

IMPLICATIONS FOR FORESTS AND LIVELIHOODS

中国与亚太地区国家林产品贸易研究

SIBERIAN AND
RUSSIAN FAR EAST
TIMBER FOR CHINA

LEGAL AND ILLEGAL PATHWAYS,
PLAYERS, AND TRENDS

ANATOLY LEBEDEV









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SIBERIAN AND RUSSIAN FAR EAST TIMBER FOR CHINA:

LEGAL AND ILLEGAL PATHWAYS, PLAYERS, AND TRENDS

by Anatoly Lebedev

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BACKGROUND: VALUE OF SIBERIAN AND RUSSIAN FAR EASTERN FORESTS AND REVIVAL OF TIMBER PRODUCTION IN THEM

The preservation and sustainable use of Siberian and Russian Far East (RFE) forests is of global importance for a number of reasons. Yet, these forests, which are the traditional environments of many endangered species and indigenous tribes, are now supplying timber to nearby regions and countries that have largely destroyed their own forests. The vast forests of Asian Russia act as reservoirs for one-seventh of the global carbon pool. Russia holds 75 percent of the carbon stored by all of the world's boreal forests; thus, deforestation is the second largest source of carbon dioxide emissions, after fossil fuel combustion, in Russia, as it is worldwide. Properly conserved, Russian forests act as a critical green "lung" for the Earth, second only to Brazil's Amazon. The atmospheric carbon sink process, however, occurs much more slowly in the taiga than in the tropical rainforest as does the process of carbon exportation from organic changes. As a result, this source of carbon storage will also be more slowly restored to its initial function after broad-scale commercial logging or forest fires than in tropical forests.

All across Russia, the collapse of timber production in the 1990s and the desire to achieve the level of volumes extracted during the Soviet period have led to a revival in domestic timber production over the past five years. In the RFE's Primorye Krai (Province), for example, roundwood production rose from 2.2 million cubic meters in 1998 to 3.3 million cubic meters in 2002 and to 3.7 million cubic meters in 2003 and seems to be increasing further under the pressure of growing Chinese and domestic demand. The same trend exists in Khabarovski Krai. Its roundwood production grew from 5 million cubic meters in 1999 to approximately 6.5 million cubic meters in 2002. In both Krais there is a clear trend towards harvesting in formerly reserved, inaccessible or roadless areas. Not only, then, is the industry launching a sort of "last attack" on formerly used, exhausted and burnt forests, it is also aggressively pursuing the intact ones, which are already suffering from illegal operations. Expansion of logging and processing capacity over the last 3 to 4 years has lacked a new and improved strategy and has left the remaining commercially available forests in a poor condition and has led to a constant reduction of timber quality and price.

INDUSTRY STRUCTURE, EXPORT COMPOSITION, AND DRIVERS OF EXPORTS TO CHINA

Before the industry crashed in 1992, the forest sector in Siberia and the RFE was much more balanced. Roundwood output comprised 40 percent of total production, wood-processing made up 41 percent and pulp and paper production 16 percent. At that time almost half of all wood products were used within the region, while one quarter was sent to other regions of the Soviet Union and 30 percent was exported internationally.

Although the timber industry in the RFE and Siberia has demonstrated a significant and positive trend in developing new sawmills at the middle size timber depots over the last 5 years, the industry primarily continues to live off of raw log exports. Even former large-scale sawmills have turned themselves into logging companies, seemingly having no choice but to export logs or, at best, simple boards. In 2000, the ratio of log exports to total timber product exports (by volume) rose to 90 percent for the RFE and Siberia. Since then, however, the ratio has been decreasing slowly, mainly as exports of pulp and wood

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chips from Siberia have begun to grow more significantly. During the 1990s, about 68 percent of forest product exports from the RFE and Siberia went to Japan and about 25 percent went to China. Japan's primary exporter role seemed quite stable in the 1990s; in 2000, however, it ranked second behind China.

Russian forests are directly affected by Asia's demand for particular species. For example, Japanese and Chinese companies prize ash for housing construction. The increasing demand has led to illegal logging of ash along protected river basins, as well as general overlogging in some regions of high conservation value, which were formerly logged for coniferous production only. A growing part of this raw hardwood flow is goes to Japan via China, where it is first processed into lumber, thus earning added value. Additionally, plywood manufacturers in both consuming countries have shifted preference from tropical luan to Russian larch. This change in the market will most likely lead to long-term damage of the fragile permafrost of the RFE's and Siberia's forests. Overall, the main species of Russian timber exported to China are two types of softwood – larch and Mongolian scotch pine – although some other pine species (including Korean pine, a legally restricted and high-valued species of the RFE) are also important in this trade. Oak and birch are the main hardwood species which China officially imports from Russia, as identified by the international custom code system. This system, however, unfortunately puts one of the most popular species, ash timber, in the category of "other hardwoods", complicating the analysis significantly, given that ash is the most popular target for illegal loggers.

Indeed, the fact that ash is not tracked as a separate species in Russian customs statistics has caused problems in monitoring hardwood exports. A similar problem applies to the case of Korean pine. RFE customs departments, however, have now organized separate calculations for both as a result of pressure from the administration. Another part of the problem is that there are very few customs specialists capable of checking and identifying as h and oak in a pile of logs on a train or truck. Therefore, customs data about hardwoods, either Russian or Chinese, may not be considered reliable enough. According to Russian data, for example, Primorye Customs exported about 490,000 cubic meters of hardwood in 2000, although Chinese customs data cites only 443,000 for total hardwood imports from this province. If one considers at different sources in both countries, the the discrepancy becomes even more shocking. Investigation of small gateways in the RFE, like Heihe (only 1,800 cubic meters) or Tongjiang (only 349 cubic meters) did not account for the 50,000 cubic meter discrepancy. A possible explanation is that hardwood can be exported from Russia and imported to China as pulpwood or other species; or the product might have entered without any control and documentation, via small remote border points on the Amur River. According to some unverified sources, such border points – located mainly in nonsettled areas around provincial borders, like Pashkovo-Sagibovo on the Russian side - have become the place of small-scale local logging and smuggling.

Siberia and the RFE are major external timber suppliers to China. Both have ranked among the top three of Russia's China-supplying regions and countries since the 1980s, and in recent years ranked first and second on this list. There are several reasons for a significant increase in exports from these regions. First, much of the Russian timber extracted from natural forests has better quality and larger diameters (most over 24 cm) than that found in China. Second, the price of Russian timber is lower than that of Chinese domestic timber for similar species and specifications, since Chinese wholesalers are successful in purchasing logs just next to Russian logging sites, on the first link of the chain of custody. Third, resources for good-quality hardwood for decoration, such as Manchurian ash and Mongolian oak are nearly exhausted in Northeast China, and Russian timber is a very good alternative. Fourth, China and Russia are neighbors and therefore suited for border trade, and 90 to 95 percent of the timber trade

between China and Russia has occurred through land gateways in recent years. Fifth, starting in 1996, the Chinese Government reduced the customs tariff and import tax policy for small border trade deals by 50%. Importers benefited in that they only had to pay half of the value added tax (VAT) (customs tariffs for logs and sawnwood had already been reduced to zero) when importing from Russia. This policy seems to have been continued. Finally, a requirement in the Russian customs procedure to show documentation of timber's origin was recently cancelled, opening a broad gate for relatively cheap illegal timber to enter China from certain border areas.

Another positive driver of the timber trade with China has been the fact that provincial Chinese governments established free economic zones around the most actively developing border gates to Russia. Suifenhe, in Heilongjiang Province, was the first one. It was officially established in 1999 and turned from a poor village into a prosperous city in under 7 years. In 1992, it had only a couple of dirty hotels. Now it has 58 hotels. Any Russian may go to Suifenhe now and establish a trading business without being charged taxes or fees. Another such initiative has already been announced by Jilin Province, which has been planning to create a similar zone around Hunchun since 2000. Hunchun is connected with Kraskino in Primorye Krai by rail and road and is the main ethnic Korean community in Northeast China. There are also plans to make Hulin in China's Inner Mongolia and opposite Markovo-Lesozavodsk a "second Suifenhe." Finally, as the mayor of Heihe Hu (Heilongjiang Province) announced in January of 2004 in Russia's Blagoveschensk, a free trade zone was opened in Heihe Hu on January 16, 2004. The zone offers visa-free entry for Russians aiming to start their business here and provides them with a full set of privileges.

Trends in China's overall forest product imports reflect both high overall growth and a drive towards lower value-added timber product imports, which in turn make up a high proportion of the log exports of Russia's forest product exports to China. By 2002, logs and lumber dominated China's timber imports, making up 85 percent and 80 percent of China's total timber import by volume and value, respectively. Between 1997 and 2003, China's overall log imports increased by over 5 times, growing from 4.5 to 25.5 million cubic meters, while imports of lumber grew at a similar pace, from 1.3 million cubic meters to 5.5 million cubic meters (Sun et al. 2004). Despite its enormous size, China has not traditionally been a large per capita consumer of forest products. As the nation's economy continues to expand and affluence increases, however, per capita consumption of both solid wood (primarily for flooring, interior fixtures and furniture) and pulp and paper products (packaging, and printing and writing papers) is expected to continue to increase.

By focusing on raw log exports, however, Russian timber companies are also speeding up logging and are faced with a growing scarcity of accessible stands. This has forced companies to develop resources in the roadless wilderness. This is not only environmentally destructive for the remaining intact forests, but is also economically unstable. When Japanese buyers failed to maintain purchase levels during the Asian financial crisis, local officials began reviving their timber processing in order to sell finished value-added wood products and ensure sustainable revenues. They have not, however, reduced logging volumes; instead they are continuing to open new areas for lease. In effect, the more new sawmills are opened, the larger the demand for raw timber. Rather than effecting a change in industry structure, the turn to processing simply expands the overall raw wood market.

Another trend in China's forest product imports that may be affecting Russian exports is the issue of hardwood imports. While China's imports of softwood logs jumped by 15 times from merely 930,000

cubic meters in 1997 to 15.8 million cubic meters in 2002, imports of hardwood logs increased by only 2.5 times: from 3.5 million cubic meters in 1997 to 8.6 million cubic meters in 2002. China's imports of tropical hardwood logs showed steady growth from 1997 to 2001, but dropped by 17 percent from 2001 to 2002, partially driven by export bans in major supplying countries, including Indonesia and Cameroon, and indicating a shift from tropical to temperate hardwood products (Sun et al. 2004). While most Chinese sawmills tend to be small enterprises that produce custom products for highly localized markets, this shift generally turned the eyes of consumers in Central China to Russian ash and oak, which have become very popular over the last 5 years on the timber exchanges of Northeast China, such as Suifenhe, Heihe, Harbin and Fuyuan. As a result, the volume of the highly expensive hardwood from Russia jumped substantially between 2001 and 2002. In addition, some analysts estimate that at least half of this expensive timber was logged illegally or with inappropriate documents or methods.

As in the Japanese market, however, Russian timber is not always well received in China. One leading log export company complained, "The Chinese, like the Japanese, are always re-scaling shipments at the border and almost always file claims." Part of the problem is the fact that scaling systems are different in China and Russia, but it is also clear that the Chinese market is generally driven by price, rather than by high quality.

Another strong driver for Russian exports to China is the fact that in the late 1990s the Chinese Government banned or drastically limited the harvest of conifer in its over-logged northeast. Since the implementation of these logging restrictions, it has also launched an aggressive new housing program, which has increased demand for industrial wood, interior mouldings and millwork, and interior furnishings. Heilongjiang Province, bordering Russia, has established substantial capacity in new timber processing enterprises, representing more than 600,000 cubic meters of additional annual processing capacity. As a result, more than 2 million new processing jobs were created in this province during the late 1990s, depending to a large extent on raw logs coming from the frontier forests of Siberia and the RFE.

China's increasing role in transshipment is also impacting Russian exports. To speed up the handling of timber crossing the border, the Heilongjiang provincial government recently announced its intention to create a new railroad link from Suifenhe straight southwest to Dalyan. The railroad will be located along the Russian and Korean borders – across the leopard habitat and Changbaishan Preserve. Thus, it will be possible to move the best Russian raw logs from the Suifenhe exchange straight to the Dalyan shipping port and on to the Asia-Pacific market at a much higher price without any effort in the area of processing. The net result is a significant change in the structure of the Pacific Rim conifer log market and by extension, the market for all forest products in the region. These changes include a significant decline in Russia's direct conifer log trade with Japan, as Japanese imports of forest products from China increase rapidly. They also include a shift in the type of conifer logs traded within the region and a move away from large diameter Douglas fir and white wood species toward pine (Radiata, Red and Korean) and larch. Other relevant forest product trends occurring in the region include the movement in traditional importing countries towards the import of primary processed products (lumber, pulp, panels) rather than logs due to the relatively high cost of primary processing in such countries and the growth of demand in non-Japanese markets, such as China, South Korea and Southeast Asia.

LOCAL COMMUNITY IMPACTS, LOGGING COMPANIES, ILLEGAL ACTIVITY AND CHINESE INVOLVEMENT

Across Siberia and the RFE, many timber companies now work in communities experiencing oppressive social and economic conditions. Some simultaneous trends – the opening of Asian markets, privatization, legislative problems and increasing illegal activity – have forced many large, formerly state-owned logging companies to cut back on production and lay off workers. Many of the laid-off workers have started their own private logging firms with old and hardy military loading and transport equipment, which was available at very low prices after the Russian disarmament. There are now three to five times as many logging companies operating in the region as during Soviet times. In addition, an uncountable number of unregistered small brigades supply illegal timber to the market under the corrupted system of state control. Using handmade equipment, these small businesses profit by logging and trading timber illegally or through the use of fake documents, which is increasingly associated with trade flows to China.

