

## Chapter 13

# *China emerges as world's fastest growing market for tropical timber products!*

## *Trends in the tropical timber trade<sup>1</sup>*

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### **Highlights**

- Japan and China are the world's top two importers of tropical timber but these two markets are moving in very different directions: Japan towards a higher degree of processing and China towards sawlogs and veneer logs.
- Many producer countries continued their shift to secondary processed products exports in 2001.
- Tropical log exports fell 11% to 14.4 million m<sup>3</sup> in 2001.
- African exports of processed primary timber products exceeded log exports for the first time in 2001.
- Indonesian exports of sawnwood appear to have risen in 2001 reflecting new estimates based on trading partner reports.
- China's tropical plywood exports, based on imported logs, continue to soar, moving China past Brazil as the world's third largest exporter in 2001.
- Prices for tropical plywood continue to reach new lows due to depressed construction sectors in major importing markets and growing substitution by softwood plywood and other panels, such as OSB and thin MDF.
- Japan, the Republic of Korea and China are still dependent on tropical sources for over 90% of total plywood imports.
- Several ITTO producing countries, e.g., India, Thailand and the Philippines, have become major importers of tropical logs and sawnwood.

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<sup>1</sup> By: Dr. Steve E. Johnson, Statistician/Forest Economist, Economic Information & Market Intelligence, Dr. Michael Adams, Market Information Service Coordinator and Ms. Masaki Miyake, Statistical Assistant, International Tropical Timber Organization (ITTO), International Organizations Center, 5th Floor, Pacifico-Yokohama, 1-1-1 Minato-Mirai, Nishi-ku, Yokohama 220, Japan, telephone +81 45 2231 110, fax +81 45 2231 111, e-mail: itto@itto.or.jp

## Secretariat introduction

Once again, this analysis is possible thanks to the close cooperation with our colleagues in the International Tropical Timber Organization, specifically Drs. Steven E. Johnson and Michael J. Adams and Ms. Masaki Miyake. Drs. Johnson and Adams are the principal authors of the ITTO *Annual Review and Assessment of the World Timber Situation 2001* and *Market Information Service*, respectively, from which this chapter was drawn. Like our *Review*, ITTO's *Review* is the basis for a market discussion each May, which has also contributed to the updated analysis below.

Readers will note that some of the terminology differs slightly from the rest of the *Review* but the authors have focused the following analysis on the tropical trade developments of the UNECE region. ITTO categorizes its members into producer and consumer countries. Only ITTO member countries are covered, but ITTO membership constitutes 95% of the tropical timber production and trade.

In contrast to previous tropical chapters, production and consumption are not covered here. For a complete analysis of trends in the production and consumption, as well as trade of tropical timber in relation to global timber trends, see the *Annual Review and Assessment of the World Timber Situation 2001* prepared by the International Tropical Timber Organization. The *Review* can be found on the ITTO website ([www.itto.or.jp](http://www.itto.or.jp)) or by contacting the chapter authors (addresses on the previous page).

### 13.1 Introduction

In 2001 the global tropical timber sector continued to evolve following the severe market downturn of the late 1990s, with the important markets moving in different directions. China's increasing imports continued to drive the tropical log market, with the country soon set to become the largest importer of primary tropical timber products. However, a notable increase in Russian softwood log imports by China was also observed. Japan's tropical timber imports declined marginally in 2001, continuing a steady erosion of market share. Japan's domestic hardwood plywood production is plummeting, along with tropical log imports. Japan and China are the world's top two importers of tropical timbers, but as can be seen by the above examples, the two markets are moving in very different directions. The contrast between these two timber trade giants, in their consumption patterns, their market structure and their trading style, is having a major impact on the global timber trade, introducing new challenges for manufacturers and traders.

The Japanese domestic timber sector is also undergoing change: the consumption of tropical logs by domestic mills continues to decline while the demand for finished products is growing steadily. From discernable trends, Japanese production of softwood plywood, dependent on Russian and North American logs, will increase, while tropical hardwood plywood production will continue to decline.

China provides some sharp relief to the general story of decline: it is, in fact, the world's fastest-growing market for tropical timber products. The country imports more tropical than temperate timber, with tropical products accounting for about 60% of the value of all primary timber product imports. Total Chinese timber imports have doubled since 1993 led by increased (tropical and temperate) log imports, as noted above. This increase is the result of many factors, including explosive growth in per capita consumption, especially related to construction and housing development, a ban on logging, and a strong currency. Nevertheless, per capita consumption is well below that of the developed economies, suggesting potential for continued growth.

The global average annual consumption of timber per capita is around 0.68 cubic metres, whereas China's is only 0.12 cubic metres, or less than one fifth of the world average. However, consumption rates are rising quickly in cities such as Shanghai, Beijing and Guangzhou and by now may not be far off the world average.

Many tropical timber producer countries continued their shift to secondary processed product exports in 2001, with trade in these products continuing to rise towards the level of primary tropical timber products trade. The contribution of further processing to the wood product industries and related trade will continue to increase in producer countries. Based on past performance, the expected growth rate in exports of added value timber products from tropical countries will result in exports of \$5.1 billion in 2001 and by 2003 up to \$6.6 billion, with exports of primary products expected to remain stable (or decline slightly) below \$10 billion over the same period.

### 13.2 Export trends

#### 13.2.1 Logs

The contribution of logs to total tropical timber exports of ITTO producers (in terms of both value and roundwood equivalent volume) has fallen dramatically from over 60% in the 1980s to around 25% in 2001 (table 13.2.1). Only Africa continues to export a significant volume of logs compared to processed

Table 13.2.1

**Composition of tropical timber exports by producing regions, 1999-2001**  
(1,000 m<sup>3</sup> roundwood equivalent)

Region	Log production			Log exports			Processed exports			Total exports		
	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
Africa	12 174	13 286	12 554	4 540	5 043	4 244	3 910	4 470	4 831	8 450	9 513	9 075
Asia-Pacific	78 425	79 864	79 852	9 908	10 830	9 982	30 644	31 061	32 640	40 552	41 890	42 622
Latin America	32 267	32 521	33 388	227	224	178	3 509	4 112	4 308	3 736	4 336	4 485
Total	122 865	125 671	125 794	14 675	16 097	14 404	38 063	39 643	41 778	52 738	55 740	56 182

*Note:* Totals may not sum exactly due to rounding.

