CHINA:
Overview of Forest Governance, Markets and Trade

November 2010
Regional Support Programme for the EU FLEGT Action Plan in Asia

Background
The European Commission (EC) published a Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan in 2003. FLEGT aims not simply to reduce illegal deforestation, but in promoting good forest governance, aims to contribute to poverty eradication and sustainable management of natural resources.

The European Forest Institute (EFI), an international research organisation with its headquarters in Finland, conducts, advocates and facilitates forest research networking at the pan-European level. Under its Policy & Governance programme, the EFI assists in the EU’s implementation of the FLEGT Action Plan. In 2007, the EU FLEGT Facility was established, hosted and managed by the EFI. The Facility (i) supports the bilateral process between the EU and tropical producing countries towards signing and implementing “Voluntary Partnership Agreements” (VPAs) under the FLEGT Action Plan, and (ii) executes the regional support programme for the EU FLEGT Action Plan in Asia.

The FLEGT Asia Regional Office (FLEGT Asia) of the EFI’s EU FLEGT Facility was formally established in October 2009. FLEGT Asia seeks to collaborate and build synergies with existing regional initiatives and partners in Asia. The EU FLEGT Facility is managed and implemented by the EFI in close collaboration with the EU.

Goal of FLEGT Asia
The goal of the FLEGT Asia Regional Programme is the promotion of good forest governance, contributing to poverty eradication and sustainable management of natural resources in Asia, through direct support of the implementation of the EU’s FLEGT Action Plan.

Strategy
The strategy to achieve this goal focuses on promoting and facilitating international trade in verified legal timber – both within Asia and exported from Asia to other consumer markets. In particular, it aims to enhance understanding of emerging demands in key timber-consuming markets and promote use of systems that assist buyers and sellers of Asian timber and timber products to meet these demands.

Work Programme
The work programme to achieve the Programme’s goal has three phases:

1. Information Collection
   Baseline information (trade statistics, product flows, future scenarios, stakeholder identification and engagement strategies), applied to countries in the region. Information on producers, processors, exporters and major consumers of exports from this region will be collected and collated. It will then be used to develop training and communication materials; to further define the nature of the capacity building to be undertaken (who are the target beneficiaries and what the training needs are) and form the baseline for monitoring the progress over the 3 years’ duration of the programme.

2. Capacity Building
   The second phase is the strengthening of key institutions (companies, trade associations, NGOs, government agencies, customs etc.) for improved forest governance in each country and across the region to meet the identified market needs. This will consist of training (at individual level, training of trainers, workshops, pilot studies e.g. on individual supply chains and for Timber Legality Assurance); information dissemination and communications (roadshows, seminars, communication materials, website, etc).

3. Customs & Regional Collaboration
   The work to support trade regionally and to invest in customs capacity in accordance with market requirements will be undertaken in collaboration with other programmes in the region.

This report is financed by FLEGT Asia as part of phase (1-2) activities.

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CHINA: Overview of Forest Governance, Markets and Trade

Sun Xiufang and Kerstin Canby

Forest Trends for FLEGT Asia Regional Programme
November 2010
**Forest Trends** is a Washington, DC-based international non-profit organization whose mission is to maintain, restore, and enhance forests and connected natural ecosystems, and life-sustaining processes, by promoting incentives stemming from a broad range of ecosystem services and products. Specifically, Forest Trends seeks to catalyze the development of integrated carbon, water, and biodiversity incentives that deliver real conservation outcomes and benefits to local communities and other stewards of our natural resources.

**ACKNOWLEDGMENTS**

The authors wish to thank Michael Jenkins and the rest of the Forest Trends staff for their support, in particular Christine Lanser for her research assistance, and Anne Thiel for her formatting and design assistance. We would also like to thank our Chinese colleagues who provided valuable information, including Dr. Chen Xiaoqian of TNC/RAFT China, Dr. Deng Zhixin of TFT China, Han Zheng of WWF China, Li Jia of IUCN China, and Yi Lan of Greenpeace China.
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ACRONYMS

ABC  Agricultural Bank of China
BCM  Bilateral Coordination Mechanism (EU – China)
BFU  Beijing Forestry University
CAF  Chinese Academy of Forests
CDB  China Development Bank
CFCC Chinese Forest Certification Council
CNCA Certification and Accreditation Administration of China
CNFA China National Furniture Association
CNFPIA China National Forest Products Industry Association
CoC Chain of Custody
CSR Corporate Social Responsibility
CTDA China Timber Distribution Association
EP Equator Principles
EU European Union
FDI Foreign Direct Investment
FGHY Fast-Growth High-Yield (Plantations)
FLEGT Forest Law Enforcement, Governance and Trade (EC program)
FSC Forest Stewardship Council
GEI Global Environment Institute
ICBC Industrial and Commercial Bank of China
IFC International Finance Corporation
MNC Multi-National Corporation
MOU Memorandum of Understanding
NDRC National Development and Reform Commission
NGO Non-Governmental Organization
PBC People’s Bank of China
PEFC Pan European Forest Certification
PNG Papua New Guinea
RA Rainforest Alliance
RWE Roundwood Equivalent
SFA State Forest Administration
SFM Sustainable Forest Management
SME Small- and Medium-Sized Enterprise
TFT The Forest Trust
TLAS Timber Legality Assurance System
UK United Kingdom
UK SDD UK – China Sustainable Development Dialogue
USD United States Dollar
VLO Verified Legal Origin
VPA Voluntary Partnership Agreement
WWF World Wildlife Fund
WWF GTFN World Wildlife Fund Global Trade and Forest Network
“In 2007, China’s total consumption of wood forest products converted approximately 371 million cubic meters, but the [Chinese] domestic supply of wood products market is only 202 million meters, with the actual consumption gap more than 100 million cubic meters.”

“It is estimated that by 2020, China’s total wood consumption will rise to 457-477 million cubic meters; the long-term timber supply gap will remain at 100-150 million cubic meters.”

Quotes attributed to Zhang Jianlong, Deputy Director of the State Forest Administration, as reported by China Wood Monthly, October 2010.

Map 1: China’s Forest Product Imports, 2009

Source: China Customs statistics, as compiled by Forest Trends.
Note

<table>
<thead>
<tr>
<th>RANGE</th>
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Map 2: China’s Forest Product Exports, 2009

Source: China Customs statistics, as compiled by Forest Trends.

ARROW WIDTH = MILLION m³ RWE

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<tr>
<td>11-15</td>
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</tbody>
</table>

Map 3: Chinese Imports Compared to Regional Manufacturing Hubs Vietnam and Thailand, 2009

Source: European Forestry Institute, as compiled by James Hewitt

ARROW WIDTH = MILLION m³ RWE

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1. INTRODUCTION AND SIGNIFICANT FINDINGS

In 2009, the Chinese wood products industry posted historic highs in terms of imports, production, and market activity. Trade data shows that 2009 imports of forest products were the highest on record (Figure 1), and domestic harvesting reached its highest peak in history in 2008. Domestic markets are booming, and while exports are down by volume, by value the export market was relatively stable (Figure 2). The economic downturn of 2008 and 2009, however, did cause numerous bankruptcies and closures especially among China’s small- and medium-sized mills – indicating that while the overall market remained relatively stable, a massive shift in industry structure occurred.

All over the globe, wood products industry analysts and sales specialists are expecting China to be the fastest-growing consumer of wood products in the years to come, to feed what is likely to be continued demand from the US, Europe and elsewhere, but in particular, a burgeoning domestic market. Regionally, the global recession actually strengthened China’s trade relations with its Asian neighbours, particularly ASEAN\(^1\) when China’s import markets remained relatively stable compared to other countries such as the US and Europe. China is expected to be the fastest-growing lumber producer, importer and consumer in the world, with annual increases in lumber consumption of 5.1 million m\(^3\).

This fast-paced consumption growth should have a strong impact on global wood demand, particularly as the major global economies begin to emerge from the current economic recession and China’s export markets recover.

Figure 1. China’s Forest Products Imports, by Product (million m\(^3\) RWE)

![Graph showing China’s Forest Products Imports by Product from 1997 to 2009.](image)

Source: Chinese customs statistics, as compiled by Forest Trends.\(^2\)

\(^1\) The China – ASEAN free trade agreements became operational in 2010.

\(^2\) All charts and figures based on China customs statistics, as compiled by Forest Trends, unless otherwise noted.
Significant findings of this report include:

- **Imports of forest products at historic high in 2009**: After a marginal decline in 2008, China’s imports of forest products reached its historic high in 2009, with one of its sharpest annual increase (22%), rising to 113 million m$^3$ RWE (Figure 1). During the first six months of 2010, imports of softwood logs were up 17% from the same period in 2009, again reaching their highest levels on record.

Currently, the wood products industry depends on imports for more than 50% of its overall supply for forest products (excluding recycled materials). Within China itself, great efforts have been made in developing forest plantations, but imports for the past few years (113 million m$^3$ RWE in 2009) have consistently been equal to or higher than China’s peak domestic production levels of commercial timber$^3$ (81 million m$^3$ in 2008). The majority of China’s plantation forests are poplar, Chinese fir and Masson pine, mostly consumed by the plywood and pulp / paper industry. China will continue to rely on imports for tropical hardwood species, used for the high end furniture and wooden flooring, at least in the near future.

Much of the 2009 increase came from the imports of wood pulp and chips to meet the burgeoning demand from the paper industry which continues to build and expand mega-pulp and paper mills.

- **Shifts in the structure of China’s industry**: There are several indications of shifts underway in the Chinese wood products manufacturing industry:

  o Closure of small and medium-sized mills attributed to the economic downturn of 2008 and possibly the inability of these smaller enterprises to comply with the requirements of the “big box” retailers such as WalMart, IKEA, etc.

  o A forced decreased reliance on log imports and possible substitutions, caused by an increase in log export bans or taxes from major supplying countries such as Gabon and particularly Russia$^4$. The supply gap created by the shortage of Russian log supply is too substantial to be easily replaced by other softwood log importers such as New Zealand. Thus, we are seeing increased imports of semi-finished products, the increased use of domestic sources, and the substitution of softwood products to non-wood products where practical.

  o Increased focus on domestic Chinese markets, mirroring a global trend where advanced economies recovery from the economic downturn remained sluggish, but there was often rigorous economic activity returning in many emerging and developing economies due to growing internal demand. In the case of China, this was spurred by aggressive fiscal stimulus packages.

  o Increase in Chinese labor costs, reducing China’s competitive advantage in primary processing of logs; and/or a general shift towards higher-end manufacturing particularly for export markets.

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$^3$ Total domestic timber supply includes not only commercial timber, but also fuelwood consumption and harvesting overquotas, etc.

$^4$ In November 2009, the Russian government announced that the log export duty will remain at 25% of export value through 2010 and will likely be extended into 2011. Potential increases were postponed. Many wood processors who heavily depended on Russian log supplies in the past developed other suppliers in response to the threat of higher log costs. In 2009, log imports from Russia represented only 68% of China’s total softwood log imports, down from 91% in 2007. In November 2010, reports began to circulate that the Russian log export taxes would be reduced or eliminated, possibly due to concerns about Russia’s WTO accession. At time of this report’s printing, no official announcement had been made.
• **Domestic production in 2008 reached its highest peak in history**, at 81 million m³, an increase of 16.22% over 2007 Figures. This is mainly due the clearance of forest materials damaged in the severe winter conditions in the early part of the year, and recovery schemes after the 2008 Sichuan earthquake. The 2009 Figures show a decline back to expected levels of 69.38 million m³, about the same level as 2007.

