

## CHAPTER 13

# TROPICAL TIMBER DEVELOPMENTS<sup>1</sup>

### Highlights

- Tropical timber markets continued to fall sharply during the first half of 1998, but appeared to reach the bottom in the later half of the year.
- Recovery in some tropical timber markets was occurring in early and mid 1999.
- ECE exporters were severely impacted by the downturn in Asian markets in 1998; however, demand was increasing in Japan and Korea in early and mid 1999.
- Production and trade of secondary tropical forest products withstood the economic crisis better than primary products and in some cases were positively influenced by producers' currency devaluations.
- Tropical timber prices fell sharply in 1998, but partly recovered in early 1999.
- Currency devaluations of many Asian currencies had direct effects on ECE region forest products trade.

**Secretariat introduction.** The secretariat would like to thank the principal authors of this chapter, Dr. Steve Johnson, Statistician and Dr. Michael Adams, Marketing Service Information Coordinator, both of the International Tropical Timber Organization (ITTO). Most of the following information came from the ITTO *Annual Review and Assessment of the World Timber Situation 1998*. Note that the ITTO statistics in the following chapter may differ from FAO statistics as ITTO members represent most, but not all, of the tropical timber production and trade.

### 13.1 Introduction

The major factor affecting tropical timber production and trade in 1998 and 1999 was the economic crisis which started in Asia in 1997 and spread to other regions. The information presented below shows the extent of the effects of the downturn on many tropical producing and consuming countries over the past two years.

<sup>1</sup> By Dr. Steve Johnson, Statistician, Economic Information and Market Intelligence, ITTO, International Organizations Center, 5<sup>th</sup> Floor, Pacifico-Yokohama, 1-1-1, Minato-Mirai, Nishi-Ku, Yokohama, 220-0012 Japan, Tel: +81 45 223 1110, Fax +81 45 223 1111, e-mail: itto@mail.itto-unet.ocn.ne.jp

Dr. Michael Adams, Marketing Service Information Coordinator, same address.

Although few figures are available yet for 1999, it appears that most economies are improving with a positive impact of the timber sector. However uncertainties remain regarding the extent of an overall recovery in the tropical timber sector due to continued weakness in two major economies in the sector, ie Japan and Indonesia.

### 13.2 Production

#### (i) Logs

In 1998, log production by ITTO producer member countries fell over 6% to 123.3 million m<sup>3</sup>. The production of tropical saw and veneer logs in ITTO producer member countries totaled 131.4 million m<sup>3</sup> in 1996. This total was down 2% from 1995 levels, with production remaining at 131.4 million m<sup>3</sup> in 1997, 82% of production of all saw and veneer logs in all tropical countries and 14% of global saw and veneer log production. Graph 13.2.1 shows ITTO's five major log producers for 1996-1998, ranked by 1997 production, as well as aggregate production by all other members.

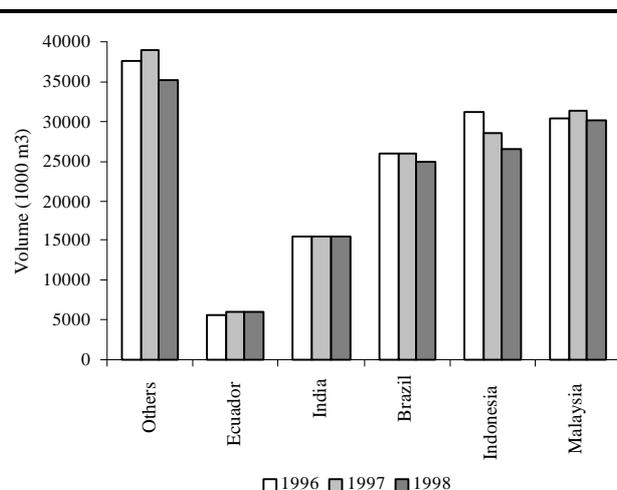
Of the top five, only India was stable during the period 1996-1998, whereas the rest (especially Indonesia) continued decreasing. Malaysia reported a rise of almost 1.1 million m<sup>3</sup> in log production between

1996 and 1997, from 30.3 million m<sup>3</sup> to almost 31.4 million m<sup>3</sup>. However, Malaysian production has fallen from about 37.3 million m<sup>3</sup> in 1994 to 30.2 million m<sup>3</sup> in 1998, a reduction of almost one-fifth in just five years. This decrease reflects lower harvests in both Sabah and Sarawak, with the latter's harvests from its permanent forest estate now at the annual level of 9 million m<sup>3</sup> recommended by the ITTO Mission to Sarawak in 1990. In all regions harvests fell in 1998 due to decreased demand associated with recession in many domestic and export markets (table 13.2.1).

Four countries (Malaysia, Indonesia, Brazil and India) dominate tropical log production and together comprised almost 80% of ITTO production in 1997-1998 (graph 13.2.1). All figures are based on total estimated removals, including those from forest conversion operations. Indonesian reports indicate that in recent years, the government has converted 3.4 million hectares of forests into plantations, 2.4 million of which are palm oil estates. Most of the cleared forests were classed as "secondary degraded" and did not contribute significantly to Indonesian log production. Ecuador remains the fifth largest ITTO log producer and was the only major producer that has increased tropical log production since 1996.

Eight other ITTO producer members had log production exceeding 1 million m<sup>3</sup> in 1997. All of

GRAPH 13.2.1  
Major tropical log producers, 1996 to 1998



Source: ITTO, 1999.

these (Papua New Guinea, Cameroon, Myanmar, Côte d'Ivoire, Colombia, Gabon, Peru and Ghana) experienced relatively stable or declining log production in 1998. Log production has decreased dramatically between 1997 and 1998 in Cambodia (47%), Gabon (47%) and PNG (43%) due to the economic turmoil in markets served by these countries. Log production has also fallen by 44% since 1994 in Ghana, where strict harvest controls and a log export ban have been in place for the past four years. The

TABLE 13.2.1

Tropical forest products production, 1996 to 1998  
(1000 m<sup>3</sup>)

	1996	1997	1998
<b>AFRICA</b>			
logs	9903	11102	9416
sawnwood	2021	2097	2200
veneer	441	422	486
plywood	243	276	308
<b>ASIA PACIFIC</b>			
logs	85058	83371	78106
sawnwood	21901	21317	20250
veneer	1432	1525	1256
plywood	14329	11404	10957
<b>LATIN AMERICAN/CARIBBEAN</b>			
logs	36439	36952	35781
sawnwood	14401	14588	13979
veneer	580	595	570
plywood	1954	1931	1816
<b>TOTAL</b>			
logs	131400	131425	123303
sawnwood	38323	38002	36429
veneer	2453	2542	2312
plywood	16526	13611	13081

Source: ITTO, 1999.