*Source:* ITTO, 2002.

products, as 34% of log production is exported. In 2001 African log exports comprised 48% of total roundwood equivalent export volume. Despite the continued significance of African log exports, 2001 marked the first time that the roundwood equivalent volume of exports of processed products exceeded that of logs. The Asia-Pacific region is rapidly replacing log exports with the export of processed products, spurred by Indonesian plywood exports and Malaysian exports of sawnwood, veneer and plywood. Asian log exports made up 26% of total Asian export volume in 2001 (13% of log production). Latin American tropical log exports are a small fraction of both production and total exports. Total roundwood equivalent export volume as a percentage of log production increased from 12% to 13% in Latin America, from 52% to 53% in Asia, and from 69% to 72% in Africa during the period from 1999 to 2001. Total ITTO producer member exports (roundwood equivalent) increased by 7%, from 52.7 million m<sup>3</sup> to 56.2 million m<sup>3</sup>, for the same period, owing to the recovery of African and Asian log exports and increased sawnwood exports by all three regions.

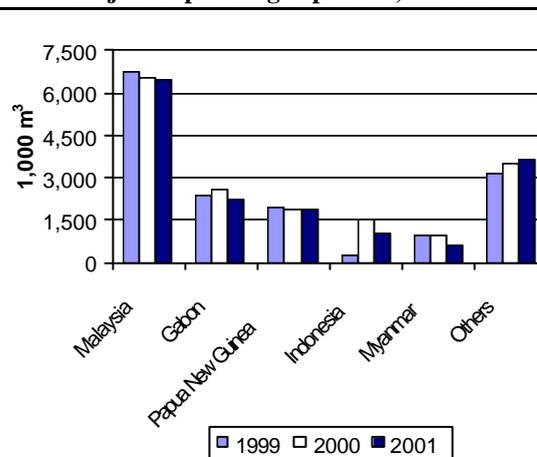
Log exports by producer members decreased by 11% in 2001 to 14.4 million m<sup>3</sup>. Malaysia continues to dominate the trade in tropical logs with 6.5 million m<sup>3</sup> exported in 2001, constituting 45% of ITTO producer member exports (graph 13.2.1). Malaysia's major log customers are China (including Taiwan Province of China), Japan and India.

Papua New Guinea is the third largest tropical log exporter, with estimated 2001 exports of almost 1.9 million m<sup>3</sup>, down by 2% from 1999 levels. Papua New Guinea's log exports remain far below the pre-Asian crisis level of almost 3 million m<sup>3</sup> per year. The bulk of its log exports go to Japan and the Republic of Korea. The Chinese market for its logs grew in 2001, mainly for lower grades. Log exports by Myanmar, the fifth largest log exporter in 2001, decreased by almost 40% in that year. Myanmar's main trading partners are India, Thailand and China.

Africa supplies the majority of the remainder of world tropical hardwood log exports. Gabon is the region's largest exporter (and ITTO's second largest), but the Congo, Liberia, Cameroon, the Central African Republic and Côte d'Ivoire also exported substantial quantities of logs in 2001. Gabon's exports fell 15% to under 2.2 million m<sup>3</sup> in 2001 as log export restrictions were implemented. Cameroon imposed limitations on exports of some species as far back as 1999, leading its exports to plunge by 38% in 2000 and a further 40% in 2001 to under 381,000 m<sup>3</sup>. Ghana, a former top log exporter, banned exports of tropical hardwood logs in 1996. Liberia's civil war (which led to drastic decreases in official log production and exports for most of the 1990s) was resolved in 1998, leading to a resumption of log exports. Liberia's exports jumped by 206% in 2000 (to 637,000 m<sup>3</sup>), with most of these logs destined for Europe, but in 2001 fell back to 409,000 m<sup>3</sup>.

GRAPH 13.2.1

**Major tropical log exporters, 1999-2001**



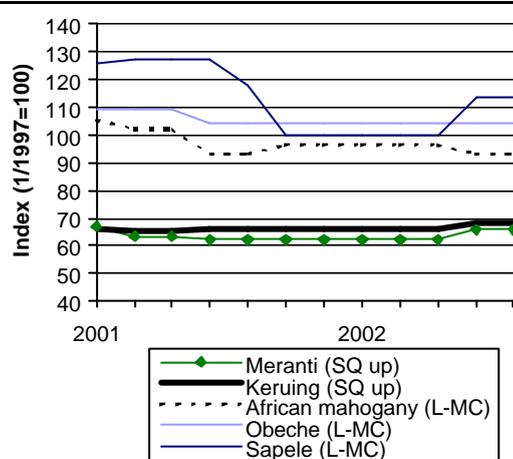
*Source:* ITTO, 2002.

### 13.2.2 Tropical log prices

After the sharp drop during the Asian crisis of 1997 and 1998, prices of most species of Asian logs have been recovering slowly (graph 13.2.2). Most have traded at real (1990) prices between \$120 and \$160/m<sup>3</sup> from the end of 1998 through 2001, still a long way from 1996 and 1997 price levels. Keruing prices were relatively stable in 2001, trading at around \$159/m<sup>3</sup> at the close of the year. Meranti logs were trading at \$164/m<sup>3</sup> in the third quarter of 2000, when export markets (particularly China) increased orders, but declined steadily from the last quarter of 2000 and were trading at only \$140/m<sup>3</sup> in late 2001.

GRAPH 13.2.2

## Tropical log price trends, 2001-2002



Note: FOB prices, SQ up is sawmill quality, L-MC is Loyale Merchant. Prices are from January 2001 through May 2002.  
Source: ITTO, 2002.

Real FOB prices for most important species of African log exports were generally declining but fluctuated widely during the 2000-2001 period. Having followed an upward trend since mid-1999, real prices for African mahogany (acajou) peaked in mid-2000 at around \$260/m<sup>3</sup>, before declining sharply during most of the last half of 2000. In late 2000, African mahogany prices were at \$190/m<sup>3</sup>, a record low over the past decade, mainly as a result of a weakening of the French franc and the euro compared to the United States dollar. African mahogany prices rose gradually during the first quarter of 2001 and firmed at around \$222/m<sup>3</sup> before declining again during the second and third quarters to \$187/m<sup>3</sup>, a new record low owing to lower demand in France and a perception in the European markets of high stocks in log yards. Prices remained relatively stable at this level to the end of 2001.