• **Exports of forest products decreased by volume, but barely decreased by value** (Figure 2), reflecting a likely shift in Chinese manufacturing towards higher-value wood products. Furniture and paper continue to be the main staples of the export-oriented industry. Despite massive increases in domestic plywood production, plywood exports, however, have been dropping as attention is focused on domestic markets. This trend may change in 2010 as exports figures for the first half of 2010 are posting large increases over 2009 (for example, plywood exports increasing 45%; fiberboard 76% and 58% in the first and second quarters respectively; wooden furniture up 16% and 29%).

**Figure 2: China Forest Products Exports, by Product (US$ billion)**

- **Chinese domestic markets are the new target of China’s forest products industry.** In 2009, China was the only major global market posting **positive** increases in consumption – with the exception of the Middle East which is a relatively small market (Table 1). Total figures on China’s domestic consumption rates vis-à-vis exports have been notoriously difficult to calculate, but pre-downturn calculations by RISI, a wood products consultancy firm, estimated that 92% of China’s domestically produced wood products were destined for domestic markets in 2005.
Table 1: China’s Increases in Wood Products Consumption vis-à-vis Other Markets, 2009 (%)

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>United States</th>
<th>Canada</th>
<th>EU</th>
<th>Japan</th>
<th>Middle East</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softwood Lumber</td>
<td>+20%</td>
<td>-23%</td>
<td>-15%</td>
<td>-15%</td>
<td>-14%</td>
<td>+15%</td>
</tr>
<tr>
<td>Plywood</td>
<td>+5</td>
<td>-16</td>
<td>-16</td>
<td>-29</td>
<td>-17</td>
<td>+16</td>
</tr>
<tr>
<td>Particle Board</td>
<td>+2</td>
<td>-5</td>
<td>-7</td>
<td>-13</td>
<td>-12</td>
<td>+3</td>
</tr>
<tr>
<td>MDF</td>
<td>+5</td>
<td>-3</td>
<td>-20</td>
<td>-20</td>
<td>-19</td>
<td>+46</td>
</tr>
<tr>
<td>Pulp</td>
<td>+21</td>
<td>-9</td>
<td>-19</td>
<td>-16</td>
<td>-21</td>
<td>-</td>
</tr>
<tr>
<td>Paper</td>
<td>+7</td>
<td>-5</td>
<td>-2</td>
<td>-6</td>
<td>-14</td>
<td>-</td>
</tr>
<tr>
<td>Packaging &amp; Tissue</td>
<td>+2</td>
<td>-21</td>
<td>-2</td>
<td>-16</td>
<td>-13</td>
<td>-</td>
</tr>
</tbody>
</table>


Expectations continue to be high for increased wood consumption in future years following recent government planned low-cost housing programs which aim to provide 7.5 million homes to low-income urban households from 2009-2011. Part of China’s 2009 fiscal stimulus package included the reduction of taxes and loan interest rates for residential purchases for single family houses and apartments. Out of the destruction of the Sichuan earthquakes, it was recognized that wood-based construction was safer, spurring more demand for this type of construction. Indeed, Chinese lumber consumption – particularly concrete forming lumber for new housing and general construction – is forecast to rise from 41.6 million m$^3$ in 2009 to 70 million m$^3$ by 2015.\(^5\) The complex systems of domestic markets, historically geographically isolated and with poor communication networks, are beginning to organize into more efficient distribution channels as well.

China’s main export markets increasingly require legal verification: The United States, Japan and the European Union continue to be the main markets for furniture and other wood products made in China (Figure 3). In 2009, China exported over US$27.3 billion of forest products, with the United States remaining the largest importer of China’s manufactured forest products, at US$7.5 billion in 2009. European countries imported over US$5.1 billion, while Japan imports in 2009 stood at US$3 billion. Together, these three major markets capture more than 50% of China’s export market, by value, of forest products.

In all three of these major markets, over the past ten years, there has been a rapid increase in demands for products which meet varying environmental and socially responsible requirements. In the wood products sector, buyers are increasingly requiring proof of legality or sustainability for their wood products – both for domestically produced wood as well as imported – and this proof must be third-party verified. This has been driven by a range of different processes relating to the verified legality of timber sources, increased consumer awareness in these markets and global pressures to mitigate impacts of biodiversity and climate change impacts by combating illegal logging and associated trade. Major components of this shift include:

a) Increasing retailer purchasing preferences
b) European and Japanese Public Procurement Policies
c) Amendments to the US Lacey Act (2008)
d) EU Timber Regulation (2010)
e) Swiss law requiring wood importers and suppliers to identify their products’ source (2010)

As with any market shift, Chinese producers and manufacturers can either try to take advantage of new opportunities caused by these new policies to gain greater market share, or possibly watch their existing markets dwindle. With a large proportion of wood products exported to the most environmentally-sensitive markets in the US and Europe and to a lesser extent in Japan and Australia, China’s industry, like its competitors in Indonesia and Vietnam, is potentially vulnerable to these shifts, particular in the...
plywood, wood furniture and wood flooring sectors. Continued research and monitoring will be needed to determine whether and how China and competing national industries respond to these new market requirements: losing markets, or taking advantage of new market opportunities.

- **China depends on imports for more than 50% of its supply, much of it from developing countries with poor forest governance records.** The sourcing of raw materials for this large and growing sector in China is crucial to its long term stability – both in terms of sustainability of supply but also reputational risk which is critical for China’s major export markets. Several of the countries which are major suppliers to China’s forest products industry are considered medium- to high-risk6 by market players in terms of possibility of illegally sourced wood materials (red text in Table 2).

- **China’s domestically produced timber is considered generally low-risk, although questions with regard to potential irregularities during land allocation processes for the burgeoning plantation sector remain:** The Chinese government controls the legality of domestic timber, and most stakeholders will comment that the Chinese laws are reasonably appropriate and adequately enforced. Documentation of source of origin at district levels of Chinese timber still poses some difficulties for some manufacturers.

The Chinese central government in recent years has enacted several measures to advance rural development and forest restoration by strengthening the land rights of communities and households, including farmers’ rights to the nation’s forest lands. This reform also allows households to transfer their land rights to others, including outside investors, as long as the process is voluntary and no one involved has a conflict-of-interest. However, these measures are often not implemented adequately at district levels, as shown by a recent study by the Rights and Resources Initiative (RRI). The pressure to ignore land rights is likely to grow worldwide as demand for land (for agricultural, forest or even carbon emission reductions) increases. As in many countries in Asia where land is at a premium, the allocation of land for economic land concessions (including plantations) often raises questions about how local communities have been engaged, processes for free and prior informed consent, and long-term benefits for these communities.

**Table 2: Top Suppliers of Forest Products to China, 2009 (million m³ RWE)**

<table>
<thead>
<tr>
<th>Timber Products</th>
<th>Rank</th>
<th>Country</th>
<th>Volume</th>
<th>Share</th>
</tr>
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<tr>
<td></td>
<td>1</td>
<td>Russia</td>
<td>19.5</td>
<td>38.5%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>New Zealand</td>
<td>5.2</td>
<td>10.3%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Canada</td>
<td>3.9</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Thailand</td>
<td>2.8</td>
<td>5.5%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Vietnam</td>
<td>2.4</td>
<td>4.8%</td>
</tr>
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<table>
<thead>
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<th>Logs</th>
<th>Rank</th>
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<th>Volume</th>
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<tr>
<td></td>
<td>1</td>
<td>Russia</td>
<td>14.8</td>
<td>52.8%</td>
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<tr>
<td></td>
<td>2</td>
<td>New Zealand</td>
<td>4.4</td>
<td>15.7%</td>
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<tr>
<td></td>
<td>3</td>
<td>Papua New Guinea</td>
<td>1.7</td>
<td>5.9%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Solomon Islands</td>
<td>1.1</td>
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</tr>
<tr>
<td></td>
<td>5</td>
<td>Gabon</td>
<td>1.1</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

6 “High-risk” is usually determined by market players, based on market perceptions of risk. These perceptions of risk are usually based on factors such as indicators of overall governance situation in a country (often tracked by international organizations such as Transparency International or the World Bank), recent reports on the forest governance situation in the country, producers’ ability to demonstrate legality based on internationally accepted verification or certification processes, etc.
### Lumber

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<td>Thailand</td>
<td>1.46</td>
<td>10.4%</td>
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<td>4</td>
<td>United States</td>
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<tr>
<td>5</td>
<td>New Zealand</td>
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### Plywood

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<td>Japan</td>
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<tr>
<td>5</td>
<td>Chile</td>
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### Wood Pulp

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<td>Canada</td>
<td>10.4</td>
<td>19.5%</td>
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<tr>
<td>3</td>
<td>Chile</td>
<td>7.6</td>
<td>14.3%</td>
</tr>
<tr>
<td>4</td>
<td>United States</td>
<td>5.8</td>
<td>10.9%</td>
</tr>
<tr>
<td>5</td>
<td>Indonesia</td>
<td>5.1</td>
<td>9.5%</td>
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### Paper

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<td>20.1%</td>
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<td>United States</td>
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<td>15.6%</td>
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<tr>
<td>3</td>
<td>Taiwan</td>
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<td>15.4%</td>
</tr>
<tr>
<td>4</td>
<td>South Korea</td>
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<td>9.5%</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>0.86</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

- **Rise of the paper industry:** In 2007, the paper industry was based mainly on domestic pulp and wastepaper, with a small proportion of imported pulp and pulpwood (used for bleached kraft pulp) and hardwood pulp for export-grade paper coming from unknown or potentially threatened forests. But as China’s producers scramble to meet growing domestic and international demand for higher quality paper, plantation programs across the region continue to underperform, and traditional sources of wastepaper (the US and EU) are shrinking, 7 substantial amounts of virgin wood and wood pulp from “high-risk” countries may become more attractive. Further research is recommended to ascertain the sourcing of this rapidly increasing import.

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7 For example, the US has reduced its consumption of newsprint by about 50% since 2000.
2. INCREASING DOMESTIC AND INTERNATIONAL DEMAND FOR FOREST PRODUCTS

Total figures on China’s domestic consumption rates vis-à-vis exports have been notoriously difficult to calculate, but 2005 calculations by RISI, a wood products consultancy firm, estimated that 92% of China’s manufactured wood products remain within China. Deutsche Bank in 2007 estimated 84% in 2007 (Chart 1).

Chart 1: Key End Users of Wood in China, 2007

After the economic downturn, however, this figure is likely to have increased: across the globe, research is showing that while in advanced economies recovery remained sluggish, rigorous economic activity developed in emerging and developing economies due to growing internal demand. This trend appears to be true for the relative consumption patterns of China’s domestic versus export markets for forest products.

A variety of factors is the reason for China’s burgeoning demand for forest products.

2.1 Increasing Domestic Demand

China has had considerable success in reducing poverty – the number of people living on less than US$1 a day halved during the last decade of the 20th century – and disposable income has steadily increased. Core demand for forest products in China is a natural extension of continual strong economy (i.e., improved living conditions for the middle class, significant infrastructure and construction projects), the improved accep-
tance of lumber in construction overall after the Sichuan earthquake demonstrated the durability of wood-based buildings, and an improving distribution network for wood construction materials throughout China.  