Philippines has experienced rapidly falling production since logging was banned in virgin forests in 1993; production dropped by almost half since 1994, to just over 400,000 m<sup>3</sup> in 1998. The only main producers that increased log production over the last five years were Ecuador (41%), Myanmar (22%) and Peru (11%).

The Asia-Pacific region produced about 63% of ITTO members' tropical hardwood logs in 1997 and 1998. Africa's share of production remained at about 8% in 1997-1998, with Latin American production growing from 28% to 29%. Growth in the Latin American and African share of total ITTO production will likely continue to the turn of the century and beyond, as few of ITTO's Asian members have the potential to substantially increase log production sustainably. The proportion of log production utilized domestically (i.e. production minus exports) rose slightly in Asia, from 88% to 90% in 1997-1998. In Latin America almost 100% of log production is processed domestically. Domestic log consumption in Africa fell from 58% to 52% of production in 1997 as log exports boomed, but rose back to 63% in 1998. The general trend towards an increasing proportion of log production being processed domestically will accelerate and affect all regions in the next few years and tropical log supplies will tighten as increased processing capacity comes on line in producing countries. While there will be short-term reversals when log exports will surge due to economic conditions, rapid population growth in Africa (which will rise from 12% to almost 25% of the world total over the next 150 years according to the World Bank), and economic growth in Asia and Latin America, will ultimately contribute to pushing long-term domestic log processing upwards in producing countries.

## (ii) Sawnwood

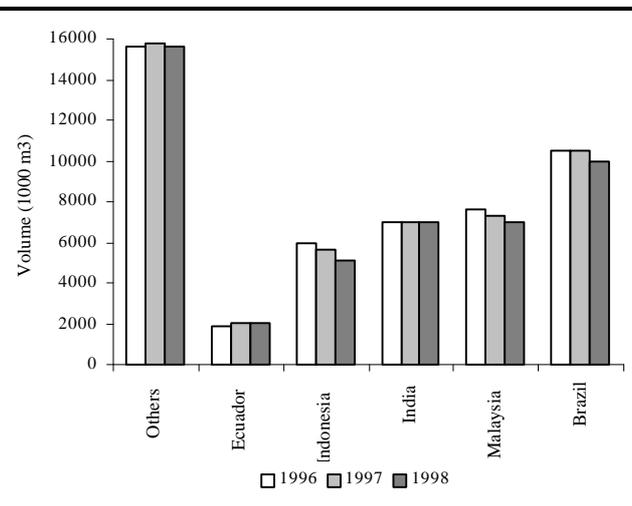
Production of tropical sawnwood in ITTO producing countries totaled 36 million m<sup>3</sup> in 1998, down 4% from the 38 million m<sup>3</sup> in 1997. This represents 80% of sawnwood produced by all tropical countries and 10% of global sawnwood production. Africa's production grew by almost 10% from 1996-1998, but still only accounted for about 6% of the ITTO total. The region continues to suffer from weak infrastructure and heavier reliance on environmentally demanding export markets (relative to other regions) that constrain major investments in wood processing. Although Latin America increased its production by 1% in 1997, it dropped by 4% in 1998 (accounting for 37% of the ITTO total), reversing the upward trend experienced throughout the 1990s. Asian production fell by 5% in 1998, when it accounted for 56% of the ITTO total, reflecting declining economies, decreases

in log production, and an increased focus on value-added processing in the region.

Graph 13.2.2 shows the major producers of tropical sawnwood in the 1996-1998 period, ranked by 1997 production. Brazil (10.5 million m<sup>3</sup>) replaced India (7 million m<sup>3</sup>) as the major producer of tropical sawnwood following a revision of sawnwood production estimates. These two countries produce almost half of ITTO's tropical sawnwood but consume most of this domestically. Malaysia is ITTO's second largest tropical sawnwood producer, but production fell by 4% to about 7.3 million m<sup>3</sup> in 1997 and by another 4% to just below 7 million m<sup>3</sup> in 1998 as log production fell and available logs were increasingly diverted to veneer and plywood mills.

GRAPH 13.2.2

### Major tropical sawnwood producers, 1996 to 1998



Source: ITTO, 1999.

Seven other countries (Ecuador, Colombia, Peru, Côte d'Ivoire, Cameroon, Ghana, Japan and China) produced over 500,000 m<sup>3</sup> of tropical sawnwood in 1997. Production increased or remained stable in 1998 in all of these countries except Côte d'Ivoire and Japan. Although stable in 1997 at about 310,000 m<sup>3</sup>, Thailand's tropical sawnwood production fell dramatically to virtually zero in 1998. Thai sawnwood production plunged due to the country's economic problems in 1997-1998, but should start to recover with the economy in 1999.

ITTO consuming countries, such as Japan, produced 1.85 million m<sup>3</sup> of tropical sawnwood in 1997, up 2% from 1996 levels. Production decreases due to economic slowdowns in Japan and the Republic of Korea accounted for most of a 5% drop in 1998, to 1.76 million m<sup>3</sup> (a 34% drop over the last five years). EU countries (mainly France and Portugal) increased

tropical sawnwood production by over 5% in 1998 to almost 500,000 m<sup>3</sup>, but this was still about one-third less than production levels in the early 1990's.

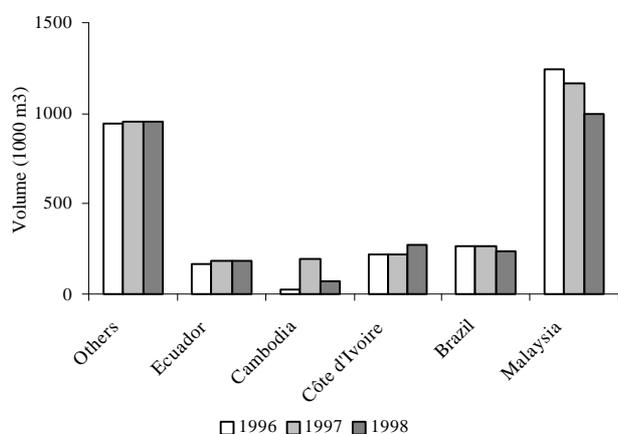
### (iii) Veneer

Production of veneer in ITTO producing countries fell in 1998, by 9%, to 2.3 million m<sup>3</sup> from just over 2.5 million m<sup>3</sup> in 1997. ITTO production accounts for 91% of total veneer produced by all tropical countries, and 39% of global veneer production. The 1998 decrease was due largely to a drop in Malaysia's veneer production, which fell from 1.2 to 1.0 million m<sup>3</sup> between 1996 and 1998.