Trends in the industry have generally had negative livelihood implications for Russian loggers, although some improvements have been seen recently. According to some, Russian loggers are often forced to work under very poor conditions and in some cases illegal or semi-legal Chinese immigrants act as their new bosses with a lot of smug gled cash from homeland partners. In the 1990s, logging brigades earned only 18 rubles, or 75 cents, per cubic meter logged. Each brigade member, then, received an average of less than 10 cents per cubic meter logged. The truck driver who transported the logs 40 kilometers away received 7 rubles (or about 25 cents) per cubic meter, while the wood itself would be sold to China or Japan for US\$100 per cubic meter. Loggers continued to work for such petty wages, because no other job opportunities existed for them. Since 2000, as processing has experienced a boom and Chinese operations in Russia have become more legal (also increasing employment opportunities), however, the incomes of regular loggers have increased. More and more of them have collected enough money to move from the forest area to the cities; they have purchased apartments there, are able to afford appropriate education of their children and are enjoying a higher standard of life. Some of them, being perfectly aware of the environmental concerns associated with illegal logging and being professionals in the field themselves, have gotten involved in anti-poaching activities, for example in Primorye. As far as livelihoods in forest settlements are concerned, these trends demonstrate that the illegal logging activities by many community members can in some ways be considered an unavoidable phenomenon in the transition of the local economy. That is to say, their activity, in the absence of other livelihood options, rather than being considered illegal, might be viewed as appropriate exercise of their basic constitutional rights to the resources in the area they inhabit during a time of ineffective governance and forest management.

Production of sawnwood and other finished wood products could theoretically provide jobs to local Siberian and RFE communities, as well as yield more income per tree and reduce waste. Logging managers, however, have been spoiled with easy cash revenues from Chinese wholesalers. As a result, workers have lost their processing skills and equipment has turned into scrap, shifting dreams of a "processing paradise" to China, with its greater population and cheaper labor. Thus, timber companies export raw logs instead of investing in processing, offering few benefits for local communities.

The new century has brought new dynamics to this complex market system, with greater Chinese incountry involvement becoming a relevant issue to Russian livelihoods. More Chinese have begun to stay on illegally in Russia for the long-term, and now serve as cheap and efficient labor in small timber businesses on the Russian side of the border, namely those with 100 percent Chinese ownership. Such

Chinese timber businesses developed a very sustainable position from 2000 to 2003, first in the illegal, and now also in legal, timber economy of the Russian Far East.

Lack of funding for the Forest Service – along with officially permitted opportunities for staff to enrich themselves by confiscating illegally cut timber – has led to extraordinary corruption throughout the Forest Service. More recently, since 2002, forest service and law enforcement agencies are no longer able to enrich themselves by selling sequestered timber since now the government requires that all sequestered timber be sold as state property, so that nothing reverts to Forest Service entities. Nobody, however, has succeeded in stopping bribes, which are now replacing the loss in sequestered timber income of foresters and militia. Too many officials, both Russian and Chinese, are involved with illegal logging and sales of illegal timber for the system to be easily corrected. Thus, the Ministry of Economy and Trade's efforts in early 2004 to propose a new Forest Code which would deliver all authority for forest maintenance to commercial leasers has created great worry amongst analysts. Some worry that in the end, the most valuable national forests in the RFE will come under Chinese logging control.

Most deals with illegal timber are done much before any checking is carried out, taking place just between the logging site and the first wholesale storage, where illegally cut logs are dissolved in legal consignments and protected by local officials. Officials and perpetrators share all of the criminal revenues with each other, turning illegal operations into a planned system and feeding municipal power. The key player in this huge and constantly increasing off-budget industry is the local forest station specialist: pressed between private interests of the local, regional and federal bosses, in fear of the most brutal logging gangsters, and restrained by his own honesty and the law. Most of them yield to these pressures. They are betrayed by giant private cottages and expensive jeeps in poor villages. The monthly salary of foresters is not more than US\$80—a clear demonstration of the total victory scored by timber market demand over any rules and environmental efforts.

Trends in Chinese involvement in Russia's forest sector merit further attention. The border between China and Russia extends approximately 2,000 miles, from southwestern Primorsky Krai in the Russian Far East to Chita and Altai Krais in East Siberia. Along this expanse, dozens of border crossings allow the export of logs to China by rail and truck. As indicated, some Chinese companies have moved beyond merely trading to investing directly in logging operations in Siberia and the RFE. Such involvement is not limited to areas bordering China directly, but extends westward along the Mongolian border through South Siberia and even to Kazahkstan. Officials in Siberia's Altai Republic some years ago concluded a deal with China to barter Russian timber for Chinese cotton and they are considering leasing additional forests to Chinese logging operations. A proposed road to facilitate this exchange would open huge areas of pristine wilderness to timber operations and other forms of resource extraction.

According to officials and those in industry, Chinese timber brokers are moving aggressively into the RFE and many of them are working illegally. In a letter to Primorsky's governor, the Russian Federal Immigration Service, wrote: "After inspection, we found that in the Lesozavodskii and Dalnerechenskii Districts, 71 Chinese residents are involved in timber wholesaling and export to China. They come to Russia with the S series business passport. They themselves arrange expert assessment of timber quality and value and accompany the timber back to China. All of this goes on, even though they have no right to work in Russia (April 21, 1999)." Since that time, some Chinese have succeeded in getting full legal rights to live and work in Russia, using the capital made in the timber business to purchase such rights. Some specialists have indicated that there are up to 1.5 million illegal Chinese immigrants currently in the

Russian Far East. Chinese migration to Russia has been substantial and can be said to be a result of China's own high population, now over 1.2 billion. The population of China's northeast outnumbers the population of the RFE by about 10 to 1.

Fyodor Kronikovski, a local activist based in Krasnoarmeiskii Municipal District of Primorye Krai has provided information on Chinese involvement in his district. According to him, about 50 Chinese are officially registered in the district now, working at four private, Chinese-owned sawmills as follows:

- Klemba in Novopokrovka 15 people
- Xinda in Novopokrovka 21 people
- Trofimov in Romny 7 people
- Leader in Boguslavetz 7 people.

All these people have tourist or commercial visas, which are extended on an annual basis. Only two of them have official permits to work – the head of Xinda and the head of Trofimov. This situation is a result of the complicated and expensive procedure for getting a work permit as compared to the more simple procedures for obtaining commercial and tourist visas. All of the production of the above-listed sawmills, as with most Russian ones, is bound for China. The process timber purchased mainly from illegal loggers, with a higher proportion of legal timber being bound for Japan. District leaders, law enforcement agencies and businessmen all benefit personally from the illegal purchases. As a result, multiple efforts to stop illegal procedures, such as complicated checking procedures or special road checking points, have failed.

Besides the aforementioned, there are around 140 additional Chinese citizens working in the district on a long-term basis and involved in logging in the area, capable together of producing up to 1 million cubic meters of tim ber annually. 15 to 20 of them are based in Roschino, 10 to 15 in Glubinnoye, 10 to 15 in Boguslavetz, 10 in Taborovo, 10 to 15 in Izmailikha, 30 in Novopokrovka and 50 in the rest of the district. Their number is constantly increasing; and their influence penetrates all municipal institutions, including the administration and militia. To come to the area, Chinese citizens arrange for tourist visas in Khabarovsk, but such "tourists" get off the train at Dalnerechensk station to get to Krasnoarmeiskii District. In Krasnoarmeiskii District, they then join their colleagues, working in a sawmill or get involved in wildlife and timber poaching and smuggling there. Sooner or later, they might buy a house or apartment with the help of new Russian friends and become regular Russian citizens. To get a passport and thus full citizenship then becomes only a matter of price. Regular inspection of Chinese ventures in recent years has become merely a formal procedure, since the key goal of militia or immigration inspectors is to get as much money through fines and penalties as possible. Therefore, they extend the immigration permits for the Chinese workers.

Particularly worrisome, Chinese organized crime is using the wave of demographic expansion to develop operations in Russia. There are three major reasons for this trend: (1) the Chinese government's crackdown on crime syndicates in general and Chinese triads in particular, which has forced them to shift some activities abroad; (2) potentially high profitability for these groups in the RFE where a wild market reigns; and (3) the ineffectiveness of Russian law enforcement agencies in stopping them. Chinese organized crime groups have managed to peacefully carve out spheres of influence within the Russian Mafia. Chinese gangs prey on and shadow legal Chinese immigrants' businesses in the RFE, while their Russian colleagues hold a tight grip on local entrepreneurs, having aspirations to move all their financial

take out to the Canary Islands, Cyprus, or New Zealand – the further the better. China's retired generals and secret service agents are becoming increasingly involved in Chinese legal and illegal activities in the RFE. These agents are actively engaged in buying properties and hiring illegal labor. They control Chinese businesses working in such areas as trepang processing, wild herb processing, and log and lumber exports.

Many Chinese operators control wholesale timber yards in Primorsky Krai's cities of Luchegorsk, Dalnerechensk, Lesozavodsk, Ussuriisk, Nakhodka and Dalnegorsk, as well as in Khabarovsky Krai and the Jewish Autonomous, Amur and Chita Oblasts. In addition, many Chinese control export firms. These are listed under false names and aliases, allowing them to hide cash operations. According to Alexander Fomenko, a high level officer of the Department for Fighting Organized Crime (UBOP), the department has much of the necessary data and documents to testify that Chinese organized crime groups (*triades*) not only control this timber business, but are also connected with Japanese organized crime groups (*yakudza*) on the other side of the custody chain.

In the most popular illegal export model, exporters label high-quality timber as "pulp logs," in order to reduce the official contract price. This strategy is meant to hide company profit on the Russian side and thereby reduce the profit tax the company must pay to Russia. On the Chinese side, the importer or wholesaler may reject the timber due to poor quality, forcing the Russian supplier to reduce the price.

REGULATIONS AND THEIR IMPLEMENTATION

Rules for Timber Transport

As an example of regulations for timber transport in the RFE, the current transport rules in Primorye Krai (issued by the Primorsky Department of Militia on September 26, 2001, in item #1568) are given below:

Any commercial company or individual entrepreneur, organizing timber transportation within the territory, must have the following basic documents:

- Transporting license
- Order
- Waybill, specifying logging license number and date
- Checking document, including truck number, name of driver and destination (destination not required in the case of firewood)
- When a truck transports raw logs of hardwood (ash, oak, elm) or Korean pine from the logging site, the driver should be ready to present the following additional documents provided initially by the forest station (leskhoz)
- Copy of intermediate timber checking document (not needed for other tree species)
- Copy of logging license with hologram

An exception is small batches of timber for local community members, which are delivered by special order of the leskhoz that contains the volume of transported timber and the date of transport.

If the transported timber (aside from hardwood and Korean pine) was purchased, the following documents are required:

- Waybill, specifying date of loading, logging license number, truck number, name of driver, and destination (destination not required for firewood)
- Copy of invoice, confirmed by the seller, or receipt of cashier, confirming payment
- Waybill for timber delivery from seller
- Copy of trade contract, if relevant
- Copy of logging license, confirmed by the forest station (leskhoz), if the timber is taken directly from logging site (required only for hardwood and Korean pine)

For transported timber that has been sequestered by the leskhoz:

- Waybill for timber delivery (not required for firewood)
- Confirmed (stamped) copy of any document, confirming timber sequestration and involved leskhoz
- Waybill for timber delivery to seller
- Copy of invoice, confirmed by the seller, or receipt of cashier, confirming payment
- Copy of trade contract for sequestered timber.

If state forest inspection officials accompany the truck transporting sequ estered timber to the point of storage, there is no need to have the first, third and fourth documents listed directly above. In such cases, any document, prepared by the forest inspector and providing his name, the truck number, date, time and destination may be shown. All the documents listed should be registered and confirmed specifically by the leskhoz.

Rules for Control of Timber at Checkpoints of By Mobile Inspection Groups

The following rules apply to timber control at checkpoints or by mobile inspection groups in Primorsky Krai:

When timber crosses control points, traffic and/or forest inspectors will mark the copy of the logging license with the:

- location of the checkpoint
- date of crossing the checkpoint
- name and signature of inspector

Both traffic control inspectors at stationary checkpoints as well as mobile inspectors should enter all data relating to the inspection in the appropriate log book.

Administrative arrest of a truck carrying hardwood or Korean pine raw logs will occur in the cases of:

- obvious signs of forgery in above-listed and other documents
- information on illegal logging operations and timber trade associated with the shipment
- confirmed misrepresentation of property, volume or species
- absence of the required documents.

Remarkably, the regulations require that, if the shipment involves illegal timber operations, the inspector must make an urgent decision on its sale. That is to say, the inspector of the militia or leskhoz must choose an entrusted timber exporting company to sell the sequestered timber, usually to the same Chinese consumer as originally intentioned. As a result, a perfectly efficient illegal junction between inspecting officials, illegal loggers, entrepreneurs and municipal authorities is created.

Customs Procedure for Timber Export from Primorsky

Primorye customs procedure, based on federal rules, requires that exporters present notification of their timber consignment to the territorially appropriate customs point at least 10 days before they plan to submit their customs declaration. This notification should be both registered at the relevant customs point and then presented to the appropriate militia office for checking on the legality of the timber source and documents. Militia experts are to check for agreement of holograms and initial registration logging licenses in the leskhoz, as well as similarity of volumes, sorts of species, export prices etc. After such checking, the militia is to deliver the resulting receipt to the exporter and should also register results in a special logbook. When making these entries, inspectors should compare data in the documents and logs for each consignment and review the expert evaluations of species, etc. If necessary, inspectors can conduct selective species checks in a certain consignment, involving experts from other organizations certified by the Chamber of Commerce or from the special partnership, the Timber Tech Center. Naturally, such checking should be conducted at the timber depot or shipping terminal.

When the exporter comes to the customs point, he should have the following documents to declare his consignment:

- militia's inspection receipt
- expert timber checking document from the Chamber of Commerce
- number of trade contracts and a copy of logging license (if hardwood is to be exported by a middleman)
- document indicating volume and sort, number of banking order, and destination stamped and signed by both trade partners

This complicated system of checking, stamping, re-checking, and signing by different agencies seems to be perfect enough to guarantee that illegal logging and smuggling of timber do not occur. There is, however, one more necessary condition, which can make the system senseless if it is not followed. All the players, from the logger and wholesaler through to the militia, foresters and customs officers must respect and comply with laws and regulations. It only takes one corrupt and bribable person in the chain of inspectors to open a broad space for smuggling, in which all the documents may be perfect but either fake or having no relation to the real timber consignment. So, to develop realistic estimates of timber export volumes, one needs to conduct more or less constant independent field reviews with free access to all involved documents and one will also need the skills to identify the most typical violations, such as declaring inaccurate volumes, sorts and species to hide the real profit resulting from the contract. Another major stumbling block in freeing this process from corruption might result if Russia enters the WTO. According to the Russian government's strategy, customs officials would then no longer have the right to check any documents regarding the source of timber. As a result, one will be able to easily export whatever illegal pile of timber is purchased from loggers. At the same time, administrative reform

undertaken in 2004 has tended to significantly reduce the role of state forest and environmental inspections in timber export control.