All of this has stimulated a sharp increase in the domestic demand for forest products – for paper products, furniture, and other products used for housing (plywood, wooden flooring). In 2009, China was the only major market posting positive increases in consumption in 2009 (Table 3), with the exception of the Middle East (which is globally a very small market).

Table 3: China’s Increases in Wood Products Consumption vis-à-vis Other Markets, 2009 (%)

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>United States</th>
<th>Canada</th>
<th>EU</th>
<th>Japan</th>
<th>Middle East</th>
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</thead>
<tbody>
<tr>
<td>Softwood Lumber</td>
<td>+20%</td>
<td>-23%</td>
<td>-15%</td>
<td>-15%</td>
<td>-14%</td>
<td>+15%</td>
</tr>
<tr>
<td>Plywood</td>
<td>+5</td>
<td>-16</td>
<td>-16</td>
<td>-29</td>
<td>-17</td>
<td>+16</td>
</tr>
<tr>
<td>Particle Board</td>
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<td>-5</td>
<td>-7</td>
<td>-13</td>
<td>-12</td>
<td>+3</td>
</tr>
<tr>
<td>MDF</td>
<td>+5</td>
<td>-3</td>
<td>-20</td>
<td>-20</td>
<td>-19</td>
<td>+46</td>
</tr>
<tr>
<td>Pulp</td>
<td>+21</td>
<td>-9</td>
<td>-19</td>
<td>-16</td>
<td>-21</td>
<td>-</td>
</tr>
<tr>
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<td>-5</td>
<td>-2</td>
<td>-6</td>
<td>-14</td>
<td>-</td>
</tr>
<tr>
<td>Packaging &amp; Tissue</td>
<td>+2</td>
<td>-21</td>
<td>-2</td>
<td>-16</td>
<td>-13</td>
<td>-</td>
</tr>
</tbody>
</table>


Per capita demand for wood products in China remains far below global averages for nations with this level of economic growth, but expectations are high for increased wood consumption especially following recent government planned low-cost housing programs which aim to provide 7.5 million homes to low-income urban households from 2009-2011. Part of China’s 2009 domestic stimulus package included the reduction of taxes and loan interest rates for residential purchases for single family houses and apartments. For new housing units alone, China’s Sino-Forest company has estimated roughly 1 billion cubic meters of wood fiber will be required over the next 3-5 years for construction, furniture and decoration (compared to the estimated 160 million cubic meters of domestic consumption in 2008).

Softwood lumber: Increases in softwood lumber consumption can be attributed to improvements in general living standards and the expansion of domestic furniture and interior decoration industries. Much imported lumber can be traced to end-use in the construction sector, particularly for concrete forming. The improved acceptance of lumber in construction overall can be traced to the demonstrated durability of wood-based housing during the Sichuan earthquake, as well as standardization of wood truss systems to re-roof old buildings for energy efficiency. Softwood lumber also substituted to some degree the decrease in demand for logs after countries such as Russia and Gabon implemented stringent log export taxes or even outright bans.

---

8 China’s wood distribution channels have historically shown to be a complex of thousands of geographically and product-specific small and large physical wood markets with poor communication networks, leading to distribution channels which have been disordered and highly localized.
Wood-based panels (plywood, particleboard, MDF): After years of importing plywood, China’s plywood industry is now the largest in the world. China is currently the world’s largest plywood producer as well as consumer. Consumption increased by 5% in 2009, offsetting a net decrease in exports of plywood (-20%) due to the low demand in global export markets. 80% of China’s plywood production is estimated to be consumed domestically. China is now the world’s 2nd largest particleboard producing country. Almost 100% of China’s particleboard is estimated to be consumed domestically. It is also estimated that almost 95% of China’s MDF boards are consumed domestically.

Paper and paperboard: China’s economic expansion has led to greater consumption of all types of paper and paperboard, from high-quality products used for writing, magazines and photocopying to cardboard boxes, paper bags and toilet paper. A survey in 2005 found that the residents of Shanghai now use twice as much tissue and toilet paper as the international average9. The aspirations of people throughout the rest of China will be much the same as those of people who live in Shanghai and other urban centers – or indeed, the rest of the world (Figure 4).

Figure 4: Paper Consumption by GDP per Capita

Pulp consumption in China has been growing aggressively in recent years, driven by the rising production and better quality of paper and board produced. Growth in consumption of packaging paper was only moderate 2% in 2009 (compared to increases of 10% or more most years in the 2000s) due to the reduction in the export of Chinese manufactured goods necessitating packaging (again, due to the economic downturn).

2.2 Increasing International Demand

Exports of forest products decreased by volume, but barely decreased by value in 2009, reflecting a likely shift in Chinese manufacturing towards higher-value wood products. Furniture and paper continue to be

the main staples of the export-oriented industry. The plywood industry posted large increases in domestic production; plywood exports, however, have been dropping as plywood producers focus their attention on domestic markets.

In response to the global crisis, the Chinese government raised its export tariff rebates at least 7 times since 2009 to reduce the pressure on export-oriented businesses. The export tariff rebate rate for wooden furniture increased to 15%. Export figures for the first half of 2010 are posting large increases over 2009 (for example, plywood exports increasing approximately 45%; fiberboard 76% and 58% in the first and second quarters respectively; wooden furniture up 16% and 29%).

2.2.1 Exports by Country

China is now the world’s largest “workshop,” responding to a growing demand for furniture, plywood, wood moldings and flooring from the developed world. In just a period of twelve years (1997-2009) China’s forest product exports increased by almost 700% in value, from less than US$5 to $27.3 billion. The major markets remain the US, EU and Japan, which capture more than 50% of the export market by value – US $15.5 billion in total (Figure 5).

It is interesting to note that, despite the global economic downturn starting in 2007, the value of China’s forest products exports remained relatively stable, although the volumes decreased since its high in 2007 – reflecting an increase in the unit value of China’s forest products exports (Figures 5 and 6).

Figure 5. China Forest Products Exports, by Country (US$ billion)
The United States, Japan and the European Union continue to be the main markets for furniture and other wood products made in China. In 2009, China exported over US$27.3 billion of forest products, with the United States remaining the largest importer of China’s manufactured forest products, at US$7.5 billion in 2009. European countries imported over US$5.1 billion, while Japan imports in 2009 stood at US$3 billion. Together, these three major markets capture more than 50% of China’s export market, by value, of forest products.
Figure 7: Chinese Exports to the United States, by Product, by Value (US$ billion)

Figure 8: Chinese Exports to the European Union, by Product, by Value (US$ billion)
Much has been said about a “leakage effect” in which the higher environmental demands of the markets from the US, EU, Japan and Australia would lead to a shift away from these markets towards less demanding markets such as the Middle East or Central Asia. Indeed, trade data show a rapidly increasing market for Chinese manufactured wood products in the Middle East and Central Asia (Figure 9), but at only approximately US$2 billion per year, these markets are only 16% the size of China’s exports to the US and EU markets combined, and have grown at similar rates as those for the other countries.

Fiscal stimulus packages in the Middle East, responding to the global economic downturn, however, are now promoting large infrastructure projects as well as housing programs to address a housing shortage.
While still a relatively small global market (4.4 million m³ total softwood lumber consumption), Middle Eastern consumption and net imports were one of the only positive areas of growth in 2009 (up 15%).

### 2.2.2 Exports by Product

Paper remained China’s number one export by volume in 2009, likely export-grade printing paper. There was a slight (1%) increase in furniture exports in 2009 while plywood decreased by 21% from 2008 from 18 million m³ RWE. By value, however, furniture remained China’s number one exporting product in 2009, followed by paper and then plywood.

**Figure 10: China Forest Products Exports, by Product (million m³ RWE)**
Figure 11: China Forest Products Exports, by Product (US$ billion)
3. SOURCING

China’s industry sources its wood materials with both domestically and imported supplies. Great efforts have been made in developing forest plantations, and China’s peak domestic production occurred in 2008 when approximately 81 million m$^3$ were harvested. But imports in 2009 (113 million m$^3$ RWE) have been consistently equal or higher than even this peak domestic production levels. In order to augment domestic supply, the wood products industry depends on imports to meet this supply gap, with some estimating the supply gap (met by import or substitutes) to be between 100 and 150 million m$^3$.

3.1 Domestic Supply

Despite massive government investment in afforestation/reforestation, domestic supply of industrial wood has failed to keep up with China’s growing demand. This is a reflection of not only the spectacular increase in the growth in domestic and export demand, but also the government’s decision to protect the country’s forests. The Natural Forest Protection Program (often referred to as the logging ban), introduced in 1998 after floods devastated the middle reaches of the Yangtze River – deforestation in the upper reaches of the Yangtze River was thought to be partly responsible – led to a dramatic decrease in domestic production. Various programs of natural forest protection covered 30 million hectares across 18 provinces.

Figure 12: China’s Domestic Commercial Timber Production (million m$^3$)

![Graph showing domestic timber production from 1999 to 2009.](image)

*Data Source: China State Forest Administration*

In 2008, China saw its domestic production of commercial timber reach its highest point at 81 million m$^3$, an increase of 16.22% on 2007 figures. This is mainly due to activities to clear out the damaged forest materials and subsequent recovery schemes after the infamous 2008 earthquake and severe winter weather conditions in the early part of the year. The 2009 figures show an obvious decline, to 69.38 million cubic meters, about the same level as 2007.
The Chinese government has attached great importance to afforestation/reforestation programs in the past decades. The central government has spent 233.2 billion yuan (more than US$31 billion) on the 415 million mu (27.7 million hectares) of newly planted forests planted between 1999 to 2009. A third of these lands were farmlands returned to woodlands. This effort will continue – the State Forestry Administration has announced that China’s government will earmark a total of another 200 billion yuan (US$30 billion) to afforestation schemes to the end of 2021. Such programs are also considered part of China’s commitment to address climate change.

The massive government-led investment in afforestation and reforestation has turned out some good results. According to the State of the World’s Forests 2009 released by the UN Food and Agriculture Organization (FAO), global forest resource tends to be declining while forest in Asia Pacific regions increased, largely due to China’s afforestation efforts, which netted a more than 3 million hectares increase. The newly released 7th national forest inventory (2004-2008) shows that forest cover is 20.36%, compared to 18.5% during the 6th inventory period. Forest areas in mainland China reached 193.33 million hectares (ha), with a stock volume of 13.363 billion cubic meters.

Dramatic increases in forest plantations have been a part of the SFA’s overall strategy to increase domestic timber production and reduce reliance on imports of timber products. Plantation forests now account for 38% of total forest areas, 61.69 million ha in area and 1.961 billion cubic meters in stock volume. Timber harvested from plantation forests accounted for nearly 40% of total harvests.

The majority of China’s forests are located in five regions, accounting for 85% of forest land. These lands are owned by the state and rights are assigned to state owned forest farms or bureaus, collective farms and private enterprises. Collectives manage nearly 60% of the forests. The remaining 40%, mainly natural forests, are managed by the government in the form of independent state forest farms and state forest bureaus. The private sector remains relatively small. Southern collective forest regions will be a key area for commercial forests and timber production, by promoting the planting of fast-growing high-yield (FGHY) forests, the development of raw material bases and large-diameter timbers. Northeast China is the traditional center of state-owned forest areas, where sustainable forest management will be enhanced to ensure the long term supply of valuable species and large-diameter materials. The central and northern plain regions will focus on eco-protection natural forests, and new industry bases to supplement timber supply mainly through forest plantations.