Production rose in Africa but fell in Asia and Latin America in 1998. The Asian region produced over 1.5 million m<sup>3</sup> of tropical veneer in 1997, Latin America produced 595,000 m<sup>3</sup> and Africa produced 422,000 m<sup>3</sup>. The main ITTO veneer producers in 1996-1998 are shown in graph 13.2.3. Malaysia's dominant (but declining) role is clear from this chart.

GRAPH 13.2.3

#### Major tropical veneer producers, 1996 to 1998



Source: ITTO, 1999.

Côte d'Ivoire reported veneer production increases that made it the second largest ITTO producer in 1998. Cambodia's tropical veneer production climbed six-fold in 1997, making this country ITTO's fourth largest veneer producer, with Ecuador following. Cambodia's jump in veneer production was not explained, but the figure for 1997 is supported by trade figures from importers, mainly China.

Japan's production of tropical veneer continued falling in 1997-1998 (down 45% over the last five years) as its tropical veneer and plywood industries are shrinking together with log availability and its economy. With Ecuador's increasing veneer production, Japan has been displaced from the list of

the top five ITTO producers. Taiwan Province of China and six ITTO members (the Philippines, Ghana, Venezuela, Italy, Cameroon and the Republic of Congo) had veneer production exceeding 50,000 m<sup>3</sup> in 1997, with Ghana, the Republic of Congo, the Philippines and Italy reporting increased production in 1998.

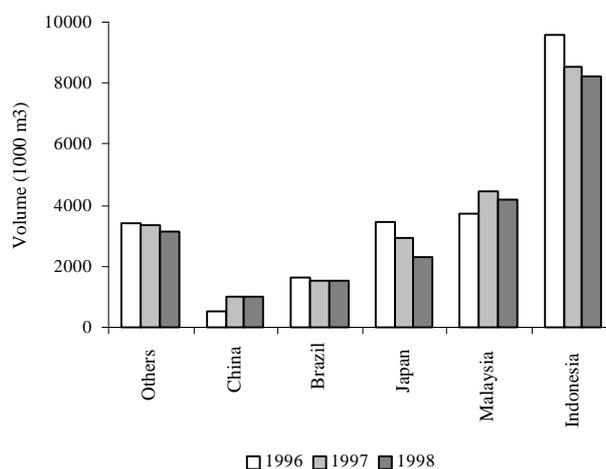
ITTO consuming countries produced about 443,000 m<sup>3</sup> of veneer in 1997, up 5% from 1996 levels before declining 7% in 1998. Production of veneer in consumer countries in 1997 was split between Japan (34%), China and Taiwan Province of China (12% each) and the EU (44%). Japan, China and Taiwan Province of China consume virtually all of the veneer they produce, however, while about 35% of the total produced in Europe is re-exported, mainly to other European countries. The main European producers of tropical veneer are Italy and Portugal.

### (iv) Plywood

Plywood production in producing countries decreased almost 10% in 1997 and fell a further 4% in 1998 to 13.5 million m<sup>3</sup>. Production of plywood in ITTO producing countries totaled over 14 million m<sup>3</sup> in 1997, about 95% of production by all tropical countries and 26% of global production. Plywood production by Indonesia, the top ITTO producer, dropped 11% from 1996 levels to about 8.5 million m<sup>3</sup> in 1997, falling further to 8.2 million m<sup>3</sup> in 1998. Malaysia's plywood production, in contrast, continued to rise steadily through 1997 to over 4.4 million m<sup>3</sup>, a 23% increase from 1994 levels before falling over 5% to 4.2 million m<sup>3</sup> in 1998. The Asian region produced 12.4 million m<sup>3</sup> (over 86% of total producer member production) of plywood in 1997, Latin America produced just over 1.9 million m<sup>3</sup> (12%) and Africa produced 276,000 m<sup>3</sup> (2%).

GRAPH 13.2.4

#### Major tropical plywood producers, 1996 to 1998



Source: ITTO, 1999.

The main ITTO plywood producers in 1996-1998 are shown in graph 13.2.4. Indonesia's dominant but declining role is clear from this chart. Plywood production in Malaysia is growing, while production in Brazil and major consuming countries except for Japan and the Republic of Korea is stable. China (including Taiwan Province of China), the Republic of Korea, the Philippines, India and France all produced over 200,000 m<sup>3</sup> of tropical plywood in 1997, although production in all these countries was stable or declining in 1998. Thailand, formerly a major producer, reported a 20% drop in plywood production in 1997, with a further 50% reduction in 1998, leaving production at 78,000 m<sup>3</sup>.

ITTO consuming countries produced 5.7 million m<sup>3</sup> of plywood in 1997 (about 30% of total ITTO production), a slight increase from figures for 1996. ITTO consuming countries' production dropped sharply by 11% to just over 5 million m<sup>3</sup> in 1998. Most of the drop in consumer country production is accounted for by Japan and the Republic of Korea, both of which were in recession. Japan's tropical plywood production has fallen by 42% since 1994. Japanese domestic plywood production has fallen well below plywood imports since 1995, when a 50-year period of domestic production exceeding imports ended. Japanese plywood manufacturers are increasing the proportion of softwoods used in plywood production, as well as investigating lamination and other techniques to allow re-use of concrete form-ply. Several plywood manufactures have established joint ventures for plywood and other panel production in producer countries. These factors, together with a depressed market and a declining supply of logs, mean that Japanese (and most other consuming countries') production of tropical plywood will continue to decline. The downward trend in Korean tropical plywood production is also noteworthy, having fallen by 50% since 1994. Tropical plywood production in the EU, in contrast, rose by 10% in 1998 to 538,000 m<sup>3</sup>, with France and Spain the main producers.

Substantial quantities of reconstituted panel products, particularly MDF, are now being produced in several tropical countries, primarily in Asia. Many new plants are currently under construction to meet the expected surge in demand for such products in the Asian region. There were 43 MDF mills and 34 particle board mills operating in tropical Asia as of 1997, with more (usually joint ventures) being announced monthly. Reconstituted panel products will become increasingly important as limits on the growth of plywood production are reached and as more countries move further into downstream processing and attempt to utilize available resources more efficiently. These panels will substitute for plywood and sawnwood in many uses, resulting in decreasing or slower growth in production of these traditional tropical timber products in many countries.

