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ILLEGAL LOGGING AND TRADE IN FOREST PRODUCTS IN THE RUSSIAN FEDERATION





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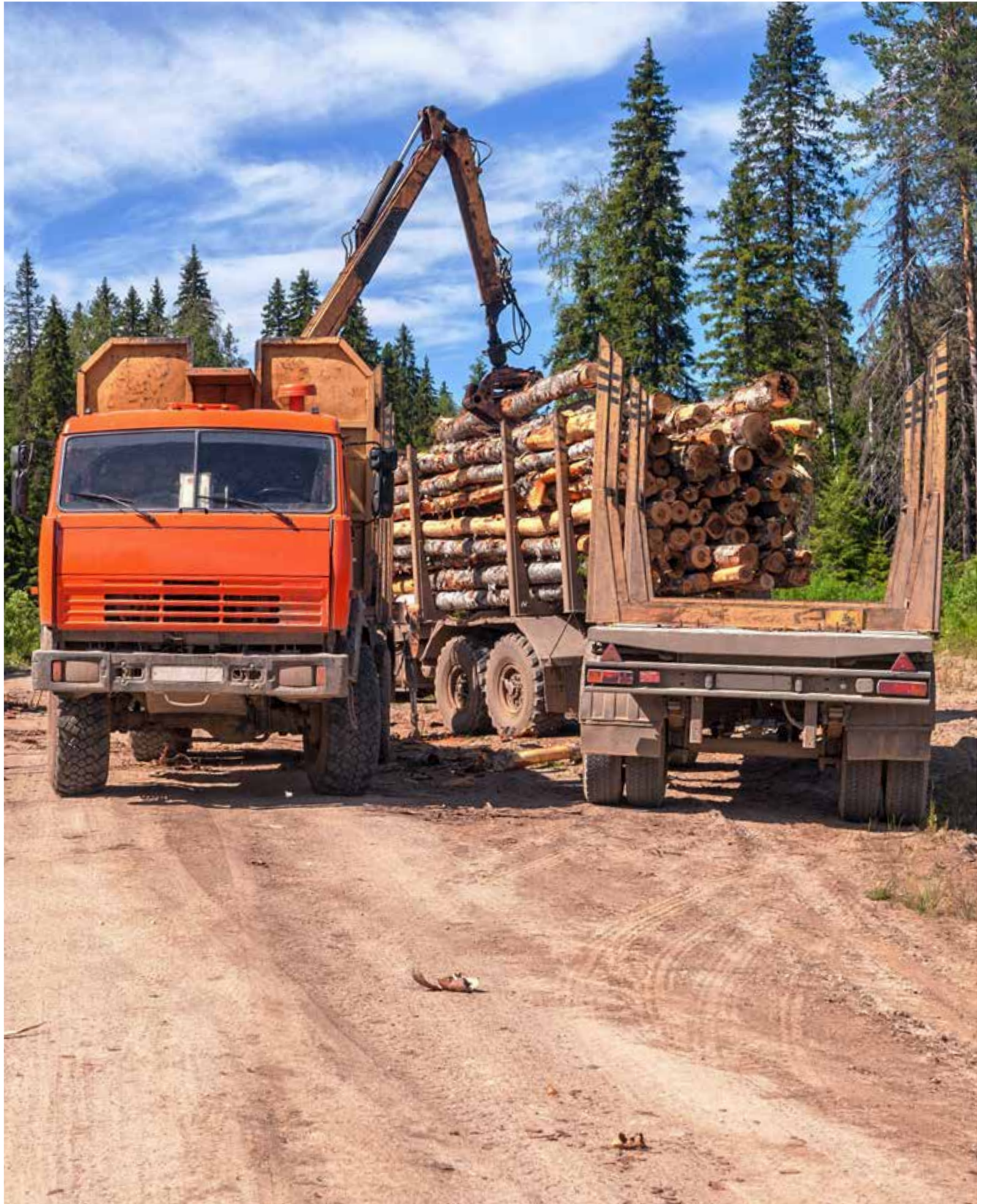
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FOREWORD

Transnational organized environmental crime is a rapidly growing threat to the environment, to revenues from natural resources, to state security and to sustainable development. It robs developing countries of an estimated US\$ 70 billion to US\$ 213 billion annually or the equivalent of 1 to 2 times global Official Development Assistance. It also threatens state security by increasing corruption and extending into other areas of crime, such as arms and drug smuggling, and human trafficking.

High-profit, low-risk crimes often occur in countries with a high rate of corruption and violence and impact directly on the poorest populations. It is extremely hard to fight such crimes because they are hidden within legal trade, take advantage of tax havens and weaknesses in global transportation systems, and are largely controlled by extensive, sophisticated criminal organizations.

Transnational organized environmental crime involves five key areas: illegal logging and deforestation; illegal fisheries; illegal mining and trade in minerals; illegal dumping and trade in hazardous and toxic wastes; and the illegal trade and poaching of wildlife and plants. The problem of illegal logging and trade in forest products addressed in this report is one of the most pressing social, environmental and economic problems in the world today. It has an estimated annual worth of US\$ 30 billion to US\$ 100 billion – which equates to 10 to 30 per cent of the total global timber trade.

Russia possesses enormous forest resources (over 83 billion m³), representing a quarter of the world's timber reserves. The annual environmentally sustainable amount of logging is over 650 million m³, of which less than a third is actually harvested. A significant amount of these resources are located in the Siberian and Far Eastern regions of Russia, where actual timber harvesting does not exceed 10 to 20 per cent of environmentally acceptable level.

For Russia, illegal logging and forest crime result in enormous monetary losses from the state budget. According to data from the Russian Federal Forestry Agency (*Rosleshoz*), in 2014 alone there were 18,400 cases of the illegal logging of forest plantations—a total volume of 1,308,400 m³—with an

estimated value of 10.8 billion rubles. While there has been a reduction in the amount of illegal logging in 36 regions of the Russian Federation, illegal logging has increased in 44 other regions. The most critical areas remain in the regions of Siberia and the Far East.

It is not always possible to detect illegal logging: remote sensing images only reveal areas of widespread clearfell logging, whereas illegal logging often targets individual trees with the most valuable wood (whose absence is difficult to detect). Moreover, in some regions, a significant amount of illegal timber is harvested by ostensibly legitimate companies implementing government selective logging contracts who are, in practice, harvesting the best wood and leaving behind the less valuable trees affected by pests and disease.

Presently, no effective methods have been adopted for assessing the amount of illegal logging in the Russian Federation. This is due to a number of factors including: a lack of definition of illegal logging in Russian legislation; the use of different methods for the measurement and accounting of wood; a lack of transparency in forest use (on the precise areas of logging, the quantities involved and species composition); and corruption within forest control bodies.

The damage caused to forests is not only economic, but also ecological. When determining the ecological damage in monetary terms it is important to account not only for the cost of restoring the damaged natural environment, but also the irreversible environmental losses. The lack of reliable information on the amount of illegal logging is of paramount significance to the state – it leads to an underestimation of economic and environmental damage and, as a result, insufficient funding of forest control and supervision.

An equally important issue raised in this report is the export of illegally harvested precious wood to China. Russia presently is the world's third largest exporter of unprocessed timber and for three consecutive years these exports have been increasing.

A specific problem is the export of illegally-logged precious wood, which has led to the near-extinction of productive

deciduous and coniferous-deciduous forests in the south of the Far Eastern Federal District. Since July 2012, the export of certain types of coniferous species has been regulated by tariff quotas allocated on the basis of licenses issued by the Ministry of Industry and Trade. With the correct license exporters pay a reduced rate of customs duty – from 80 percent to between 13 and 15 per cent. This makes the export of timber economically attractive to criminals. Commonly used ploys to avoid tariffs

include misrepresenting the actual amount, grade and value of wood and falsifying declarations (claiming a consignment of illegally harvested species contains species that have been legally obtained).

This report reveals the scale of illegal logging in Russia based on the best available, most up-to-date, expert data. It is hoped that governments will take note and take action.

Peter Harris

GRID-Arendal Managing Director

EXECUTIVE SUMMARY

Forests are crucial for preserving global ecosystems. In Russia they also provide a livelihood for more than 1.1 million people working for 60,000 forestry enterprises. Russian President, Vladimir Putin, stated in April 2013 that illegal logging had increased by an estimated 66 per cent during the previous five years, creating financial losses comparable to the level of federal funding invested in the forestry industry. The Russian Federal Customs Service regards illegal logging as second only to illicit trafficking in narcotics, in terms of the number of crimes committed. Illegal logging, conducted in violation of ecological and forest management requirements, deprives local budgets of royalties, harms ecosystems and damages the global market's perception of the Russian forestry sector.

Estimates of the amount of illegally harvested wood vary widely. According to the Russian Federal Forest Agency, *Rosleshoz*, between less than 1 per cent and 10 per cent of the total wood harvest is illegally cut every year. The Russian branch of the World Wildlife Fund (WWF) and the World Bank estimate that 18 per cent of logging, 35 million m³, is illegal (resulting in a total budget loss of between 13 billion and 30 billion rubles). Greenpeace Russia has estimated that 25 per cent of all logging, 50 million m³, is illegal. The wood balance model used in this study found that between 70 million and 90 million m³, the equivalent of 36 to 48 per cent of the volume of legal logging, could be defined as of 'unknown origin'. This estimation could vary as much as between 59 million and 117 million m³, taking into account the uncertainties in the model. Assuming that all 70 million to 90 million m³ of timber of 'unknown origin' was harvested illegally, potential losses could range from as much as between US\$ 150 million and 200 million, to between US\$ 13 billion and 17 billion.

The main reasons for the current prevalence of illegal logging are: high levels of corruption and organized crime in the forest industry and law enforcement agencies; ineffective legislation and the need for continued reforms in forest management; the lack of reliable information on most of the country's forests (their condition, the threats to their survival and the losses sustained); the lack of an adequate state forest protection service; the weak management of the forestry sector; poverty

and the inability of local residents to find employment; the lack of development of local/regional systems of timber processing; and an undeveloped forestry infrastructure.

A number of measures to address illegal logging have been taken in recent years. These include the approval of the state programme for the 'Development of Forestry for 2013-2020'; the implementation of the 'Plan to prevent illegal logging and timber trade in the Russian Federation for 2011-2014'; the passing of new laws and amendments to combat illegal logging; increased liability for illegal logging; increased export duties on roundwood; the upgrading of timber labelling and monitoring systems; and a new Uniform State Automated Information System (EGAIS) for the accounting of timber.

Reducing illegal logging requires addressing macroeconomic challenges beyond the forestry sector, especially unemployment and low incomes in rural areas. A number of steps can also be taken to help improve enforcement and make progress towards halting the destruction of Russia's forest heritage. These include:

- establishing a public council to monitor and control forest management
- ensuring transparency of forest documentation (e.g., forest plans, regulations, logging site lists) and the active involvement of public environmental organizations and local communities
- promoting public participation in the allocation of forest rights
- recording all the country's forests in a state property registration system (cadastre)
- creating an e-governance system for timber accounting
- increasing the number and powers of the Federal Forestry Agency (*Rosleshoz*)
- ensuring constant patrolling of forests attractive to illegal loggers
- encouraging independent forest certification systems such as the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC)
- prohibiting logging in 'specially protected forests'
- prohibiting residents from selling timber harvested for their own needs
- expanding cooperation between customs authorities in border countries

INTRODUCTION

RUSSIA’S FORESTS AND FORESTRY SECTOR

Russian forests cover 891 million hectares of land, approximately 50 per cent of the country’s territory and comprise over one-fifth of all the world’s forests.¹ Russia’s forest landscape is more than just a natural resource – it forms the heart of the country’s vast territory (Figure 1).