Currently, China’s plantation forests are mainly poplar and Chinese fir forests in the North and Masson pine in the South, either FGHY species or not, which are mostly consumed by the plywood and pulp/paper industry. China’s domestic plywood production remained stable in 2009, sourced from developing domestic fiber sources from fast-growing and high-yield plantations in North China, East China and the middle and lower reaches of the Yangtze River.

The quality and production levels of the plantations have been a major problem and some doubt the ability of the Chinese forest plantations programs to meet their ambitious goals. There are doubts about the ability of China to meet its own domestic production targets – particularly its plantation targets – without encouraging further production from small holders, farmers, and low-income forest owners. There is a growing realization among Chinese government officials and researchers that the current approach to forestry development has its limits. Nevertheless, China now has the opportunity to boost domestic forest production in both public lands and collective forests.
3.2 Imports

Despite the rapid growth of other Asian wood products manufacturing hubs such as Vietnam, China remains the largest importer of forest products (Map 3).

3.2.1 Imports by Product

The sourcing of raw materials for this large and growing sector is crucial to its long term stability. The majority of China’s own plantation forests are poplar, Chinese fir and Masson pine, mostly consumed by the plywood and pulp / paper industry. China will continue to rely on imports for those products which require tropical hardwood species – such as for high end furniture and wooden flooring, at least in the near future.

In early 2006, China’s National Development and Reform Commission (NDRC), a department of the State Council with a mandate to develop national economic strategies and long term economic plans, publicly stated that its research confirmed at 140-150 million m³ per annum gap in China’s own domestic production of wood and total demand (Asia Pulse, 2006). This research accompanied a State Council Guobanfa (“State Directive”) which called for several initiatives to fill this gap, including boosting domestic production, increasing wood imports, and encouraging substitution and greater efficiency (China State Council, 2005). In October 2010, the China Wood Monthly Market Report (China Wood International Inc., Volume 5, No. 10) quoted State Forest Administration officials with estimating the supply gap to rise to more than 100 million m³ by 2020 – but this was based on the assumption that China’s own domestic sources would increase by another 80-100 million m³. Importing wood has been the easiest short-term approach to bridge this supply gap (Figure 13). The government is aggressively promoting trade and development programs to major supplying countries such as Russia and in Africa. Government and industry players are becoming more involved in basic development assistance and investment support for major infrastructure projects such as roads and ports to facilitate the transport and trade of basic commodities such as logs to China-based mills.¹⁰

Figure 13: China Forest Products Imports, by Product (million m³ RWE)


© FLEGT Asia, CHINA: Overview of Forest Law Enforcement, Governance and Trade, November 2010
This Action is funded by the European Union governments of Finland, France, Germany, the Netherlands and the United Kingdom.
www.efi.int/portal/projects/flegt/flegt_asia/, www.euflegt.efi.int
Despite the global economic downturn starting in 2007, China’s imports of forest products did not significantly decline in 2008, and in fact posted one of its sharpest yearly increases (22%) in 2009 to 113 million m³ RWE. During the first six months of 2010, imports of softwood logs were up 17% from the same period in 2009, reaching the highest level on record. Import levels were high at a time when the volume of exports of wood products declined significantly – indicating either a stockpiling of materials or a further shift in producing for domestic markets.

**Wood pulp:** The majority of the increase is due to the imports of virgin wood based pulp, which has steadily increased from approximately 15% to 50% of total imports from 1997 to 2010 respectively. Rising domestic paper production for both export and domestic use has steadily increased demand for pulp.

**Logs:** Logs remain China’s second largest import although decreased from 38% to 25% of the market share between 2007 and 2009.

**Lumber/sawnwood:** Sawnwood has taken an increasing portion of total imports at 12% in 2009. Increased imports of sawn lumber, possibly at the expense of raw log imports, are also indications of potential shifts underway, such as decreasing interest in importing raw logs due to:

(a) increases in log export bans or taxes from major supplying countries such as Russia\(^\text{11}\) and Gabon;

(b) increases in Chinese labor costs, reducing China’s competitive advantage by making low-end (log) processing less cost-effective than moving up the value chain.

Domestic sawmills are estimated to be producing 77% of total lumber / sawnwood which are then sent on to furniture mills, construction sites, etc. Trade analysts estimate that China’s lumber imports will double between 2007 and 2010, and then double again by 2015\(^\text{12}\).

**Paper:** Paper imports, on the other hand, steadily declined from almost 50% in 1997 to less than 10% in 2009.

**Wood chips:** Wood chips remain a relatively small portion of the market, but the volume has increased significantly (160%) in the last year to 3 million m³ RWE, increasing 10 fold from levels in 2003. Vietnam is the largest supplier of chips followed by Indonesia and Thailand, which together supply almost 90% of all imported chips.

**Plywood:** Plywood and veneer imports have steadily declined.

### 3.2.2 Imports by Country

Russia is the largest supplier of forest products to China, amounting to 20% of all imports. Imports from Canada, Brazil and the United States have also increased while Indonesia’s exports to China have decreased, down from 10 to 7 million m³ RWE between 2002 (13% share) and 2009 (6%). In 2009, Chile became the 5th largest supplier of forest products to China with nearly 8,000,000 m³ RWE – slightly higher than the European Union and Indonesia. Imports from Vietnam and Uruguay have increased significantly in the past four years.

\(^{11}\) In November 2009, the Russian government announced that the log export duty will remain at 25% of export value through 2010 and will likely be extended into 2011. Potential increases were postponed. Many wood processors who heavily depended on Russian log supplies in the past developed other suppliers in response to the threat of higher log costs. In 2009, log imports from Russia represented only 68% of China’s total softwood log imports, down from 91% in 2007.

Looking at only timber products (i.e., not considering paper and pulpwood), Russia is the largest supplier of timber products to China amounting to 38% of imports – dropped from 53% in 2007 (Figure 15). Imports from New Zealand increased significantly becoming China’s second largest timber product importer in 2009 accounting for 10% of timber imports. Timber products from Canada doubled to 3.9 million m^3 RWE. Imports from Thailand and Vietnam have increased as well, with Thailand exporting 2.7 million m^3 RWE to China (5.5% of market share) and Vietnam exporting 2.3 million m^3 RWE (4.8%). Imports from Australia doubled in 2009 to 4% while imports from Papua New Guinea and Malaysia declined. Papua New Guinea’s share decrease by a third while Malaysia’s share dropped to 3% in 2009 (down from its peak 12% in 2003).
Table 4: Top Suppliers of Forest Products to China, 2009 (million m³ RWE)

**Timber Products**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Volume</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Russia</td>
<td>19.5</td>
<td>38.5%</td>
</tr>
<tr>
<td>2</td>
<td>New Zealand</td>
<td>5.2</td>
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</tr>
<tr>
<td>3</td>
<td>Canada</td>
<td>3.9</td>
<td>7.7%</td>
</tr>
<tr>
<td>4</td>
<td>Thailand</td>
<td>2.8</td>
<td>5.5%</td>
</tr>
<tr>
<td>5</td>
<td>Vietnam</td>
<td>2.4</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

**Logs**

<table>
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<td>New Zealand</td>
<td>4.4</td>
<td>15.7%</td>
</tr>
<tr>
<td>3</td>
<td>Papua New Guinea</td>
<td>1.7</td>
<td>5.9%</td>
</tr>
<tr>
<td>4</td>
<td>Solomon Islands</td>
<td>1.1</td>
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</tr>
<tr>
<td>5</td>
<td>Gabon</td>
<td>1.1</td>
<td>3.9%</td>
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</tbody>
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**Lumber**

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**Plywood**

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<td>Chile</td>
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**Wood Pulp**

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<td>5</td>
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**Paper**

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<td>Taiwan</td>
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<td>South Korea</td>
<td>0.93</td>
<td>9.5%</td>
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<tr>
<td>5</td>
<td>Japan</td>
<td>0.86</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

**Logs:** For nearly a decade, Russia was the predominant supplier of softwood logs into China, representing 90% of China’s total softwood log imports between 2000 and 2007. Since 2007, however, Russian log exports to China have plummeted due to a rising Russian log export tax and higher delivered log prices, reducing China’s log supply for Chinese saw and plywood mills. Log imports from Russia now represent only 68% of China’s total softwood log imports. China has had to depend much more heavily on imported lumber from other countries to make up a deficit. China is now seeking alternative log suppliers. Suppliers from New Zealand, Australia, USA and Canada have been happy to increase their exports of logs to China. This shift is expected to continue as long as the price of Russian logs remains uncertain or likely to increase.

**Lumber:** China is the world’s second largest importer of lumber, after the United States, despite being the world’s second or third largest producer of lumber as well. Supplies from Canada and Chile have been the fastest growing over the past 5 years, as their historical US market has hit an economic decline. Since 2008, Canada’s market share in China (almost all from British Columbia), has grown faster than Russia’s, albeit from a smaller volume base. Russia’s growth in lumber exports to China have likely been due to Chinese companies that have responded to the Russian log export tax by building sawmills in Russia and then shipping to minimally processed production to China. Russian lumber is considered better quality than Canadian or US lumber, but since much of the softwood lumber is used for concrete forming, competitive prices are more important than quality. Most of China’s higher quality lumber is processed and then re-exported as value-added finished products to the US, EU and other wealthy countries.
4. CHINA’S WOOD PRODUCTS INDUSTRY

4.1 Industry Structure

No exact statistics on total number of wood processing mills in China exists. It is reported that China wood industry consists of 100,000 individual companies, and most of them are small and medium sized enterprises (SMEs). Data from China Forest Industry Association show that there are more than 6,000 plywood manufacturers, more than 10,000 veneer mills, and 650 particleboard mills. National Economic Census showed China has 25,000 furniture manufacturers, while China Furniture Association says the number could be doubled if small mills were counted. More than 50% of China’s wood products manufacturers are privately owned.

4.1.1 China’s Plywood Industry

China’s plywood industry has grown rapidly in the past decade, making China a net exporter of plywood since 2001. After growing strongly at the beginning of the decade, Chinese plywood production remains relatively stable at 27 million m$^3$ in 2009. China’s plywood products are featured to have core veneer of domestic species such as poplar and face and back veneer of imported hardwood species, particularly those for exports. For plywood producers sourcing tropical hardwood logs, a location with close proximity to a major log port is a necessity to facilitate the unloading and loading of barges for transport to mills via canals. The industry has therefore developed in and around the ports of Zhangjiagang, Shanghai, Shenzhen, Lianyugang and Nanjing. Although production is spread throughout the country, there are large concentrations of plywood producers in the following areas: Jiashan County in Zhejiang Province, Wen’an in Hebei province, Linyi in Shandong Province, and Pizhou in Jiangsu Province. Jiashan in Zhejiang Province has also become a flooring production center. Domestic forest plantations, particularly poplar plantations, have grown rapidly in these same regions.

Chinese plywood mills face challenges in providing legality verification for both imported and domestic timber.