### 13.3 Exports

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 1980 to a quarter in 1998 (table 13.3.1). Only Africa continues to export a higher volume equivalent of logs than processed products, with log exports making up 48% of log production and 63% of total roundwood equivalent export volume in 1997. 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, as well as exports of secondary processed wood products by these countries and others such as Thailand. Latin American log exports are a small fraction of both production and total exports. Total roundwood equivalent (rwe) export volume as a percentage of log production decreased from 12% to 10% in Latin America in the period 1996-1998, remained stable in Africa at 71%, and fell in Asia from 54% to 46%. Total ITTO producer member exports (rwe) fell almost 19% from 57.4 million m<sup>3</sup> to 46.4 million m<sup>3</sup> in 1996-1998, due to declining exports of logs, sawnwood and plywood by many countries.

TABLE 13.3.1

#### Composition of exports by producing regions, 1996-1998 (1000 m<sup>3</sup> roundwood equivalent)

Region	Log Production			Log Exports			Processed Exports			Total Exports		
	1996	1997	1998	1996	1997	1998	1996	1997	1998	1996	1997	1998
Africa	9903	11102	9416	4208	5370	3437	2781	3122	3212	6989	8492	6649
Asia-Pacific	85058	83371	78106	10420	10273	8175	35646	29876	27970	46066	40149	36145
Latin America	36439	36952	35781	35	215	221	4328	4170	3369	4363	4385	3590
Total	131400	131425	123303	14663	15858	11833	42755	37168	34551	57418	53026	46384

*Note:* totals may not sum exactly due to rounding. Processed exports are sawnwood, veneer and plywood.

*Source:* ITTO, 1999.

TABLE 13.3.2  
Tropical timber export ratios, 1996-1998

Region	Log exports as a % of production			Log exports as a % of total exports			Processed exports as a % of total exports		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
Africa	42	48	37	60	63	52	40	37	48
Asia Pacific	12	12	10	23	26	23	77	74	77
Latin America	0	1	1	1	5	6	99	95	94
Total	11	12	10	26	30	26	74	70	74

Source: ITTO, 1999.

Africa's jump in 1997 exports was due to a surge in log exports from Gabon and Cameroon.

Export ratios give an indication of the dynamics of the tropical timber exports in each region (table 13.3.2). As exports of primary products shrink, in this case logs, then domestic consumption is rising, assuming relatively unchanged production and low imports (or increased domestic stocks, which would be temporary). Processed export growth shows further value-added processing. Of course the ratios are negatively effected by the economic crisis.

The following table is inserted for regular readers of the ECE/FAO *Market Review* who have been

following its changes over the past few years (table 13.3.3).

#### (i) Logs

Log exports by producer members crashed by 25% in 1998 to 11.8 million m<sup>3</sup> due to the economic turmoil in many Asian markets. Total ITTO producer member exports of 15.9 million m<sup>3</sup> in 1997 were worth almost \$2.2 billion. This accounted for 90% of the volume (85% of the value) of global exports of non-coniferous tropical industrial roundwood (the only tropical timber product for which global trade estimates are available).

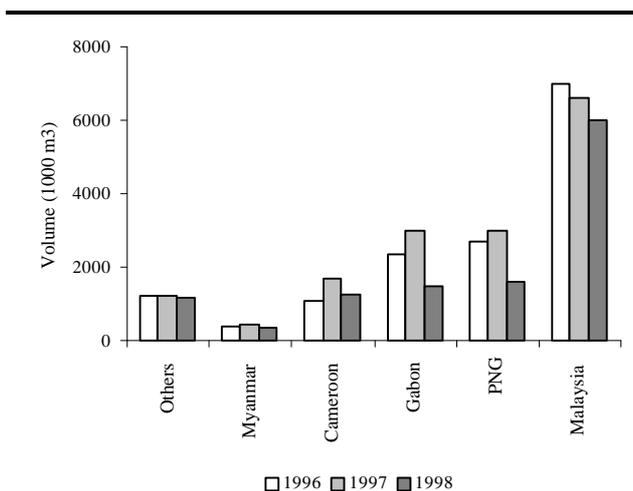
TABLE 13.3.3  
Tropical forest products exports, 1996 to 1998  
(1000 m<sup>3</sup>)

	1996	1997	1998
AFRICA			
logs	4,208	5,370	3,437
sawnwood	1,163	1,262	1,275
veneer	254	300	318
plywood	79	111	125
ASIA PACIFIC			
logs	10,420	10,273	8,175
sawnwood	4,381	3,600	3,305
veneer	722	983	716
plywood	11,435	9,329	8,954
LATIN AMERICAN/CARIBBEAN			
logs	35	215	221
sawnwood	1,310	1,308	1,038
veneer	177	133	83
plywood	699	668	575
TOTAL			
logs	14,663	15,858	11,833
sawnwood	6,853	6,170	5,618
veneer	1,153	1,416	1,117
plywood	12,213	10,108	9,654

Source: ITTO, 1999.

Malaysia continues to dominate the trade in tropical logs with almost 6.6 million m<sup>3</sup> exported in 1997, constituting 42% of ITTO producer member exports (graph 13.3.1). Malaysia's log trade in 1997 decreased in volume by 6% from 1996 levels and continued to decrease steadily (to 5.5 million m<sup>3</sup>) in

GRAPH 13.3.1

**Major tropical log exporters, 1996 to 1998**

Source: ITTO, 1999.

1998. These reductions are due to decreased exports from Sarawak which have brought the state in line with the recommendations of an ITTO Mission, which concluded that a sustainable level of production would be about 9.2 million m<sup>3</sup> per year from its permanent forest estate of 4.5 million hectares. Malaysia's major log customers are all in Asia, with Japan, China (including Taiwan Province of China) and the Republic of Korea accounting for over 74% of the reported log export volume in 1997. Malaysia's log exports were worth almost \$908 million in 1996, increasing slightly to \$917 million in 1997. The devaluation of the Malaysian ringgit and the decline in tropical log prices in 1998 led to a sharp drop in the dollar value of exports, to less than \$500 million.

Papua New Guinea (PNG) is the second largest tropical log exporter, with 1997 exports of just over 3.0 million m<sup>3</sup> worth \$351 million. Exports from PNG decreased almost by half in 1998 as the country was hard hit by the Asian economic crisis. The bulk of PNG's log exports (86% in 1997) go to Japan and the Republic of Korea, with the Philippines accounting for about 7% of PNG's exports in 1997, mainly in lower grades. Official log export statistics for Myanmar (the fifth largest log exporter in 1997 at 423,000 m<sup>3</sup>) showed an increase of 3% in 1997, but all exports may not be accounted for by official figures. Myanmar's main trading partners are India, Thailand, Japan and China.