Implementation Issues and Ineffective Regulations

On paper, Russian rules regarding logging methods are extremely strict. Yet due to corruption within the Forest Service, municipal administrations and the militia, timber companies can easily circumvent all of these rules. As a result, illegal logging has become common and widespread. As evidenced by documented logging in nature reserves, game preserves, and "Group I" forests – the most strictly environmentally protected amongst all three groups of Russia's commercially available forests – logging rules are routinely ignored.

At the same time, Russian forestry legislation does not really provide for sustainable forest use, and, in many cases, even restricts it. For instance, the assessment process of forest inventory for commercial stock in the RFE includes forests with a standing stock of over 50 cubic meters per hectare, although in practice logging companies need to be working in areas with a standing stock of at least 80 to 100 cubic meters per hectare to achieve economically reasonable and sustainable operations. There is also a significant amount of highly fragmented, burnt and unaccessible forest included in forest inventory data, creating the myth of forest-rich territory even in times of deep resource exhaustion. In practice, forest inventory formulas often justify annual allowable cuts which exceed realistic and sustainable estimates by more than 2 times. The new logging rules of the RFE, put into practice in the middle of 2000, increased the minimum size requirements for trees to be cut and thus reduced the annual allowable cut.

Since the government began depriving municipal administrations, forest inspection bodies and militia from keeping a part of the revenue from sequestered timber, illegal logging control has actually weakened. At the same time the hardening of some other measures has not delivered results. In one such measure in Primorye, for example, the government reduced the number of legal wholesale timber depots from about 100 to 17 in 2002 and curtailed the use of non-transparent coal railcars for log transport, so that consignments would be visible for a second inspection at the border. They also reduced the number of custom points available for timber export and created a special commission for regular checking at these points. They further added the requirement that timber transfer certifications, containing all of the information on the consignment and trade, be made available from the logging site through the entire chain of custody. They strengthened control and tried to stop and sequester equipment from private logging, trailing and timber transfer facilities. The certification requirement, however, was cancelled as illegal in terms of the Civil Code; and all sequestered equipment and vehicles were returned to the illegal loggers by prosecutors and judges who are also all dependent on money gained from the illegal timber trade.

Most governmental efforts to control illegal activities seem to be stymied by a number of other problems. Underlying all of these problems is the current "Wild East" or "frontier" mentality in the RFE and Siberia, which means that citizens, totally free for centuries to get whatever they want from the vast taiga, routinely ignore new market-oriented laws and regulations that reduce the level of their freedom. Further, the "soft capitalistic revolution" has forced people, including loggers, traders, militiamen, Forest Service staff, customs officials, border guards and even government officials, to fend for themselves. Indeed, controlling illegal logging and trade has proven to be extremely difficult due to the complicity of

government organizations charged with protecting forests. NGOs and journalists, in turn, have become the key groups in focusing the public eye on illegal logging and trade issues.

RUSSIAN-CHINESE GATEWAYS AND TIMBER FLOWS

There are three main gateways in the Russia-China timber trade, all of which are associated with land routes. Through the first gateway, the highest volume of timber is exported to China using the Chinese Eastern Railroad, which cuts directly across Manchuria from the Eastern Siberian border point of Zabaikalsk-Manzhouli. The route associated with the second gateway – through which the second highest volume of timber passes – runs from Naushki in Buryat Republic via Mongolia through to China's Erlianhot. The third main gateway is associated with a route running from Primorsky Krai's Grodekovo (the town of Pogranichnoye) to the Chinese city of Suifenhe, which is located just 100 kilometers from Russia's Ussuriisk, now a center for Russian-Chinese trade. According to official statistics, this last trade route handles 55 percent of all international trade between Heilongjiang Province and Russia. Together, these three routes are estimated to account for about 95 percent of all timber exported officially from Russia to China. Volumes on these routes have drastically increased in recent years, as a result of logging bans and reductions associated with China's Natural Forest Protection Program.

During the last few years, three more routes across the Amur River have demonstrated a substantial increase in timber exports. The first route is associated with the Blagoveschensk (Amur Oblast)-Heihe gateway, through which export volume grew from zero in 1997 to almost 100,000 cubic meters in 2000. Although there is no bridge or even railway ferry between the two countries, border trade is very active because rails connect Heihe on the Chinese side to the city of Qiqihar, where a significant part of this timber flow (37,446 cubic meters) was registered in 2000 by local customs. In 1999, the Sino-Russia Timber Trade Market was established in Heihe to facilitate increasing log imports. Covering an area of 17 ha, it is regarded as the largest timber market along the 4,000 km border between the two countries.

The second of these growing border passages for raw log export is located in Leninskoye Town of Jewish Autonomous Oblast (JAO) on the Russian side and two separate customs units in China, sharing a flow of about 47,000 cubic meters in 2000. The two Chinese towns, Tongjang (41,955 cubic meters) and Fujin (3,267 cubic meters), like Heihe, have a railroad connection to other centers of Heilongjiang Province. This is an obvious reason for the fast growth, based upon the timber from forest rich areas of Amur Oblast...

The last of these expanding routes with a comparatively large flow of RFE raw logs runs from Khabarovsk to the gateway of Fuyuan on Chinese side. This flow also meets the Chinese railroad near the border, which has helped to develop this area and increase timber imports from 6,500 in 1999 to 42,000 in 2000. The rest of the border gateways, however, require serious field investigation, since they are working almost out of state control and are reportedly open to any sort of illegal operations.

On the Russian shore of the lower Amur River, there are many small mooring points for shipping timber – Troitzkoye, Kiselevka, Tzimmermanovka, Yagodnoye, Yelabuga, Lidoga, Naihin, Komsomolsk, Mago etc. In 1999, these points exported in total about 50,000 cubic meters of raw logs. Traditionally, 40 percent of this timber headed downriver to Japan in the form of high-quality supplies, and the remaining 60 percent of lower-quality supplies went to South Korea. However, from 2000 to 2003, the flow from Nikolaevsk and Mago timber ports to China's Dalian port began to increase significantly, reflecting

increased quality pressure from the Japanese market and a serious trend in the Japanese Government to move the whole market towards FSC certification. In addition, some product is moved by river to upper Amur points in China (mainly Fujin or Tongjiang on the Sungari river). This product is generally out of real control and a better understanding of it would require special monitoring, such as periodic speedboat rides on the river in summertime or car rides in the winter. Checking this flow, however, is essential, since the biodiverse Sikhote-Alin forests are located right along the riverside of the lower Amur and are easily accessible to illegal operations thanks to their remote location, far from the main administrative facilities.

Besides all of the above mentioned border customs points and gateways, including the two indirect ones, China's coastal gateways also import some amount of timber from Russia. Timber entering China by port is mainly exported from the Russian ports of Vanino-Sovgavan, Nakhodka, Vladivostok, Posyet, De-Kastri and others having a large number of traditional and newly developed timber shipping terminals.

Moving beyond border gateways and evaluating more completely the flow of timber from its origin in Russia to its final destination is difficult. It is almost impossible to learn which complex set of incentives drives timber wholesalers either to re-sell Russian timber immediately to Japan via Dalyan port or to pass their consignment on to any domestic exchange in Harbin, Beijing or to more local lumber markets in the Northeast. It is also extremely difficult to separate locally logged timber from Primorye or Khabarovsk Krai and timber from Amur Oblast or Siberia, particularly when dealing with conifer softwood. Primorye, for example, produces 3.5 million cubic meters locally and exports about 5.1 cubic meters; even local exporters can never honestly say (and thus document) whether their timber came from any local district or was re-purchased from the foggy chain of custody. In addition, Chinese entrepreneurs operating in Primorye do not always sell their timber to China. Depending on the profit margins, their customer may instead be a direct Japanese consumer or any wholesalers working with the Japanese market. The system of Russian customs permits dealers to go through the customs procedure wherever they want all over the country, so it is possible to see timber from a Moscow-based company in Zabaikalsk or Grodekovo without knowing exactly where the timber came from and where the documents were prepared.

The Chinese and Russian customs systems consist of the larger, first-class offices, located in the main export/shipping points like Grodekovo and Harbin, Zabaikalsk and Manjouli, etc. The rest of the customs offices are located in the smaller Chinese towns or customs points (departments) in Russia. Sometimes, statistics may be presented by a smaller (second-class) customs office itself, or included into the umbrella reporting of the larger ones. For example, a large volume of logs passes through the gateway of Grodekovo-Suifenhe by railroad via the Grodekovo station; simultaneously, a number of trucks pass by another customs point on the highway, which supplies the small consignments to tens of local processing factories in the Suifenhe area. Timber arriving on trains from Grodekovo tends to be sorted and re-sold at the Suifenhe station and then often goes from there straight to the inner areas of China. Another characteristic of this border-crossing complex is that there is no timber yard at Pogranichnoye town (Grodekovo station). Thus, almost all the trains passing through this gateway with timber are loaded at other far away sites and checked by other customs agents. The timber may be Siberian pine, coming from the Baikal area, or ash and oak which was loaded in Lesozavodsk-Markovo timber depots and checked by the customs station in Dalnerechensk or Bikin. Also, the trade contract is generally already implemented at these earlier sites, so that timber arriving in G rodekovo often already belongs to the Chinese consumer.

It is worth noting that some gateways, such as Xunke and Jiayin, have started to import logs only recently with the broadening scale of illegal logging in, and export from, the RFE. On the other hand, gateways such as Tongjiang, Hulin, Mishan, and Dongning do not show large increases in import volume. There are some different causes for this phenomenon, revealed by special field investigations by NGO activists in a series of anti-poaching raides. First, with the fast development of the whole Northeast timber trade and processing economy in China, many local processing entrepreneurs are attracted by easier opportunities to buy raw timber on the timber exchanges, rather than deal with Russian suppliers. Since models of illegal logging and sale were developed in the Sikhote-Alin area, however, it is particularly easy to come to this area, with timber or logging permits only, and deliver these to Chinese or Russian criminal exporter-wholesalers for some tax-free money. While doing fieldwork in Sikhote-Alin, the author came across such traders and documents from the Jewish Autonomous Oblast, Amur Oblast, Khabarovsk Krai, and Krasnoyarsk Krai. A significant portion of their shipments consisted of the most valuable timbers of oak, ash and Korean pine, mainly grown in Sikhote-Alin and logged with a set of violations in the water protection and feeding zones of wild animals, and using fake documents, etc.

LIVELIHOOD PROSPECTS AND RECOMMENDATIONS

As has become obvious, despite the analysis of forestry and timber market violations, we can only provide a general impression of the extraordinarily low accuracy of official statistics and other existing data collected from the different sources. Thus, our ability to present effective recommendations to the governments, which have been looking for solutions without significant results, may seem doubtful. An important result of timber market analysis, however, is the awareness that some of what is termed "illegal logging" should be not convicted, but supported as selective community-based operations. Such operations are conducted in favor of sustainable livelihoods and are much less destructive and more sustainable than legal and large scale logging on huge tracts and in remote leased areas.

Official big timber business – including wholesale and export logging, – are pressed by leasing fees, bribes, strict environmental regulations, and financial responsibility for local infrastructure. They are doubtful to survive without any portion of illegal timber, either logged by simple violations on the leased area or purchased from small brigades. One of the biggest problems of such businesses is the high level of value added and profit taxes; most of these revert to the federal budget and are stripped from the local area forever, while the rest is used by municipalities to compensate for the lack of budget contributions to urgent municipal needs, forest management and protection. Given these pressures, big companies are generally unable to implement both of their pre-lease promises to communities of creating new jobs and maintaining infrastructure (e.g. for transport, medical care, power, heating etc.). Instead, they must generally choose between these two obligations and either teach and hire local people or simply satisfy their families directly via infrastructure maintenance. Without violating many environmental restrictions or utilizing illegally logged timber provided by community members, no company can take care of both responsibilities.

We have perfect examples of such choices, which always result in pitting the company against community members. Rimbunan Hijau – RFE based in Khabarovsk Krai is currently the largest supplier of raw logs from RFE. The company got its biggest concession in the late 90s on the territory of indigenous people, which is also designated as the nature preserve of Sukpai. To obtain access to this desirable area, they promised a huge investment in the region, including taking responsibility for the livelihood of indigenous

communities – medical and school services, roads and public transportation, and enough jobs for all unemployed community members. Now, five years since they started logging the area, only Chinese and a few Malaysians are working there, and people have forgotten the emergency cars they donated to the village years ago. Most municipal taxes collected are controlled personally by local and regional officials; and the logging area is strictly closed to the public. The same scenario occurred with the Hyundai joint venture Svetlaya in the mid-1990s, and, indeed, the same seems to happen with many concessions granted to Russian companies as well. The concessions all enrich a very limited group of officials and select, often criminal, managers. The livelihood status of most forest communities in the concession area remains very poor.

At the same time, particularly for the mixed forests in south RFE, there is always a great opportunity for long-term sustainable, community based non-timber forest businesses, using rich flora, fauna, fish and recreational resources like bird watching. These do not include any logging at all and have quite high revenues. Such activity requires a fraction of the investment associated with logging and bring sustainable, moderate levels of profit immediately. Such industries were very successful and widespread in Soviet times; and there is still great local and foreign market demand in the region. The dissolution of these industries is completely a result of poor management and strategy.

Unfortunately, market and data analysis can only reveal how wrong the current system is and how many opportunities timber market players have to easily avoid any administrative, economic and fiscal measures and barriers. Therefore, it is recommended that the future direction of NGO research and attention with regards to the livelihoods of forest communities shift to:

- increasing attention and financial, legal and administrative support to small, community-based forest businesses
- making legal changes to the region's methodology of forest inventory, so that it incorporates modern technology and advances in knowledge
- concurrent market analysis and promotion of non-timber forest products, recreational, and tourist resources for all areas
- promotion of national regulations to increase the involvement of locals (as opposed to foreigners) in the timber and other forest businesses
- financial analysis of local black market and official revenues of community members, producing, together with reasonable officials, realistic and balanced models of alternative forest businesses, including hunting, fishing, non-timber forest product processing and tourism
- strengthening mechanisms for, and the level of, public monitoring of forest use practices involving illegal loggers and poachers
- strengthening the rules and laws for sequestering equipment and stopping official operations when conducted with violations.