According to estimates from the Russian Federal Forestry Agency (*Rosleshoz*) in 2013, Russian forest resources had an economic value of as much as US\$ 28 trillion. By comparison, the country’s oil and gas reserves are valued at US\$ 19 trillion and US\$ 7 trillion, respectively.² As of 2012, about one-fifth of Russian forests have been leased, including some 15 per cent directly for timber harvesting, and this value is still growing. In 2014, nearly half of Russian standing stock of timber – 43 billion m³ of the country’s total of 83 billion m³ – was suitable for timber harvest. That year

203 million m³ were removed. This was slightly up on the figures for 2013. According to the Food and Agriculture Organization (FAO), in 2013 Russia was the world’s second leading producer of industrial roundwood (Figure 2). Nevertheless, the Russian share of the world timber trade is below 4 per cent.³

The forest sector’s contribution to gross domestic product (GDP) is modest: 1.3 per cent in 2012,⁴ and since the introduction of the Russian Forest Code in 2007, total forest revenues have been lower than the cost of forest management (Figure 3).⁵

The manufacture of paper products is a significant element of the Russian economy and comprises between 10 and 50 per cent of total industrial production in 45 regions of Russia. Logging, however, has recently become an unprofitable and low-wage



Figure 1: Timber stock and timber harvest, 2013



industry. In 2010, the forestry sector employed approximately 1.1 million people or 1 per cent of the workforce,⁶ but in recent years employment in the sector has decreased by a factor of seven.⁷

Forests provide crucial habitats, livelihoods for local people, vital ecosystem services and aesthetic benefits that enrich people's lives. Yet Russian forests are in peril as a result of illegal forestry practices and the weak rule of law. This analytical report gathers the best available information on the extent of illegal logging activities in Russian forests, and their economic and ecological impacts.

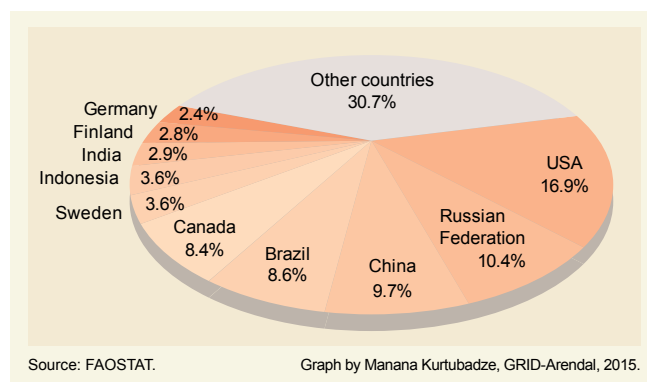


Figure 2: World's largest industrial producers of roundwood in 2013



Figure 3: Total forest revenues as a percentage of forest management costs

ILLEGAL LOGGING IN RUSSIA: AN OVERVIEW AND ANALYSIS

SCOPE OF THE PROBLEM

Illegal logging is an enormous and increasing problem in Russia. Indeed, the Russian Federal Customs Service notes that timber smuggling is second in profits only to illicit trafficking in narcotic drugs and psychotropic substances.⁸ A major difficulty, however, is in determining the scope of the problem – official estimates vary hugely from independent estimates.

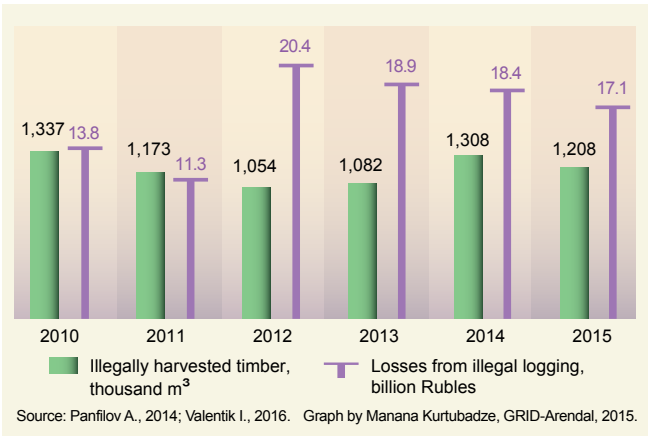


Figure 4: The volume of illegal logging and associated losses between 2013 and 2015

Figures considerably differ and are not very reliable. According to a 2013 *Rosleshoz* report,⁹ between 1.082 million and 1.337 million m³ a year (less than 1 per cent of the total wood harvest) were illegally cut in 2010–2013, with some decline in losses from 13.8 billion rubles in 2010 to 9.1 billion rubles in 2013 (Figure 4a).¹⁰ However the 2015 *Rosleshoz* report¹¹ states the same amount of illegally harvested timber, but monetary losses are estimated differently: from 20.4 billion rubles in 2012 to 17.1 billion rubles in 2015 (figure 4b) In 2014, the State Prosecutor’s office estimated losses exceeding 10 billion rubles.¹² Yet, on another occasion, *Rosleshoz* reported that 19 million m³ (10 per cent of the total 192 million m³ harvested in 2012) was illegally harvested.¹³

Furthermore, Russian Prime Minister, Dmitry Medvedev, considers 10 to 20 per cent of the total volume of logging to be illegal.¹⁴ The Prosecutor General’s Office claimed in 2013 that nearly half of the country’s harvested timber was illegal.¹⁵ According to the Presidential office and in contradiction to *Rosleshoz* data, illegal logging in 2013 had in fact increased by 66 per cent during the preceding five years, resulting in financial losses comparable to total federal funding for the entire forest industry.¹⁶

Source	Volume per year	Share of timber harvest	2050
Rosleshoz	1.1–19 million m³	<1–10%	2010–2013
Prime Minister’s Office	–	10–20%	–
WWF Russia, World Bank	35 million m³	20%	–
Greenpeace Russia	50 million m³	25%	–
Prosecutor General’s Office	–	~50%	–
Environmental Investigation Agency	59–117 million m³	30–60% ¹⁹	2013

Table 1. Comparison of various estimates of illegal logging in Russia



According to WWF Russia and the World Bank, 20 per cent of logging (35 million m³) is illegal, resulting in a total budget loss of between 13 billion and 30 billion rubles.¹⁷ Greenpeace Russia has estimated that at least 25 per cent of annual official logging, or 50 million m³, is illegal. This includes:

- approximately 20 million m³ a year of logging by private individuals for their own use (home heating, stockpiling for construction and maintenance)
- some 10 million m³ of illegal logging by individuals and businesses for sale or processing
- more than 20 million m³ a year of logging sanctioned by official permits, but in gross violation of forestry regulations¹⁸

Differences between estimates are due, in part, to a lack of clear definition of the term ‘illegal logging’ and weaknesses in assessment methods. For instance, official estimates are often based on satellite data for clear-felling outside of designated areas and clear-felling areas of considerable size without permits, thus likely disregarding other types of illegal logging (including selective logging in smaller areas or the sale of timber from areas damaged by forest fires).

GEOGRAPHY OF ILLEGAL LOGGING

Illegal logging by local populations for their own needs is ubiquitous and occurs in all regions of Russia. Illegal commercial logging, however, is concentrated mainly in the border regions, where high-quality timber is in great demand from foreign buyers. Chinese demand for timber of any origin has spurred the massive development of illegal logging in all border regions or areas connected with China by rail, and since 2014, by waterways.²⁰ Forest-related crime rates are highest in southern Siberia and the Far East (Figure 5).

The Far East contains about half of Russian forests – 43 per cent or almost 500 million hectares. As of 2012, the volume of annual logging permitted in the Far Eastern Federal District amounted to 92 million m³, which equates to approximately 8 per cent of the volume of timber harvested in the whole country. The timber industry in the Far Eastern Federal District comprises less than 1.5 per cent of the gross regional product, making it relatively underdeveloped in comparison with other regions. While at the national level 75 per cent of tax payments come from timber processing companies, in the Far East 90 per cent comes from logging companies.²¹

As stated by the Deputy Plenipotentiary Representative of Russian President in the Primorsky Krai Vladimir Sirkin,²² in 2010 the federal budget lost 4.1 billion rubles (US\$ 130 million) due to illegal logging in the Far East. Environmental Investigation Agency experts argue, however, that the actual total losses exceed 80 billion rubles, or US\$ 2.6 billion.²³

Approximately two-thirds of the illegal logging in the Far East occurs in Primorsky Krai, an area larger than the entire Korean peninsula. With 80 per cent of the territory covered with forests,²⁴ Primorsky Krai is one of the most densely-forested regions of Russia. The forestry sector produces up to 30 per cent of the budget revenue in some forest areas²⁵ and more than half of the working population is employed in the forestry sector. It is not surprising that illegal logging is prevalent when the average salary of a forester is no higher than 15,000 rubles a month (US\$ 8 per day). To put this into context, the national average worker's wage is twice as high: 28,000 rubles a month (US\$ 15 per day).²⁶ At the same time, there is very little control over the forest. For example, only two staff members with no state-provided means of transport are responsible for controlling the Artemovskiy branch area of the 'Primorsky Forestry Association' – an area covering 15,900 hectares.²⁷

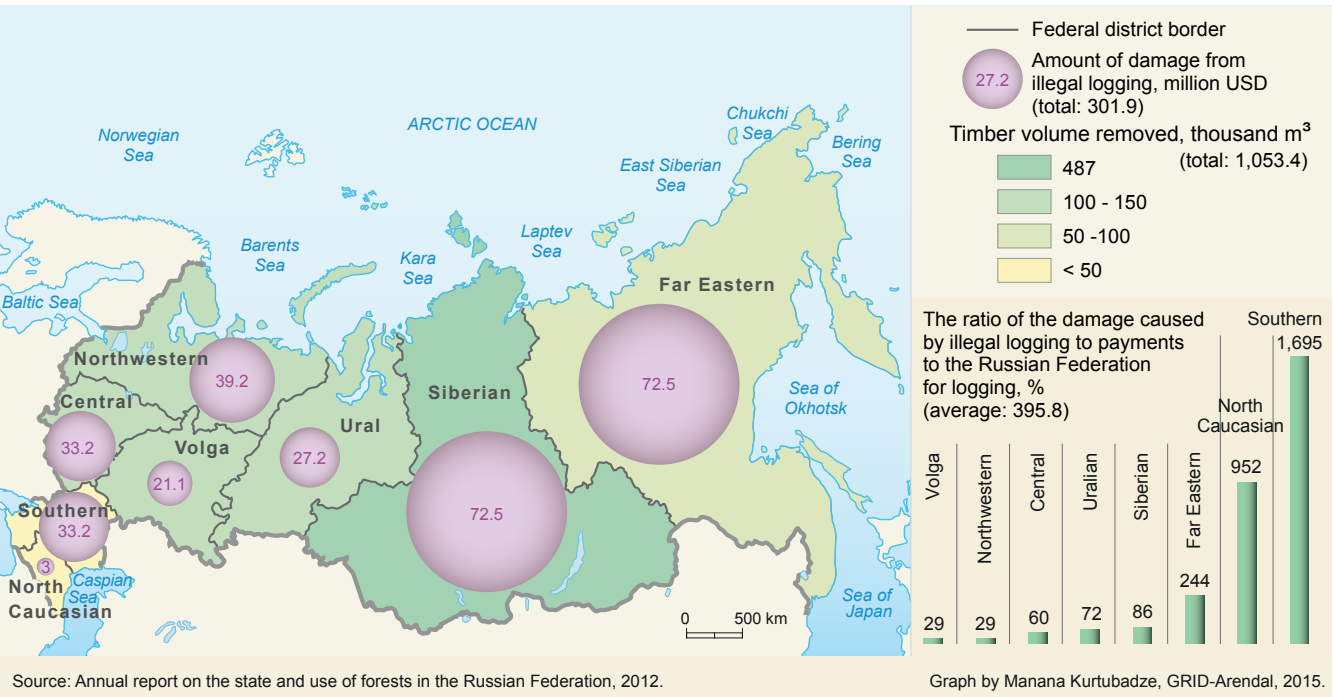


Figure 5: The volume of illegally harvested timber and the amount of damages from illegal logging by region and the ratio of damage to payments to the budget in 2012

Arkhangelsk Oblast is another example of an export-oriented forest region (Lesnoy region, 2012). Forests cover 28.5 million hectares, ranking it eighth within the Russian Federation and second in the Northwestern Federal District. Logging in the Arkhangelsk Oblast decreased from 13.4 million m³ in 2007 to 11.8 million m³ in 2011. Losses rose from 80.1 million rubles to 506.5 million rubles –

a more than six-fold increase. At the same time, employment in the timber industry fell from 42,000 in 2007 to 25,400 in 2011.