Africa supplies the majority of the remainder of world tropical hardwood log exports. Gabon and Cameroon are the region's largest exporters (and ITTO's third and fourth largest), but Republic of Congo and Côte d'Ivoire also exported substantial quantities of logs in 1997. Gabon and Cameroon experienced major increases (28% and 55%, respectively) in 1997 exports, whereas Côte d'Ivoire's exports fell by over two-thirds in that year as log export restrictions took effect. Cameroon also proposes to limit log exports beginning in 1999, so further reductions in African supplies appear likely. Ghana, a former top exporter, has banned exports of tropical hardwood logs since 1995. The resolution of Liberia's civil war that led to drastic decreases in official production and exports until 1996 has led to a resumption of log exports which doubled from a low base in 1997. African exports go primarily to China, France, Italy and the Philippines, with the Asian importing countries seeking new log supplies in recent years to offset decreases from Malaysia. African exporters were hard hit by the Asian crisis as well, with exports to Korea and Japan falling to almost nil in 1998.

The resumption of Indonesian log exports in 1998 after a 13-year moratorium may also have an impact on African log exports to Asian markets. Malaysia reported imports of over 400,000 m<sup>3</sup> of Indonesian logs in 1997, prior to the decrease in levies under the 1998 International Monetary Fund plan that led to the resumption of exports (probably evidence of log smuggling or tax evasion as no corresponding exports were reported by Indonesia). In late October of 1998, Japan reported its first shipments of meranti logs (about 19,000 m<sup>3</sup>) from Indonesia since February 1985. China has also been importing shipments of Indonesian logs regularly since late 1998.

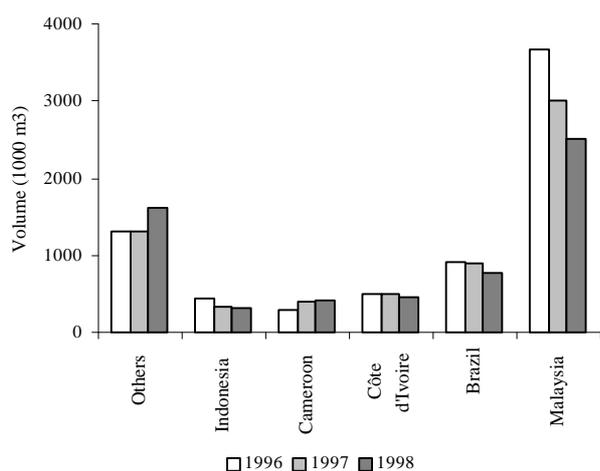
Re-exports of logs by consumer countries were stable at 83,000 m<sup>3</sup> in 1997, 61% of which was accounted for by inter-European trade. France, Belgium/Luxembourg, Germany and the Netherlands were the major log re-exporters in 1997, selling tropical logs mainly to each other. The European tropical log trade, along with total consumer country exports, increased slightly in 1998.

**(ii) Sawnwood**

Exports of tropical sawnwood continued their four-year slide and reached 6.0 million m<sup>3</sup>, a 7.0% fall from 1997 and a 30.2% decline since 1994. Graph 13.3.2 shows the major ITTO tropical sawnwood exporters in 1996-1998, ranked by 1997 export volume. Total ITTO producer exports of almost 6.2 million m<sup>3</sup> (valued at almost \$2.2 billion) comprised 76% of all sawnwood exports by tropical

countries and 6% of global exports of all sawnwood in 1997. Malaysia continues to dominate the trade in tropical sawnwood, with the 3.0 million m<sup>3</sup> exported in 1997 constituting 49% of total ITTO producing member exports (graph 13.3.2). Malaysia's sawnwood trade fell 18% in 1997 as raw materials continued to be directed to plywood production and other secondary

GRAPH 13.3.2

**Major tropical sawnwood exporters, 1996 to 1998**

Source: ITTO, 1999.

processing. In 1997 Malaysia's sawnwood exports were fairly equally divided between Sarawak (41%), Peninsular Malaysia (30%) and Sabah (29%). Malaysia's major sawnwood customers in 1997 were all in Asia (Thailand, Japan, China, Taiwan Province of China, Republic of Korea and the Philippines). The total value of Malaysia's 1997 sawnwood exports was \$1.06 billion.

Malaysia announced in late 1995 that it would stop all sawnwood exports from Peninsular Malaysia by 2000 due to reductions in timber supplies brought about by stricter management standards and the country's commitment to further and more efficient processing of its forest resources. The economic crisis in most of the Asian markets served by Malaysia and consequent drop in demand prompted Malaysia to rethink this policy, however, with export levies on several species lifted in 1998. Malaysian sawnwood exports still dropped by 10% to 2.7 million m<sup>3</sup> in 1998, however, with the United States dollar value of these exports dropping to under \$650 million due to the devaluation of the ringgit and price declines.

Indonesian exports of sawnwood decreased 25% to 330,000 m<sup>3</sup> in 1997. Indonesia imposed export levies ranging from \$250/m<sup>3</sup> to \$2400/m<sup>3</sup> on all sawnwood exports from 1994 to 1998 and exports during these years may include some further processed

products (e.g. mouldings) as well as sawnwood. The removal of these levies under the IMF plan resulted in Indonesian exports remaining relatively stable in 1998, despite the Asian crisis. Sawnwood exports from Brazil, Côte d'Ivoire and Indonesia decreased in 1997, while Cameroon's exports increased. Other major traders are Ghana, Honduras, Bolivia and the Philippines, all with 1997 exports of over 100,000 m<sup>3</sup>. Bolivian sawnwood exports, primarily of mahogany to the United States and the United Kingdom, reached 133,000 m<sup>3</sup> in 1997 after growing rapidly in the early 1990's, but fell to 83,000 m<sup>3</sup> in 1998. Exports from Honduras are mostly tropical pine sawnwood.

ITTO consumer countries exported 248,000 m<sup>3</sup> of tropical sawnwood worth about \$156 million in 1997, primarily (83%) from the EU countries. EU exports of tropical sawnwood increased from 167,000 m<sup>3</sup> in 1995 to 207,000 m<sup>3</sup> in 1997. The Netherlands, a larger tropical sawnwood exporter than most producing countries, was the main EU sawnwood exporter, although its exports have decreased by 29% since 1994 to 65,000 m<sup>3</sup> in 1997. The unit value of the Netherlands' sawnwood exports, \$662/m<sup>3</sup> in 1997, was slightly below the average export unit value for consumers but 81% more than the average unit value for all ITTO members, indicating that mostly high-value species of (or high value-added) sawnwood are being exported. Tropical sawnwood exports from the Netherlands and other EU countries are absorbed almost wholly within Europe.