ANNEX: PROFILES OF THE STATE OF LOGGING AND TIMBER EXPORT IN SELECTED PROVINCES

This annex reviews the logging and timber export situations in selected provinces of Southeastern Siberia and the RFE. The Southeast Siberian provinces covered are Irkutsk Oblast, Buryat Republic, and Chita Oblast. The RFE provinces covered are Amur Oblast, Jewish Autonomous Oblast, Khabarovskii Krai, and Primorskii Krai.

IRKUTSK OBLAST

Irkutsk Oblast, located northwest of Lake Baikal, is considered the most forest-rich province in Russia. It was capable of producing about 12 million cubic meters annually in Soviet times and was first in the region to surpass that volume in 2000, exporting more than 15 million cubic meters. Irkutsk possesses half of all the conifer forests in Russia, about 21 hectares per person. In practice, however, this treasure which legally belongs to the state and people, is controlled by a group of criminal entrepreneurs. Data provided by the Irkutsk militia colonel Barkhatov indicate that this province exported 1.5 million cubic meters annually to China and Japan in the late 1990s, while official statistics reported not more than half of that. Financial loss to the state (in taxes not collected) is estimated in the hundreds of millions of dollars a year, with these funds instead enriching members of an almost perfectly organized smuggling industry. An important part of this industry consists of one-day firms, registered by fake or stolen passports. One example of the repercussions of these one-day firms was that a retired person, who lost his passport, was eventually accused of illegally exporting US\$400,000 worth of raw logs to China. Other examples of criminal activity include that of Chechen criminals going to the Okskoye Forestry Station, 15 kilometers from Irkutsk City and forcing a forester to log as a slave. Finally, in 1999, four foresters in this province were killed, and some of their houses were burnt down. This appears to be the destiny of those who are brave enough to face the criminals involved in the industry.

According to Deputy Chief of the East Siberian Customs Department, Oleg Gladyshev, each coach of logs declared in the area contains more timber than reported and that timber is sold at a higher price than is declared. By 2000, there were 2,600 logging firms operating in Irkutsk Oblast; and it was virtually impossible to control this large number of companies. Reportedly, even former pilots, teachers, policemen and sportsmen occassionally became illegal loggers, stimulated by the government's so-called "free market strategy." Periodically, officials have passed angry decrees to stop illegal practices, but could do nothing to implement then. Despite thousands of violations concerning timber exports in the province, the militia was unable to initiate even a single court case on corruption. At the same time, sources have identified more than 20 organized criminal groups involved in resource export, as well as 300 firms clearly connected to those groups' activities.

Depsite high log exports from the province, the huge lumber complexes and pulp mills of Irkutsk Oblast like Baikalski and Ust-Ilimski have a constant problem in obtaining raw timber supply. Similarly, there is a lumber factory in Bratsk capable of producing 250,000 cubic meters of sawnwood annually that had to stop work due to lack of logs. In fact, just this one district in which the sawmill is located supplies hundreds of trucks of raw logs to China and Japan. If all the exported wood was processed here and sold not at US\$60 per cubic meter (for logs), but \$180 (for sawnwood), the factory could earn an extra \$70

million annually. According to official statistics of the provincial government, Irkutsk logged 8.1 million cubic meters in 1999, while Federal Forest Service data indicates that 15.8 million cubic meters were logged in the province that year. The same sorts of large discrepancies are typical in both railroad and financial statistics. Chinese timber managers have become familiar regulars on the Trans-Siberian Railroad from Krasnoyarsk to Ussuriisk, purchasing raw timber with cash dollars and immediately shipping purchases by train to their homeland for wood processing. They are said to never get involved in logging themselves, but instead to leave this work to Russians. With this background of foreign involvement the protection of forests becomes more problematic. Disproportionate to the huge volume of hard currency involved, fines and penalties for illegal logging are unreasonably small. Also, fining the poor Russian logger only makes him more dependent on the Chinese businessman. There are some opportunities to use other sections of the Criminal Code, like that on theft of state property or illegal management to counter illegalities further down the commodity chain. A lot of work, high levels of legal skills and a certain amount of money, which governmental and inspecting agencies always lack, however, are needed to pursue these avenues. Practically, in many inspectors' viewpoints, the system needs special licensing and computer-based monitoring of each logging permit through to the final export consignment to be sure it fits with the initial permit in terms of quantity and quality. Pre-export certification by the Chamber of Commerce, put into practice in Irkutsk and Chita Oblasts from September of 1999, based on development of an effective model in Buryat Republic, was successful in hindering many illegal operations, although it did not reduce increasing logging volumes. Because of contradictions to federal legislation, however, this system was cancelled. Lawyers and governmental officials explain that the new policy created harsh conditions for legal exporters and increased export prices for timber. Seemingly, free trade ideology takes priority over real results in fighting forest illegalities for Russian law writers.

From time to time, authorities in the province make statements or issue reports showing their lack of understanding of the dire need for more sustainable forest practices. This lack of understanding is also reflected in the fact that General Komkov, who came to the Irkutsk region with an ins pection team from Moscow, found that there have been no corruption cases heard in Irkutsk courts. Vladimir Chekhov, the chief of the provincial state forest agency, noted that the area of forestland that had been allocated for logging was not, in fact, being entirely logged. He said that the highest quality wood, the Siberian Pine forests, should be harvested now or that otherwise the forests would get old. As for those forest agencies that cut down five times more trees than the private wood companies, he said that their logging activity should be encouraged, as it would at least ensure that people have jobs.

S. Karakutsa, the Chief Forest Inspector in Irkutsk Province, in a recent report, appears to concur with the Head of the Forest Department. The main idea of his report is that the province needs to cut and sell more trees. Noone has stood up to counter this opinion because the economic needs are so great. Each local village, however, should find a way to log for profit without causing destruction at the same time. Forests around small Siberian cities and villages are quickly melting away. All along the railways and roads one can see piles of pine trees. The situation is getting worse every day. In Taishet, the author's colleagues were shown three new streets built up with fabulous new mansions. People call these streets "Squares of Poverty" because they are frequented by local bankers and policemen involved in drug crimes and businessmen involved in the logging industry. Irkutsk Oblast militia officials are considering revamping the system of local inspectors for forest protection, particularly in the northern parts of the province. Under their new scheme, one inspector would cost around US\$1,100 per year, which is not more than one truck of timber. Such an inspector might bring back to the budget much more stolen timber, even though there is always a risk that an inspector with such a modest salary may be bribed, as foresters

everywhere used to be. Seven districts found funding for such forest inspectors to work on the key timber routes and brought money to the local budgets for this purpose.

BURYAT REPUBLIC

During early 2000, a system of pre-export timber certification was implemented in Buryat Republic. As mentioned, the system was then cancelled because of conflicts with federal laws protecting free trade principles. Local foresters have indicated that they hope law writers will pay more attention to the condition of forests and the scale of illegal operations. Federal trends in 2003-2004, however, demonstrate an opposing ideology to that, bringing forth such initiatives as pre-export certification in Buryatia, Primorye and other regions.

While the system of certification was in force, the 15 most trusted companies were released from the procedure. Certification was provided by the Chamber of Commerce, which checked the following parameters: existence of an export contract, a copy of logging licenses, a stamp by the leskhoz and documentation of the source of the timber. Each coach was required to have specification of the timber it contained. Export prices also had to be strictly checked to avoid dumping. Export points were fixed by the administrative order and customs control always had to compare its data to that of the Chamber of Commerce before delivering the final permit for the customs declaration. This system, although not reducing export volumes, improved the efficiency of the system and provided benefits in terms of government budgets.

The former Buryat Republic Forest Service consisted of 4,000 foresters, all of whom now run the risk of being fired after the Central Government's cancellation of the nation's Forest Service System. Another worrisome process is currently underway. Based on an inter-governmental Russian-Chinese treaty, Russia has been planning to lease forest territories to Chinese companies, primarily in Siberia and the RFE, for a minimum term of 10 years. (The maximum legal term is 49 years). Given that Chita Oblast has already been warned by the Central Government that their forest territories that have not yet been leased are to be given up to Chinese loggers, foresters in Buryat Republic are anticipating similar news regarding their own forests. As pointed out by the Deputy Chief of Buryat Forest Service, Alexander Goloushkin, the Russian-Chinese Treaty does not include requirements for the development of timber processing in logged areas.

In early 2004, Russia's Ministry of Economy and Trade presented a new draft Forestry Code containing official rights for foreign companies to obtain long-term forest leases by bidding procedures. These rights include full rights on the leased area, responsibility to maintain it, and the right to eventually obtain full ownership. The initial draft, however, contained no reference to the responsibility of such a foreign lease owner to uphold the basic rights of local communities to use forest resources for harvesting non-timber products and for general recreation. This particular point regarding the draft Code precipitated a storm of protest all over Russia and floods of messages to the President. These were partially respected by the Code writers and the point was added to the draft.

In the past, there were 96 logging enterprises in Buryat Republic. By early 2000, however, the official count had risen to 7,600. This large number of businesses all needed to get licenses and have their harvesting observed by a governmental specialist. The Republic had 760 foresters working in 38 forestry stations to assign to these enterprises. These foresters sequestered 6,000 cubic meters of stolen timber in

1999 and only 4,600 cubic meters in 2000, the result of 2,072 identified violations. On the basis of their inspecting activity, 142 criminal investigations concerned with logging and export operations were initiated. Other pressures on the forest-related administration include the need to register and control 200 timber exporters in the process of exporting 220,000 cubic meters of raw logs harvested by long-term lease holders. Another issue requiring the attention of forest-related government personnel is that of forest fires resulting from increasing human pressures on forests. Burnt forest areas in Buryat Republic in 2000 totaled 60,000 hectares, mainly located on illegal logging sites. Just before the State Forest Service was officially eliminated by the Central Government in 2000, Buryat foresters increased the area of reforestation by up to 17,000 hectares over the three preceding years. Now, however, the newly created State Forest Agency seems to be incapable of continuing this important work.

Remarkably, the many measures to cut the volume of timber exported from the Republic all failed. Total timber exports from Buryat keep increasing along with that of the rest of the Siberian provinces and with the parallel development of illegal operations on protected areas. The province did not uncover any problems with exporters or foreign timber consumers, based on descrepancies in timber quantity and quality, although these certainly exist.

Tables 1, 2, and 3 show official statistics on Buryat Republic provided by the province's Forest Service and its provincial government. Table 1 shows Buryat's industrial roundwood production statistics and compares them to the official allowable cut. Table 2 lists the top log and sawnwood exporters (based on 1999 and 2000 data) of the province. Finally, Table 3 provides official data on timber exports from 1995 to 2000, showing trends in Buryat's exports to China and other destination countries.

Table 1: Buryat Oblast: Official Statistics on Industrial Roundwood Production

| Year | Industrial roundwood production (1,000 cubic meters) | Proportion of allowable cut harvested (%) |
|------|--|---|
| 1990 | 3 ,757.1 | 45.7 |
| 1997 | 523.0 | 8.4 |
| 1998 | 404.7 | 6.5 |
| 1999 | 628.8 | 10.1 |
| 2000 | 744.0 | 11.9 |

Source: Buryat Forest Service.

Table 2: Key Timber Exporters from Buryat Oblast (1999 – 2000)

| ? | Exporter | 2 | 2000 | 1999 | | | | |
|-----|-------------------------|-----------|-------|-----------|-------|--|--|--|
| ٤ | Exporter | 1000 cu m | % | 1000 cu m | % | | | |
| | Raw Logs | | | | | | | |
| 1 | Pribaikalski Les | 29.9 | 4.70 | 6.5 | 1.05 | | | |
| 2 | Kurumkanles | 28.8 | 4.52 | 17.2 | 2.77 | | | |
| 3 | Taigan | 23.5 | 3.69 | 5.4 | 0.87 | | | |
| 4 | SAB | 22.0 | 3.46 | 9.6 | 1.55 | | | |
| 5 | BLK | 17.1 | 2.69 | 33.4 | 5.39 | | | |
| 6 | Mayak Service | 14.9 | 2.34 | 19.4 | 3.13 | | | |
| 7 | Zabaikallesoexport | 13.4 | 2.10 | 20.6 | 3.32 | | | |
| 8 | Zabaikallesinterbusines | 13.3 | 2.08 | | | | | |
| 9 | Sanray | 13.0 | 2.04 | 31.4 | 5.06 | | | |
| 10 | Semerka | 12.5 | 1.96 | 16.8 | 2.71 | | | |
| 11 | Zabaikallespromkhoz | 11.8 | 1.85 | | | | | |
| 12 | Raldina | 10.9 | 1.71 | 7.6 | 1.23 | | | |
| 13 | Bubeeva | 8.5 | 1.34 | 11.2 | 1.81 | | | |
| 14 | Dorzhieva | 7.5 | 1.18 | 8.1 | 1.31 | | | |
| Tot | | 227.1 | 35.67 | 187.2 | 30.19 | | | |
| Tot | al by Republic | 636.6 | 100.0 | 620 | 100 | | | |
| | | Sawn Woo | d | | | | | |
| 1 | BLK | 5.5 | 16.82 | 1.16 | 4.36 | | | |
| 2 | Taigan | 5.1 | 15.60 | 0.40 | 1.50 | | | |
| 3 | Mayak Service | 2.2 | 6.73 | 0.90 | 3.38 | | | |
| 4 | Dorzhieva | 2.1 | 6.42 | 1.00 | 3.76 | | | |
| 5 | Bazarova | 1.6 | 4.89 | - | - | | | |
| 6 | Kerulen | 1.5 | 4.53 | 0.07 | 0.26 | | | |
| 7 | Ingrida | 1.2 | 3.55 | 0.40 | 1.50 | | | |
| Tot | | 19.1 | 58.53 | 3.93 | 14.77 | | | |
| Tot | al by Republic | 32.7 | 100.0 | 26.6 | 100.0 | | | |

Source: Buryat Oblast Government.