The following examples of cases of illegal logging in regions across the Russian Federation demonstrate the scale of forest-related criminal activities (Table 2):

Part of Russia	Year (or year reported)	Case details and references	Estimated damage (millions of rubles)
The Far East	2000–2009	Threefold increase in the area of illegal logging in some pine-nut harvesting and hunting zones in Primorsky Krai; approx. 1,800 hectares harvested instead of the authorized 533 hectares ²⁸	
	Oct–Nov 2013	> 1,500 m ³ of illegal logging uncovered in the forests of water source protection zones in Primorsky Krai ²⁹	> 100
	2013	24 identified cases in total ³⁰	> 216
	2013	Group of people cut trees in Primorsky Krai, 12 units of special equipment seized - chainsaws and Kalashnikov bullets ³¹	> 150
	2013	Poachers detained in Primorsky Krai during ‘Operation Forest’ conducted by the Ministry of Internal Affairs; illegal logging recorded in protected oak forests in Shkotovsky district ³²	113
	2013	Sixty hectares of forest harvested 50 km from Vladivostok, instead of the authorized 14 hectares, under the guise of logging for the needs of the local population ³³	
	2013	Total estimate for illegal logging in Primorsky Krai ³⁴	1,600
Siberia	2008	Three shell companies smuggled forest products from Altai Krai to Tajikistan ³⁵	884
	2012	Illegal logging of valuable tree species in Tomsk Oblast ³⁶	> 2
	2012	24 cases of illegal logging brought to court in Krasnoyarsk Krai; villagers and district forestry workers had organized three teams to harvest and sell timber to Chinese entrepreneurs ³⁷	50
	2013	Russian-Chinese timber smuggling group detained in the Irkutsk Oblast; authorities seized 40,000 m ³ of timber as well as weapons, ammunition, and a large number of fake seals ³⁸	> 2,000
Southern Federal District	2012	204 precious trees, including chestnut, Iberian oak, hornbeam and beech, cut in Sochi Zakaznik ³⁹	54.5
	2012	Felling of 27 oaks in the Republic of Adygea ⁴⁰	5.5
Northwestern Federal District	Jan–May 2014	Illegal logging in the Arkhangelsk Oblast ⁴¹	100

Table 2. Selected cases of illegal logging in various parts of Russia (Source: Environmental Investigation Agency)

TRADE OF ILLEGAL TIMBER

The Russian forestry sector is highly dependent on exports. In 2014, US\$ 11.6 billion worth of Russian wood and wood products were exported,⁴² comprising 72 per cent of the total value of revenues

from Russian exports.⁴³ In 2011, 68 per cent of sawn wood products were exported to world markets. Cellulose exports comprised 85 per cent of the total amount produced (up 15 per cent from 2007).

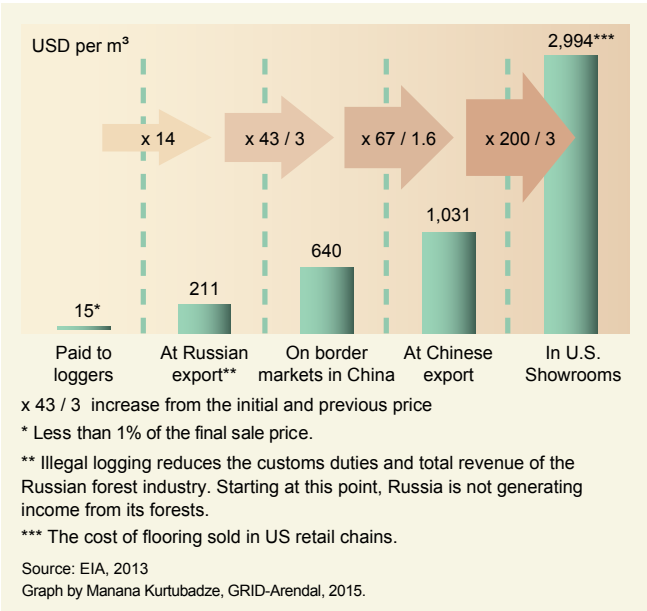


Figure 6: The value of oak along the supply chain

Expensive woods, such as oak, ash, elm and linden, are commonly used for furniture and flooring. As illustrated in Figure 6, the value of Russian timber increases dramatically from the time it is cut to when it is sold to the final consumer. When harvested timber is smuggled the share of revenues to local communities and the Russian budget can be as low as zero. When this is the case, none of the profits from criminal businesses are reinvested in improving the management of old-growth forest ecosystems in Russia.

China and Finland are the main importers of Russian roundwood (Figure 7). In 2012, Russia exported more than 30 million m³ of timber to China; according to EIA experts, approximately 24 million m³ of this was exported illegally. Russian timber comprises approximately 20 per cent of timber imports to China, including 21 per cent of Chinese imports of roundwood – inferior only to New Zealand (Figure 9). In 2012, China exported timber, ready-made furniture and flooring worth US\$ 20 billion: 33 per cent of which went to the United States, 17 per cent to the EU, and 7 per cent to Japan.

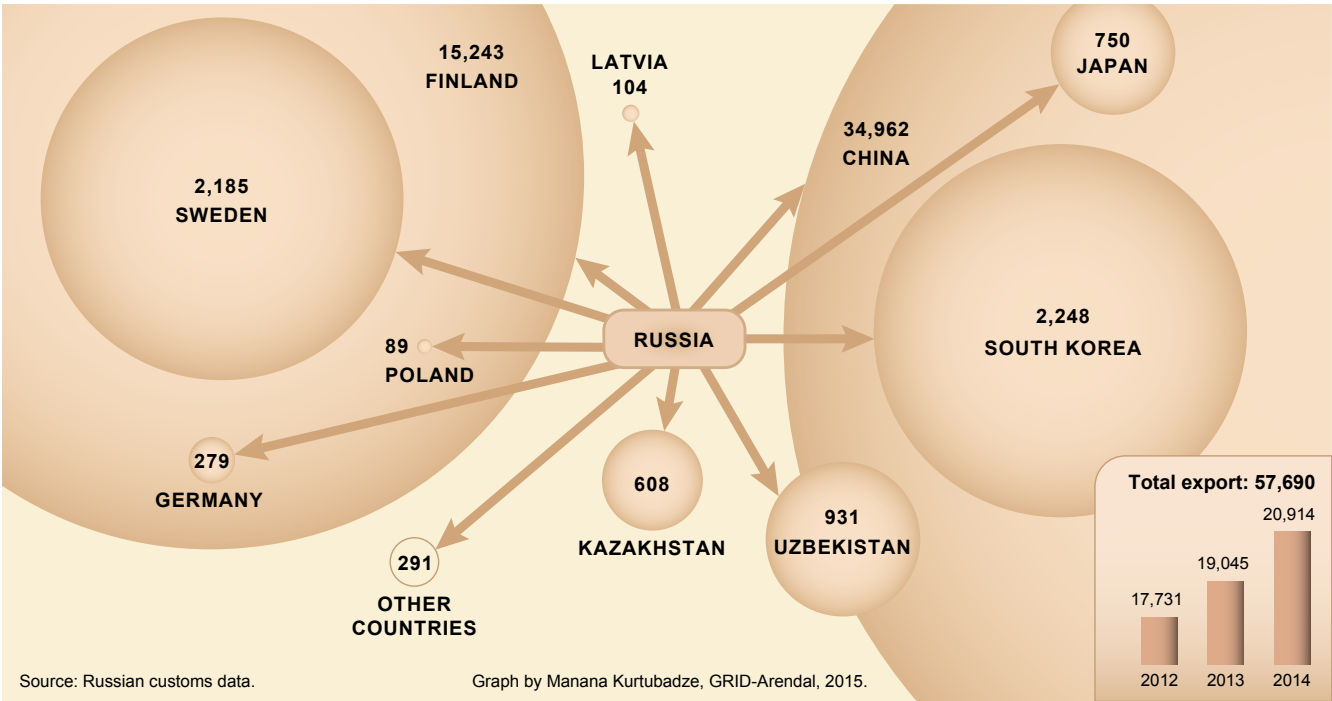


Figure 7: Roundwood exports from Russia between 2012 and 2014

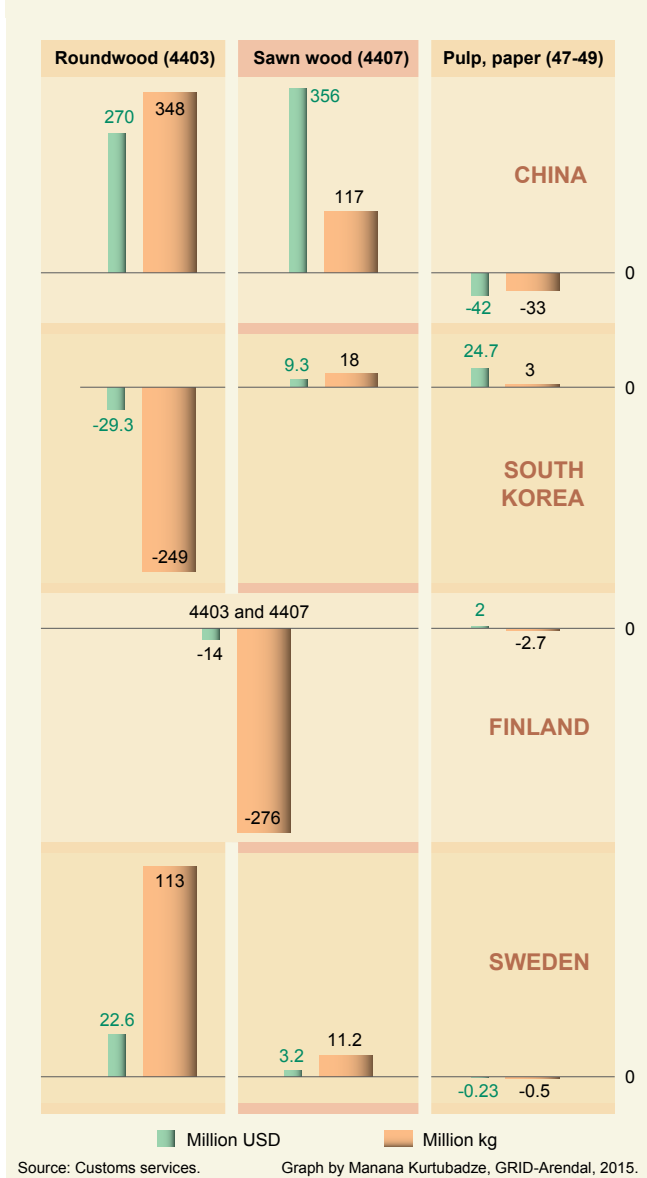


Figure 8: Balance of Russian exports of wood products to four major trade partners