4.1.2 China’s Furniture Industry

Chinese furniture industry is dominated by private owned companies. The wooden furniture industry is highly fragmented with many small players and only one percent of the companies have annual sales greater than US$15 million and 49% have sales less than US$1.5 million per year. China has become the world largest furniture exporter since 2004, with annual growth of 20-30%. The US has been the largest market with a share of 40-45%, while EU imported roughly 20% of China’s total furniture exports.

There are geographic clusters where furniture production has been concentrated. Guangdong Province in Southern China has been a major furniture production and export base.

The Chinese government has been promoting structural transition of its economy, from export-driven to domestic demand driven economic development. Growing competition from Vietnamese, Thai and Malaysian furniture industries in key exports market such as the US and EU has been evident. As part of responses to both factors, many Chinese furniture manufacturers are paying more attention to the domestic market.

Verification of sources of timber used in Chinese furniture mills is extremely complicated, as one piece of furniture could have used both solid wood and wood-based panels, from imported and domestic sources.

4.1.3 China’s Lumber Industry

China is ranked as the world’s third-largest lumber producer after the US and Canada, with over 32.3 million m$^3$ of reported sawn lumber produced in 2009. The domestic sawmills produce approximately 77% of total demand for lumber (41.6 million m$^3$) – with the remainder coming from imports. China’s sawmill industry remains relatively dominated by small and medium-sized enterprises – thousands of small sawmills producing lumber for furniture factories, local buildings, packaging, construction, etc. Production figures from such numerous, small-scale operations is notoriously difficult and likely to be underestimated$^{14}$.

4.1.4 Pulp and Paper Industry

In 2008, China became the world’s largest paper and paperboard producer, and is a major importer and producer of wood pulp. China’s demand for wood pulp has been explosive, driven by the rising production and quality of paper and paperboard. China transitioned from a net importer to net exporter of newsprint in 2006 with the start-up of several mega mills in China; there have been similar large scale capacity expansions in the fine printing and writing paper sectors. Much of this expansion benefited from government incentives in the form of discounted loans, with interest rates lower than standard loan interest rates set by the Central Bank and extended repayment periods.

Despite shutdowns of small industry players in the 2000s due to negative environmental impacts (particularly water pollution discharge) and poor energy efficiency, the paper industry remains relatively fragmented with the top five players$^{15}$ accounting for 18% of total market share in 2008, and the rest producing less than 78,000 tonnes per year.

In 2007, the paper industry was based mainly on domestic pulp and secondary fibers, with a small proportion of imported pulp and pulpwood (used for bleached kraft pulp) and hardwood pulp for export-grade paper coming from unknown or potentially threatened forests (Figure 16). But as China’s producers scramble to meet growing domestic and international demand for higher quality paper, plantation programs across the region continue to underperform, and traditional sources of wastepaper (the US and EU) are shrinking,$^{16}$ substantial amounts of virgin wood and wood pulp from “high-risk” countries may become more attractive.

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$^{15}$ Nine Dragons, Shangdon Chenming, Lee & Man, Gold East Paper (APP) and Shandong Sun Paper.
$^{16}$ For example, the US has reduced its consumption of newsprint by about 50% since 2000.

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In 2009, paper mills were able to acquire more wood pulp due to the low price of imported pulp (caused by the global economic downturn and the depreciation of the US dollar). Paper production capacity has grown faster than consumption in China, with the excess production being exported. The capacity of “mega paper mills” with associated plantation expansion programs is driving the demand for new sources not only in China but in neighboring countries such as Indonesia and Laos (see Table 5).
Table 5: Chinese Pulp and Paper Projects with Plantation Expansion Plans in Laos

<table>
<thead>
<tr>
<th>Company</th>
<th>Pulp Capacity</th>
<th>Lao Pulpwood Plantation Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oji Paper</strong></td>
<td>400-800,000 tonne / year fine paper mill (by 2015)</td>
<td>Oji-Laos Plantation</td>
</tr>
<tr>
<td>(near Shanghai)</td>
<td>700,000 Adt / year BHKP pulp mill</td>
<td>50,000 hectares</td>
</tr>
<tr>
<td></td>
<td>US$1.95 billion investment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oji-Laos South</td>
<td>25-30,000 hectares</td>
</tr>
<tr>
<td></td>
<td>50,000 hectares</td>
<td></td>
</tr>
<tr>
<td><strong>Shandong Sun Paper</strong></td>
<td>400,000-tonne/yr cartonboard</td>
<td>100,000 hectares (70,000 hectares of outgrower/contract</td>
</tr>
<tr>
<td>(Shandong)</td>
<td></td>
<td>farming arrangements)</td>
</tr>
<tr>
<td><strong>Joint venture US International Paper</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stora Enso</strong></td>
<td>No mill yet, but discussions at one time were for 1.2 million tonne / year</td>
<td>Stora Enso Laos</td>
</tr>
<tr>
<td>(Guangxi)</td>
<td>BHKP pulp mill</td>
<td>35,000 hectares</td>
</tr>
<tr>
<td></td>
<td>35,000 hectares</td>
<td></td>
</tr>
<tr>
<td><strong>Asia Pulp and Paper</strong></td>
<td>Fourth largest pulp &amp; paper production facility in China</td>
<td>Gold East Company</td>
</tr>
<tr>
<td>(APP) (<strong>Hainan Island</strong>)</td>
<td>1.3 million ADT / year BHKP pulp mill which could expand to 2.2 million</td>
<td>Survey stage</td>
</tr>
<tr>
<td></td>
<td>New proposal for Guangxi pulp mill of 1.2 million tonne / year BHK pulp line</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and 2 300,000 tonne / year APMP lines</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Keith Barney, 2010: personal communication.*
5. CHANGES IN DEMAND FOR LEGALLY OR SUSTAINABLY HARVESTED WOOD PRODUCTS FROM CHINA’S MAJOR MARKETS

5.1 Legislative Measures and Purchasing Policies

In four of China’s major markets – US, EU, Japan and Australia – over the past ten years, there has been a rapid increase in demands for products which meet varying environmental and socially responsible requirements. This is affecting many product sectors: fisheries, palm oil, textiles, food as well as the wood products sector. In the wood products sector, buyers are increasingly requiring proof of legality or sustainability for their wood products – both for domestically produced wood as well as imported – and this proof must be third-party verified.

Major components of this shift in demand are as follows:

- **Increasing retailer purchasing preferences:** The first major sign of changes in demand came more than ten years ago with increased market preference for certified wood products, such as the Forest Stewardship Council (FSC). Buyers from North America, Europe and Japan wanted to show corporate responsibility and minimize risk (reputational risk, supply sustainability, and lately, new risk against prosecution under the US Lacey Act). Major international companies such as WalMart or Carrefour now require suppliers to be able to not only document country of origin of timber sources, but also demonstrate sustainability through third-party verification systems. The UK Timber Federation established strict purchasing policies for all its members, which resulted in several contracts with Indonesian and Chinese suppliers being cancelled.

While the volumes of certified timber remained small and brought few premiums for sellers, it did help a few forward-looking wood product producers to establish a market niche – providing an opportunity to enter new markets. Within a few years of the increased consumer and retailer demand for certified wood, European and Japanese public procurement policies helped to boost the demand for these products (see below). Today, while many private purchasing policies accept legal timber as a minimum, most require progress towards certification. Therefore, while proof of legality is useful, it may not be adequate for those who are requiring proof of sustainability (i.e., certification).

- **European and Japanese public procurement policies:** By the mid 2000s, several European member states and Japan were individually developing and adopting timber public procurement policies which required third-party evidence of legal compliance or sustainability. The UK, Denmark, Germany, France and Spain took early leads. It was estimated that central government purchases accounted for 15-25% of all timber products purchased in most EU Member States, and many local governments were encouraged to follow. There were additional spill-over affects into private procurement practices as suppliers did not like to keep separate inventories.

The European and Japanese public procurement policy changes provided another opportunity for certified forest products to increase their market share. By 2010, new regulations in the US and Europe are expected to rapidly increase this demand by degrees much larger than seen before (see below).
• **Amendments to the US Lacey Act (2008):** In 2008, the US Congress passed a new law making it unlawful to import, export, transport, sell, receive, acquire of purchase in interstate or foreign commerce any plant taken or traded in violation of the laws of the US, a US State, or relevant foreign laws. The law includes the concept of “due care” which is assessed during any prosecution to determine degree of penalty, and requires a statement of origin, species. The level of penalty is steep – with jail time, forfeiture of goods, or fines depending on degree to which company knew – or should have known – that it was handling illegal products. The first prosecution under the Lacey Act was in 2009.

• **EU Timber Regulation (2010):** The EU Parliament recently passed a law which requires all timber operators to establish “due diligence” systems which will minimize the risk of handling illegal timber. All operators (importers, traders, buyers, sellers) must know the country of origin, species, details of supplier and information on compliance with national legislations (“illegality” is defined in relation to the laws of the country where the timber was harvested).

These new regulations in Europe and the US, in particular, have made retailers realize that they need to buy certified or verified legal products in order to escape possible prosecution or fines. In the US, more retailers (55%) now consider it “essential” that producers be third-party certified – up from 27% in just 2007.

Each of the market signals described above has different specific requirements, but all share some fundamental similarities. These similarities include the demonstration of “due care” or “due diligence,” – a flexible concept that encompasses the efforts that a company should take to ensure that its supply chain is untainted with illegal wood. Virtually all also share the requirement that operators must be able to document the source of origin of the harvested wood.

Industry has complained that it is difficult to comply with all these similar, but different, requirements. While not a guarantee, importing goods certified under a credible and robust certification standard is likely to be given significant weight by United States and European enforcement personnel in any given investigation into (or assessment of the legality of, and any criminal liability related to) any imported goods. By constituting due care and keeping illegal material out of supply chains, credible certification standards implemented appropriately are likely to help protect importers from many penalties.

### 5.2 Market Opportunity or Market Vulnerability for China’s Exporters?

As with any market shift, producers and manufacturers can either try to take advantage of new opportunities to gain greater market share, or possibly watch their existing markets dwindle. The EU, US, Japan, and other relatively environmentally sensitive markets in Australia and New Zealand account for 50% of the world’s net imports. Yet, only 8% of the world’s globally traded wood products are certified (FAO 2009) – indicating that those countries which are able to supply these markets first with certified or verified legal product will likely be able to gain market share. Africa has 7 million hectares currently certified by FSC. Seeing the market opportunity in Europe, some African trade associations with their European partners are gearing up to get an additional 5 million hectares certified by 2012.

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17 No assessment has been done to compare the robustness of the various national and international certification standards. But it is highly likely that those schemes which have a national standard agreed by consensus with major stakeholder groups, based on nationally applicable forest laws, and include thorough physical inspection of forest and supply chain by independent accredited auditors, are likely to be considered more robust than others.
With a large proportion of their wood products exported to the most environmentally-sensitive markets in the US and Europe and to a lesser extent in Japan and Australia, China’s industry, like its competitors in Indonesia and Vietnam, are potentially vulnerable to these shifts, or can seize this as an opportunity, particular in the plywood, wood furniture and wood flooring sectors.

How much of China’s wood products are sourced from certified sustainable or legally verified forests, and can be traced by credible chain of custody (CoC) systems? If all of China’s wood products have documented source of origin and third-party proof of legality (if not sustainability), then China’s exports to Europe, the US and Japan should not be considered vulnerable.

There are significant challenges in determining whether these countries will be vulnerable to these new market requirements, or will be well placed to take advantage of new market opportunities. The lack of high quality and detailed information hinders attempts to determine the true impact.