Table 3: Buryat Republic: Timber Export Dynamics and Destinations, 1995-2000

| | | Sales v | olume, | 1000 cı | ı meter: | 5 | | Average | price, \$ | per cu | meter | |
|----------------------|-------|---------|--------|---------|----------|-------|-------|---------|-----------|--------|-------|------|
| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
| Raw logs, including: | 108.3 | 92.9 | 281.7 | 451.9 | 620.0 | 636.6 | 102.6 | 77.4 | 65.0 | 59.6 | 56.0 | 56.5 |
| China | 23.3 | 65.2 | 262.4 | 447.1 | 612.8 | | 78.2 | 64.0 | 63.7 | 59.5 | 55.7 | |
| Japan | 79.2 | 18.6 | 5.2 | 0.9 | - | | 124.9 | 124.2 | 106.5 | 75.0 | - | |
| Mongolia | 1.3 | 2.8 | 10.8 | 1.8 | 7.0 | | 66.3 | 60.8 | 69.2 | 63.3 | - | |
| Sawnwood, including: | 28.0 | 22.7 | 10.3 | 9.2 | 26.6 | 32.7 | 136.8 | 116.2 | 111.7 | 94.8 | 75.2 | 83.7 |
| China | - | 0.8 | 0.4 | 2.2 | 23.7 | | - | 64.8 | 71.3 | 81.3 | - | |
| Japan | 8.3 | - | - | - | - | | 174.1 | - | - | - | - | |
| Kazahstan | 5.4 | 2.3 | 2.5 | 1.9 | 0.3 | | 118.5 | 102.6 | 86.0 | 75.5 | - | |
| Uzbekistan | 5.2 | 13.3 | 3.8 | 0.8 | 1 | | 112.4 | 121.7 | 130.2 | 130.0 | - | |
| Moldova | 2.5 | 2.4 | 1.4 | 1.3 | - | | 90.7 | 118.3 | 110.2 | 142.8 | - | |

Source: Buryat Government.

CHITA OBLAST

According to the State Forestry Fund (a department of the State Forestry Agecy), Chita Oblast's Committee of Nature Resources includes 30 leskhozes. Official statistics indicate that 872,400 cubic meters were logged in the main commercial operations in 2000. This is 113.8 percent of the volume logged in 1999. Production of market timber (meaning that timber targeted for production of forest products other than pulp, paper, and chemicals), however, made up only 58.9 percent of the total logged volume (69.5 percent of the coniferous volume is market timber and 17 percent of the broadleaf species was market timber).

Of the amount logged in 2000, 248,200 cubic meters were logged in burnt forests, 32,600 cubic meters of which were logged by selective operations. Chita Oblast's timber industry enriched the federal budget by US\$184,000, the provincial budget by \$274,000, local budgets by \$12,000 and the forest service (leskhozes) by \$1,122,200 that year. Sanitary and maintenance logging operations were implemented over an area of 11,135,000 hectares, with a production of 226,500 cubic meters. All other kinds of non-commercial logging operations (i.e. those carried out ostensibly for the purpose of maintenance) supplied 286,700 cubic meters of commercial timber. The main forest product export from Chita Oblast in 2000 was raw logs, which brought in about \$28 million in sales.

Two basic customs offices have been operating in Chita Oblast since the middle of 2000. The former office in Borzya was reorganized and its checking points put under the control of Zabaikalsk and Chita Customs. Practically all of the customs points for declaring raw log exports have registered declarations by firms based in other Russian provinces, thus suggesting outside or igin of shipments. The volume of exports of such firms registered by Chita Customs in 2000 by province of origin is shown in Table 4.

Table 4: Timber Export Values Declared in Chita Oblast by Firms from Other Regions (2000)

| Territory | Export Value, \$ 1000 |
|-------------------------------------|-----------------------|
| Moscow, Including European transit | 148.0 |
| Buryat Republic, Including transit | 1,098.2 |
| Krasnoyarsk Krai, including transit | 25.4 |
| Primorski krai, including transit | 15,615.6 |
| Amur oblast, including transit | 2,10.6 |
| Irkutsk oblast, including transit | 2,231.3 |
| Altai Republic, including transit | 224.6 |
| Tverskaya oblast, incuding transit | 87.9 |
| Moscow oblast, including transit | 15.1 |
| TOTAL | 4,056.7 |

Source: Chita Oblast Administration.

Similarly, some local firms registered in Chita Oblast also use customs in other provinces for their timber export operations. According to the Southern Customs District, timber export value of these companies, registered in Chita, via RFE Customs, totaled \$1,509,600 in 2000. Most of this timber targeted China (74 percent). For Chita Oblast's official exports, China's share, by value, was about 20.5 percent. In addition, almost all barter contracts from the province also targeted China.

Timber exports grew 3.5 percent in 2000 alone, making timber the province's leading export for that year. 97 percent of the timber exports to China were raw logs, while only 2.7 percent were sawnwood.

Table 5: Timber Production Supplied to the Market in Chita Oblast by Species in the 1st Quarter of 2000

| # | Name of product | Cubic meters |
|---|------------------------------|--------------|
| 1 | Red pine: sawnwood | 60.630 |
| 2 | Raw logs, red pine | 247616.204 |
| 3 | Larch: raw logs | 33811.553 |
| 4 | Birch: raw logs | 36.423 |
| 5 | Railroad ties, non processed | 115.026 |
| 6 | Pine boards | 12070.639 |
| 7 | Other coniferous boards | 3155.369 |
| 8 | Chipboards | 481.250 |
| 9 | Plywood | 4.400 |
| | TOTAL | 297,353.48 |

Table 5 above gives timber supply in the province by product for the first quarter of 2000. Based on the total in the table (and multiplying by four to get an annual amount), one might expect total production to exceed 1.19 million cubic meters, although total official logging volume that year was 872,000 cubic meters. As indicated in Table 6 below, 265,000 cubic meters of this volume comes from the key forest leasers in the province, while 5,445 cubic meters were sequestered from illegal operations that year.

About 50 percent of those exporting timber from Chita are private entrepreneurs, most notably re-sellers. True export volumes are thought to be much higher than those officially reported.

Table 6: Logging Volume and Leased Areas of the Key Forest Leasers in Chita Oblast in 2000 (1000 cubic meters)

| Forest user and leskhoz | Leased area(hectares) | Logged in 2000 (1000 cubic meters) |
|--|--------------------------|--|
| Zabaikalsk Railroad, Badinski Leskhoz | 86,173 | 16 |
| "Alexandrovskoye" Co., Verkhne-Chitinski Leskhoz | 48,551 | 11 |
| "Epos-Les Agro", Ingodinski Leskhoz | 174,904 | 25 |
| "Klyuchi", Mogochinski Leskhoz | 207,998 | 60 |
| Zabaikalsk Railroad, Hilokski leskhoz | 58,848 | 10 |
| "Zabaikal-Agroles", Hilokski | 56,809 | 20 |
| Others | 1,156,810 | 123 |
| Total | 2,300,093 | 265 |

Source: Chita Forest Service.

AMUR OBLAST

Temporary permits issued by a special operating group established by the Amur Oblast's governor are now required to export timber from the province, whether such timber is headed to China or other countries. The main purpose of such permits is to limit existing dumping and guarantee that Russian banks receive the appropriate income for any export contract. The system also aims to compel barter consumers of timber to realize their contracts by working with proper suppliers. The operating group collects exporters' applications, which should include documents confirming that the timber came from a legal source. The operating group also checks whether contract prices correspond to the current international market level, particularly prices on the Japanese market. In 2003, as mentioned, the operating group's requirement for pre-export certification was vigorously attacked by prosecutors as contradicting the Civil Code and the efforts of the federal government to meet WTO rules.

By Decree No. 25 (January 18, 1999) of the Government of Amur Oblast, applications for timber export from the province should include the following:

- 1) Official request from the exporter for timber export, including sorts, species, volume of consignment, source of timber and contract price
- 2) Copy of contract
- 3) Documents confirming the initial source of timber (e.g. contract with logging firm, invoice, logging license)
- 4) Bank confirmation of advance payment receipt
- 5) Confirmation by tax bureau of the exporter meeting obligatory tax payments

According to requirements, this set of documents should be checked and signed by the Forest Service, Financial Control and Tax Service, Militia, the local department of the Ministry of Economy and Trade, and Department of Justice and Customs.

During 2000, Amur Oblast officially exported about 1,000,000 cubic meters of timber to China, mainly to the Heihe area. More than 50 percent of exports were supplied in small consignments of not more than 1,000 cubic meters. Only about 4 percent of all the timber flow exported to China was hardwood, with birch being the main hardwood species. Oak in the region does not present any commercial value. Key logging sites in Amur Oblast that supply China are located in Zeiskii, Shimanovskii, Selemdzinskii and Mazanovskii Districts, which together account for 66 percent of the timber exported from the province to China (see Table 7 below).

Table 7: Proportion Supply by Administrative District of Amur Oblast's Timber Exports to China (2000)

| ?dministrative district | Proportion of Amur Oblast's Total Exports to China Supplied by District (%) |
|-------------------------|--|
| Zeiskii | 21 |
| Shimanovskii | 20 |
| Selemdzinskii | 15 |
| Mazanovskii | 10 |
| Bureiskii | 9 |
| Belogorskii | 8 |
| Magdagachinskii | 6 |
| Tyndinskii | 5 |
| Arkharinskii | 3 |
| Skovorodinskii | 2 |
| Zavitinskii | 1 |
| T?tal | 100 |

Source: Amur Oblast Government.

Red pine forests, which account for no more than 3 percent of the forests left in Amur Oblast, are the most endangered in the province. In the most forest-rich districts, ripen pine logging was banned in October, 1999, by the provincial governor's Decree #621. Some non-commercial logging operations, such as maintenance, thinning and selective salvage are still allowed, as is pine logging on forest plots that were leased before the ban was signed.

High-quality pine timber is of high value on the Chinese market. Thus, it is very likely that destructive forest fires which occured all over the province in 2000 were caused not only by the dry weather, but also by illegal loggers, pretending to get pine by so-called salvage logging operations after the light, grass-based fires. According to Russian logging rules, even such lightly burnt forests should be leased out for logging to limit the spread of pests and forest disease. As a result, the administration was unable to reduce the red pine export volume as expected.

In June, 2000, the Amur Oblast Legislature increased the stumpage fee on pine by 8.4 times, which raised the total stumpage fee for pine to the level of 200-250 rubles (\$8) per cubic meter. Even though this stumpage fee might be considered relatively low, local loggers had difficulties in paying such fees when they targeted to sell pine locally, rather than to export it. Only the external Chinese market can easily

cover such a stumpage fee. Indeed, while such extrernal market conditions exist, it seems practically impossible to stop or even limit extraction of red pine from the forests in Amur Oblast. If any logger has some pine logs left after exporting the limit in his official consignment, he may sell these to another exporter with a logging license that was not used for export before or was not implemented at the logging site. As a result of such possibilities, all the administrative measures adopted may only partially restrict the export of illegally cut wood, but never block it completely. In some ways, it appears that achieving any results in this difficult fight against illegality may require local regulations that contradict the federal ones.

Plans for development in Amur Oblast call for further increases in Russian-Chinese economic cooperation in the logging and wood processing industries. The key project involved will be the building of a bridge crossing the Amur River between Blagoveschensk and Heihe and the creation of a free trade zone there. And, even so, increasing Chinese and international demand may overcome this positive process so that logging continues and the scale of illegal operations grows accordingly. The price of red pine sawn logs on the Chinese market in 2000 varied from US\$45 to \$73, the price for larch from \$34 to 62, and the price for spruce from \$34 to \$70. Birch sold for about \$40 on the Chinese market.

Notably, the provincial government of Amur Oblast kept a certain degree of Soviet ideology all during Yeltzyn's era, and even into the present. Under the strong influence of the provincial legislature, still named "the Soviet," an always positive vision of the province's economy is held by the media and general public. Environmental activists have also played their role in maintaining this rosy vision, continuing to work on the establishment of new protected areas and defending reasonable environmental standards in any development projects, but closing their eyes to any criminal activities and to the increasing role of Chinese demand and business activities in the province's forest sector. Only in the late 90s did these environmentalists begin to pay attention to the dangers facing the province's pine forests. Given this "rosy view" problem and lack of public attention to illegal practices, it has been extremely difficult to monitor or even discover logging and timber trade violations in the province.

Tables 8-11 below provide additional information on logging in and log exports from Amur Oblast. Table 8 provides official logging volumes in the province from 1997 through 2003 and compares these to the official allowable cuts and accessible allowable cuts. Table 9 provides data on the export prices for various species and sizes of log exported from the province in 2000. Table 10 provides a list of 18 Chinese companies importing timber from Amur Oblast in 2000 and also gives the volume imported by each of these. Finally, Table 11 lists key forest leasers in the province and provides their 2002 and 2003 production volumes.

Table & Use of Allowable Cut in Amur Oblast

| Item | Units | 1997 | 1998 | 1999 | 2002 | 2003 |
|---------------------------------------|----------------------|---------|---------|---------|---------|--------|
| Allowable cut | 1,000 m ³ | 16,039 | 16,039 | 16,039 | 16,039 | 16,040 |
| Accessible allowable cut | 1,000 m ³ | 9,971.7 | 9,971.7 | 9,971.7 | 9,971.7 | 9,972 |
| Use of allowable cut (logging volume) | 1,000 m ³ | 1,531 | 848 | 1,306 | 1,830 | 1,800 |
| Use of allowable cut | % | 9.5 | 5.3 | 8.1 | 12 | 11 |

Source: Amur Oblast Forest Service.

Table 9: Average Price per Cubic Meter of Raw Logs Exported from Amur Oblast in 2000

| Species | Diameter (cm) | Average price, \$USD/m³ |
|----------|--|----------------------------|
| Red pine | 22 cm and up 32 cm and up | 55 73 |
| Larch | 16 cm and up 22 cm and up 32 cm and up | 35 45 62 |
| Spruce | 22 cm and up 32 cm and up | 47 70 |
| Birch | 18 cm and up | 40 |

Table 10: Chinese Traders Importing Timber from Amur Oblast in 2000

| Company Name (Home Base) | Volume Imported to China from Amur Oblast (Cubic Meters) | Company Name (Home Base) | Volume Imported to China from Amur Oblast (Cubic Meters) |
|---------------------------------|---|---------------------------------|---|
| Tzin Yan (Heihe) | 20,000 | Dahei (Heihe) | NA |
| Ukon (Heihe) | 4,500 | Trade Commercial Co. (Heihe) | 2,800 |
| Hailan (Heihe) | 900 | Huan Zy (Dalyan) | NA |
| Ex-imp Co. (Heihe) | 34,000 | Airport Heihe | 4,600 |
| Transport Co. (Heihe) | 3,600 | Lun Tuan (Heihe) | NA |
| Inter-trade Co. (Heihe) | 2,800 | Shie (Heihe) | 2,000 |
| Shin-Hua (Suifenhe) | NA | Sun He Trade Co. | 5,000 |
| Heilounzyan Plywood "Tunvan" | 1,500 | Beiyan Inter Trade Co. | 3,700 |
| Heihe Inter Trade | 1,500 | Ya Syun (Heihe) | NA |

Source: Amur Oblast Administration.