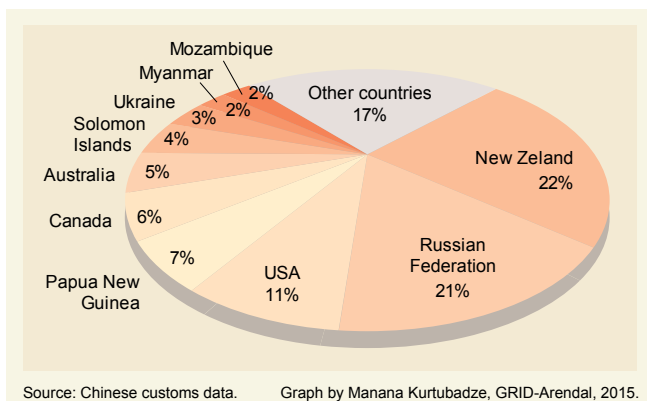


Figure 9: Major roundwood exporting countries to China in 2014

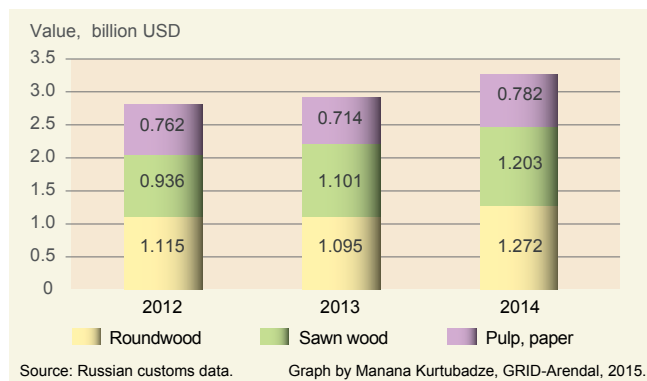


Figure 10: Russian exports of wood-based products to China, 2012–2014

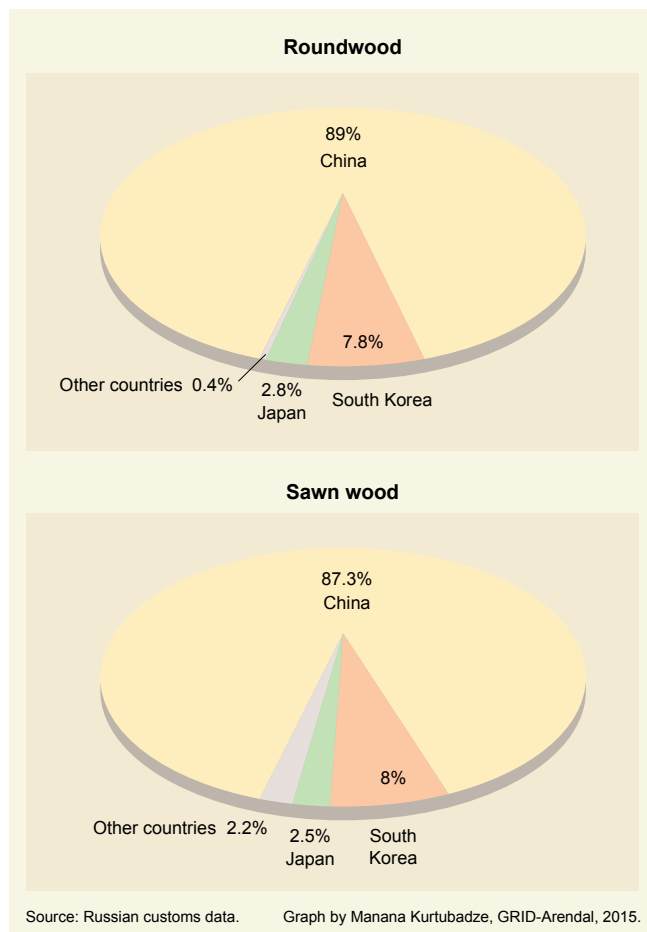
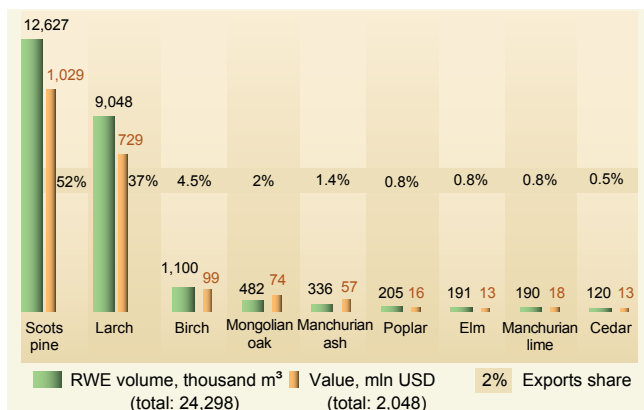


Figure 11: Importers of forest products from the Russian Far East in 2014



Source: Russian Customs, 2012, EIA, 2013. Graph by Manana Kurtubadze, GRID-Arendal, 2015.

Figure 12: Export of Russian timber to China by tree species in 2012

China receives 96 per cent of the precious wood exported from the Far East of Russia (Figures 11 and 12). Estimates by the Environmental Investigation Agency suggest that at least 80 per cent of these exports consist of illegally-logged old-growth timber, often from protected areas, stolen with the use of fake documents and official seals that have been received from bribed forest officials.⁴⁴

The Environmental Investigation Agency tracked valuable, illegally harvested hardwoods across the Russian-Chinese border to showrooms around the world. The United States ‘Lacey Act’ requires importers to indicate the country of origin for timber. The investigation revealed that timber flooring from China was labelled ‘Made in Germany’ at the request of Lumber



Liquidators because "the US market and the Government do not like Russia". Bribes must also be taken into account: according to one Chinese businessman, documentation for illegally harvested timber costs between US\$ 3 and US\$ 6 per m³.⁴⁵

A detailed comparison of official statistics from the Russian and Chinese national customs services reveals discrepancies in the value and amount of wood products exported from Russia and imported to China (Figure 13): Chinese customs data⁴⁶ shows a greater value for timber imports from Russia than was reported by Russian customs.⁴⁷ The sum of the differences in declared export/import values of wood and wood products was US\$ 668 million; and a discrepancy of 432 million kg in the declared amount of products.

To understand whether the kinds of discrepancies found in Russian-Chinese trade are common elsewhere, it is necessary to analyse timber exports to other major Russian trade partners. As shown in Figure 13, Finnish customs data,⁴⁸ for example, shows some losses in the value of timber imports from Russia when compared to Russian customs reports. By contrast, Swedish customs data for 2014⁴⁹ shows a substantially greater value of timber imports from Russia than was reported by Russian customs. South Korean customs data⁵⁰ shows significant losses in the value and the amount of roundwood imported from Russia during 2014.

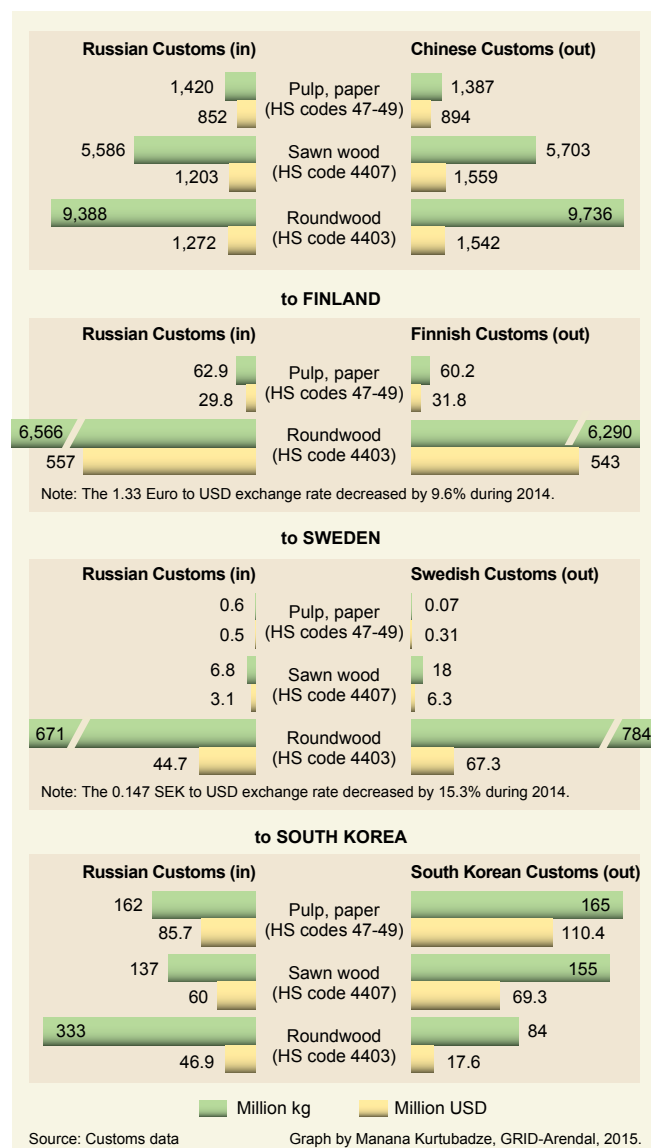


Figure 13: Russian wood-based exports to China, Finland, Sweden and South Korea in 2014

Box 1. Illegal logging for the Chinese market

The case of Suifenhe Xingjia Economic and Trade Company

Weak legislation, systemic corruption, and the lack of efficient and professional forest protection make the forests of Siberia and the Russian Far East easy prey for an unscrupulous ever-growing Chinese market. Illegal logging in the Russian Far East is today a well-organized criminal enterprise, involving a huge number of people, including local citizens, law enforcement agencies and local authorities, Chinese criminal syndicates and senior managers of major western companies. Illegal timber is typically obtained:

- on legal woodlots, beyond the authorized quota
- outside designated areas or in places where it is forbidden (in valuable forests, watersheds and water protection zones, within protected areas and peri-urban forests)
- under the guise of sanitary felling or thinning, when mercantile timber is harvested instead of weak and diseased trees

Several methods are used for legalizing illegally harvested timber and reducing the export duty. These include:

- preparing mixed loads consisting of legal and illegal timber, accompanied by supporting documents for the legally harvested portion, which is often low quality and does not reach consumers
- falsely representing fine wood as low-value timber in export documents
- using copies of the same permit to supply various consumers
- falsifying information about the manufacturer or seller in documents
- using invalid or fraudulent licences from the Russian Ministry of Industry and Trade
- exporting unprocessed timber, which is limited by high customs duties, under the guise of low-grade, low-value processed timber
- concealing or failing to declare (usually the most valuable) part of the timber⁵⁴
- selling through a long supply chain, the beginning of which cannot be traced

According to estimates from the Environmental Investigation Agency (EIA), the level of criminality in Siberian forestry is on a par with the Far East and illegal lumberjacks use similar practices.