Certain exporters, faced with uncertain documentation from supplying countries such as Papua New Guinea, may decide to export wood products to Europe or the United States anyway, incurring varying degrees of risk. As time passes, traders will become more familiar with the enforcement and penalty risk they incur if they send undocumented or unverified wood products into the US or Europe in particular. Undocumented wood products sourced from raw materials from the United States, for example, will be seen as less risky than undocumented wood products from central Africa due to the perceived differing levels of basic forest governance in these source countries.

As some countries begin to run out of natural forests and plantation development programs have yet to come on-line, or other countries such as Indonesia begin to implement their own legality standards, the volumes of wood materials exported to China will likely shift, but in a highly complex manner as several factors come to play such as:

a. harvesting levels will decrease due to lack of forests or new sustainable harvesting levels;

b. domestic policy makers may desire to take advantage of new market niches available to the wood certified under new legal standard (e.g. the Indonesian SLVK) and keep it reserved for domestic value added processing; and/or

c. Higher prices for certified logs

d. Impact on domestic production to potentially offset reductions in imports from riskier countries

While it is acknowledged that legality and certification systems can create additional challenges for forest-based enterprises (both large and small) due to the cost of implementation, the changes in market or trade structures could also be positive, allowing benefits to outweigh the costs.

5.3 Verified Legal or Certified Supply of China’s Wood Sources

The Chinese government controls the legality of domestic timber. Most stakeholders will comment that the Chinese laws are reasonably appropriate and adequately enforced. Documentation at district levels of source of origin of Chinese timber still poses some difficulties for some manufacturers, and manufacturers complain of the complexities and extra cost of implementing the extra due diligence requirements. However, more than 1,400 Chinese manufacturers now have Chain of Custody (CoC) certification, including a large number of pulp and paper mills, furniture manufacturers, and panel producers.
Perhaps one of the largest and most difficult stumbling blocks to verifying the legality of Chinese domestic production will be underlying irregularities in land allocation processes.

5.3.1 Verified Legal or Certified Supply of Domestic Timber

In China there are 4 licenses in place to ensure timber legality: certificates of forest tenure, logging licenses, transport licenses, and processing licenses. As a part of 5-year development planning, the SFA prepares a 5-year logging quota. After approved by the State council, the SFA allocates quota for each province and key forest bureau, then from provincial level to county or town level. Logging licenses are issues based on logging quota by the forestry authorities at local level.

Transport licenses are required for transportation of timber from forest to other places. There are checkpoints established on the way from forests to the places like market places or sawmills. Normally transport licenses are issued by the forestry authorities at or above county level. However, for the timber which comes from key forest areas, the licenses must be issued by the SFA.

Any company or individual want to do wood business, either processing or selling, must obtain a processing license from the forestry authority where the business is going to operate.

Third-party verification systems of legality, however, have developed rapidly since 2004. There are 3 forest certification/verification schemes or systems operating in China: FSC, PEFC, the Chinese national scheme CFCC. In addition, a project to develop a Chinese national timber legality verification system is also underway:

**FSC:** By the end of June 2010, a total of 1.3 million ha of forests have been certified by FSC, most located in Northeast state-owned forest regions. The FSC China National Initiative was launched in March 2006 to develop forest certification standards compatible to forest conditions in China.

Chain-of-Custody (CoC) certification has grown even faster. According to the FSC, there are nearly 1,300 FSC CoC certified manufacturers in China, including a large number of pulp and paper mills, furniture manufacturers, and panel producers.

The FSC standard has received the highest level of international assistance to develop:

- WWF’s China Forest Trade Network works closely with industry on sourcing of FSC certified timber
- The Forest Trust (TFT) has been actively working with Chinese wood products exporters to clean up their supply chain. With the guidance provided by TFT, in June 2010, a Chinese plywood manufacturer received FSC VLO certification from SmartWood, a part of Rainforest Alliance, the first ever in China.

**PEFC:** PEFC has also been active in promoting forest certification in China since 2007, when PEFC China Initiative started in Beijing. Although there is no PEFC certification for forest management, by August 2010, 97 Chinese mills have been certified by PEFC CoC – with 72% (70) of these PEFC certificates issued to the mills in the paper sector, including paper trading and printing firms.

**CFCC:** In October 2007, China issued its own forest certification standards, followed by a number of pilot projects to test such standards. While there are no CFCC certified forests to date, the State Forest Administration (SFA) aims to have the CFCC to be open to all international systems, with mutual recognition with PEFC and FSC, etc.
**Chinese National Timber Legality Verification system:** The project on developing Chinese National Timber Legality Verification system was launched in December 2009 with the help of DFID, connecting China with UK and EU experience. It aims to develop a cost efficient legality verification system which is adapted to Chinese context, and could possibly develop to endorse wood products labelled under robust legality or certification standards from other importing countries, e.g. license issued by Indonesian Timber legality Assurance System (TLAS), VPA licenses, FSC certificates of forest certification or timber legality verification.

Certification bodies active include SGS, which has been involved in COC certification of Chinese wood-processing mills with imported timber for either FSC or PEFC, and FSC-certification for Forest Management, RA/Smartwood, a key FSC-certifier in China and the issuer of the first FSC VLO certification to a Chinese plywood mill, Institute for Marketecology, IMO, accredited by FSC for both Forest Management and Chain-of-Custody. In September 2009, SFA established Zhonglin Tianhe (Beijing) Forest Certification Center as the first “legal” certification body in the country accredited by Certification and Accreditation Administration of China (CNCA) to carry out forest certification in China.

Unfortunately, to date, the certification standards themselves as hesitant to give estimates of the total supply of certified timber produced, and limit themselves to publication of number of hectares certified and number of chain of custody certificates awarded. Trade associations do not generally account for volumes of certified or verified legal wood produced and traded. While 1.3 million ha are FSC certified, much of this land is categorized as protected or conservation forests with annual allowable cuts (timber production levels) relatively low.

The number of companies having CoC certifications is relatively small compared to the size of the industry. Perhaps more importantly, many of those companies, while having the ability to do so, do not actually process much certified wood materials.

### 5.3.2 Irregularities in Land Allocation Processes

The Chinese central government in recent years has enacted several measures to advance rural development and forest restoration by strengthen the land rights of communities and households, including farmers’ rights to the nation’s forest lands. This reform also allows households to transfer their land rights to others, including outside investors, as long as the process is voluntary and no one involved has a conflict-of-interest. However, these measures are often not implemented adequately at district levels, as shown by a recent study by the Rights and Resources Initiative (see Box 1).

**Box 1: Stora Enso in China, October 2010**

Stora Enso, one of the world’s largest and “greenest” paper companies, was shown in a recent paper by the Rights and Resources Initiative (RRI), had many irregularities in the way that the company gained control over approximately 22,000 hectares for a eucalyptus plantation in the Guangxi Autonomous Region of southern China. The RRI study was commissioned in 2009, when farmers’ protests against the Stora Enso land acquisitions in Hepu ended in violence.

To acquire land required for the plantation, 70% of the land transactions were conducted through the local government company—created for the sole purpose of acquiring land for Stora Enso—and 20% through multiple middlemen. The remaining 10% of the transactions were carried out directly between Stora Enso and the administrative entities of local collectives.

Middlemen, acting on behalf of Finnish paper and pulp manufacturer Stora Enso, often violated existing laws, and at times used physical threats on farmers who balked at signing over their rights. The use of a local government company also brings to bear the question whether negotiations were free of duress. The experience of the farmers of Hepu County in the Guangxi Autonomous Region, as recorded in the study, suggests that booming global demand for agriculture, forest products and bio-energy may well endanger the success of the Chinese government’s unprecedented and revolutionary forest land reforms.
For companies interested in adequate social due diligence, the lesson learned from this experience is that all companies and their investors need to proactively investigate land rights and ongoing land-related conflicts. They cannot assume that local rights and interests are being protected, or that the laws are being followed, just because local governments are involved. The use of a local government company to acquire the land is not appropriate, because Chinese laws require rural land transfers be conducted between the individual transferring the land and the purchaser through a negotiation that is free of duress. Standards of corporate social responsibility need to be strengthened when it comes to land.

It should be noted that not alone in confronting inappropriate land grabs. The pressure to ignore land rights is likely to grow worldwide as demand for land (for agricultural, forest or even carbon emission reductions) increases. As in many countries in Asia where land is at a premium, the allocation of land for economic land concessions (including plantations) often raises questions about how local communities have been engaged, processes for free and prior informed consent, and long-term benefits for these communities.

5.3.3 Verified Legal or Certified Supply of Imported Forest Products

There are serious concerns about the rapid decline of natural forests in many of the countries that source forest products to China, and their ability to supply products in the future, both for local needs and export. In several countries, such as Russia, Laos, Thailand, Papua New Guinea, Malaysia, Indonesia and several African countries, there is evidence to suggest that large quantities of illegally-sourced forest products are heading for China. Arguments that the international community cannot confirm the true extent of illegal logging has now been surpassed: it is no longer a question of legal vs. illegal wood, or low-risk vs. high-risk, it is a question of documented versus un-documented (sourcing or legality). Even low-risk countries (US, Canada) may now need to show documentation they have never had to before.

Although main voices from different stakeholders indicate that it’s time for the Chinese central government to engage in this issue in ways similar to the EU or the US with their public procurement policies and/or legislation requiring due care/diligence in the sourcing of legal materials, many in the Chinese government express concerns over possible sovereignty issues, with the role of third-party verifies (required by major markets) in potential conflict with the role of producer country government agencies. China’s State Forest Administration is developing a Timber Legality Verification System, and it remains to be seen whether this system will be accepted by the major markets.

For Chinese companies importing timber, they must have import rights. Then it must provide relevant documentation including customs declaration form, contract, commercial invoices, Bill of Lading, packing list, certificate of origin, and certificate of plant quarantine. However, no information on the legality of timber is required or associated with any of these documents. Official or systematic mechanisms to ensure that imported timber meets requirements for legality in the forest and supply chain control up to the point of import do not exist, although a number of independent certification schemes which offer chain of custody certification (as explained above) do exist.

Only 8% of the world’s globally traded wood products are certified (FAO 2009). Unfortunately, only back of the envelop calculations can be made for the likelihood that China’s major wood sources are verified legal or certified sustainable. As seen above, the certification standards are able to publish the number of hectares certified and number of chain of custody certificates awarded; with difficulty one may be able to estimate the amount of harvested wood product from public documents, but in no case does any institution monitor the amount of verified / certified wood product is traded on the international market.
5.3.4 Implementing Due Diligence Systems

China’s wood industry has concerns over conducting due diligence requirements demanded by North American and European markets, and experience difficulties in verifying materials sources from both the technical and economic aspects. Complex and sometimes broken chains of custody are common for many mills. Management costs incurred with legality verification could further lower industry’s profits which already low. There is lack of a national timber legality verification scheme even for domestic timber, although China implements its own documentation process (harvesting license, transport license and processing license) to ensure timber legality. For imported timber, virtually none of China’s major supply partners have nationally implemented third-party legal verification standards, and those wishing to comply with international due diligence requirements must source from certified standards such as FSC, PEFC, etc.