After peaking at \$317/m<sup>3</sup> in early 2000 as a result of a mid-1999 Cameroonian log export ban on several species, real prices for sapelli also declined sharply during most of the year to \$256/m<sup>3</sup> in November 2000,

close to the lowest price for this species over the past decade. Sapelli prices rose gradually through the first quarter of 2001, firmed at around \$304/m<sup>3</sup> and fluctuated around that level during the second and third quarter of 2001. Sapelli prices dropped steeply at the end of 2001 to around \$230 owing to depressed demand in Europe.

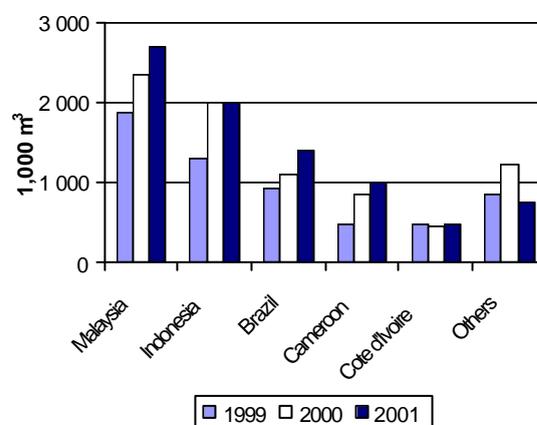
## 13.2.3 Sawnwood

Malaysia continues to dominate the trade in tropical sawnwood, with the 2.7 million m<sup>3</sup> exported in 2001 constituting 31% of total ITTO producer member exports (graph 13.2.3). Malaysia's sawnwood customers are primarily Japan, Thailand, the Netherlands, the Republic of Korea and the large Chinese market (including Hong Kong Special Administrative Region and Taiwan Province of China).

Export estimates for Indonesian sawnwood have been adjusted to take into account trading partner reports. Based on this new information, Indonesian exports of sawnwood rose to 2 million m<sup>3</sup> in 2001, a 54% increase over the figure reported in 2000. Indonesia's major sawnwood market is China, but its reported trade with China in 2001 was far smaller than China's reported imports. Cameroon's sawnwood exports have also grown sharply in recent years, jumping almost 80% in 2000 and a further 18% in 2001, reaching 1 million m<sup>3</sup> as mills were able to benefit from restrictions on log exports. In addition to the top five exporters shown in the graph, Thailand and Ghana both exported over 200,000 m<sup>3</sup> of tropical sawnwood in 2001.

GRAPH 13.2.3

## Major tropical sawnwood exporters, 1999-2001



Source: ITTO, 2002.

ITTO consumer countries exported 494,000 m<sup>3</sup> of tropical sawnwood in 2001, primarily (77%) from the

European Union countries which accounted for 380,000 m<sup>3</sup> of the total. Belgium is the main European Union tropical sawnwood exporter with 190,000 m<sup>3</sup> in exports in 2001, followed by the Netherlands (60,000 m<sup>3</sup>). The United States also exports substantial quantities of sawnwood produced from imported tropical logs, with 62,000 m<sup>3</sup> shipped in 2001.

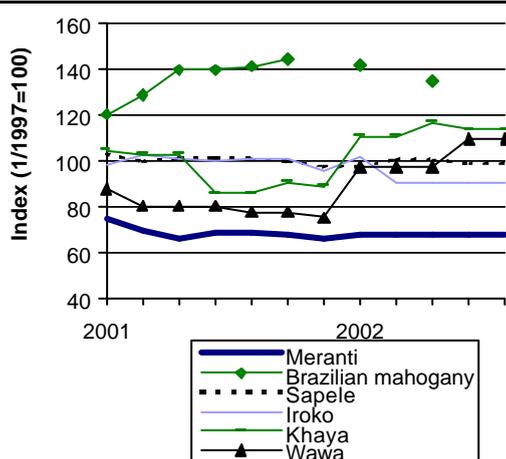
### 13.2.4 Tropical sawnwood prices

African sawnwood prices were declining for several important species including mahogany (acajou or khaya) and wawa (obeche) in 2000-2001 (graph 13.2.4). After peaking at a record high of \$634/m<sup>3</sup> in April 2000 as a result of a boost in European Union furniture sector imports, real prices for mahogany (one of the most valuable African sawnwood export species) were declining for most of 2000, reaching \$538/m<sup>3</sup> by year-end. After a period of relative stability, prices of wawa rose slightly in the second half of 1999 and early 2000 to reach \$330/m<sup>3</sup> but declined gradually to \$258/m<sup>3</sup> in late 2000 as competition from lower-priced Asian sawnwood, temperate hardwoods and softwoods increased. Wawa sawnwood prices rose to \$295/m<sup>3</sup> in early 2001, before declining to around \$235/m<sup>3</sup> by the end of the year.

After reaching record highs in 1994, declining through 1995, firming in 1996 and then falling sharply

GRAPH 13.2.4

Tropical sawnwood price trends, 2001-2002



Note: FOB prices. No data after March 2002 for Brazilian mahogany due to harvesting and export ban.

Source: ITTO, 2002.

in the second half of 1997 and first half of 1998 (during the Asian economic turmoil), prices of dark red meranti sawnwood firmed at around \$420/m<sup>3</sup> until the end of 2000. Prices of Malaysian meranti sawnwood declined steadily throughout 2001 as a result of market uncertainty and competition in some importing

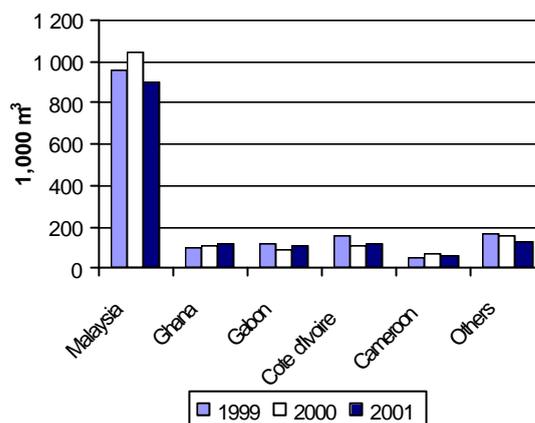
countries with increased sawnwood supply from Africa (mainly Cameroon). In contrast to other species, Brazilian mahogany sawnwood rose in 2001 and was trading at year-end at \$1,420/m<sup>3</sup>, a record high. The price of mahogany is expected to increase further in 2002 owing to strong demand and limits on supply as a result of stricter forest management and export controls in Brazil.