According to an EIA investigation,⁵⁵ one particular company with strong connections to illegal logging operations in the Russian Far East is the Suifenhe Xingjia Economic and Trade Company. Xingjia specializes in logging and the manufacture of hardwood flooring and is the leading supplier for Lumber Liquidators, the largest seller of parquet floors in the United States – a company that markets itself as adhering to ‘sustainability principles’.⁵⁶ Approximately 74 per cent of Xingjia imports come through Suifenhe City. To expand imports from Russia, the company received a loan of 200 million yuan (US\$ 33 million) for the construction of a port on the Amur River. The city of Suifenhe also built a railway station and a railway line. Two factories in China owned by Xingjia produce 1.5 million m³ of hardwood flooring (oak and birch). The EIA found that one-third of this amount (500,000 m³) was exported to the USA and Canada, mainly to Lumber Liquidators and, to a lesser extent, COSTCO Canada. Another 200,000 m³ were exported to the EU under the name ‘GreenLeaf’.⁵⁷



Figure 14: Lumber Liquidators' supply chain for hand-scraped solid oak flooring

The President of Xingjia, Mr. Sun, told undercover investigators that the key to success was involving the relatives of Russian officials in the business. Their biggest supplier, for example, is the son of the Deputy Governor of Khabarovsk Krai, and their nominal head of exports is the brother of the Attorney General of the Far Eastern Federal District. One of the advantages of his business, Mr. Sun noted, was that unlike Japanese companies, Chinese companies are not worried about the legality of timber.⁵⁸

According to the owner of a sawmill in the Russian Far East, half of the timber he receives from producers has involved over-cutting the forest and exceeding the authorized limits by up to 50 per cent. The second half he receives from poachers illegally harvesting timber.

The EIA study describes the movement of timber from loggers to consumers (Figure 14):

- Crews of illegal lumberjacks on tractors deliver stolen timber to a nearby sawmill, which belongs to a company involved in the supply of roundwood.
- The sawmill owner prepares fraudulent documents for the timber (sometimes just printing them out from the Internet) showing the timber has been harvested at their authorized logging site and takes them to local officials who certify the forged documents.
- Logs and sawn wood are mixed and can no longer be controlled during transport.
- Companies from China, in full knowledge of the illicit origin of the timber, buy it under the guise of timber harvested according to official quotas. A major player in this market is Xingjia Company.
- If necessary, the smugglers use forged documents and bribes to cross the border.
- Most of the Russian wood arrives in Suifenhe City and is further transported by rail across the country, mixing on the way with legally harvested timber.
- The final products reach Lumber Liquidators, which owns approximately 300 retail stores.



The approximate US\$ 600 million discrepancy in the Russian-Chinese timber trade data could be attributed to the prevalence of illegal deals. However, the results of similar case studies suggest that many factors are at play.⁵¹ The discrepancy could also be caused by incorrect specifications of origin or destination of shipments; confusion in the classification of timber; and differences in measurement standards and scaling methods.⁵² Therefore, although illegal trade is likely to constitute some part of the discrepancy in timber trade statistics, it is impossible to determine from the official customs data how much of the timber was 'illegal'.⁵³

DAMAGE FROM ILLEGAL LOGGING

ECONOMIC DAMAGE

According to WWF Russia and the World Bank, total losses to the Russian budget, from an estimated 35 million m³ of illegal logging, vary from between 13 billion and 30 billion rubles.⁵⁹ Other estimates exist, mostly at the regional level. There is, however, no perfect method for determining and quantifying

the existence of products that have been intentionally hidden. At the national level, there are two main approaches: relying on expert opinion or using the wood balance method. This report uses the wood balance method to estimate losses to the Russian economy from illegal logging.

Box 2. Wood balance methodology

The wood resource balance has been described as a “tool to assess all different sources and uses of wood as part of comprehensive assessments of bioenergy and sustainable wood supply”.⁶⁰ The method is based on the approach used by Palmer⁶¹ to estimate illegal logging in Indonesia – although it differs in that in forest waste is not included in the calculation (Figure 15). In forest waste remains in the forest and does not enter the supply chain, so its inclusion in the model would result in an overestimation of illegal logging.

The underlying idea of the wood balance method is to provide an overview of all wood products using one calculation system.⁶² This can be done by expressing wood product volumes in roundwood equivalent (RWE). To arrive at the amount of a particular wood product in RWE, its quantity (in initial units, i.e., m³, m² or tons) should be multiplied by

a ‘conversion coefficient’. Conversion coefficients indicate how much roundwood is needed to produce one unit of a particular wood product. For example, 4.3 m³ of roundwood is needed to produce 1 ton of sulphate pulp.⁶³ In this study, coefficients for the conversion of wood products into RWE volumes were determined using the average of values from previous studies (Figure 16).

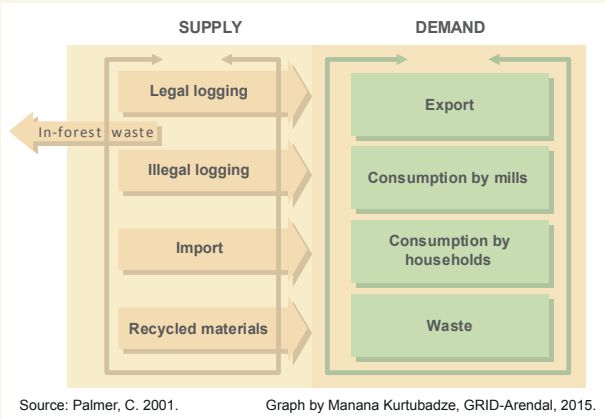


Figure 15: Conceptual wood balance model

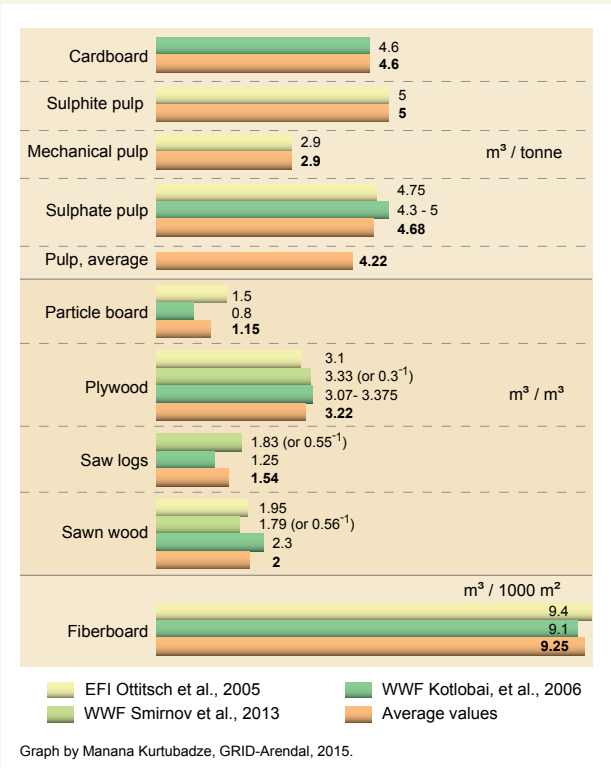


Figure 16: Coefficients for conversion of major wood-based products into RWE volume

For the wood balance model used in this study, wood materials reported by the Federal Customs Service in kilograms were converted into roundwood equivalent (RWE) values using average rates calculated from Russian trade statistics:

1 m³ of sawn wood = 559 kg

1 m³ of unprocessed wood = 758 kg.

The data in Figure 16 (in which averaged coefficients were used) and Figure 17 indicate that between 36 and 48 per cent, or 70 million to 90 million m³, of legal logging was of 'unknown origin'. Sensitivity analysis of the influence of individual coefficients (Figure 18) shows that the value may vary between 59 million and 117 million m³. These results are higher than those reached in other attempts to use the wood balance method to estimate

DEMAND			Init. units	RWE	SUPPLY			Init. units	RWE
Exports	Roundwood, thsd m ³		19,047	29,332	Imports	Roundwood, thsd m ³		38	59
	Firewood, thsd t		2,971	3,922		Firewood, thsd t		6	8
	Mill products	Sawnwood, thsd m ³	21,518	43,036		Mill products	Sawnwood, thsd m ³	39	78
		Plywood, thsd m ³	1,758	5,661			Plywood, thsd m ³	262	844
		Fiberboard, thsd m ²	79,575	736			Fiberboard, thsd m ²	109,814	1,016
		Particle board, thsd m ³	790	909			Particle board, thsd m ³	5,263	6,052
		Other wood, thsd m ³	980	1,960			Other wood, thsd m ³	412	1,739
		Pulp, thsd t	2,386	10,069			Pulp, thsd t	181	833
		Board, paper, thsd t	2,673	12,296			Board, paper, thsd t	2,368	10,893
Consumption by mills		Sawnwood, thsd m ³	21,700	43,400	Legal logging, thsd m ³		-	193,261	
		Plywood, thsd m ³	3,329	10,719	Recycled waste	Recycled paper [67], thsd t	800	3,680	
		Fiberboard, thsd m ²	427,000	3,950					
		Particle board, thsd m ³	6,600	7,590		Woodchips [68], thsd m ³	482	554	
		Pulp, thsd t	7,200	30,384					
Board, paper, thsd t	7,822	35,981							
Households' firewood consumption [65], thsd m ³			-	9,000					
Waste	Mill activities [66], thsd m ³		-	35,800					
	Waste paper [67], thsd t		3,000	13,800					
Total demand (Qt)				298,544	Total supply (Qs) thsd m ³				219,016
Wood of unknown origin, Qi = Qt – Qs 79,529 thsd m ³									
Wood of unknown origin in the total demand 27%									
Wood of unknown origin in legal logging 41%									

Note: Table design based on Palmer, 2000.

Sources: Export and import – Federal Customs Service; Domestic consumption – Rosstat; Legal logging – Rosleskhoz; Sources: Semikashev, 2010 ; Kolesnikova, 2013 ; Kvaskova, 2005 ; LesOnline.ru, 2014

Graph by Manana Kurtubadze, GRID-Arendal, 2015.

Figure 17: Supply and demand for roundwood in Russia in RWE in 2013 (thousand m³)

illegal logging. The difference is due to the fact that the model included all types of wood products, not only industrial wood.