Table 11. Commercial Timber Production of Key Forest Leasers in Amur Oblast, 2002 - 2003

| Company | Production in 2002 (1,000 cubic meters) | Production in 2003 (1,000 cubic meters) |
|------------------------------------|---|---|
| Skidder | 11 | - |
| Gongor | 16 | 10 |
| Izumrud | 15 | 11 |
| Tyndales | 421 | 449 |
| Gudachi | 56 | 52 |
| Oryon-les | 16 | 10 |
| Vostok-Cyprus | 17 | 14 |
| Forest League | - | 10 |
| Lestrans | - | 16 |
| Tayozhny | 38 | 39 |
| Sever-Invest | 15 | 16 |
| Turanles | 10 | 16 |
| Taldanski LPH | 13 | 35 |
| Zeiskii LPK | 82 | 33 |
| Exportlesvostok | - | 48 |
| Tutaul | 17 | 17 |
| Luch-invest | 15 | - |
| A-Viking | 11 | - |
| Kerales | 31 | - |
| Bagulnik | 10 | - |
| Start | 13 | - |
| Vostochnaya | 27 | - |
| OTHERS | NA | NA |
| Subtotal for commercial production | 1618 | 1600 |
| Total logging volume | 1830 | 1800 |

Note: This does not include logging volumes for municipal and salvage needs.

JEWISH AUTONOMOUS OBLAST (JAO)

There are only 3 river-crossing border gates to China in the Jewish Autonomous Oblast (JAO): (1) Leninskoye (Nizhne-Lelinsk) – Fujin (Tongjang), (2) Pashkovo – Jiayin, and (3) Amurzet - Luobei. Export practices are based completely upon shipping across the river by barges in the summertime. Notably, export operators in Pashkovo and Amurzet reduced timber export volume in 2000 as compared to 1999, from 341 to 188 cubic meters and from 705 to 299 cubic meters, respectively. Only operators in Leninskoye demonstrate some increase, based on Chinese statistics – from 25,713 cubic meters in 1999 to 44,103 cubic meters in 2000. According to a source from Khabarovsk, however, shipping timber to

Chinese customs in Tongjang, located opposite Leninskoye, does not necessarily mean that the timber comes from the JAO. Barges with timber from Khabarovsk also come here, making the timber flows on the Amur River quite complicated and difficult to monitor. There is an obvious trend among JAO timber traders not to use the Amur River gateways for their operations, but to use the railroad-based timber depots in Birobidjan or Khabarovsk instead to send timber to the main RFE gateway – Grodekovo-Suifenhe. Sometimes operators, including illegal loggers and traders, send trucks of logs from the JAO to Bikin and Khor timber depots in Khabarovsk Krai to be transloaded to the train or to Lesozavodsk in Primorye. There is also some evidence that JAO logger-exporters get only their documents in the JAO, but buy their timber in Primorye to re-sell it at a higher price to exporters as timber from the JAO.

In 2000, the Federal Security Service (FSS) in Birobidjan brought a lawsuit dealing with such resale and export operations against "Les-Holding" Co. This company had no appropriate documents besides an export license, which costs much less in the JAO (US\$350) than in the highly corrupted Primorye Krai (\$1000). Indeed, there are a number of firms registered in the JAO, but working constantly in Primorye Krai. Chinese ownership or financial dependence is often not a secret for these firms – they bravely demonstrate the Chinese connection in their firm names like "Da Li Shen", "Sen Hai", and "Hua Lin". Sometimes they even reveal their geographic origin in China, like the company "Fuyuan" (also the name of the town across the Amur River from Khabarovsk). Table 12 lists the names and directors of three firms registered in the JAO that work constantly in Primorye Krai; the table also includes data from a selected contract for each.

Table 12: Examples of Firms Registered in the JAO, but Working in Primorye Krai, including Representative Contract Data

1. "Rubin"

Director: Tzy Chzun (Batenkov by proxy) Lisences 035001200040, 035001200041,

on 31.08.00

By contract ? 49093450/ 156/ 05 ?n 18.08.2000. Ash 10,000 cubic meters - US\$ 1,200,000 Oak 10,000 cubic meters - US\$ 1,200,000

2. "Arktur"

Director: Voronoi.

Lisences 035001200042, 035001200043 ?n 31.08.2000.

By the contract ? HLSF -104-028 ?n 28.08.2000.

Ash 4,000 cubic meters - US\$ 480,000 Oak 4,000 cubic meters - US\$ 480,000

3. "DVEKS"

Director: Alexander Kormakov

Lisences 035001200044, 035001200045 ?n 30.10.2000.

By the contract HLSF - 007-118-001?n 27.10.2000.

Ash 5,100 cubic meters - US\$ 618,500, Oak 4,950 cubic meters- \$ 593,500

KHABAROVSKII AND PRIMORSKII KRAIS

Khabarovskii and Primorskii Krais are the top two forest provinces in the RFE and are also the two RFE provinces that supply China with the greatest amount of timber. Exports from these provinces are sent mainly to two of the largest timber consuming markets in the world – Japan and China. As a result of strong market pressure and the geographical proximity of Chinese consumers – in conjunction with the financial failure of the local timber and lumber industries and high content of the most valuable hardwood species in the Sikhote-Alin mixed forests – these provinces have the highest level of illegal logging and export activities.

Due to the integration of transport infrastructure in the area, particularly on the Sikhote-Alin mountains, and the active business collaboration of timber operators in both Krais the analysis of these two provinces have been combined in a single section. A series of field visits to these provinces last winter, which were organized in collaboration with law enforcement and official inspecting entities, yielded many cases in which companies registered in Khabarovskii Krai were operating actively in illegal timber markets in Primorskii Krai and vice versa. Significantly, Primorskii Krai presents the most opportunities for export to both Japan and China via a set of seaports and the most convenient border gates with direct truck or train connection, which does not require re-loading, unlike shipments sent via the Amur River.

Tables 13 through 16 below provide information about timber harvesting in and export from Primorskii Krai, while Table 17 provides information on logging in Khabarovskii Krai. It should be noted that the information is based on official data provided by government-related sources and therefore in most cases does not encompass the sizable amount of illegal activity in the province. Table 13 breaks down logging by Forest Service Unit (Leskhoz), which is the government organization responsible for overseeing logging in the particular locale in which it takes place. For each Forest Service Unit, the table breaks down 2002 logging into the following: logging conducted for maintenance, etc., logging conducted by long-term forest leases, and logging conducted by short term users, who, like leasers, rent the land from the government, but for a shorter period of time. Table 14 gives annual production from 1999 to 2003 of the leading logging companies in Primorskii Krai. When available, it also gives information on the number of leased plots and total leased areas for each of these companies, as of 2000. Table 15 provides log export volumes by customs branch and gateway and provides subtotals for conifer, oak and ash exports. Table 16 identifies key partnerships in the export of Primorskii Krai timber to China, listing Chinese importers and import volumes, as well as the names of exporters on the Russian side of the border that are associated with each Chinese importer. Finally, Table 17 lists top logging firms in Khabarovskii Krai, organized by district, and gives the 2000 volumes harvested by each of these firms.

Table 13: Forest Use in Primorskii Krai by Leskhoz in 2002-2003 (1,000 m³)

| Forest Service Unit (Leskhoz) | Maintenance -Salvage etc. Volumes (2002) | Volumes Harvested by Forest Leasers (2002) | | Volumes Harvested by Short-Term Users (2002) | | Total Vol. 2002 | Total Vol. 2002 except | Total Vol. 2003 except |
|-------------------------------------|---|---|---------------------|---|---------------------|-----------------------|---------------------------------|---------------------------------|
| | | Total | Conifer Subtotal | Total | Conifer Subtotal | | Mainte- nance | Mainte- nance |
| Anuchinskii | 22.5 | 64.7 | 53.8 | 21 | 9 | 108.2 | 85.7 | 75.4 |
| Artyomovskii | 2.1 | - | - | - | - | 2.1 | 0.0 | - |
| Arsenyevskii | 29.4 | 8.9 | 4.9 | 9.2 | 2.6 | 47.5 | 18.1 | 21.8 |
| Barabashskii | 2.1 | - | - | - | - | 2.1 | 0.0 | - |
| Verhne- | 46.2 | 76.1 | 45.1 | 1 | 1 | 123.3 | 77.1 | 129.4 |
| Perevalnenskii | 10.2 | 70.1 | 10.1 | 1 | 1 | 120.0 | ,,,, | 120.1 |
| Vladivostokskii | 5.5 | - | - | 2 | - | 7.5 | 2.0 | 1.8 |
| Dalnerechenskii | 11.0 | - | - | 11 | 2 | 22 | 11 | 18.6 |
| Dalnegorskii | 18.7 | 183.5 | 158 | 3.5 | 3 | 205.7 | 187.0 | 183.9 |
| Ivanovskii | 15 | - | - | 11 | 9.5 | 26 | 11 | 11.5 |
| Izm ailikhinskii | 34.1 | 37.6 | 19.7 | 2.9 | 0.6 | 74.6 | 40.5 | 48.6 |
| Kavalerovskii | 27 | 101.2 | 87.8 | 19 | 5.8 | 147.2 | 120.2 | 130 |
| Kirovskii | 21.2 | 13.9 | 5.2 | 10 | 2.6 | 45.1 | 23.9 | 26.0 |
| Koksharovskii | 33.7 | 77.1 | 69 | 2 | - | 112.8 | 79.1 | 95.9 |
| Lazovskii | 15.4 | 6.7 | 4.6 | 15 | 9 | 37.1 | 21.7 | 22.5 |
| Malinovskii | 23.5 | 119.6 | 87.9 | 25 | 7.5 | 168.1 | 144.6 | 126.2 |
| Melnichnii | 29.3 | 352.4 | 350 | 2.8 | 2.8 | 384.5 | 355.2 | 343.7 |
| Olginskii | 29.1 | 13.3 | 2.5 | 15 | 6.7 | 57.4 | 28.3 | 46.9 |
| Partizanskii | 25.7 | - | - | 8.6 | 8.6 | 34.3 | 8.6 | 0.2 |
| Pogranichnii | 13 | - | - | - | - | 13 | 0 | - |
| Pozharskii | 55.9 | 125.3 | 70.9 | 14.7 | 2.4 | 195.9 | 140 | 157.7 |
| Roschinskii | 107 | 238.4 | 120.9 | 2.9 | 2.6 | 348.3 | 241.3 | 239.9 |
| Samarginskii | 7 | - | - | 1.2 | | 8.2 | 1.2 | 1.3 |
| Svetlinskii | 141 | 280.7 | 224.3 | - | - | 421.7 | 280.7 | 420.3 |
| Sergeevskii | 21.8 | 83.1 | 81 | 3.4 | 1.4 | 108.3 | 86.5 | 93.1 |
| Spasskii | 16.4 | 9.8 | - | 0.7 | - | 26.9 | 10.5 | 14.3 |
| Ussuriiskii | 5 | - | - | 0.2 | 0.2 | 5.2 | 0.2 | - |
| Agriculture | 15 | - | - | - | - | 15 | 0.0 | - |
| Academy | | | | | | | | |
| Chernigovskii | 2 | - | - | - | - | 2 | 0.0 | 0.7 |
| Chuguevskii | 57.8 | 120.8 | 107.5 | 13.1 | 7 | 191.7 | 133.9 | 186.8 |
| Shkotovskii | 34.4 | - | - | - | - | 34.4 | 0.0 | 5.4 |
| "Orlinoye" | 7 | - | - | - | - | 7 | 0.0 | - |
| Shumninskii | 20.3 | 67.3 | 54.6 | 4.5 | 3.8 | 92.1 | 71.8 | 95.6 |
| Others | | | | | | 360 | 360 | 82.4 |
| TOTAL | 943 | 2,074.5 | 1,638 | 206.4 | 86.9 | 3,583 | 2,640 | 2,579.9 |
| Subtotal | 440 | | | | | | | |
| (maintenance, | | | | | | | | |
| etc.) by leasers | | | | | | | | |
| Substotal | 450 | | | | | | | |
| (maintenance | | | | | | | | |
| etc.) by Forest | | | | | | | | |
| Source: Primorskii Sta | | | | | | | | |

Source: Primorskii State Forest Agency.