### 13.2.5 Veneer

ITTO producer country veneer exports dropped 8% in 2001 to 1.6 million m<sup>3</sup>. Malaysia continues to be the main veneer exporter, with exports of 900,000 m<sup>3</sup> in 2001 accounting for 63% of total ITTO producer member exports (graph 13.2.5). Malaysian exports are

GRAPH 13.2.5

Major tropical veneer exporters, 1999-2001



Source: ITTO, 2002.

mainly directed to China, the Republic of Korea, Taiwan Province of China, the Philippines and Japan.

Côte d'Ivoire was the second largest tropical veneer exporter in 2001 with exports of 120,000 m<sup>3</sup>, an increase of 6% from 2000. Côte d'Ivoire's veneer markets are the European Union (mainly Germany, Italy, Spain and France) and the United States. Ghana overtook Gabon as the third largest ITTO tropical veneer exporter beginning in 2000 and exports grew steadily to 116,000 m<sup>3</sup> in 2001. Cameroon's veneer exports decreased by 15% to 60,000 m<sup>3</sup> in 2001.

The European Union accounted for 107,000 m<sup>3</sup> of total consumer country tropical veneer exports of 121,000 m<sup>3</sup> in 2001. France, Belgium, Spain, Germany and the Netherlands are the largest European Union tropical veneer exporters. Consumer country exports of tropical veneer are often of much higher aggregate value than those from producer countries, although

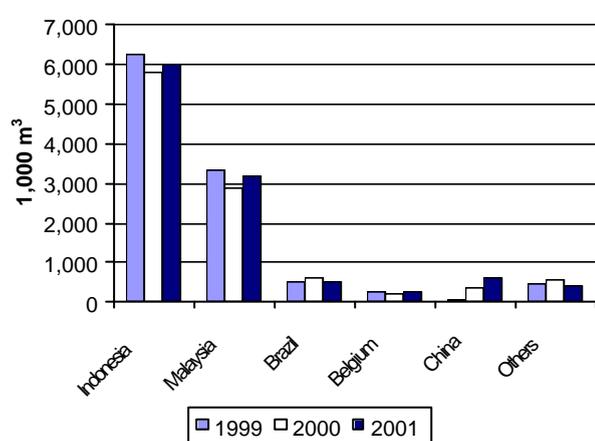
prices of individual species of tropical veneers are not regularly tracked by ITTO or others.

### 13.2.6 Plywood

Tropical plywood exports by ITTO producer member countries increased in 2001 to slightly over 10 million m<sup>3</sup>, but were still well below the volumes exported prior to the Asian economic crisis of 1998. Indonesia remains the main tropical plywood exporter with 6 million m<sup>3</sup> exported in 2001, constituting 59% of total ITTO producer member exports (graph 13.2.6). However, Indonesia's proportion of the total has fallen from a high of 80% in 1992.

GRAPH 13.2.6

#### Major tropical plywood exporters, 1999-2001



Source: ITTO, 2002.

Malaysia is Indonesia's major competitor in the tropical plywood trade. Malaysian exports decreased by 14% to 2.9 million m<sup>3</sup> in 2000, but increased to 3.2 million m<sup>3</sup> in 2001. Malaysia was a major supplier of the Chinese plywood market and has been hard hit by that country's switch to log imports. Malaysia's rapid growth in plywood exports up to 1998 (when exports approached 4 million m<sup>3</sup>) was due to the construction of new plywood mills in Sabah and Sarawak. These two eastern Malaysian states account for almost all of the country's plywood exports. Malaysia's exports were mainly to Japan, the Republic of Korea and the United States in 2001. Latin American plywood exports declined by 18% in 2001 to 586,000 m<sup>3</sup> owing to a 19% fall in Brazil's exports to 493,000 m<sup>3</sup>. The United States and the European Union (mainly the United Kingdom, Germany and Belgium) are the major markets for Brazil's hardwood plywood. Africa's plywood exports remained relatively minor at 231,000 m<sup>3</sup> in 2001, but have grown rapidly in the past

5 years owing to increased exports from Côte d'Ivoire, Gabon and Ghana.

ITTO consumer country exports of tropical plywood rose 29% to almost 1.3 million m<sup>3</sup> in 2001, led by a steady increase of exports from China, with customs data suggesting that it replaced Brazil as the world's third largest tropical plywood exporter in 2001. The European Union also exported over half a million m<sup>3</sup> of tropical plywood in 2001.

The plywood trade in China has developed at a frantic pace. Imports have plummeted from around 1.5 million m<sup>3</sup> in 1997 (they had been as high as 2.3 million m<sup>3</sup> in 1993) to just 650,000 m<sup>3</sup> in 2001. In contrast, exports have defied gravity, leaping from less than 100,000 m<sup>3</sup> in 1993 to almost 1 million m<sup>3</sup> in 2001, with the majority of this tropical. According to customs data, Chinese plywood was exported to the following main markets in 2001: Republic of Korea – 206,000 m<sup>3</sup> (representing 21.3%), Hong Kong – 169,000 m<sup>3</sup> (17.5%), Japan – 121,000 m<sup>3</sup> (12.5%), the United States – 92,000 m<sup>3</sup> (9.5%) and Taiwan Province of China – 85,000 m<sup>3</sup> (8.8%).