No doubt, a significant portion of logging which is unaccounted for is illegal, but it is difficult to ascertain the proportion. The wood balance method estimates the magnitude of the maximum possible damage. It does not allow quantifying damage with precision more than 10-15 per cent because according to experts, the data for statistical reporting and the

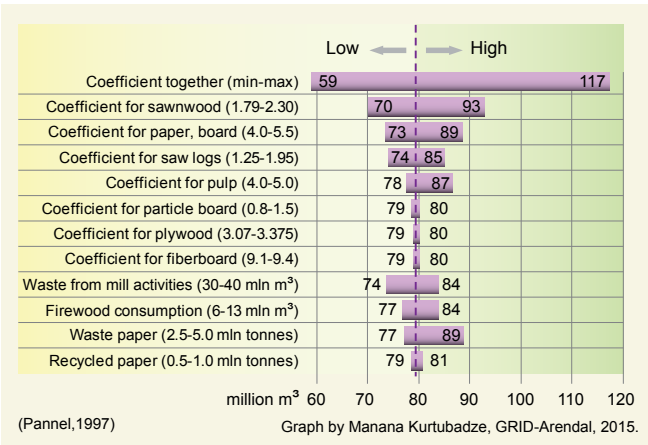


Figure 18: Sensitivity of estimated volume of wood of ‘uncertain origin’ to the variation of used coefficients

volume of timber actually harvested may differ by at least 10–15 per cent.⁶⁴ This is just one factor determining total damage. Combined uncertainty of the final estimation may probably be as high as 20 to 25 per cent. In the case that all of the wood of ‘unknown origin’ was illegal, the minimum amount of damage from illegal logging could be determined by estimating losses in government forest management revenues, i.e., payments for standing timber and export duties on roundwood.

Article 76 of the Russian Federation Forestry Code provides that the minimum payment for the sale or lease of forest plantations (the ‘stumpage fee’) is the product of the volume of harvested timber multiplied by the rate per volume. Rates per volume were established by the Government of the Russian Federation Resolution No 310 of 22 May 2007: On the payment rate per unit of forest resources and rates of payment for a unit area of forest areas under federal ownership. Rates vary, based on, for example, whether the property contains industrial wood or firewood (categorized by timber size) and depending on transportation distances. Payment rates are adjusted by an indexation coefficient, which was equal to 1.30 between 2009 and 2014 and 1.37 in 2015. By using average rates for the whole country to simplify the calculation, it is possible to estimate payments for standing timber based on the proportion of softwood and hardwood harvested in 2013 (60 per cent and 40 per cent respectively):

Box 3. Calculation of payments

Payments for 70 million m³ would be calculated as follows:
43 million m³ of softwood at 63.6 rubles per m³ =
2.7 billion rubles
27 million m³ of hardwood at 89.4 rubles per m³ =
2.4 billion rubles
which would give a total of US\$ 150 million

Payments for 90 million m³ would amount to:
55 million m³ of softwood at 63.6 rubles per m³ =
3.5 billion rubles
35 million m³ of hardwood at 89.4 rubles per m³ =
3.1 billion rubles
which would give a total of US\$ 200 million

In the worst-case scenario, if the 70 million to 90 million m³ of timber was all smuggled across the border and the money remained outside Russia, losses would amount to between: 70 million m³ x US\$ 187 (average export price of

Russian wood products HS* 44) = US\$ 13 billion and 90 million m³ x US\$ 187 = US\$ 17 billion

Annual damages from illegal logging would, therefore, be somewhere between US\$ 150–200 million and US\$ 13–17 billion.

These losses are calculated based only on woodcutting. They do not take into account reduced budget revenues or the costs of wood processing (production costs at all stages, transportation, wages, pension payments, export duties, etc.). The losses from the destruction of habitat and ecosystem services, the impacts on the livelihoods of tens of thousands of indigenous people, and the potential costs of conserving and restoring ecosystems are not estimated either.

* Harmonized System code, http://www.hsodelist.com/bbs/board.php?bo_table=HScode&sca=44

ENVIRONMENTAL DAMAGE

Existing scientific estimates suggest that the total area of forest land, total growing stock, and allowable cut in the Russian Federation are expected to increase by 2030. The area of forest available for wood supply and the share of these forests in the total forest area are expected to decrease due to creation of new forest protected areas. This trend coincides with the expected dynamics of European and North American forests. However, no estimates of the forest reserves that are economically and technically feasible to harvest, have been made in the Russian Federation so far. It is possible that commercially-viable forest reserves are not as large as assumed. Calculations of economically allowable cuts are necessary for planning and decision-making in the forest sector. Further studies on this issue are needed.⁶⁵

The Russian Far East is home to the world's last remaining large, old-growth, temperate deciduous forests with unique biodiversity-rich ecosystems. WWF has included the Russian Far East temperate forests in the list of the Earth's most biologically valuable ecoregions (The Global 200).⁶⁶ Forests within the Sikhote-Alin ecosystem along the border with China contain some of the world's most significant old-growth forests and critical habitat. Large, overgrown oaks and cedars provide food for deer, wild boars and other animals, which in turn support the existence of endangered Amur tigers and Far Eastern leopards. Illegal logging degrades the critical habitat of these rare predators and their prey, opening up these previously remote areas and increasing the risk of poaching and forest fires.

There are few international conventions and normative acts regulating the trade of precious wood in Russia. Appendix III to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) includes three tree species growing in Russia: the Korean pine (*Pinus koraiensis*), the Mongolian oak (*Quercus mongolica*) and the Manchurian ash (*Fraxinus mandshurica*).⁶⁷ The Russian Government has prohibited the felling of 50 tree species and six shrub species, including Korean pine.⁶⁸ There are, however, no specific federal and regional laws to control felling of the other two endangered species. Nor are statistics kept on the logging of valuable and rare tree species for which logging is banned. The available evidence suggests, however, that the illegal harvesting of such species is much more extensive than the illegal logging of permitted species.

The export of illegally-logged precious woods is especially problematic in the southern regions of the Far East, where export trade is leading to the almost complete disappearance of productive deciduous and coniferous-deciduous forests. Primorsky Krai is the undisputed leader in the illegal logging of valuable and rare tree species.

According to the WWF Russia Amur Branch, the volume of precious wood exported to China is 200 to 400 per cent higher than the amount of logging permitted.⁶⁹ The over-cutting of some of the most valuable trees, like Mongolian oak, has reached as high as 400 per cent of permitted levels.⁷⁰ In one reported case approximately 1 million m³ were harvested, rather than the permitted 200 thousand m³ (500 per cent of permitted levels).⁷¹

Increasingly, the best available timber has already been harvested. Leased forests now often only consist of low quality stands. As a result, the number of violations in protected forests has tripled.⁷² Poachers are more frequently harvesting trees in protected areas, where forests are particularly valuable and contain large, healthy trees on unstable slopes, riverbanks and eroded lands and in habitats for valuable and rare animals and plants.

A WWF investigation during 2011 revealed large-scale undetected illegal logging, often associated with corruption in the forestry service. The participation of WWF employees in an anti-illegal logging raid in the Roschinskoe Forest Management Unit (FMU) in Primorsky Krai led to the identification of 1,900 m³ of illegally-logged oak and ash, which was 2.8 times greater than the total volume of illegal logging identified during the three previous raids. Additional examples of illegal logging on authorized logging sites concealed by provincial forest rangers are shown in Figures 19 and 20.

Wood theft commonly entails either felling valuable timber or harvesting under the guise of thinning protected forests. The largest state-owned enterprise in Primorsky Krai, the Primorskoye Forestry Association, harvests more than 500,000 m³ of mercantile timber a year. Loggers that are claiming they are thinning protected forests harvest the entire volume. In 2010, 3.5 million m³ of mercantile timber was harvested as the result of such 'thinnings'.⁷³ In another case, all the timber harvesting took place outside of the

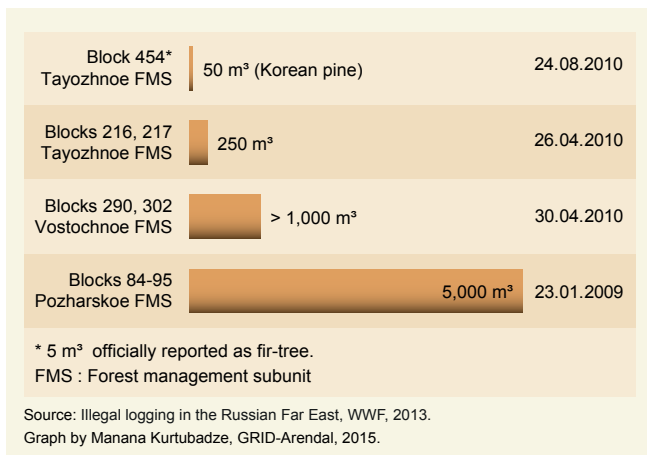


Figure 19: Volumes of underestimated illegal logging from sample logging sites

authorized logging sites. Loggers simply looked for the best parts of the forest and took the trees they liked. According to the Far Eastern Research Institute of Forestry, 90 to 95 per cent of such activity is not consistent with the principles of thinning and is, in practice, industrial logging aimed at obtaining high-quality timber.⁷⁴

Selective logging usually comprises less than 10 per cent of the total stock, but involves the harvesting of primeval trees, or other trees of special variety or quality. Such logging cannot be identified on satellite images and is almost never taken into account.⁷⁵ Selective logging was prevalent until the end of the nineteenth century.⁷⁶ Although it is often considered as a better alternative to clear-felling, selective logging poses a great danger to biodiversity and forest ecology. For instance, pine trees, which were in high demand from timber merchants and exporters, were selectively felled and as a result many pine forests in Northwestern Russia have been transformed into spruce forests.⁷⁷ Moreover, because the best trees have been cut, the remaining share of unhealthy and damaged trees has increased. Therefore, damage from illegal selective logging is higher than clear-felling per unit volume of harvested timber. In this report, however, due to the difficulties in quantifying selective logging, total damage from illegal logging will be estimated from the volume of illegal timber irrespective of the type of wood harvesting.

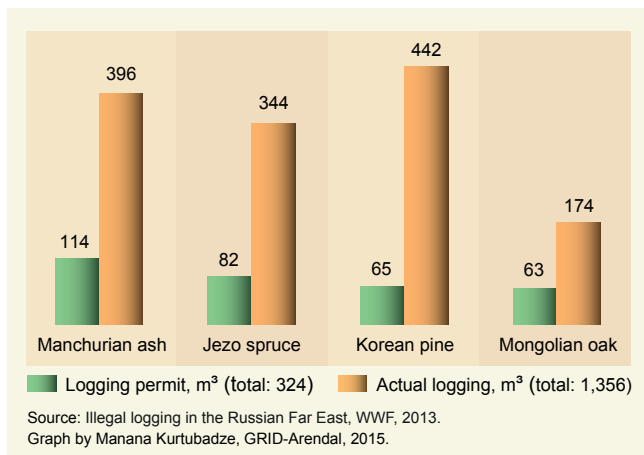


Figure 20: Authorized and actual logging in stand 1, block 231, Dalnekutskoe Forest Management Subunit (Roschinskoe FMU), winter of 2008–2009

Official figures indicate that approximately 40 million to 60 million m³ of timber is destroyed as a result of fires.⁷⁸ Greenpeace Russia estimates the volume to be around 500 million m³.⁷⁹ In most cases, timber that survives a forest fire retains its consumer qualities – growing trees usually have their bark burned but the timber under the bark remains undamaged. This creates an incentive to start forest fires because the timber can still be sold, albeit not at the original price.⁸⁰

In the south of Russia, the main supply of valuable timber for export originates from Krasnodar Krai, Rostov Oblast, Stavropol Krai and the Republic of Adygea. According to estimates, the actual supply of chestnut wood from the Southern Federal District is 3.5 times greater than declared.⁸¹

In the Northwestern Federal District the most valuable wood is the Karelian birch. The cutting of Karelian birch is prohibited. In 2007, the species was included in the Republic of Karelia 'Red Data Book'. According to the 1968–1970 inventory, natural populations of Karelian birch covered an area of 107.7 hectares. The average age of the stands ranged from 20 to 67 years and there were a total of 4,800 trees. By 2008, according to a preliminary assessment of the remaining populations, there were no more than 2,000 to 3,000 trees. The main reason for the destruction of the Karelian birch was illegal logging. Karelian birch wood costs US\$ 1,500 per ton⁸² on the market.