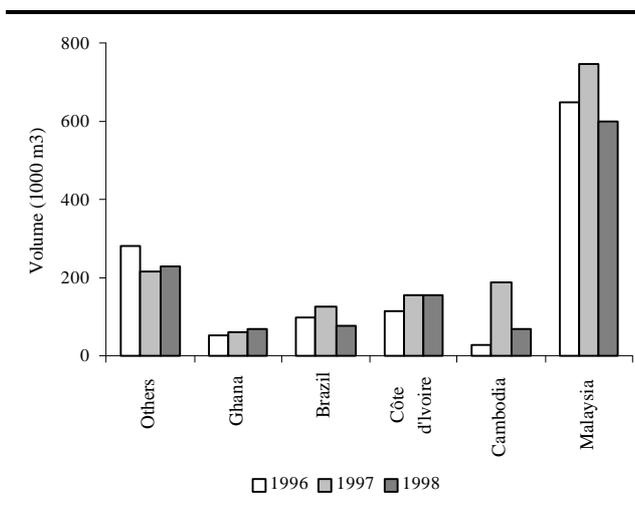
**(iii) Veneer**

ITTO producer country veneer exports fell 21% in 1998 to 1.1 million m<sup>3</sup> after a similar rise in 1997. Total ITTO producing member exports were over 1.4 million m<sup>3</sup> (worth almost \$547 million) in 1997. ITTO producer countries accounted for 90% of exports of veneer by tropical countries (92% by value) and 46% (27% by value) of global exports in 1997. Malaysia continues to be ITTO's dominant veneer exporter, with exports of 746,610 m<sup>3</sup> in 1997 accounting for 53% of total ITTO producer member exports (graph 13.3.3). Veneer exports in 1997 were split between Sarawak and Sabah in a 3 to 1 ratio, with minimal exports from Peninsular Malaysia. Malaysian exports, worth \$278 million in 1997, are mainly directed to China, Taiwan Province of China, Republic of Korea, Japan and the Philippines. Malaysia's exports dropped 9% by volume and 49% by value (dollar terms) in 1998.

Cambodia was the second-largest tropical veneer exporter in 1997 at 188,670 m<sup>3</sup>, a jump of almost seven times from reported 1996 exports. This large increase needs to be clarified, but reports by trading

GRAPH 13.3.3

## Major tropical veneer exporters, 1996 to 1998



Source: ITTO, 1999.

partners confirm the 1997 figure. Cambodia's main markets are China, Taiwan Province of China and Japan. Côte d'Ivoire is the third substantial tropical veneer exporter with exports increasing from 115,000 m<sup>3</sup> in 1996 to 155,000 m<sup>3</sup> in 1997. Côte d'Ivoire's exports are primarily to the EU and the United States.

The EU accounted for 72,000 m<sup>3</sup> of total consumer country tropical veneer exports of 87,000 m<sup>3</sup> in 1997, with 1998 levels of EU exports increasing to 73,000 m<sup>3</sup>. France, Belgium-Luxembourg and Germany are the largest EU tropical veneer exporters. Total exports by ITTO consumer countries decreased to 86,000 m<sup>3</sup> in 1998.

#### (iv) Plywood

Driven by decreased Indonesian exports, tropical plywood exports fell 4% in 1998 to 11.5 million m<sup>3</sup>, following a 10% decline in 1997. In 1997, total ITTO producer member exports of 12 million m<sup>3</sup> (worth almost \$4.7 billion) comprised 91% of tropical country plywood exports (92% by value). ITTO producing members accounted for about 57% of global exports of all types of plywood by volume (58% by value), the only forest product for which tropical countries have captured a clear majority of the global market

Indonesia continues to dominate the trade in tropical plywood with the 8.3 million m<sup>3</sup> exported in 1997 constituting almost 70% of total ITTO producer member exports, although this is down from 84% in 1991 (graph 13.3.4). Indonesia earned an estimated \$3.9 billion from plywood in 1997, down by 3% from the previous year. Indonesia's exports dropped a further 4% by volume in 1998, but value plummeted

36% due to the sharp decline in plywood prices and the economic strife in its major markets in Asia last year. Indonesia shifted some of its exports to China, the Middle East, Europe and the United States in 1998 due to the downturn in the primary Asian markets of Japan and Korea.

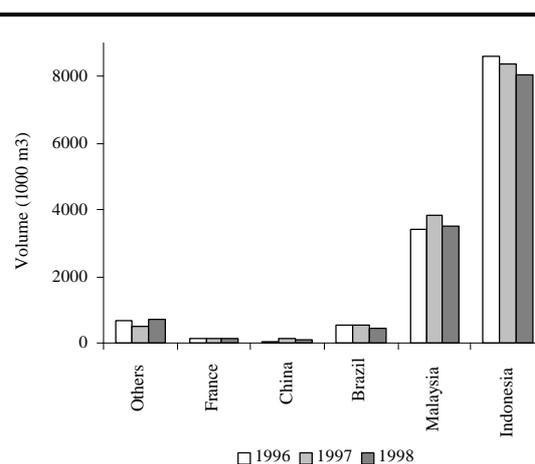
Malaysia is Indonesia's major competitor in the tropical plywood trade. Malaysian exports have been growing steadily, reaching 3.8 million m<sup>3</sup> in 1997, before dropping to 3.5 million m<sup>3</sup> in 1998. Malaysia's rapid growth in plywood exports in the 1990s has been due to the construction of new plywood mills in Sabah and Sarawak to process formerly exported veneer logs. The two eastern Malaysian states accounted for 42% and 50% of Malaysian plywood exports, respectively, in 1997. In 1997 Malaysia exported almost \$1.7 billion worth of plywood, mainly to Japan, China (including Taiwan Province of China) and non-ITTO members Singapore and Hong Kong. Malaysia's exports in dollar terms (as for other products) plunged in 1998 to under \$900 million.

Latin American plywood exports, led by Brazil, were stable in 1997 at 668,000 m<sup>3</sup>. Brazil's export growth began slowing in 1996, due primarily to the strength of the Brazilian real. The United States and the United Kingdom are the major markets for Brazil's plywood. Economic problems in Brazil, together with the prospect of a slowing United States market, led to a 14% drop in 1998 tropical plywood exports. Africa's plywood exports, led by Cameroon, are relatively minor at under 111,000 m<sup>3</sup> in 1997.

ITTO consumer countries exported 538,000 m<sup>3</sup> of plywood worth over \$412 million in 1997. China accounted for 140,000 m<sup>3</sup> (to Japan, Republic of Korea and Taiwan Province of China), the EU (primarily France, Belgium-Luxembourg and the Netherlands to other EU countries) for 276,000 m<sup>3</sup> and the United States for 79,000 m<sup>3</sup>. Exports from the EU increased

GRAPH 13.3.4

## Major tropical plywood exporters, 1996 to 1998



Source: ITTO, 1999.