### 13.2.7 Tropical plywood prices

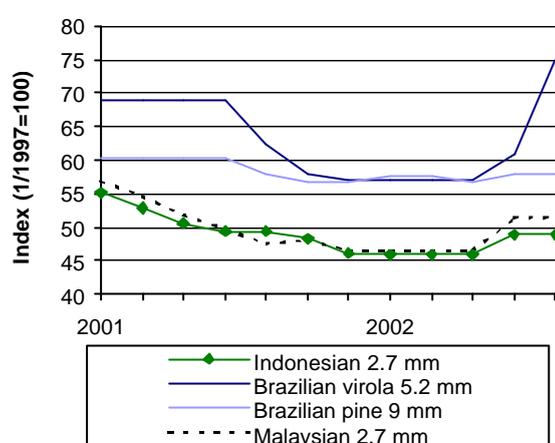
Prices for tropical plywood continue to reach new lows owing to depressed construction sectors in major importing markets and growing substitution by softwood plywood and other panels. After reaching record highs in 1996, declining through 1997 and the first half of 1998, and firming slightly in the second half of 1998 and 1999, prices of Indonesian BB/CC moisture resistant grade plywood stabilised in early 2000 at about \$388/m<sup>3</sup> and \$203/m<sup>3</sup> for 2.7 millimetre and 6-18 millimetre thicknesses, respectively. This stabilization was helped by a stronger yen and an active demand for thin plywood in China. Indonesian plywood export prices started declining steadily from mid 2000 and were trading at around \$221/m<sup>3</sup> and \$159/m<sup>3</sup> for the above thicknesses, respectively, in late 2001, record lows for these products (graph 13.2.7). These real price levels were only about 45-50% of the highs observed in 1996. Asian plywood prices have not recovered as a result of:

- Flat construction sectors in Japan and other southeast Asian consumers, as well as in Germany.
- A recent change in import tariff structures in China, which favours log over plywood imports.
- Increasing substitution by softwood plywood in many consuming countries, and strong competition from other wood-based panels.

Malaysian plywood prices have closely tracked those for Indonesian products, as shown by the 2001 price trends (graph 13.2.7).

GRAPH 13.2.7

## Tropical plywood price trends, 2001-2002



Note: FOB prices.

Source: ITTO, 2002.

Brazilian plywood prices have also undergone significant declines but not as dramatic or consistent as their Asian competitors. Prices of white virola rebounded in late 2000 to \$248/m<sup>3</sup> as volume shortages took effect and rose slowly through most of 2001, before declining to \$231/m<sup>3</sup> in late 2001. Prices for Brazilian pine plywood (9+ millimetre), included here for comparison purposes, were less severely affected during the 1997 to 1998 market turbulence than Brazil's tropical exports, but prices are still at less than 60% of

the pre-crisis levels.

### 13.3 Import trends

Of the ITTO consumer members, China, including Hong Kong Special Administrative Region and Taiwan Province of China, appears to be the most dependent on tropical imports, with a significant proportion of their substantial log, sawnwood, veneer and plywood imports of tropical origin (table 13.3.1). Major importers are defined here as those with imports of at least 100,000 m<sup>3</sup> of one or more tropical products. Unsurprisingly, given the dominance of tropical plywood in international plywood trade, most of the countries in the table have a fairly high dependence on tropical plywood imports, with the Republic of Korea, Japan and China dependent on tropical sources for over 90% of total imports (although this dependence is decreasing in the first two countries).

The products in which each country qualifies as a major importer are identified with the table in bold. Only China and Taiwan Province of China qualify as major importers of tropical timber under this criterion in all primary product categories.

Tropical sawnwood has a low market share in most non-tropical countries, with only China dependent on it for half or more of its sawnwood imports. Only Hong Kong Special Administrative Region and Taiwan Province of China among major consumers imported a greater proportion of tropical than non-tropical logs in

Table 13.3.1

#### Tropical proportion of total imports by major ITTO importers, 2001

Proportion (%)

Consumer members	Logs	Sawnwood	Veneer	Plywood
Belgium	1.5	<b>17.6</b>	62.5	<b>78.7</b>
China	<b>45.8</b>	<b>52.4</b>	<b>91.0</b>	<b>92.2</b>
France	<b>39.4</b>	<b>11.5</b>	43.4	<b>29.7</b>
Germany	<b>4.1</b>	<b>2.8</b>	22.7	<b>16.3</b>
Hong Kong S.A.R.	<b>63.9</b>	<b>17.3</b>	18.8	<b>73.5</b>
Italy	<b>7.2</b>	<b>3.9</b>	13.9	14.5
Japan	<b>15.4</b>	<b>6.7</b>	40.9	<b>90.2</b>
Netherlands	20.0	<b>12.0</b>	16.7	<b>34.8</b>
Portugal	<b>37.4</b>	<b>18.5</b>	25.0	13.8
Rep. of Korea	<b>13.5</b>	<b>31.6</b>	<b>68.3</b>	<b>90.8</b>
Spain	<b>4.4</b>	<b>10.3</b>	42.3	4.9
Taiwan, P.O.C.	<b>76.0</b>	<b>18.4</b>	<b>85.9</b>	<b>85.1</b>
United Kingdom	3.2	<b>3.9</b>	25.0	<b>57.5</b>
United States	0.0	<b>0.7</b>	5.9	<b>63.5</b>
<b>Producer Members</b>				
Brazil	56.4	<b>99.0</b>	98.6	0.0
India	<b>86.5</b>	9.1	0.0	50.0
Malaysia	<b>94.7</b>	<b>98.9</b>	5.0	71.4
Philippines	<b>58.8</b>	<b>77.5</b>	<b>82.4</b>	75.0
Thailand	<b>86.7</b>	<b>87.0</b>	71.6	0.3

Note: Bold indicates qualification as a major importer

Source: ITTO, 2002

2001. In contrast to consumer countries, most of the major ITTO producer country importers depend on tropical imports for the majority of their imported wood needs. This is changing, however, with, for example, India, the Philippines and Thailand now sourcing substantial quantities of log imports from non-tropical areas.