SOCIAL DAMAGE

Illegal and unsustainable forest management threatens the health and living conditions of forests and people, endangering the future of the industry and the regional economy. To put the scale of the challenge in perspective, the area of the border forests in Russia is 10 times greater than the area of the border forests in the United States. These forests provide livelihoods for more than 1.1 million people working for 60,000 forestry enterprises.⁸³

Through the non-payment of taxes and customs duties, and the resulting decline in employment, illegal logging is causing significant damage to governments, industries and local communities. Illegal logging reduces timber reserves for legal forest management and undercuts markets. Low timber prices ravage law-abiding businesses, leaving their employees without jobs and livelihoods, thereby creating incentive for

participation in the corrupt system logging. The overall losses for the Russian Federation in timber harvesting sector are alarming. According to the Federal State Statistics Service, the sector consistently demonstrates growing financial deficit: in 2005 it was –2,800 million rubles (118 million US\$), mounting to –17,652 million rubles (507 million US\$) in 2014, or about a 5-fold increase.⁸⁴

Similarly, illegal logging impacts on indigenous and traditional cultures. Sustainable forest management in the Russian Far East, for example, is essential for the local Udeghe and Nanai tribes, who have been living in the region for 10,000 years. Employment in the forestry sector, hunting and gathering of forest products, and fishing and beekeeping are the only sources of income and livelihood for the approximate 100,000 members of these communities.





CONCLUSIONS AND RECOMMENDATIONS

The forest potential of the Russian Federation is not sufficiently used due to corruption, lack of objective and up-to-date information and lack of proper regulation.

MAIN CAUSES OF PROBLEMS IN THE FOREST SECTOR

The ongoing problems in the Russian forest sector can be attributed to a number of factors, including:

High levels of corruption and organized crime in the forest industry and law enforcement agencies

According to the Prosecutor General's Office, the measures law enforcement agencies have taken towards the forest industry are not sufficient to restore the rule of law.⁸⁵ Findings revealed a number of cases of officials abusing their authority, forest inspectors concealing illegal felling, and heads of forest units establishing criminal organizations. Forest land management by the Russian Ministry of Defense did not always comply with anti-corruption legislation. In addition, forest management legal acts of regional authorities and local self-governing bodies, which create preconditions for the development of corruption, were identified.

Ineffective legislation and the need for further reforms in forest management

One of the main objectives in improving forest legislation is to attract small and medium-sized enterprises to the forestry sector and create competitive environment for them. Another objective is to improve the system of rental for forest plots, including the establishment of rules for setting the minimum starting bids in an auction and the application of raising coefficients to determine the correct market value of forest land. There are no regulations that clearly define a "forest road" and the responsibilities of various business entities towards its construction and maintenance.⁸⁶

Lack of law enforcement

The lack of accountability for those who violate forest management regulations makes it very difficult to reduce forest poaching and undermines enforcement efforts. As demonstrated by the

following examples, criminals, particularly those belonging to organized crime groups, tend to go unpunished:

- In 2011, only 4.25 per cent of those convicted in Vologda Oblast (5 out of 120) under Article 260 of the Russian Criminal Code were sentenced to real terms. The following year, that number was even lower: 0.7 per cent (1 in 138).⁸⁷
- Less than 5 per cent of the 10 million rubles of damage inflicted during 2012 were recovered.⁸⁸
- Out of 400 people prosecuted for illegal logging in 2012, only nine were recognized as members of organized criminal groups.
- Inspections conducted by the Prosecutor General's Office in 2013 identified 45,000 violations. The courts were presented with 5,400 potential cases. Only 901 criminal cases were filed.⁸⁹
- In 2013, a branch of the state public institution, Mosobllles, assessed 11.5 million rubles in damages to the Moscow region forest fund. The courts brought only six claims for 27,000 rubles in total.⁹⁰
- The Siberian Federal District accounts for one-third of some 16,000 annually detected crimes related to illegal logging. Only one-third of these cases reach the courts.⁹¹

The *Rosleshoz* Department of Forest Protection is responsible for verifying the legality of forestry activities. During 'Operation Lesovoz' in 2014, a joint operation with law enforcement authorities in 48 regions, the Forest Guard discovered 1,653 instances of illegal logging, totalling 57,500 m³ of timber and 602 million rubles of damage. Those responsible for the illegal logging were identified in two-thirds of the cases and 886 criminal cases were filed. In some regions, the amount of detected illegal logging has significantly increased several times due to 'Operation Lesovoz'.⁹²

Undeveloped forest infrastructure also undermines enforcement. For instance, the length of forest roads in the Russian Federation is 1.46 km per thousand hectares of forest land, while in countries of Western Europe and North America it ranges from 10 to 45 km per thousand hectares. This makes forest resources in Russia more difficult to oversee and use.⁹³

Weaknesses of the state forest protection service

The state forest protection service is too small, under-valued, poorly-paid, legally defenceless and unprofessional. As a result, it is unable to prevent organized forest crime.

By 2013, the workforce of the country's forest protection service had decreased to 17,000 people, nearly five times lower than in 2005. As a result, on average, one employee is responsible for 55,000 hectares of forest (as compared to a ratio of 1:12,000 in 2007). In territories with large area of forests, one employee might be responsible for more than 300,000 hectares (65,000 hectares in 2007).⁹⁴

A survey conducted in 2013, showed that 60 per cent of people employed in hunting, agriculture and forestry had pre-tax wages less than or equal to 14,600 rubles (US\$ 460) a month; an amount equal to less than half the average monthly pre-tax wage in Russia (29,500 rubles or US\$ 940).⁹⁵ The average monthly wage of the lowest 10 per cent of paid workers was less than or equal to 5,400 rubles (US\$ 170), which was on a par with the 2013 minimum wage (5,200 rubles).⁹⁶

Along with a lack of financial security, workers have little physical security or protection from gang violence. It is common for workers to be threatened or attacked: one of the heads of the forest protection service in Irkutsk Oblast, for example, had his car and house burned and was badly beaten.

Lack of reliable information on most of the country's forests, their condition, the threats to their survival and the losses sustained

In 2014, according to the Prosecutor General's Office, only 22 per cent of Russian forestland had been registered. In violation of the law, no forest inventory work was carried out on 17 million hectares of forest land located in the developed and densely populated areas of Krasnodar, Kaliningrad, Leningrad, Moscow and Tver Oblasts.

Overall weakness of the forestry sector management

Analysis indicates that the Russian Federal Forestry Agency does not meet basic standards.⁹⁷ As reported by the Russian Accounting Chamber, *Rosleshoz* approved the Forest Plan for the Moscow Oblast despite the fact it did not comply with requirements both in terms of its form and content.⁹⁸

Poverty and the inability to find employment.

The inability to earn a legal livelihood or improve conditions often means local residents have little option but to participate in illegal logging activities. Many of the Chinese employers, who own most of the small sawmills, offer a monthly salary of no more than US\$ 100–130).

Economic inefficiency

The Forestry sector continues to be loss-making. The level of income from forests compensates for only half of the budget expenditures. Finland and Sweden with a total volume of forest harvesting less than a half of that for Russia, export 2–2.5 times more of forest products.⁹⁹ General inefficiency and the underdevelopment of local/regional timber processing make illegal exports more financially attractive.

MEASURES TAKEN TO STRENGTHEN THE FORESTRY SECTOR AND THEIR EFFECTIVENESS¹⁰⁰

Programmes and plans

The Russian Government approved 'The Development of Forestry, 2013-2020', a state plan which aims primarily at reducing losses from illegal logging. The programme's proposed total federal funding is approximately 262 billion rubles for eight years, or an average of 32 billion rubles per year (approx. US\$ 500 million). By 2020, budget revenues from forestry are expected to increase to 20.3 rubles per hectare – 18.1 billion rubles (approx. US\$ 280 million) for all forests in the country. The number of officers working in forest protection is expected to increase to 50,000.¹⁰¹

During the last four years 'The plan to prevent illegal logging and timber trade in the Russian Federation, 2011–2014' and 'The plan for the decriminalization of key industries of the Far Eastern Federal District, 2011–2013' have been implemented. In November 2013, the President of Russia signed a list of instructions for the conservation of the Amur tiger and the Far Eastern leopard, including measures for the conservation of their habitat.¹⁰² 'Operation Timber', an annual police operation held in late winter/early spring (in many northern regions the peak time for the removal of illegally felled timber) to identify illicit timber transportation, has meant that timber transport without accompanying documents has almost ceased.

Liability and fiscal regulation

In August 2014, article 191.1 was introduced into the Criminal Code, which establishes liability for the large-scale acquisition, storage, and transportation and processing for the purpose of marketing or selling of deliberately illegal timber (over 50 thousand rubles). For particularly large-scale violations over 150 thousand rubles (which equates to a carload of coniferous sawlogs) offenders could face up to five years' imprisonment. In addition, stricter penalties for illegal logging have been introduced: the maximum term of imprisonment under part 1 of Article 260 of the Criminal Code of the Russian Federation has increased from one to two years; under part 2, from three to four years; and under part 3, from six to seven years.

Environmental, as well as economic damage, is also taken into account. Pursuant to Federal Law № 267-FZ/ 13 July, 2015 ('On

revisions to articles 260 and 261 of the Criminal Code of the Russian Federation'), estimations of damage caused by illegal logging and the destruction of forest plantations could be increased by 2 or even 10 times depending on the category of forest protection and the time of the offence.

An increase in export duty on roundwood to 25 per cent led to a decline in the share of exports of unprocessed timber to China from 84 per cent in 2007 to 51 per cent in 2012.

Financial penalties for illegal logging have been increased: Failure to provide accurate information carries a fine of 5,000 to 20,000 rubles (US\$ 80–310) for officials and from 100,000 to 200,000 rubles (US\$ 1,500–3,100) for legal entities. Violations of labelling requirements will carry fines of 30,000 to 40,000 rubles (US\$ 460–620) for officials, and from 300,000 to 500,000 rubles (US\$ 4,600–7,700), as well as the confiscation of the timber, for legal entities. Transporting timber without documents will carry fines of 30,000 to 50,000 rubles (US\$ 460–770) for officials and from 500,000 to 700,000 rubles (US\$ 7,700–10,800) for individuals.¹⁰³

Labelling, monitoring and information

In late 2013, the Federal Law 'On Amendments to the Forest Code of the Russian Federation' and the Russian Federation Code of 'Administrative Offences' improved the legal regulation of harvested timber by introducing labelling that will make it possible to trace timber from felling to sale using a specialized database. Similar regional laws are being adopted, such as the Regional Law 'On regulation of relations in the timber trade in the Primorsky Krai'. The Government is preparing a decree mandating a special document for the transport of timber. The document will accompany the timber and will include information about the owner, consignor, consignee, carrier, the volume of hardwood, its species and assortment composition, origin and destination, the number of the timber transaction declaration, as well as the number of the vehicle state registration plate.