Table 14: Primorskii Krais' Leading Logging Companies (Forest Leasers Only)

| Company | Number of Plots Leased (by 2000) | 1999 Production Volume* | 2000 Production Volume* | 2002 Production Volume* | 2003 Production Volume* | Leased Area (by 2000) in |
|----------------------|-------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|
| | Leased (by 2000) | v orume* | v olume* | (Long-Term Use Only) | (Long-Term Use Only) | Units of 1,000 ha |
| Terneiles | 4 | 387 | 393 | 298 | 383 | 619 |
| Roschinskii KLPH | 2 | 119 | 129 | 153 | 151 | 400 |
| Amgu | 1 | 141 | 114 | 138 | 205 | 198 |
| Luchegorskles | 1 | 100 | 139 | 20 | 69 | 159 |
| Sergeevskii LPH | 3 | 95 | 109 | 111 | 93 | 110 |
| Vyazemski LPH (Khab) | 1 | 71 | 74 | 38 | 34 | 85 |
| Melnichnoye | 1 | 115 | 111 | 120 | 113 | 184 |
| Kavalerovskii LPH | 1 | 114 | 119 | 90 | 90 | 162 |
| Terneilesstroi | 3 | 82 | 76 | 30 | 49 | 74 |
| Primorskii DOK | 3 | 42 | 35 | 24 | 26 | 88 |
| Dalnerechenslkes | 1 | 48 | 61 | 60 | 66 | 149 |
| Primorsklesprom | 2 | 67 | 78 | 116 | 146 | 109 |
| Germes (Roschino) | 1 | 15 | 6 | 7 | 8 | 64 |
| Ussuriiskii DOK | 3 | 34 | 28 | 21 | 13 | 65 |
| Bikin | 1 | NA | 24 | 18 | 13 | 22 |
| Military loggers | 1 | 15 | 23 | 14 | 15 | 54 |
| Izmailikha | 2 | 53 | 27 | 22 | 30 | 67 |
| Dalnerechenskii LK | 2 | 18 | NA | NA | 3 | 28 |
| Limonniki | 2 | 8 | 11 | 5 | 13 | 31 |
| Sikhote-Alin | 1 | 13 | 12 | 6 | 13 | 15 |
| Koksharovka | 1 | 36 | 44 | 23 | 21 | 104 |
| Kirovskles | 3 | 12 | 13 | 8 | 13 | 65 |
| Kemales | NA | NA | NA | 11 | 14 | 20 |
| Anuchinskii LPH | 2 | NA | 73 | NA | NA | |
| Primsnabcontract | NA | 18 | 19 | 20 | 16 | 22 |
| Pozhiga | NA | 17 | 15 | 47 | 28 | 99 |
| LuTEK | NA | 15 | 4 | 10 | 8 | 40 |
| Vostochnii | NA | 20 | 23 | 12 | 14 | 29 |
| Energiya (Roschino) | NA | 16 | 11 | 22 | 9 | 56 |
| Yappi | NA | 15 | 7 | 10 | 6 | 33 |
| Aralia | NA | 11 | 23 | 12 | 17 | 68 |
| Vostok | NA | 36 | 57 | 40 | 40 | 15 |
| Prestizh | NA | 24 | 46 | NA | NA | 78 |

| Total | 2,200 | 2,672 | 2,672 | 3,583 | 2,580 | 3,309 |
|------------------------|------------|---------------|---------------|---------------|--------------|--------------|
| by leasers) | | | | | | |
| and maintenance (not | | | | | maintenance) | |
| Municipal, short -term | 445 | 977 | 977 | 943 | 234 (without | NA |
| Lease | ` , | | | | , , , | |
| Total Long-Term | 118 (156?) | 2,227 (4012?) | 2,332 (4262?) | 2,640 (4414?) | 2,346 (4443) | 4,125 (7492) |
| Others (small) | 76 | 442 | 455 | 866 | 249 | 1,200 |
| Subtotal | 42 | 1,785 | 1,877 | 1,774 | 2,097 | 2,925 |
| Quant | NA | NA | NA | 17 | 15 | NA |
| Chuguevskii LPH | NA | NA | NA | 60 | 92 | NA |
| Stroyenergoservice | NA | NA | NA | 9 | 19 | NA |
| Olimp+ | NA | NA | NA | 7 | 23 | NA |
| Ussuri | NA | NA | NA | 12 | 15 | NA |
| Olgales | NA | NA | NA | 4 | 9 | NA |
| Soyuz (Union) | NA | NA | NA | 3 | 11 | NA |
| Dalwood | NA | NA | NA | 14 | 23 | NA |
| DV Manufactura | NA | NA | NA | 2 | 10 | NA |
| Sikhali | NA | NA | NA | 22 | 25 | NA |
| Tayozhnoye | NA | NA | NA | 93 | 88 | NA |
| Gold-wood | NA | NA | NA | 2 | 25 | NA |
| Pavlovskoye | NA | 17 | 19 | 23 | 23 | 23 |
| Transpil | NA | 11 | 7 | NA | NA | 32 |

Source: Primorsky State Forest Agency.
* Production volume in 1,000 cubic meters.

Table 15: Raw Log Export Volumes from Primorye in 2002 - 2003 by Customs Administration and Gateway

| | Species | (1,000 cul | bic meters) | (1,000 tons) | | Total cost (\$ 1,000) | | Customs fee (per 1 cubic meter, rubles) | |
|------------------------------|-----------------|------------|-------------|--------------|---------|-----------------------|---------|---|-------|
| | | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Total from | Raw logs | 5,069 | 5,501 | 4,195.8 | 4,625.5 | 280,477 | 321,064 | 159.7 | 172.1 |
| Primorye | Conifer | 2,790 | 3,545 | 2,374 | 3,005 | 141,431 | 184,056 | 120.9 | 117.3 |
| v | Oak | 144 | 209 | 145.9 | 216.3 | 139.90 | 212.61 | 808.2 | 895.5 |
| | Ash | 143 | 193 | 142.6 | 194.9 | 150.92 | 170.87 | 817.6 | 863.1 |
| Khasan customs | Raw logs, total | 99.6 | 68.2 | 80.9 | 55.1 | 5,944 | 4,102 | 116.8 | 125.8 |
| Vladivostok customs total | Raw logs, total | 585.4 | 422.2 | 479.0 | 349.5 | 38,158 | 30,415 | 194.2 | 227.0 |
| Pervomaiski Custom (ship | Raw logs | 342 | 220.5 | 279.2 | 184.8 | 22,207 | 17,193 | 212.9 | 311.3 |
| terminal) | Conifer | 82.9 | 38.3 | 72.8 | 36.1 | 3,959 | 1,986 | 99 | 100.9 |
| | Oak | 23 | 25.8 | 22.9 | 25.5 | 2,712 | 3,215 | 822 | 852.7 |
| | Ash | 24.7 | 30.8 | 24.5 | 30.5 | 3,043 | 499 | 831 | 904 |
| Vladivostok port | Raw logs | 243.2 | 201.7 | 199.7 | 164.7 | 15,942 | 13,222 | 167.8 | 134.8 |
| - | Conifer | 86.3 | 75.5 | 79.3 | 69.3 | 4,947 | 3,969 | 124.7 | 109.2 |
| | Oak | 5.3 | 0.4 | 5.3 | 0.4 | 616 | 43 | 814.7 | 965 |
| | Ash | 6.1 | 1 | 6.1 | 1.0 | 697 | 117 | 835.1 | 962.5 |
| Grodekovskaya customs | Total | 709.9 | 416.3 | 581.7 | 343.9 | 34,259 | 23,450 | 161.2 | 189.9 |
| - | Conifer | 594.4 | 301.2 | 480.6 | 243.6 | 27,497 | 15,042 | 120.7 | 118.9 |
| | Oak | 24.7 | 16.9 | 23.9 | 16.6 | 2,019 | 1,868 | 767.7 | 883.8 |
| | Ash | 19.9 | 19.7 | 18.7 | 19.6 | 1,551 | 2,202 | 762.2 | 867.5 |
| Nakhodka customs total | Total | 3,144.2 | 3,728.4 | 2,594.7 | 3,101.5 | 173,191 | 211,433 | 134.4 | 126.2 |
| | Raw logs | 1361.9 | 1140.2 | 1138.3 | 940.8 | 80,328 | 67,080 | 133.4 | 131.7 |
| | Conifer | 664 | 515.8 | 606.9 | 466.9 | 38,724 | 292,29 | 121.9 | 127.9 |
| | Oak | 12 | 0 | 11.9 | 0 | 1,201 | 0 | 814 | 0 |
| | Ash | 12.2 | 6.9 | 12.1 | 6.8 | 1,460 | 794 | 856.1 | 910.6 |
| Bolshoi Kamen | Raw logs | 99.1 | 209.3 | 85.1 | 190.6 | 5,226 | 12,396 | 115.1 | 120.3 |
| Customs point | Conifer | 66.6 | 796.1 | 60.9 | 663.2 | 3,932 | 43,320 | 125.9 | 114.7 |
| | Oak | 0 | 0.1 | 0 | 147 | 0 | 18 | 0 | 853.3 |

| Olginski customs point | Raw logs | 444.6 | 475.5 | 332.7 | 357.6 | 21,392 | 22,518 | 114.5 | 96.6 |
|---------------------------|---------------------------|-------|-------|-------|-------|--------|--------|-------|--------|
| | Conifer | 298.7 | 414.9 | 221.3 | 309.2 | 14,126 | 20,033 | 109.4 | 102.8 |
| | Oak | 2.8 | 3.1 | 2.7 | 2.8 | 256 | 205 | 706.4 | 620.6 |
| | Ash | 1 | 0.9 | 1.0 | 0.9 | 98 | 135 | 752 | 1058.9 |
| Plastun customs point | Raw logs | 634.2 | 624.8 | 527.2 | 534.7 | 29,358 | 29,012 | 154.6 | 139.4 |
| • | Conifer | 563.4 | 570.8 | 467.7 | 485.4 | 24,790 | 25,428 | 124.7 | 122.4 |
| | Oak | 12.2 | 13.6 | 11.8 | 13.4 | 1,103 | 1,378 | 811.9 | 895.8 |
| | Ash | 16.5 | 20.3 | 16.3 | 19.9 | 2,349 | 2,647 | 970.1 | 824.2 |
| Vostochny merchant port | Raw logs | 604.4 | 674.9 | 511.5 | 574.7 | 36,887 | 41,621 | 133.2 | 127.4 |
| | Conifer | 273.8 | 345.6 | 259.8 | 328.2 | 15,904 | 19,231 | 120.7 | 114.9 |
| | Oak | 4.2 | 4.8 | 4.2 | 4.7 | 433 | 560 | 762.8 | 865.4 |
| | Ash | 5.3 | 2.5 | 5.2 | 2.4 | 551 | 275 | 771.1 | 838.4 |
| Nakhodka merchant port | Raw logs | 0 | 603.6 | 0 | 502.9 | 0 | 38,806 | 0 | 126.1 |
| - | Conifer | 0 | 304.6 | 0 | 275.7 | 0 | 17,626 | 0 | 109.8 |
| | Oak | 0 | 3.9 | 0 | 3.9 | 0 | 349 | 0 | 862 |
| | Ash | 0 | 3.6 | 0 | 3.6 | 0 | 431 | 0 | 808.9 |
| Ussuriiskii customs total | Total | 529.9 | 865.9 | 459.4 | 775.5 | 28,925 | 51,663 | 278.4 | 337.9 |
| Ussuriiskii customs point | Raw logs | 22.3 | 24.4 | 19.4 | 19.8 | 964 | 1,133 | 112.3 | 136.7 |
| | Conifer | 19.6 | 19.3 | 16.8 | 15.3 | 783 | 824 | 105.6 | 120.7 |
| | Oak | 0.5 | 1 | 554 | 971 | 57 | 117 | 716 | 770 |
| Markovo customs point | Raw logs | 308.1 | 493.5 | 272.2 | 452.2 | 19,725 | 33,998 | 365 | 447 |
| - | Conifer | 137.1 | 160.6 | 104.7 | 123.3 | 6,612 | 7,946 | 139.6 | 134.7 |
| | Oak | 49.5 | 108.4 | 52.4 | 114.3 | 4,728 | 10,716 | 838.9 | 931.0 |
| | Ash | 53.2 | 92.6 | 54.4 | 94.5 | 4,910 | 8,474 | 784.6 | 856.5 |
| Poltavka customs point | Raw logs | 0.2 | 0.4 | 145 | 312 | 10 | 28 | 210 | 140 |
| • | | | | 4 4 5 | 010 | 1.0 | 28 | 210 | 140 |
| | Conifer | 0.2 | 0.4 | 145 | 312 | 10 | 20 | 210 | 110 |
| Arsenyev customs point | | 0.2 | 347.5 | 145 | 303.1 | 8,225 | 16,505 | 162.9 | 197.4 |
| Arsenyev customs point | Conifer Raw logs Conifer | | | | | | | | |
| Arsenyev customs point | Raw logs | 199.4 | 347.5 | 167.5 | 303.1 | 8,225 | 16,505 | 162.9 | 197.4 |

Note: This includes subtotals for conifer, oak, and ash exports (customs code 4403, including 4403209100 – conifer + Korean pine, 4403911000 – oak, 440399501 – ash)

Totals are for customs code 4403, and subtotals are for (1) customs code 4403209100 – conifer and Korean pine, (2) customs code 4403911000 – oak, and (3) 440399501 – ash

Source: RFE Customs Department.

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Table 16: Chinese Importers of Primorskii Krai Timber, Import Volumes and Key Trade Partners (2002)

| Importer | City in China | Exporter | Volume, 1,000 m ³ | |
|-----------------------|--------------------|---|---------------------------------|--|
| Sin Lin | Suifenhe | | 32.3 | |
| Guichen | Suifenhe | | 11.6 | |
| Luntzyan -Shanlyan | Suifenhe | Dalwood, Girin - Kavalerovo, Ex-im Tr. | 168.6 | |
| Trade Ex-Im Co | Suifenhe | Vneshtrans | 29.3 | |
| Bao Fa | Dunnin | Vostokles, Chuguevka | 13.5 | |
| Shen Syang | Suifenhe | | 38.5 | |
| Fu Tung | Suifenhe | Gold Valley, Grand-wood, Nakhodka | 29 | |
| Taion-Shandong | Suifenhe | Dalintorg, Nakhodka | 6 | |
| Topsan-Nandjin | Suifenhe | | | |
| Bao Ye | Suifenhe | Dalintorg, Prim.Leso- promyshlenniki, Les- Trading, Kirovskles | 220.7 | |
| Free Economic Zone | Suifenhe | Dalintorg, Nakhodka | 48.2 | |
| Jun Yun | Suifenhe | Dalnerechenskles | 48 | |
| Tzya Hun | Huyuang | Dalnerechenskles | 8.6 | |
| Hon Ya | Suifenhe | Dalnerechenskles | 32.4 | |
| Juy Ning | Suifenhe | Kirovskles | 33.4 | |
| Hua Fung | Suifenhe | Luchegorskles | 32.8 | |
| Sin He | Suifenhe | Ussuriisk | 8.7 | |
| Hua Ye | Suifenhe | Lesozavodsk | 8.1 | |
| Sing Han | Moulin | Prim.Lesopromysh-lenniki | 20 | |
| Rum Trade | Suifenhe | Primorlesprom | 16.4 | |
| Syan Da Li | Suifenhe | Primorlesprom, Prim. Lesopromyshlenniki | 36 | |
| Tze Hun | Suifenhe Dalyan | Dalnerechenskles | 7.3 5.7 | |
| Lin Yuang | Suifenhe | Dalnerechensk- Leso- Kombinat | 7.6 | |
| Van Lun | Dunnin | Arsenyev | 6.7 | |
| | Hong Kong | Slavyanka Timber Terminal | 47.8 | |
| Kai Tang | Hunchun | Bolshoi Kamen | 4.7 | |
| Yui Sing | Heihe | Bolshoi Kamen | 3.2 | |
| Trade-Economic Center | Dunnin | Fiolent, Pogranichny | 18.5 | |
| Hua Yu | Suifenhe | Fiolent | 9.9 | |
| | Mudandzyan | Forest-Vladivostok | 13 | |
| Tzi Sin | Dunnin | Pokrovka | 9.3 | |
| Pei Fun | Suifenhe | Prim.Lesopromyshl. | 2.6 | |
| Lun Gan | Suifenhe | Dalnerechenskles | 2.3 | |

Source: Russian Customs.