### 13.3.1 Logs

Total imports of tropical hardwood logs by ITTO members remained stable at 18.1 million m<sup>3</sup> in 2001, about 16% (or 2.9 million m<sup>3</sup>) greater than total log exports by all members. This gap between imports and reported exports could be explained by greater supplies from non-ITTO members, undocumented and illegal trade, forecasting errors, or most likely a combination of these. Differences between reported ITTO imports and exports is at least partially made up by legitimate log exports from non-members Equatorial Guinea and the Solomon Islands, with exports averaging about 400,000 m<sup>3</sup> per year each. Other non-member tropical log exporters are less significant and include Bangladesh (average annual exports around 100,000 m<sup>3</sup>), Laos (80,000 m<sup>3</sup>), Mozambique (50,000 m<sup>3</sup>), Madagascar (40,000 m<sup>3</sup>) and Viet Nam (30,000 m<sup>3</sup>).

China overtook Japan in 1999 as the world's largest importer of tropical logs and maintained this position in 2001 when it imported about 7.3 million m<sup>3</sup> (up 20% from 2000), thus consolidating it as ITTO's largest tropical log importer with over 40% of total ITTO imports (graph 13.3.1). China's growing economy, a ban on domestic harvesting and a zero tariff on log imports were the main driving factors for this sharp rise. China's tropical log imports have soared more than five-fold in the last five years, with Malaysia, Gabon, Papua New Guinea and Indonesia being the main

sources. China's import of non-tropical logs has also expanded rapidly, with Russia providing the bulk of total imports of about 7 million m<sup>3</sup> in 2001. Official Chinese statistics do not include Taiwan Province of China nor Special Administrative Regions Hong Kong and Macao, so the figures for these are based on trading partner reports and other unofficial sources.

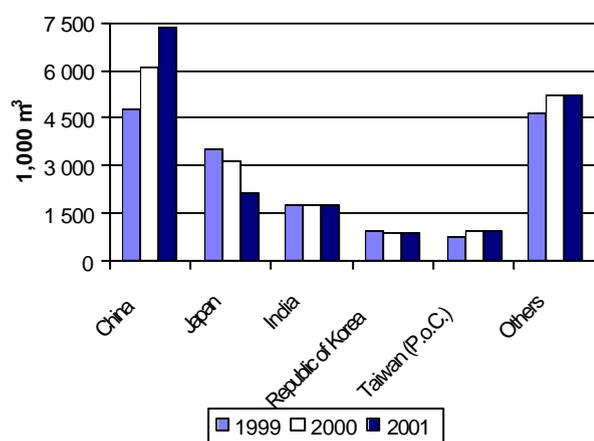
Since 1998, China has progressively phased out tropical plywood imports in favour of logs. The high levels of imports of low-cost plywood from Indonesia and Malaysia started to seriously undermine the competitive position of domestic manufacturers and many mills were forced to cut production, lay-off workers and even close. By removing import tariffs on logs (and by enforcing laws against plywood smuggling) this situation was addressed effectively. When the tariffs on logs were removed, local manufacturers were able to profitably use imported logs to fill the gap in log supplies created as a result of the drastic cuts in domestic log harvests as part of the country's new forest protection regulations. If China's log imports continue to grow as expected, China will soon replace Japan as the world's top log importer of both tropical and temperate logs.

Japan is the second largest ITTO tropical log importer, with imports of just over 2.1 million m<sup>3</sup> in 2001, down 32% from 2000 levels owing to its contracting economy, reduced supplies from Malaysia and an increasing reliance on softwood logs. Two thirds of Japanese demand for tropical logs continued to be met primarily by output from Malaysia in 2001, with logs from Papua New Guinea accounting for about one quarter of total imports and most of the remainder from Africa (mainly Gabon and Cameroon). Russia continued as Japan's major log supplier, with imports of over 5 million m<sup>3</sup> in 2001. Larch is the preferred species for plywood manufacture, and with prices below those of the cheapest tropical logs, it appears likely to gain further market share.

India is the third largest importer of tropical logs, at 1.8 million m<sup>3</sup> in 2001, mostly from Malaysia and Myanmar but with an increasing component of African logs. The Republic of Korea is also a major ITTO log importer, with almost 912,000 m<sup>3</sup> in 2001 as its economy continued recovering, with its major suppliers Papua New Guinea (35%) and Malaysia (35% of total imports, down from 71% in 1994). The Republic of Korea's imports of logs from Africa were 251,000 m<sup>3</sup> in 1995, but the ban on exports from Ghana (the Republic's main African supplier in that year) led to a sharp drop in imports from that continent. The Republic of Korea's current main African suppliers are Gabon and Cameroon, from which it now imports only minor quantities. A significant portion of the Republic's

GRAPH 13.3.1

#### Major tropical log importers, 1999-2001



Source: ITTO, 2002.

“other” tropical log supply is sourced from the Solomon Islands.

The European Union countries imported 2.4 million m<sup>3</sup> of tropical logs in 2001 (down 5% from 2000), most of which came from African producers. France remains the largest of the European Union log importers; its imports remained stable at 822,000 m<sup>3</sup> in 2001. The bulk of France’s tropical log supplies comes from Gabon, Republic of Congo, Liberia and Cameroon. Portugal and Italy are also major European log importers, each with over 410,000 m<sup>3</sup> of log imports in 2001.

Several ITTO producing countries have become major importers of logs, indicating the extent of wood shortages in their domestic forest sectors. India (1,800,000 m<sup>3</sup>), Malaysia (718,000 m<sup>3</sup>), Thailand (464,000 m<sup>3</sup>), and the Philippines (325,000 m<sup>3</sup>) were the major ITTO producer country importers of tropical logs in 2001, reflecting resource scarcity and increased timber demand in these countries. Total imports of tropical logs by ITTO producing members, however, declined by 4% to just over 3.5 million m<sup>3</sup> in 2001.

### 13.3.2 Sawnwood

Total ITTO imports of tropical sawnwood decreased by 1.1% to 8.4 million m<sup>3</sup> in 2001. With 2001 imports of 2.1 million m<sup>3</sup>, China is by far the top ITTO sawnwood importer (graph 13.3.2). China’s imports surged 6% in 2001. China’s tropical sawnwood imports are mainly from Indonesia (47%) and Malaysia (25%). The combined imports of China and Taiwan Province of China accounted for 38% of ITTO consumer imports in 2001. Thailand imported 1.1 million m<sup>3</sup> (up 20%) in 2001 as its large furniture and secondary processing

industries continued to recover. Both Thailand’s and Japan’s tropical sawnwood imports are primarily from Malaysia (69% and 49%, respectively). Japan also imported substantial quantities of sawnwood from Indonesia (39%) in 2001. Japan remained ITTO’s third largest tropical sawnwood importer in 2001, with imports decreasing by 12% to 605,000 m<sup>3</sup>. Japanese imports of tropical sawnwood have fallen almost by half since 1996, while its imports of softwood lumber (primarily from Canada and increasingly from the Nordic Countries) remained at over 8million m<sup>3</sup> in 2001.