It is expected that as a critical mass of Chinese producers, manufacturers and traders implement verification or certification schemes, economies of scale will make it easier for additional players to enter this field. As more companies become certified,

- the ease with which a new company can find certified suppliers increases, reducing the need for each company to work through its entire supply chain by itself;
- there is an increase in the availability of competent consultants to support implementation of systems, software and other systems which deliver certification requirements adapted to the national context, and increased ability of trade associations to provide assistance; and
- the number of auditors and certification bodies available increases, resulting in greater flexibility and lower costs.

Similarly, national tracking or licensing systems that could be applied to all exports can become associated with positive branding; ‘always legal’ timber. Buyers and sellers would have the opportunity to both reduce their transaction costs and demand higher prices through association with the ‘legal brand.’ Such national systems would help to reduce transaction costs, as it would reduce the need to independently audit the supply chain to satisfy importers and retailers.

In addition, the complex systems of domestic markets, historically geographically isolated and with poor communication networks, are already beginning to organize into more efficient distribution channels. In late 2009, plans for the Chengdu Furniture Industrial Zone and a Timber Industry Zone in the Lashan area were announced – both massive timber, furniture wholesale and distribution points. The Lashan industry zone would include wood based panel and lumber production projects, timber logistics, storage facilities and financial services. Likewise, the government of Nanxun City in Zhejiang Province has development plans for a wood flooring industrial park, including centers for products marketing, research and design, logistics, financial services and information centers.

These industrial parks and centers are likely a trend towards a consolidation of the wood products industry through-out China, and could facilitate the dissemination of information about international market demands, supply chain tracking and general monitoring abilities.

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18 The government of Nanxun City, for example, expects that sales of large scale enterprises (annual output value over RMB5 million) will reach RMB20 billion by 2012 and RMB40 billion by 2015, which would be 3.5 times over the 2009 level. Currently, there are more than 400 enterprises out of which 23 enterprises have annual sales over RMB100 million (ITTO MIS, December 2010).
5.4 Corporate and Social Responsibility (CSR)

Corporate and social responsibility (CSR) has become an important issue for many Chinese companies, particularly as they reach out into the global markets. In recent years, pressure has emerged from domestic sources, as scandals such as the tainted milk caused widespread public concern and government reaction. In 2005, China’s President Hu Jintao gave a speech in which he outlined several important policy principles related to China’s development, including a call for a new economic model, scientific development and the creation of a harmonious society. It marked a turning point for many in the business community, sparking a flurry of CSR conferences in Beijing, as companies, especially State Owned Enterprises (SOEs), tried to interpret what business was supposed to be doing to contribute to a harmonious society. In January 2008, the State Owned Assets Supervision and Administration Commission of the State Council followed with a new directive that raised CSR expectations for SOEs. Today, while many companies in China are now beginning to speak the language of CSR, the implementation has been widely variable.

While China attaches great importance to ecological improvement and environment protection, and makes efforts to attain the goal of sustainable development, sustainable sourcing has yet to become a key driver in Asia. Green building programs typically focus on energy and water efficiency, reflecting resource scarcities, but seldom include criteria for legal sourcing in countries of origin. Consumers tend to focus on quality and the chemicals used in the manufacturing process, but not on sourcing issues.

Research suggests that the due diligence processes applied to many of the manufacturing industries, such as the timber industry, rarely involves sufficient analysis of the key sourcing issues. The degree of CRES due diligence applied by manufacturers is influenced by a range of factors, including the nature of the institution, nature of risk, etc. Challenges include:

- Increased transaction costs
- Lack of a level playing field due to lack of regulations and/or enforcement
- Difficulties in quantifying and measuring environmental / social governance risks
- Perception that returns will be at risk
- Definition of materiality

The experiences of several leading multinational corporations (MNCs) with well-established and effective CSR programs there provide some important best practices, such as Walmart, IKEA, B&Q all of which either source from China or are expanding stores within China itself.

In a survey\(^\text{19}\) of 22 Asian forest companies (including 15 from China), environmental, social and governance information disclosure by Asian forestry companies, however, is generally poor. While forest certification provides a useful benchmark as to the adoption of best practices and the legality of wood sources, its use in Asia lags behind the rest of the world. Many companies in the Asian region find it difficult to gain access to FSC and other internationally accepted certified wood products. For those companies which have disclosed their CSR or sustainability practices, the issues of land rights and indigenous peoples are generally not addressed, nor the sustainability of their operations. The disclosure of the governance side of their operations fared better likely due to the requirements of various stock exchanges on which they are listed.

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5.5 Chinese Enterprises Operating Overseas

Exact figures of Chinese enterprises operating overseas are difficult to ascertain. While there are official processes for approving operations abroad, most governmental focus are likely on larger investments overseas, and not cover small-scale entrepreneurs or traders. Some provincial figures do exist. The Shandong Forestry Bureau, for example, has established cooperation with Russia, Japan, Indonesia and Australia to facilitate Chinese investments in these countries. Shandong Province has a specific strategy to promote enterprises abroad. The Shandong Forestry Bureau reported 17 forestry enterprises from this province to be operating in foreign countries for logging, timber processing and establishing forest plantations. These enterprises reported have purchased or leased a total of 3.5 million ha of forests with 400 million m³ of standing wood stock.

- Zaozhuang Mining Industry Group invested US$200 million in Canadian forests.
- Yangxin Eurasis Woodwork Company has leased forest area in Russia.
- Shangdong Longshen Group acquired a concession in Gabon with 0.45 million m³ standing wood stock.

Chart 2: Process for Approving Chinese Enterprises Operating Abroad

Several governmental policies aim to guide Chinese enterprises operating overseas, but most remain guidelines without regulatory enforcement:

- **Approval Rules for Overseas Investment (2005)** / Ministry of Commerce
- **A Guide on Sustainable Overseas Silviculture by Chinese Enterprises (2007)** / State Forest Administration
5.6 CSER Policies at Chinese Financial Institutions

Policies to promote environmental protection within financial institutions are not new in China. In 1995, the People Bank of China (PBC) drafted policies on these topics. The Ministry of Environment and the China Banking Regulatory Commission have been active in this area since 2007 when they were involved in the drafting of “provisions” for CSER for financial institutions:

- Provisions on Implementation of Environmental Regulations to Prevent Credit Risks
- Provisions on Strengthening the Social Responsibilities of Banking Institutes to implement environmental and social responsibilities for financial institutions
- Provisions on Financing Energy Efficiency Projects

The Ministry of Environment (MoE) is currently cooperating with the IFC to work on green credit policies and introduce the Equator Principles (EPs) more broadly in China. This backs up China’s “green loan” concept introduced in 2007, where by many plants were blacklisted from receiving loans before of poor pollution records, and at the time was lauded as a shift in the banking industry’s recognition of environmental and social issues as a business risk. In 2009, the China Banking Industry Association developed “Guidelines on Corporate Social Responsibility of Banking Institutions.”

The Equator Principles in China: Launched in 2003, the Equator Principles (EPs) are the most widely recognized sustainable banking principles. This voluntary set of standards helps financial institutions to assess and manage social and environmental risk in project financing, and are based on the International Finance Corporations (IFC), the private sector arm of the World Bank Group, performance standards. Currently more than 60 financial institutions have announced that they will accept the Equator Principles, and these banks are estimated to arrange about 85% of project financing worldwide. The EPs apply to project finance with a minimum threshold of US$10 million. Large-scale mining activities will often get to this scale. However, most forest sector investments, with the exception of new pulp and paper mill operations, will not meet this threshold.

In China, as across Asia, few banks are signatories of the EPs and local banks are willing to lend without significant environmental due diligence. Consequently, the playing field is not level for manufacturers or their lenders. Industrial Bank Company (IB) is the only first Chinese financial institution to adopt the EPs in 2008. The top three banks financing Overseas Development Investment (ODI) have not signed on to the EPs:

- EXIM Bank of China was established in 1994. Fully owned by the Chinese government and under the direct leadership of the State Council, China ExIm Bank is a government policy bank enjoying the same international credit ratings as China’s sovereign ratings. As an important force in promoting foreign trade and economy and a significant component of the financial system, China ExIm Bank has been acting as a key channel of policy financing for both Chinese import-and-export of mechanic and electronic products, complete sets of equipment, and high- and new-tech products and undertaking of offshore construction contracts and overseas investment projects by Chinese companies. Meanwhile, the Bank is a major lending bank of foreign government loans and the only operating bank for Chinese Government Concessional Loan. By doing so, the Bank is playing a bigger role in promoting the development of China’s open and export-oriented economy. Overseas lending in 2009 stood at US$174.2 billion primarily for mechanical and high-tech products. EXIM has adopted its environmental protection policy since 2007. The key elements of the policy are to enhance environmental impacts’ monitoring and management before, during and after the funded project implementation.
- **China Development Bank (CDB)** is a financial institution in China under the direct jurisdiction of the State Council. It is the only bank in China whose governor is a full minister. It is one of the three policy banks, implementing the State’s strategic priorities, while also helping develop the infrastructure, and basic and pillar industries by investing in and financing projects sponsored by the Chinese Government. In response to the call of the State to encourage domestic enterprises to “go Global”, CDB also engages in a wide range of activities focused on international cooperation. Its overseas lending stood at US$40.4 billion in 2009 primarily for infrastructure and energy projects.

- **Bank of China** was established as early as 1912. After the founding of the People's Republic of China, Bank of China became the state-designated specialist foreign exchange and foreign trade bank and contributed substantially to the development of China's foreign trade and national economy. It was transformed from a specialist foreign exchange bank into a state-owned commercial bank in 1994. The bank’s overseas lending stood at US$80.7 billion in 2009 primarily for construction and export processing.

Other major Chinese banks also have not signed up to the EPs:

- **Agriculture Bank of China (ABC)** is not a member of the Equator Principles. It has, however, developed a “green credit” system by which lending to high-energy consumption, highly polluting industries is limited (ABC CSR Report).

- **Industrial and Commercial Bank of China (ICBC)** is not an Equator Principle bank. Loans to high energy-consumption, high emissions companies and projects are restricted (ICBC Annual Report 2009). The ICBC surveyed its 59,000 corporate clients in 2007 to assess environmental performance. About 78 percent were cleared for green loans of more than 200 million yuan, accounting for about 80 percent of the total.
6. STAKEHOLDER IDENTIFICATION AND LEVEL OF UNDERSTANDING AND PERCEPTION OF FLEG-RELATED INITIATIVES

6.1 Government and Authorities

The Chinese government, particularly the SFA, has become more active in joining the international community in dialogues to address illegal logging and associated trade issues. On the international or regional level, China participated in both the East Asia FLEG and Europe and North Asia FLEG. Bilaterally, China has discussed with some major trade partner countries to join efforts to combat illegal logging and associated trade.

- As early as in 2002, China signed Memorandum of Understanding (MOU) with Indonesia for this aspect. However, no concrete actions taken from either side until recently when SFA and Indonesian Ministry of Forestry met more frequently.

- China and the United States agreed to work together to combat illegal logging and the associated wood trade in order to promote sustainable forest management, and a joint MOU was signed in early 2008, after the 3rd Strategic Economic Dialogue. Under this MOU, the two countries committed to share information on shipments of timber, step up law enforcement against illegal activity and encourage private-sector partnerships to promote sustainable forest management.