Table 17: Khabarovskii Kria – Leading Loggers and Logging Volumes in 2000 (1,000 m 3)

| District/logging company | Volume* | District/logging company | Volume* |
|---------------------------------|---------|-------------------------------------|--------------|
| Solnechny District - Total: | 1,148 | Ulchskii District-Total: | 726 (797?) |
| Gorinskii LKPH | 161 | Mariinskles | 26 |
| Sredneamgunskii LPH | 141 | Klyuchevoi | 56 |
| Evoronskii KLPH | 249 | Takhtinskoye | 67 |
| Krona | 60 | Tzimmermanovskoye | 65 |
| Amgun | 59 | Flan | 18 |
| Harpin | 26 | De-Kastriles | 223 |
| Ves Mir | 38 | De-Kastrinskii Torgovy Dom | 43 |
| Monolit | 38 | Taiga | 66 |
| JV Rimbunan Hijau DV | 150 | · · | |
| Komsomolski District - Total: | 936 | Khabarovskii Dictrict Total: | 91 |
| ? | 188 | Magdusa | 18 |
| Komsomolskii LPH | 135 | Ulikanskii KLPH | 42 |
| Vizir | 65 | Amurskii District, total | 59 |
| Snezhnoye | 61 | Litovskii LPH | 23 |
| Kaskad | 40 | LICOVSKII LI II | 20 |
| Yasen | 50 | Verkhnebureinskii District - Total: | 497 |
| Skimen -les | 34 | Skidder | 52 |
| Ves Mir | 21 | Badzhalskii LPH | 118 |
| Magma | 58 | Suluk | 122 |
| JV Arkaim | 127 | Mercury | 28 |
| JV AIRAIII | 127 | Dallestroy | 35 |
| Nikolayevskii District - Total: | 302 | Urgal | 8.5 |
| Nikolayevskles | | Organ | 6.0 |
| | 53 | D Odranka District Teach | 117.4 |
| Nikolayevskii DOK | 20 | P. Osipenko District - Total: | 115.4 |
| Forpost | 14 | Cheatyn | 53 23 |
| Nikolaevskii marine port | 9 41 | Amgun | 23 |
| Liman | | C+ C | 450.0 |
| Lazarevskoye | 94 | Sovet-Gavanskii District - Total | 452.8 |
| Flox | | Nelma | 99.5 |
| Nord | 25 | Gector | 12 |
| Delt lei Deata de la | 07 | Business Center Anchor | 29 |
| Bikinskii District - Total: | 37 | Fart | 53 |
| | 100 | Mezhdurechye | 28 |
| Vyazemskii District -Total: | 122 | SAR | 101 |
| Vyazemskii LPH | 92 | Lestransservice | 32 |
| | | Germes | 28 |
| Vaninskii District - Total: | 1,211.4 | | |
| Extrales | 63.3 | Lazo District - Total: | 423.4 |
| Vega | 126 | Mukhensokye | 22 |
| Sovgavanles | 50 | Progress | 11 |
| JV Forest Starma | 370 | Ros-DV | 47 |
| Chistovodnoye | 35 | Dallesstroy | 28 |
| Tis | 45 | JV Rimbunan Hijau Int. | 114 |
| Vaninolesexport | 61 | Modul | 8 |
| Vodolei | 88 | | |
| Kato | 85 | Nanaiskii District - Total: | 263 |
| Arkaim | 68 | Altai | 9 |
| Tumnin-les-2 | 38 | Sindinskoye LP | 61 |
| Ost | 19 | Spektr | 20 |
| Vanino Marine port | 35 | Model Forest | 23 |
| Total Volume Logged in Khabarov | | | |
| | | 999: 5,016,000 cubic meters | |

Source: Khabarovskii Krai Administration and Khabarovskii State Forest Service

Remarkably, according to the State Customs Committee, the total raw log export from Primorskii Krai in 2002 was 5,069,000 cubic meters (see Table 15), while only 3,583000 cubic meters were officially logged in total (see Table 13). One should keep in mind that this huge gap of 1.5 million cubic meters cannot be explained simply by resale operations that year, particularly because timber trade control had become especially strict in Primorskii Krai, so that most volumes in transit from other places tended to have already been checked in locales with less stringent customs procedure before the consignment came to Primorskii Krai. Thus, the large amount by which official exports exceed official production highlights the high degree of illegal logging in Primorskii Krai, along with the effectiveness with which an illegal product somehow becomes legal by the time it arrives at the border for export. Interestingly, in the case of the very valuable hardwood species of oak and of ash, export figures do not exceed production figures. Primorskii Krai's official production of oak in 2002 was 302,000 cubic meters, of which 144,000 cubic meters were exported as raw logs (see Table 15). Ash production was 203,000 cubic meters that year, of which 143,000 cubic meters were exported as raw logs (see Table 15).

The forest service recognized the existence of only 33,000 cubic meters of illegally logged timber in 2002, including 6,500 cubic meters of ash and 8,040 cubic meters of oak. The aforementioned extra 1.5 million cubic meters exported fom Primorskii Krai but not legally logged there may seem insignificant given the geographic position of the province, which sees the transit of millions of cubic meters of timber annually from RFE and Siberian exporters via its key Chinese gateway of Grodekovo-Suifenhe and its shipping seaports. Major timber exporters from other territories who deal with large consignments, however, usually do not use middlemen in Primorskii Krai, instead sending their timber directly to the port or gateway. Thus, their timber does not enter Primorskii Krai's customs statistics. This implies that the 1.5 million cubic meters of "lost" timber belongs to small firms that log in Primorskii Krai and, partly, in the neighborhood of Khabarovskii Kraii with legal loopholes, such as those mentioned above. This also means that the efforts of local customs and administrative authorities of the province to tackle illegal operations and to resolutely limit commercial cut under so -called "municipal" or "maintenance" operations cannot bring real success, although efforts in this regard appear quite serious. With regard to illegal operations, it is also of interest to note a shift in gateway volumes, as indicated in Table 15 which shows that the combined flow of Primorskii Krai's exported logs through Grodekovo and Ussuriiskii Customs totalled about 1.2 million cubic meters (about 20 percent of Primorskii's total log exports) in both 2002 and 2003. These gateways are the main passageways for logs flowing from Primorskii Krai to China. A clear shift from Grodekovo being Primorskii Krai's top China gateway to Ussuriiskii playing that role can be seen through volume changes between 2002 and 2003. The shift is likely caused by criminal rather than economic reasons. In 2003, some officers of Grodekovo Customs were arrested for bribery and the top customs officials at Grodekovo are thought to have passed some of their clients on to colleagues at Ussuriiski Customs.

A number of other key trends are reflected in Tables 13 – 16. First, most large and middle-sized China-oriented loggers and exporters in Primorskii Krai, such as Terneilesstroy, Kavalerovsky and Koksharovka, did not significantly increase their timber production between 2001 and 2003. In fact, they even reduced it, while their Japan-oriented colleagues, such as Amgu and Terneiles increased production substantially (see Table 14).¹ Another trend is that so-called maintenance (or salvage) logging operations have become a key means of legalizing destructive logging of the most valuable species in restricted zones with free

licenses approved by the forest service. Many middle and large sized firms have shifted to such operations or, reducing their standard activity on the areas they have leased, have become sub-contractors for the hundreds of small municipal users – schools, hospitals, militia, state authorities and private users – which all have rights to conduct maintenance logging but no experience in doing this kind of work. These kinds of maintenance operations have become the main sources of illegal timber and the Forest Service began to exclude them from the official statistics in 2003. By some estimates, the volume of commercial timber logged under the label of municipal needs and forest maintenance or in the framework of short-term use exceeded 1.5 million cubic meters in Primorskii Krai in 2003. It is difficult, however, to collect specific data on the various operations involved in this sort of business.

The increasing mobility of loggers and exporters, due to the easy crossing of provincial borders to find the most "open" passage to China or to avoid strict provincial regulations, makes analysis and monitoring of market activities quite difficult. Specifically, trying to discover a sort of "market border" on the lower Amur between timber suppliers to China and those supplying Japan, we discovered that such an imaginary border would have to be quite unclear and broad. Sometimes, suppliers send their timber west to China from points which are located much lower on the river than the sources of consignment and are established for shipping east to Japan. Also, the shipping models and chains of custody are quite diverse. Some loggers log in Nanai District on the Amur River, with their mooring point on the river being in Troitzkoye. These loggers, however, prefer to send their trucks with stolen timber directly to Khabarovsk or even further to timber depots in Khor or Bikin, where the system of stolen log wholesale is perfectly organized. These illegal loggers often have legal firms, registered outside of the district where they operate.

Primorskii Krai has become an obvious center for illegal logging operations and trade activities distributed all over the RFE and Siberia. Exporters in Primorskii Krai use this network in their role as transit dealers (i.e. facilitating the transit of illegal timber from other provinces through Primorskii and out to China). A group of professional criminals in Primorskii Krai, working jointly with former gold miners of Amur Oblast, has created a set of private firms in Krasnoarmeiski, Terneiskii, and Dalnerechenskii Districts and has developed links with Chinese wholesalers. These wholesalers always seem to have extra cash from the resale of Russian timber in Suifenhe, where it sells for double the price than it does in Russia. As a result of this significant capital, they have been able to get all the local administrations under their control, as well as the inspection and law enforcement agencies. They have thus developed a very efficient, but fraudulent industry, and maintaining the local infrastructure (e.g. sawmills, bakeries, heating firewood, roads, buses, schools, medical emergency facilities, communications etc.) to some extent depends on their leaders' discretion and personal conception of justice in distributing timber profits. The leaders' behavior also depends on their sharing of illegal revenues with higher officials in the municipal and regional governments and militia. The system of illegal timber marketing is based upon a group of broadly known middlemen in the forest areas. These middlemen are well-supplied with cash for payments, including those for bribery of militia and forest inspectors. Thus, the middlemen have easy access to all the required blank documents, having all the necessary stamps and signatures for wholesale. Well-known among loggers, they can export any timber consignment they come across, whether it be on the road or in the timber depot.

¹ This trend reflects the tendency of small and mid-sized businesses focusing on the China trade to use nearly exhausted forests with existing infrastructure, and for bigger leasers who work for Japan to pursue new areas, including those reserved for protection, and develop new infrastructure.

There are many Chinese citizens in the RFE who are fluent in Russian, have practically become residents (albeit illegal), and are generally known under Russian names like Kostya, Misha or Kolya. Nonetheless, it is apparent that they have developed friendly relations with the administrative authorities and the militia. As an example, "Les-Holding" Co. has an ongoing Chinese consumer, "Fen-Syan" Co., whose representative, with the Russian name Borya, had already been expelled from Russia as an illegal immigrant. He later came back to Russia, however, and his family business prospered. Borya's mother is marketing stolen timber from Primorskii Krai on Chinese territory. The family's business is ensured by bribing Russian inspectors. In many cases, according to sources, Borya has doubled the agreed export commission after crossing the border into China for Russian suppliers. As a result, these suppliers had to pay not US\$2 per cubic meter, as negotiated, but \$4, since they had no other way to make money. Members of the special inspection team "Tiger" of the Nature Resource Ministry have confiscated many fake official documents for timber export from "Les-Holding, Co." These documents could be used to buy consignments of timber logged in other districts and to export the consignments via a third border point, where neither logger nor wholesaler are even known. Since Primorskii Krai officials seem to be seriously trying to at least limit illegal timber flow, they are constantly making their system of document control for Primorskii Krai loggers and exporters stricter. Their authority, however, only covers the territory of Primorskii Krai, so that by use of the aforementioned models, timber from the JAO and Khabarovskii Krai goes through Primorskii Krai gateways more easily. In particular, train shipments, checked by customs in the Khabarovskii Krai points of Khor and Bikin are then sent on to the bordergate of Pogranichnoye-Suifenhe.

One popular practice in the illegal timber trade is the sales by Forestry Stations (leskhozes) themselves. Legally, the Forest Stations only have the right to carry out non-commercial logging, which generally yields only firewood or at most pulpwood. It is now typical, however, for the foresters to sell (either directly themselves or via middlemen) high quality timber as firewood for US\$4 per cubic meter and then participate in sharing the real profit, which appears after the timber is exported at US\$100 per cubic meter. Despite this obvious illegality, it is very difficult to create an appropriate set of documents for a successful lawsuit. As a result, militia, the forest service and district administrations simply plan and manage illegal operations to provide for their own maintenance and therefore permit illegal operators to survive and continue. The system has become even more efficient in hiding illegal profit since Chinese sawmills have begun to sprout up all over the southern part of the RFE. From 2002 to 2003, such sawmills became a significant new industry, supplying processed wood not only to China, but also for the rapidly increasing local needs of the RFE.

Environmental organizations are currently creating a new strategy to deal with the new political and economic situation. The new Primorskii Krai Government has succeeded to some extent in taking control of the illegal timber trade – not to stop it, but to shift money generated from private pockets to their budget, which they now control. A mentality of environmental conservation, despite the best efforts of environmentalists, has not caught on among officials. Thus, forest destruction continues, not only in Primorskii and Khabarovskii Krais, but also in the rest of the RFE and Siberia. In addition, drafts for a new Forest Code, promoted by the government in early 2004, seem to maintain all the most dangerous trends. The drafts continue to adhere to the former public-use forest models of the Soviet era and do not take into consideration the culture of private property rights in a free market economy.

REFERENCES

Annual statistics of Russian Customs, Forest Service Agencies, and Governments of Provinces studied – Irkutskaya, Chitinskaya, Amurskaya and Jewish Autonomous Oblasts, Buryat Republic, Khabarovskii and Primorskii Krais

Author's fieldwork and interviews with a broad range of local non-government and municipal support: 1996 - 2003.

BROC, FSF, and Forest Monitor (UK), "The Wild East," 2000.

BROC, FOE-Japan and PERC, Plundering the RFE Taiga, 1999.

"Carana" Report of Khabarovsk Investment Strategy, 1998.

Lu, W. 2000. Annual Report on China's Forest Sector.

Sun, X., E. Katsigris, and A. White. 2004. *China's forest product import trends 1997-2002: Analysis of customs data with emphasis on Asia-Pacific supplying countries*. Washnington, DC: Forest Trends, 2004.