The Netherlands, Malaysia, Spain, Belgium, France, the United States, the United Kingdom and Taiwan Province of China, each with over 300,000 m<sup>3</sup> of tropical sawnwood imports in 2001, were also major importers. Imports by the Netherlands, Belgium, the United Kingdom and Taiwan Province of China were primarily from Malaysia and (to a lesser extent) Indonesia, while Malaysia’s were from Indonesia, although no corresponding trade flow was reported by Indonesia. The tropical sawnwood market is the most diversified of all primary tropical timber products, with the five largest importers accounting for only half of total ITTO imports in 2001.

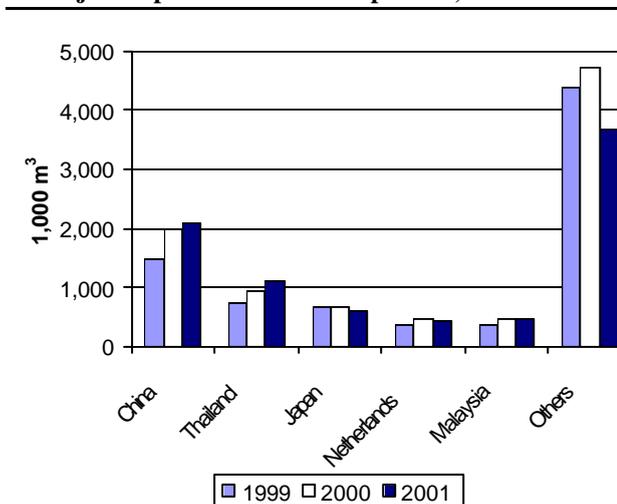
Total tropical sawnwood imports by European Union countries declined by almost 11% in 2001 to 2.5 million m<sup>3</sup>, primarily as a result of decreased imports by Belgium, France and the United Kingdom. As stated above, Malaysia and Indonesia are the main sources for European Union imports, accounting for over half of the total. Côte d’Ivoire, Cameroon, Brazil and Ghana supplied virtually all of the remainder of European Union imports. The Netherlands is the largest importer of tropical sawnwood in the European Union, absorbing 450,000 m<sup>3</sup> in 2001. France (385,000 m<sup>3</sup>) and Spain, Belgium and the United Kingdom (at 300,000 m<sup>3</sup> each) were other major European Union tropical sawnwood importers in 2001.

### 13.3.3 Veneer

Total ITTO imports of tropical veneer were stable at almost 1.4 million m<sup>3</sup> in 2001 due to steady imports of China and Taiwan Province of China’s remaining stable (at 589,000 m<sup>3</sup> and 140,000 m<sup>3</sup> respectively) in 2001 (graph 13.3.3). The Republic of Korea’s imports (168,000 m<sup>3</sup>) also remained stable in 2001. Four out of the five top veneer importers are Asian countries. Imports by Asian countries are primarily sourced from Malaysia, while the majority of European imports are from African producers (mainly Côte d’Ivoire, but increasingly from Gabon and Ghana as well). The European Union absorbed 237,000 m<sup>3</sup> of tropical veneer in 2001, around one-fifth of total ITTO imports.

GRAPH 13.3.2

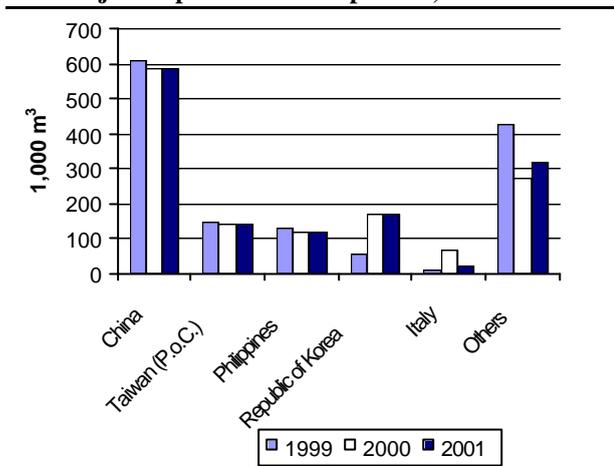
Major tropical sawnwood importers, 1999-2001



Source: ITTO, 2002.

GRAPH 13.3.3

## Major tropical veneer importers, 1999-2001



Source: ITTO, 2002.

Japan's tropical veneer imports decreased by 6% to 45,000 m<sup>3</sup> in 2001.

### 13.3.4 Plywood

Total ITTO imports of tropical plywood declined by 5% to 10.2 million m<sup>3</sup> in 2001. The majority of all tropical plywood imports are sourced from Indonesia and Malaysia (60% and 39% respectively in 2000 for the top importer, Japan). Japan continues to replace domestic hardwood plywood production with softwoods, imported plywood (tropical and non-tropical) and substitutes like OSB and MDF. Its tropical imports decreased slightly by 1% in 2001, to 4.5 million m<sup>3</sup>, due to its flat construction sector. The general trend towards increasing plywood imports by Japan is at least partially due to its difficulty in obtaining tropical logs for domestic production in the face of competition from China. Low prices also made imported plywood more attractive than domestic production in 2000 and 2001. Japan is now importing growing quantities of low-priced tropical plywood from China.

The United States was ITTO's second major plywood importer in 2001, with 1.5 million m<sup>3</sup>, a drop of 2% from 2000 levels (graph 13.3.4). Of the United States tropical plywood imports, 43% was from Indonesia, 23% from Malaysia and most of the rest from Latin America. The Republic of Korea was ITTO's third largest tropical plywood importer in 2001 with 890,000 m<sup>3</sup>. Korean tropical plywood imports have rebounded back to pre-crisis levels as its construction sector has recovered. Indonesia has traditionally supplied most of the Republic's plywood imports, but Malaysia has gradually increased its share from 18% in 1995 to over one third in 2001. China dropped to fourth largest tropical plywood importer

with 600,000 m<sup>3</sup> in 2001. As noted above, Chinese imports have fallen to less than one third of 1998 levels as authorities have moved to increase domestic plywood production from imported logs to boost employment and offset reduced domestic log supplies. Tariffs on imported plywood are 15%, compared to zero for logs.