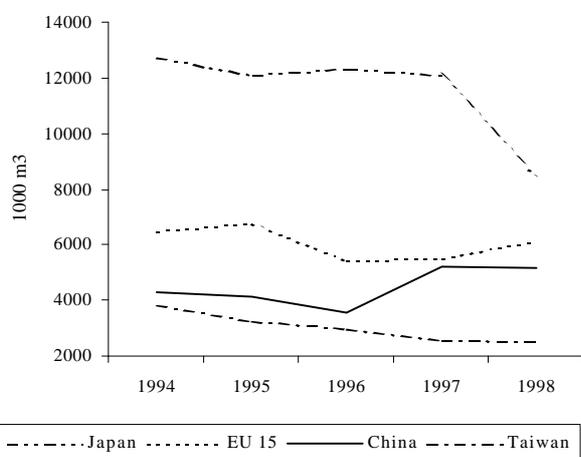
in 1998, driving ITTO consumer country exports of tropical plywood up by 23% to 664,000 m<sup>3</sup>.

### 13.4 Imports

Japan is by far the world's largest importer of tropical timber products. However, its imports fell rapidly in 1998 due to economic recession (graph 13.4.1) (table 13.4.1). Imports of all products from all regions were down significantly, with African log imports and European log/sawn imports the hardest hit. While imports of sawnwood have fallen equally

GRAPH 13.4.1

#### Imports of tropical wood products\*, 1994 to 1998



\* Tropical wood products here are logs sawnwood, veneer and plywood together.

Source: ITTO, 1999.

TABLE 13.4.1

#### Decreases in Japanese Timber Imports in 1998

Product	Imports, 1998 (1000 m <sup>3</sup> )	Change from 1997 (%)
Temperate logs	11,521	-19
North American	4,722	-17
European	91	-45
Russian	4,720	-25
NZ/Chilean	1,988	-6
Tropical logs	3,433	-40
Asian	3,310	-36
African	123	-75
Temperate sawnwood	6,317	-42
North American	4,631	-37
European	744	-60
Russian	310	-24
NZ/Chilean	632	-34
Tropical sawnwood	798	-37
Temperate plywood	445	-9
Tropical plywood	3,840	-21

Source: ITTO, 1999.

from both temperate and tropical suppliers, it appears that tropical log and plywood imports have fallen much more sharply than their temperate counterparts. Japan's economy is predicted to rebound slightly in 1999, with the government providing stimuli to spur new home construction. This should result in some increase in levels of imports, although nowhere near pre-recession levels. At the end of 1998 Japan reported 398 operational plywood and veneer mills and 12,810 sawmills, down 14.6% and 5.1% respectively from 1997 totals.

TABLE 13.4.2

#### Value of some ITTO countries imports of tropical wood products, 1996 to 1997 ((\$ million))

	1996	1997	% change 1997/1996	% share of total
Japan	4,635	4,429	-4.4	37.0
European Union 15	2,511	2,484	-1.1	20.7
Taiwan	1,009	795	-21.2	6.6
China	964	1,327	37.7	11.1
United States	690	754	9.3	6.3
Others	2,645	2,195	-17.0	18.3
Total	12,454	11,984	-3.8	100.0

Source: ITTO, 1999.

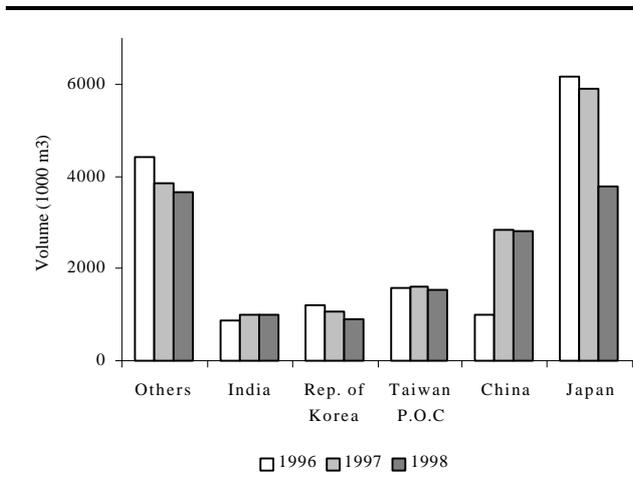
Some other countries imported fewer tropical logs, sawnwood, veneer and plywood too (table 13.4.2). The EU, the second largest group of tropical wood importers, decreased imports by 1.1%, despite currency devaluations which made them more attractive. China and the United States imported more primary tropical wood products, and although the table does not show it, they also increased their imports of secondary forest products.

#### (i) Logs

In 1998, total imports of tropical hardwood logs by ITTO members (consumers and producers) fell by 15.9% to 13.7 million m<sup>3</sup> after rising by 7% to 16.3 million m<sup>3</sup> (worth about \$3.2 billion) in 1997. Japan still dominates the global tropical log market, with 5.9 million m<sup>3</sup> (worth almost \$1.18 billion) imported in 1997, 48% of which came from Sarawak, down almost 8% from 1996 (graph 13.4.2). Japanese tropical log imports fell 5% in 1997 due to its declining economy and reduced supplies from Malaysia. The recession in 1998 drove Japanese demand for tropical logs down a further 40%, to less than 3.5 million m<sup>3</sup>, still met primarily by output from Malaysia. Japan's imports from Africa (mostly from Gabon and Cameroon) reached 513,000 m<sup>3</sup> in 1997, before collapsing back to 123,000 m<sup>3</sup> in 1998. Imports from PNG increased to over 1.9 million m<sup>3</sup> in 1997

GRAPH 13.4.2

## Major tropical log importers, 1996 to 1998



Source: ITTO, 1999.

from 1.7 million m<sup>3</sup> a year earlier, but also fell sharply (to under 1 million m<sup>3</sup>) in 1998.

China is the second-largest ITTO tropical log importer, with imports of about 2.9 million m<sup>3</sup> (worth just over \$505 million) in 1997, almost triple 1996 imports. China's growing population and economy drove this increase, with import levels maintained at a high level in 1998 due to continuing relatively high growth and construction to repair damage caused by severe floods during the year. It bears mentioning that in the "absence" of Japan during 1998, China provided the momentum for tropical timber markets, as its currency did not devalue. The Chinese National Bureau of Forestry has estimated that more than 10 million m<sup>3</sup> of logs, sawnwood, veneer, plywood, etc., both temperate and tropical, will have to be imported in 1999. Domestic production of all wood products is forecast to be 49.4 million m<sup>3</sup> which is below the forecast demand of the 60 million m<sup>3</sup> according to the National Bureau of Forestry. Floods in 1998 which were partly blamed on the loss of tree cover, have resulted in logging bans and restrictions which could affect 80% of China's forest. These same floods damaged 5 million homes (*Timber & Wood Products*). (Official Chinese statistics do not include Taiwan Province of China or Hong Kong.)

