forest products, such as fuel wood;
- Promote well-defined and full recognition of property and resource rights, in particular private rights, through the provision and communication of:
 - Clear requirements and obligations for land tenure and use rights;
 - Clear and unambiguous legal definitions and regulations covering forest resources and forestry practices;
 - Open and transparent processes for allocating and pricing harvesting rights;

(iii) Institutions and Capacity Building

- Ensure the appropriate application of customs codes to facilitate accurate monitoring flow of timber and forest products trade;
- Establish open and transparent data base on domestic and international trade in wood and forest products to monitor and report progress;

¹ National plan of action is understood to be either a specific plan or an enhanced set of activities integrated into national forest programmes or equivalent frameworks.

- Support the collection and dissemination of information in a form readily accessible to the public on management of parks, protected areas, forest concessions and other forest areas;
- Provide enhanced opportunities for forest stakeholders, including the private sector as well as the environmental, social and development NGOs and indigenous people's organizations, to raise public awareness on the significance of forest crimes and to participate in the formulation and implementation of public policies related to forest management and law enforcement;
- Strengthen institutional mechanisms and capacity building and support the monitoring, assessment and reporting of progress with the participation of representatives of various stakeholder groups including civil society and, private sector;
- Capacity building in the implementation of anti-corruption tools;

(iv) Sustainable Forest Management

- Provide information on regulations governing the allocation of forest resources and sustainable management of forests to all forest-related stakeholders;
- Assign high priority to control illegal logging and wildlife poaching and to strengthen law enforcement in forest management areas and in protected forest areas;
- Create enabling conditions for and promote the use of tools and methods relating to sustainable forest management and forest use, that permit flexible, cost effective solutions, which may include
 - Responsible purchasing of wood by private and public sector;
 - Environmental Management Systems and forest management guidelines and plans according to the respective forest types;
 - Private sector traceability / tracking systems and including GIS surveys and independent verification systems;
 - Chain of custody certification for selected sources;
 - Codes of conduct applicable to producers and purchasers;
 - Certification systems for sustainable forest management;
 - Satellite information and GIS data;
- Monitor and assess forest resources and operations in forests and make information on methods and results readily available to the public in a timely and accessible format;
- Evaluate the adequacy of funding and management of state forests, and as needed identify ways to strengthen the sustainable management of state forests;
- Take measures to help ensure that there is adequate support and effective management of protected forest areas, forest biodiversity and of non-state forests;

(v) Rural Development, Livelihoods and Poverty Alleviation

- In collaboration with broader rural development efforts; identify and promote better alternative economic opportunities for forest dependent communities so as to reduce illegal forest-related activities and to lessen the pressure on forest ecosystems, this may include:
 - Investment promotion and alternative employment and income creation;
 - Development of forest based and alternative sources of energy;
 - Develop opportunities for increased income generation from sustainably managed forests by local communities;

(vi) Trade and customs

- Identify the most vulnerable transboundary areas in relation to illegal timber trade and reduce their vulnerability;

International level

(i) Forest-related Policies

- Integrate, where appropriate, elements of the Ministerial Declaration into other international forest policy initiatives, in particular in the on-going international initiatives such as G8, MDG, C&I processes, UNFF, FAO and ITTO;

(ii) Trade and customs

- Facilitate the gathering, synthesis and sharing of import/export data on wood and forest products and their integration into international open databases (for example from FAO, ITTO);
- Ensure the appropriate application of customs codes to facilitate accurate monitoring flow of timber and forest products trade;
- Support cooperation in identifying the most vulnerable transboundary areas in relation to illegal timber trade and reduce their vulnerability to cross border trade in illegally harvested forest products, among other activities, through:
 - Customs law enforcement training;
 - Timber tracking systems;
 - New or improved public databases on cross-border trade;

(iii) Research

- Support multidisciplinary research on the main causes of illegal logging, associated trade and corruption;

(iv) Collaborative Implementation Actions

- Strengthen coordinating actions to combat illegal logging and transboundary illegal trade, for sharing information and experience and for reporting progress on implementation, including e.g. through a peer review mechanism, of the St. Petersburg Declaration and indicative list of actions;
- Secure cooperation and support towards the implementation and monitoring of the indicative list of actions, and of the consecutively developed regional and/or national strategies or action plans, from multilateral organizations including the World Bank, FAO and other relevant CPF members, UNECE, and MCPFE, as well as the European Community and bilateral donor agencies, and mainstream the actions being taken into the programmes of work of these organizations through their governing bodies;
- Share best practices on forest governance and law enforcement;
- Establish collaboration with the UN Convention on Transnational Organized Crime and other relevant multilateral mechanisms to support the implementation of the indicative list of actions;
- Supporting countries in their efforts to enhance transparency and access to information, to facilitate exchange of information between public and private sector and financing institutions on illegal financial transactions and money laundering related to illegal logging and associated trade;
- Cooperate with interested countries in the implementation of their regional and/or national strategies or action plans, including the provision of training to forest law enforcement officials, customs officials, prosecutors and for representatives of the private sector and of the civil society in order to build capacity to apply tools to monitor forest activities and conditions;
- Encourage, adopt or extend public timber procurement policies that favor legal timber, where they can influence the private sector to use legally sourced timber and share experiences of this with others;