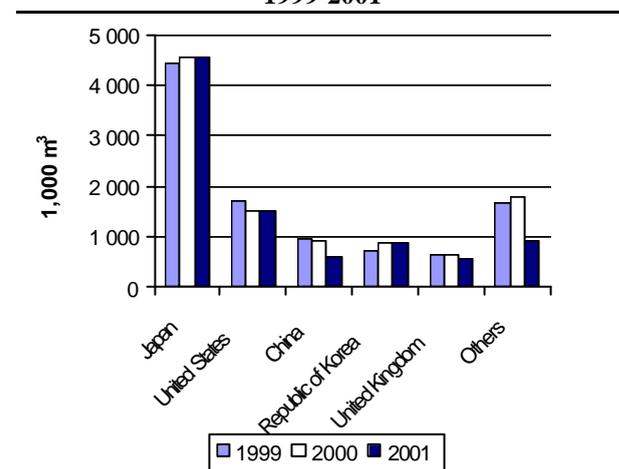
European Union imports of tropical plywood totalled just under 1.6 million m<sup>3</sup> in 2001, a 7% decrease from 2000 levels owing to declines in the United Kingdom, the Netherlands and Germany. European Union imports are led by the United Kingdom and the Netherlands. Most of the European Union's tropical plywood also came from Indonesia and Malaysia, with Brazil and inter-European trade also playing a fairly large role in many countries' imports. China continued to export small but growing amounts of tropical plywood to the European Union, particularly to its largest plywood importer, the United Kingdom. Taiwan Province of China (530,000 m<sup>3</sup>) was also a substantial tropical plywood importer in 2001.

## 13.4 Tropical timber trends

This concluding section briefly examines some important trends in the tropical timber sector that will

GRAPH 13.3.4

## Major tropical plywood importers, 1999-2001



Source: ITTO, 2002.

continue to be felt in 2002 and beyond.

### 13.4.1 Chinese plywood exports

As noted in the section on plywood, China has converted from a major importer to a major exporter of this product in the space of a few years. First quarter 2002 Chinese customs statistics confirm that imports of plywood and veneer continued to fall. Imports of plywood fell from 194,000 m<sup>3</sup> in the first quarter last year to just 124,000 m<sup>3</sup> this year, a decline of 37%. On the other hand, exports of plywood continued to surge, with first quarter 2002 plywood exports up by 31% over the corresponding period of 2001.

China's plywood exports are largely made up of tropical species and rely on logs and veneer imported from Malaysia, Indonesia and other tropical countries in Asia and Africa. With exports of plywood likely to exceed 1 million m<sup>3</sup> this year, China has become a serious competitor in the global plywood market, especially in East Asia. Tropical plywood producers will be seeing more of their traditional markets under attack by low-priced Chinese exports in future.

### 13.4.2 Forest area changes

FAO's *Global Forest Resource Assessment 2000*, released in late 2001, shows that net tropical deforestation (i.e., deforestation minus forest extension, excluding plantations) slowed from 12.8 million hectares per year during the 1980s to 11.5 million hectares per year in the 1990s. Separating tropical countries into ITTO members and others shows that the annual rate of deforestation in ITTO member countries fell from 0.6 to 0.5% between the two decades, while that of other tropical countries increased, from 0.7 to 0.9%. While this trend is due to many factors (e.g. forests are generally more important in ITTO member countries, many other tropical countries have more dry zone forests which are more easily destroyed, and income and growth are generally lower in other tropical countries than in ITTO members), it is nonetheless encouraging.

The 2000 FAO *Forest Resource Assessment* also shows that global forest plantations increased by almost 12 million hectares per year in the 1990s, compared to less than 4 million hectares per year in the previous decade, with half of this phenomenal growth in Asia (primarily India, China and Japan). ITTO producer members established 1.7 million hectares per year of plantations during the 1980s, rising to 3.2 million annually in the 1990s. This compares to only 400,000 hectare per year by other tropical countries, and 1.8 million by non-tropical developing countries such as China. ITTO producer countries had 59 million hectares of plantations in 2000, approaching 5% of their total natural forest area.

With growth in area planted increasing by over 10% per year, plantations look set to play an ever-increasing role in the forest sector of tropical countries, especially in the development of capacity for secondary processed wood products (see chapter 12).

### 13.4.3 Illegal logging and trade and certification

The problem of illegal logging and trade in timber products has garnered substantial international exposure in recent years. While such problems can be found to some degree in almost all countries, the scope of illegal logging and its potentially devastating impact on forest resources in several tropical countries ensures that these countries will remain the focus of international attention. ITTO has been involved in several activities to combat these problems in member countries, most notably through a decision taken at the end of 2001 calling for more project funding for forest law enforcement and an innovative study that is currently under way to compare trading partner discrepancies with a view to identifying illegal trade. A dozen countries, including all major importers and exporters of tropical timber, have volunteered to participate in this study.

An integral part of any serious effort to combat illegal logging and trade is reliable auditing of forest operations and chain-of-custody verification. ITTO is supporting several country initiatives to develop credible forest auditing frameworks and has recently approved a set of guidelines for the development of such frameworks. Several tropical countries are also developing national certification schemes based on forest management auditing frameworks and ITTO's criteria and indicators. In 2001, both Malaysia's National Timber Certification Council and Indonesia's Eco-labeling Institute began steps to market certified tropical forest products with their own labels. While some countries are in negotiations with international accreditation bodies such as the Forest Stewardship Council (which has to date primarily awarded certificates in temperate forests), it appears unlikely that any one scheme will gain prominence in the tropics. The proliferation of national or regional schemes is therefore likely to continue, and will call for a framework for mutual recognition between schemes. ITTO has been active in attempting to facilitate agreement on such a framework, and will continue to support the efforts of tropical countries to monitor and report on the sustainable management of their forests.