The upgrading of the existing remote monitoring system is under way, which should allow to monitor activities in the entire forest area, thereby reducing the volume of illegal logging.¹⁰⁴

Pursuant to Part 1 of article 50.2 of the Forest Code of the Russian Federation, the wood of valuable forest species (oak, beech, ash) is subject to mandatory labelling by those engaged in its export from the Russian Federation. In addition, the Forest Code establishes the procedure for enumeration of tags, the requirements for their mounting, manufacturing and capabilities for scanning the information. The establishment of mandatory requirement for labelling of oak, beech and ash will allow to tighten the control of the foreign trade in valuable timber.

Article 50.4 of the Forest Code of the Russian Federation, which entered into force on 1 July 2014, requires the presence of accompanying documentation for each shipment of transported timber other than quantities harvested by individuals for their own needs. It is estimated that individuals have declared up to 6 per cent of mercantile timber as being for their own needs.

In 2012, the Russian Government included timber in the list of strategic goods to be accounted for when moving across the border.¹⁰⁵ During that year the Siberian customs office initiated 63 criminal cases, including 53 involving the smuggling of logs and timber products that were valued at half a billion rubles (US\$ 15.1 million).¹⁰⁶

The Uniform State Automated Information System (EGAIS) for the accounting of timber was launched on January 1, 2015.

The system is supposed to provide information on i) the actual volume of harvested timber and its labelling (including the individual labelling of oak, beech and ash products for export); ii) companies and individuals, who have made timber transactions; and iii) declarations of such transactions etc. Parties on both sides of transactions involving timber are required to provide information to the EGAIS from 1 July, 2015.¹⁰⁷

As of 1 July, 2015, all legal entities and entrepreneurs dealing in wood, are required to submit an online declaration of all transactions in the form of an electronic document with an electronic signature to *Rosleshoz*, the operator of EGAIS. The form of the document and the procedure are set out by the resolution of the Government of the Russian Federation of 06.01.2015 № 11. Failure to submit, late submission or the provision of deliberately false information entails, as of 1 January 2016, an administrative fine. For officials the fine is between 5,000 and 20,000 rubles; for persons engaged in entrepreneurial activities without forming a legal entity, between 7,000 and 25,000 rubles; and for legal entities, between 100,000 and 200,000 rubles.

In addition to these state measures, a number of national and international environmental organizations like WWF Russia and Greenpeace have been working to stop illegal logging in Russia. However, illegal logging still poses significant threat to forests and their biodiversity.

RECOMMENDED MEASURES TO REDUCE ILLEGAL LOGGING

Reducing illegal logging requires effectively addressing macroeconomic challenges beyond the forest sector, especially the problems of unemployment and low incomes in rural areas.¹⁰⁸ A number of steps can be taken, however, to help improve enforcement and make progress towards halting the destruction of Russia's remarkable forest heritage:

- Establish a public council under the auspices of the Government of Russia that works with the active participation of a coalition of leading environmental organizations and that has the authority to monitor and control forest management.
- Maximize the openness and transparency of forest legal documentation as well as information about obtaining the right to use and manage forest resources. Make this information public and freely available on the Internet and ensure the active involvement of environmental organizations and local communities. The information should include forest plans for each administrative territory of the Russian Federation, public consultations regarding the plans, forest management regulations for all forests across the country and a list of all logging sites that are in use, with geo-referenced borders.
- Promote public participation in the allocation of forest rights (rent, gratuitous uses, sales contracts, etc.) and public supervision and control of the execution of these decisions.
- Register in a 'cadastre' (state property registration system) all the country's forests, especially forests with mercantile timber and those with valuable tree species.
- Develop a state-operated e-governance accounting system for timber.
- Increase the number and powers of the state forest protection service. Ensure constant patrolling of forests that are particularly attractive to illegal loggers.
- Encourage the spread of independent forest certification systems (FSC, PEFC and others).
- Prohibit logging, and leasing of timber properties for logging, in 'specially protected forests', for example, in pine-nut harvesting and hunting zones, nut and berry forest plantations, etc.
- Prohibit residents from selling timber harvested for their own needs.
- Promote expanded cooperation with customs authorities in countries bordering the Russian Federation.

NOTES

1. (Federal Statistical Service, 2015)
2. (Moscow State Forest University, 2014)
3. (FAO, 2012)
4. (FAO, 2012)
5. (Federal Forestry Agency, 2013a)
6. (FAO, 2012)
7. (Davydov, 2013)
8. (Tks.ru, 2014)
9. (Federal Forestry Agency, 2013a)
10. Panfilov, 2014
11. Federal Forestry Agency, 2015)
12. (Office of the Prosecutor General, 2014)
13. (Federal Forestry Agency, 2013b)
14. (Government of the Russian Federation, 2014)
15. (RIA Novosti, 2013b)
16. (Office of the President of Russia, 2013)
17. (FAO, 2012)
18. (Yaroshenko, 2013)
19. The percentage range was calculated from estimated range of illegal harvest of 59-117 million m³.
20. These include the Republic of Buryatia, Irkutsk and Amur oblasts, Transbaikalia, Krasnoyarsk, Khabarovsk and Primorsky Krai, and the Jewish Autonomous oblast. In the border areas of the Northwestern Federal District corruption and illegal logging has developed mostly in the Republic of Karelia and Leningrad oblast, as well as in Pskov, Novgorod and Vologda oblasts.
21. (RIA Prima-Media, 2013)
22. (Ragnum, 2011)
23. (Kryazhev, 2013)
24. (Newell, 2004: 111-112)
25. (WWF Russia, undated)
26. (RIA Prima-Media, 2013)
27. (Kozhin, 2014)
28. (Centre of Forestry Economics, 2013)
29. (WWF Russia, 2013)
30. (Ministry of Interior, 2013)
31. (RIA Novosti, 2013a)
32. (WWF Russia, 2013)
33. (WWF Russia, 2013)
34. (Polpred.com, 2014)
35. (Galichanin, 2008)
36. (TV2, 2013)
37. (Nash Krasnoyarsky krai, 2013)
38. (Bogdanov, 2013)
39. State Nature Preserve (Galitskih, 2012)
40. (o7KBR.ru, 2013)
41. (Popova, 2013)
42. (Dmitrieva, 2015)
43. (Dmitrieva, 2015)
44. (EIA, 2013)
45. (EIA, 2013)
46. Data from www.customs-info.com online information service platform, supervised by China Customs Information Center and operated by China Cuslink Company <http://www.haiguan.info/OnLineSearch/TradeStat/StatComSub.aspx?TID=1>
47. Data from Russia's Federal Customs Service <http://stat.customs.ru/apex/f?p=101:1:385514471278744::NO>
48. Data from Uljas system for the distribution of foreign trade statistics, operated by the Finnish Customs http://www.tulli.fi/en/finnish_customs/statistics/uljas/index.jsp
49. Data from Statistics Sweden <http://www.statistikdatabasen.scb.se/pxweb/en/>
50. Data of the Korea International Trade Association <http://global.kita.net/>
51. (ITTO, undated)
52. (ITTO, undated)
53. (OECD, 2012)
54. (Molodtsova, 2014)
55. (EIA, 2013)
56. (Lumber Liquidators, undated)
57. (EIA, 2013)
58. (EIA, 2013)
59. (FAO, 2012)
60. (UN, 2008)
61. (Palmer Charles E., undated)
62. (UN, 2008)
63. (Kotlobai, 2006)
64. (Turaev, undated)
65. (FAO, 2012)
66. (Olson and Dinerstein, 2002)
67. (CITES, 2015)
68. (Federal Forestry Agency, 2011)
69. (Smirnov et al., 2013)
70. Comparison of annual logging permits for Mongolian oak in 2010 in Primorsky and Khabarovsk Krai (0.45 million m³) with the data on its exports (0.9 million m³), shows that at least 50% of the oak was illegally harvested. In 2007 and 2008 the volume of oak timber exports, 1.7 million m³, was 4 times higher than the annual logging permit, indicating that 75% of the timber was smuggled (Smirnov et al., 2013).
71. (Domnysheva, 2013)
72. (Evplanov, 2013)
73. (EIA, 2013)
74. (Kabanets et al., 2013)
75. (Lesonline, 2013)
76. (Zoofirma.ru, undated)
77. (Teplokot.ru, 2013)
78. (Federal Forestry Agency, 2013a; Salova, 2015)
79. (Vandysheva, 2014)
80. (Utrov, undated)
81. (Kirillov, 2007)
82. (Vladimirov, 2014)
83. (Office of the President of Russia, 2013)
84. (Federal State Statistics Service, 2015b)
85. (Buksman, 2013)
86. (Petrinin, 2014)
87. (Putin, 2013)
88. (Buksman, 2013)
89. (Office of the Prosecutor General, 2014)
90. (Prosecutor General's Office, 2014)
91. (Office of the President of Russia, 2013)
92. (Nuus.ru, 2014)
93. (Forest Sector Development Strategy, 2008)
94. (Office of the President of Russia, 2013)

ABBREVIATIONS

- 95. Data from Russia's Federal Statistical Service www.gks.ru/free_doc/new_site/population/trud/obsled/tab1.xls
- 96. Data from ConsultantPlus legal reference system <http://www.consultant.ru/law/ref/stavki/soc-sfera/mrot/>
- 97. (Office of the State Prosecutor of the Irkutsk oblast, 2012)
- 98. (Yaroshenko, 2010)
- 99. (Kashin, 2015)
- 100. Some inputs to this section were kindly provided by A. Sukhareno, director of the Research Center on New Challenges to the National Security of the Russian Federation, Vladivostok.
- 101. (Government of the Russian Federation, 2013)
- 102. (WWF Russia, 2013)
- 103. (Donskoy, 2013)
- 104. (Federal Forestry Agency, 2013a)
- 105. (Government of the Russian Federation, 2012a)
- 106. (Molodtsova, 2014)
- 107. (Government of the Russian Federation, 2012b)
- 108. (FAO, 2012)

EGAIS	Uniform State Automated Information System
EIA	Environmental Investigation Agency
FAO	Food and Agriculture Organization
FMU	Forest Management Unit
FSC	Forest Stewardship Council
HS	Harmonized System code
ITTO	International Tropical Timber Organization
PEFC	Programme for the Endorsement of Forest Certification
RWE	Roundwood equivalent
WWF	World Wildlife Fund
CITES	The Convention on International Trade in Endangered Species of Wild Fauna and Flora
CSERGE	The Centre for Social and Economic Research on the Global Environment
GDP	Gross Domestic Product
UNEP	United Nations Environment Programme

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ENVIRONMENTAL CRIME SERIES **ENVIRONMENTAL CRIME SERIES** **ENVIRONMENTAL CRIME SERIES**

Russia possesses enormous forest resources (over 83 billion m³), representing a quarter of the world's timber reserves. The annual environmentally sustainable amount of logging is over 650 million m³, of which less than a third is actually harvested. For Russia, illegal logging and forest crime result in enormous monetary losses from the state budget. While there has been a reduction in the amount of illegal logging in 36 regions of the Russian Federation, illegal logging has increased in 44 other regions. The most critical areas remain in the regions of Siberia and the Far East. This report reveals the scale of illegal logging in Russia based on the best available, most up-to-date, expert data.