List of selected international and regional organizations, and institutions and processes

No.	Acronym	Full form
1	CIFOR	Center for International Forestry Research
2	CBD	Convention on Biological Diversity
3	CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
4	EBRD	European Bank of Reconstruction and Development
5	EFI	European Forest Institute
6	FATF	Financial Action Task Force
7	FAO	Food and Agriculture Organization
8	GEF	Global Environmental Facility
9	ITTO	International Tropical Timber Organization
10	IUFRO	International Union of Forest Research Organizations
11	MCPFE	Ministerial Conference on the Protection of Forests of Europe
12	OECD	Organization for Economic Cooperation and Development
13	UNCTOC	United Nations Convention on Transnational Organized Crime
14	UNCCD	United Nations Convention to Combat Desertification
15	UNDP	United Nations Development Programme
16	UNECE	United Nations Economic Commission for Europe
17	UNEP	United Nations Environment Programme
18	UNFF	United Nations Forum on Forests
19	UNFCCC	United Nations Framework Convention on Climate Change
20	ICRAF	World Agroforestry Center
21	IUCN	World Conservation Union
22	WCO	World Customs Organization
23	WB	World Bank
24	WTO	World Trade Organization

Annex 3.

Russian Association of Environmentally Responsible Timber Producers — Principles of Ecological Policy

Principle 1. All wood used by the company is legally harvested, or the legality of origin is monitored and certain.

1.1 The company has a transparent wood supply policy

Wood supply policy includes:

- Ceasing the purchase of wood in cash, without relevant documents, and/or from doubtful suppliers
- Purchasing wood by contracts with clear requirements for origin legality and ecology
- Transparent wood-tracing procedure, and the company's readiness to verify it

1.2 The network of suppliers is optimised in accordance with the supply requirements of responsible forest management

Optimisation of the supply network includes:

- Careful selection of wood suppliers in order to influence the quality of their forest management
- The number of suppliers is balanced with the company's capacity to check them qualitatively
- Purchasing wood at trading agents that have, in turn, a transparent system of tracing wood origin

1.3 Mechanisms for monitoring suppliers are implemented

Wood origin monitoring mechanisms consist of:

- An internal system for monitoring wood supply, including cutting area inspection procedure
- Verifying the internal monitoring system by a third party

Principle 2. The company does not use wood from protected areas and supports the protection of high conservation-value forests

2.1 The company fulfils the restrictions of the forest use regime and roundwood procurement

- The company does not use wood from protected areas, except where such felling (main cutting) is legally allowed
- The company does not use wood from Group I forests where commercial logging is prohibited, spawning-ground protection zones of valuable fish species, valuable forest sites, reserved forest sites, and sub-tundra forests
- The company does not use wood from areas which are included in the proposed list of newly-protected areas, or from special protection sites endorsed by the Government of the Russian Federation or by regional administrations
- The company does not use wood from large intact forests until interested parties arrive at a mutually acceptable social, economic, and environmental solution for conservation and use.

2.2 The company supports the identification and protection of high conservation-value forests in leased areas

- If a region in the Russian Federation has no maps of high conservation-value forests, the company initiates their identification or actively supports the endeavour
- The level of protection and use of leased forests is in compliance with their conservation value
- Basic biotopes and high conservation value forests are identified in each cutting area, and marked in management plans and flow charts

Principle 3. The company operates in compliance with the principles of inexhaustible forest management (applicable only for leaseholders)

3.1 The harvesting practice of the company does not exhaust forest resources in leased areas in the long term

- The company designs and implements a programme of inexhaustible forest management

Principle 4. The company's trained personnel ensures the transparency of ecological policies

4.1 The company ensures that the implementation of ecological policies is transparent

- The company ensures that its economic activities regarding the implementation of ecological policies are transparent
- The company promotes its ecological policies
- The company makes annual reports publicly available, preferably completed by a third party

4.2 The personnel are trained to implement ecological policies

- The company has an environment director (top-level manager) responsible for the ecological policies of forest use and procurement
- The company carries an expense item in the budget to implement ecological policies
- The personnel are trained to implement ecological policies

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