- Since its official launch in November 2005, the UK-China Sustainable Development Dialogue (SDD) has evolved into a genuinely cross-governmental platform for policy exchanges and technical collaboration, involving the active participation of 17 government departments, and agencies from both countries. It also engages a range of stakeholders from government, academia, business and civil society, many of whom are now taking forward specific projects.

Under the SDD, a UK-China Forestry Working Group has been established. The 2009-2010 Action Plan was agreed at the second working Group meeting in July 2009, covering sustainable forest management, forest and climate change, forest certification and procurement, illegal logging and governance, and forest landscape restoration. Training and capacity building at Chinese government agencies and institutions have been undertaken. In the fall of 2008, two State Forestry Administration staff were seconded to government departments and NGOs in the UK and gained an increased understanding of policy, and the policy-development process, relating to forest governance, procurement and forest management policy in the UK and other European countries. In July 2009, three officials and experts from China’s State Forestry Administration (SFA) participated in the summer forestry training courses hosted by Proforest. Collaboration in developing Chinese timber legality verification system scheme is also a part of UK-China SDD. Such government to government talks have also been going on between China and Japan, Australia, and Russia. By late 2009, China and Australia have signed the MOU on jointly combating illegal logging and associated trade and promoting sustainable forest management.

- The EU and SFA agreed to establish a Bilateral Coordination Mechanism (BCM) on FLEG in January 2009. One of many tasks listed is to explore opportunities for EU and China to develop a shared approach towards legality verification schemes for timber and timber products implemented by timber exporting countries, including in the context of FLEGT VPAs. The BCM experts committee which consist of experts
from both China and EU have drafted the work plan later 2009 for both Chinese and EU governments to consider. However, no positive moves by SFA showed for EU-China VPA negotiation.

A Task Force for Combating illegal logging and associated trade was established in 2007, which includes representatives from the SFA, Ministry of Commerce, Ministry of foreign Affairs, and Customs. The SFA Department for International Cooperation is the leading liaison office, while the Department of Planning and Finance is responsible for practical work. The task force members do not meet regularly, but only on occasions when relevant issues arise and/or joint actions are needed.

In general, SFA is aware of FLEGT, although most departments do not have in-depth knowledge, except for the Department for International Cooperation and the Department of Planning and Finance. The Department of Foreign Trade under the Ministry of Commerce and the Department of Statistics under the General Administration of Customs are also aware of FLEGT.

### 6.2 Industry Associations

There are about 300 associations representing timber producers and downstream industries such as furniture, flooring and construction materials (TTAP, 2008). For major industries in China, there is usually at least one large trade association operating on a national level with numerous others at provincial and municipal levels. In the timber industry, there are three national timber industry federations and one furniture body:

- The China Timber and Wood Products Distribution Association (CTWPDA; www.cnwood.org) – previously China Timber Distribution Association (CTDA) – has been actively participating in key NGO and government meetings on timber legality and has gained knowledge on the issue to help member companies with practical solutions. It is eager to learn more about the new EU Timber Regulation so as to get their member companies better prepared for sustainable market access to the EU. CTWPDA is one of three Chinese timber industry associations who signed Memoranda of Understanding with TFT to increase collaboration in promoting Legality in Timber Trade in 2009. The Flooring Committee of CTWPDA also signed the same MOU with TFT.

- The China National Forest Product Industry Association (CNFPIA) is considering developing the Code of Conduct with guidance on “due diligence” on wood origin and legality for member companies to follow, in order to meet timber legality requirement posted not only by EU FLEGT, but also regulations from other consuming countries, such as the US Lacey Act;

- China National Forestry Industry Association (CNFIA), and

- The China National Furniture Association (CNFA; www.cnfa.com.cn) is one of the three Chinese timber industry associations who signed an MOU with TFT to increase collaboration in promoting Legality in Timber Trade in 2009.

All associations indicate concerns over too many different requirements pertaining to timber legality, which confuse member companies. Despite several years of training workshops conducted by mainly international organizations on systems related to due diligence, verified legal sourcing, or supply chain tracking, all organizations continue to say that training workshops are needed, particularly on the detailed requirements of the EU Timber Regulation (and its timeframe) and the US Lacey Act. To some extent, it appears that many of the industry associations begin to lose sight of “the forest for the trees” as they focus on the specific requirements of the US and EU legislation, rather than the overall protections provided by many of the
certification and technical assistance programs already provided in China by such groups as WWF China FTN and TFT, Rainforest Alliance, SGS, etc.

Both the CTWPDA and CNFA indicated that strict requirements like EU FLEGT by destination countries might push some Chinese wood products manufacturers to turn back to domestic market or other markets with lower requirements instead of exporting to EU and the US.

6.3 Industry

The level of awareness and understanding on FLEGT varies among Chinese industry. In general, large export-oriented companies have heard about FLEGT but they don’t know the details. They know more about FSC CoC or the US Lacey Act than FLEGT or the EU DDR. Chinese industry leaders and/or those companies targeting EU market for exports have paid great attention to the relative information, while SMEs as a majority of Chinese forest industry have little knowledge on FLEGT.

Both industry associations and companies have indicated the government should define its stance first, issuing explicit signals to the market, and provide support and guidance to the industry.

There are concerns from government agencies and the industry associations over whether FLEGT or the new EU Timber Regulation will become a technical trade barrier for Chinese wood industry. SFA has discussed such concerns with EU. Some companies are confused on what certifications need to be accompanied with the shipment to EU in order to satisfy the FLEGT requirements, for example, whether one VLO certification is sufficient or not. Clarification of timber legality is also needed. Companies also showed concerns over the costs incurred with conducting Due Diligence and timber legality verification. New costs incurred together with the existing low profit margins will likely push some companies to turn back to domestic market instead of exporting, particularly those small and medium sized enterprises.

6.3.1 Small and Medium-Sized Enterprises (SMEs): SMEs contribute to 90% of total output value and 70% of employment for China’s forest product industry. Most are located in mountainous or rural areas, and contribute significant employment in rural areas. Panel industry has created 45 million rural jobs, and tax revenues (30-34 billion RMB 2005-2007) (Xu, 2010, forthcoming). Many of these SMEs are also active in afforestation schemes, particularly supportive of local farmers’ effort in tree planting.

SMEs in China are facing many common problems, such as lack of capital, skills, and low technology input. Large enterprises or public-owned enterprises receive favourable treatment from government programs. During the recent financial crisis, SMEs with low technology and capital barriers suffered while firms with improved technology and capacities to produce high value-added products survived and may even benefit from the reduction in overall SME numbers in the wood products industry.

6.4 Academic Institutions

Chinese Academy of Forestry (CAF) and Beijing Forestry University (BFU) are the key academic institutions who have been engaged in FLEGT related activities in China. Research Institute of Forest Policy and Information of CAF has good knowledge of FLEGT, as it has been involved in many related activities. It now serves as
6.5 Financial Institutions

“Green Financing” has become a popular term used by financial institutions in recent years. In October 2008, Industrial Bank, one of Chinese commercial banks, announced it would adopt the Equator Principles, becoming the first and only bank adopting the principles in China. However, no financial institutions are very aware of FLEGT.

6.6 Domestic NGOs

While there are hundreds of domestic and international NGOs working on a variety of fields, very few have forest related programs or are aware of FLEG-related initiatives.

Global Environment Institute (GEI) has been active in FLEG related initiatives, including participating ENA FLEG conference at St. Petersburg, and collaborating with the Chinese government and financial sector to promote responsible stewardship by Chinese enterprises operating overseas. In particular, GEI provided supports to the SFA on issuing and pilot testing the Guidelines for Sustainable Overseas Silviculture by Chinese Enterprises. To this end, GEI has worked with Lao government to improve capacity of government officials on sustainable land use and market management. More broadly, GEI has also involved in helping development of environmental policy for Chinese overseas enterprises, which tries to link Chinese government and host country governments in establishing and strengthening environmental policies, thereby encouraging environmental and social best practices by Chinese overseas enterprises.

Shanshui Conservation Center, a biodiversity and conservation focused Chinese NGO has closely worked with communities and enterprises for their conservation efforts. Although they don’t have a forest program, they helped Vanke, one of the largest real estate developer in China, in developing corporate green policies, which include a component of wood purchasing policy, trying to avoid use of questionable sourced wood in all buildings Vanke develops, albeit eliminating illegal logged wood is not specified. However, Shanshui is not involved any illegal logging related activities, and has little knowledge of FLEGT.

As a consulting company focusing on forest products business, China Wood International has been actively involved in bridging Chinese industry with different market and legality requirements. With strong support from international NGOs including WWF GFTN-China and Greenpeace, China Wood International together with China Wood Conservation and Development Center launched China Timber Sustainable Development Action Plan, specifically China Green Wood Initiative in September 2009. The action plan calls for concerted actions to fight against global warming and to develop the low-carbon economy, that is to assist private partners to establish responsible sourcing policies; to encourage companies to incorporate sustainability into their sourcing policies. Key activities of this action plan so far include: organizing customized trainings for companies to strengthen the ability to identify certified products; and facilitating dialogues and collaboration among different partners. A Bilingual website has established. It opens to the wood industry, either suppliers, manufacturers, traders, industry associations, or NGOs engaged in wood processing, trade, or related business in China. 300 members are expected to join the action plan in the next 3 years or so.
6.7 International NGOs

A group of international NGOs are active in China in promoting timber legality and sustainable forest management. They are aware of FLEGT and have better understandings on FLEGT than the government and industry. These NGOs are Forest Trends, Green Peace, IUCN, TFT, TNC, and WWF.

WWF through its collaboration with IKEA has been examining China-Russia timber trade chain and explore ways in legality control. At the same time, China Forest Trade Network works closely with the industry on sourcing FSC-certified timber. TNC, particularly through its RAFT program, has been active in promoting SFM on fields in China, as well as FLEG advocacy. IUCN and Forest Trends have been jointly engaged in awareness raising through the biannual Beijing dialogue sponsored by DFID, and translating FLEG materials into Chinese. Greenpeace has relevant campaign work to FLEG such as participating FLEG meetings, and lobbying both governments and industries to move towards to responsible purchasing and eliminate illegal timber, in line with FLEG objectives. Particularly, Greenpeace has been working closely with large retailers, such as B&Q China, Orient Home Center, large home furnishing retailers in Beijing to eliminate suspicious sourced wood products from their respective product lines. As a result, B&Q China also committed to limit its products sold in China to FSC certified timber products only. TFT supports Chinese industry on supply chain management through its TTAP project.

There are also forest certification schemes and certification bodies present in China, including FSC, PEFC, Rainforest Alliance/Smartwood, and SGS. While FSC and PEFC set up China offices to promote its respective certification, SGS has been involved in COC certification of Chinese wood processing mills with imported timber for either FSC or PEFC scheme. RA/Smartwood is one of key FSC-certifiers in China. Smartwood issued its first FSC VLO certification to a Chinese plywood mill. The Rainforest Alliance is also conducting controlled wood risk assessment in china, in order for Chinese companies to better source domestic timber.

All these organizations share the same view that level of awareness raised of FLEG T Action Plan among government, industry and NGO is not sufficient. Awareness raising activities on higher political levels include but not limited to SFA, together with grass-root-level communication campaign, are needed. In fact, the awareness of stakeholders has hit a bottle-neck in that all relevant decision makers (government, NGO) are aware of the FLEG action plan but they are yet to understand the mechanism and impacts, mainly due to the fact that most VPAs have not been enforced.
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