The Republic of Korea is also a major ITTO log consumer, absorbing almost 1.1 million m<sup>3</sup> (worth over \$194 million) in 1997 from PNG (41%) and Malaysia (32% of total imports, down from 71% in 1993). Korea's imports were down over 12% from 1996 levels, with a further 15% decrease to 0.9 million m<sup>3</sup> in 1998. Korea, like Japan and some other Asian consumers, is undertaking to shift processing capacity to producing countries, closer to

resources and less expensive labour. Korea's imports of logs from Africa grew from 21,000 m<sup>3</sup> in 1992 to 251,000 m<sup>3</sup> in 1994. However, the ban on exports from Ghana (Korea's main African supplier in these years) led to a sharp drop in imports from Africa, to 6,000 m<sup>3</sup> in 1996 before recovering to 31,000 m<sup>3</sup> in 1997. Korea's main African suppliers are now Gabon and Cameroon. Much of Korea's tropical log supply is now being sourced from the Solomon Islands, which provided 207,000 m<sup>3</sup> of logs in 1997.

The EU countries imported almost 1.9 million m<sup>3</sup> of tropical logs worth \$469.8 million in 1997, most of which came from African producers. European log imports fell 5% in 1997 due to depressed demand and continuing competition from Asian log buyers in Africa. France remains the largest of the EU log importers, but its imports fell by almost 8% in 1997, to 739,000 m<sup>3</sup> before rebounding by 22% to 901,000 m<sup>3</sup> in 1998. The bulk of France's tropical log supplies come from Gabon, Cameroon and Republic of Congo. Portugal, Spain and Italy are also major European log importers, each with over 230,000 m<sup>3</sup> of log imports in 1997. European log imports rose 15% in 1998 to almost 2.2 million m<sup>3</sup>, as African exporters returned to their traditional markets due to the problems in Asia.

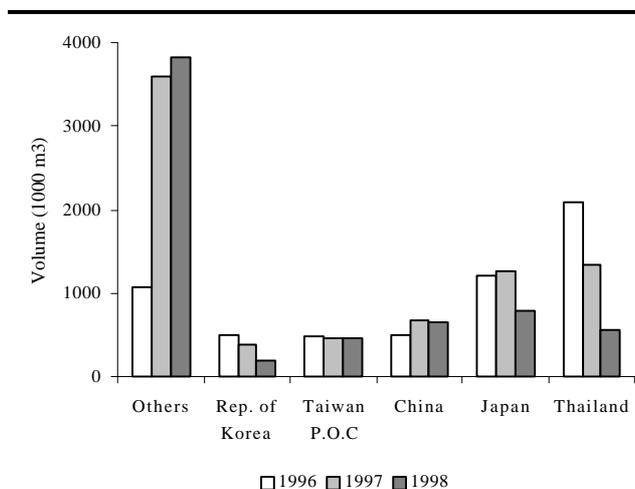
Several ITTO producing countries have become net importers of logs, indicating the extent of wood shortages in their domestic forest sectors. India (1,000,000 m<sup>3</sup>), Thailand (838,738 m<sup>3</sup>), Peninsular Malaysia (509,850 m<sup>3</sup>) and the Philippines (493,000 m<sup>3</sup>) were the major ITTO producer country importers of tropical logs in 1997, reflecting resource scarcity and increased timber demand in these countries. Malaysia reported that the bulk of its log imports (over 407,700 m<sup>3</sup>) were from Indonesia. Some Malaysian imports are occurring under a Malaysian Timber Council scheme to assist processors in Peninsular Malaysia obtain logs for their own use. Apart from the Indonesian logs, shipments in 1996-97 were largely from PNG and Africa (mainly Cameroon). Total imports of tropical logs by ITTO producing members rose 2% in 1997, to over 2.9 million m<sup>3</sup>, worth almost \$574 million, before dropping 18% to just over 2.4 million m<sup>3</sup> in 1998.

## (ii) Sawnwood

Total ITTO imports of tropical sawnwood decreased 12% to under 7.4 million m<sup>3</sup> in 1997 and fell a further 17% to just over 6.1 million m<sup>3</sup> in 1998. With 1997 imports of over 1.3 million m<sup>3</sup>, Thailand remained the top ITTO sawnwood importer, although its imports dropped by over a third from the 2.1 million m<sup>3</sup> imported in 1996 (graph 13.4.3). Thai imports crashed to 555,000 m<sup>3</sup> in 1998 as the

GRAPH 13.4.3

## Major tropical sawnwood importers, 1996 to 1998



Source: ITTO, 1999.

economic woes plaguing the country took their toll on its large furniture and secondary processing industries. Thailand's imports of all timber were worth just over \$631 million in 1997, down from \$986 million in 1996, with imports of tropical sawnwood (\$371 million) accounting for over half.

Japanese tropical sawnwood imports were up 5% to about 1.3 million m<sup>3</sup> worth almost \$852 million in 1997, falling dramatically in 1998 due to economic recession. Both Thailand's and Japan's tropical sawnwood imports are primarily from Malaysia (73% and 45% respectively in 1997). Japan also imported substantial quantities of sawnwood from Indonesia (42%) in 1997. China was the third largest ITTO importer of tropical sawnwood in 1997 at almost 661,000 m<sup>3</sup>, declining slightly to 650,000 m<sup>3</sup> in 1998. Taiwan Province of China, the Republic of Korea, Brazil and Spain are also major tropical sawnwood importers. Imports by Taiwan Province of China and Republic of Korea were primarily from Malaysia and (to a lesser extent) Indonesia; Spain's from Africa; and Brazil's from neighboring Paraguay. As the size of the bar for "Others" in graph 13.4.2 indicates, the tropical sawnwood market is the most diversified of all primary tropical timber products, with the five largest importers accounting for only slightly over half of total ITTO imports in 1997.

Total tropical sawnwood imports by EU countries rose by 7% in 1997 to over 1.9 million m<sup>3</sup> (worth \$1 billion). More than half of this was supplied by Asian producers, principally Malaysia. Côte d'Ivoire, Ghana, Cameroon and Brazil supplied virtually all of the remainder of EU imports. EU imports increased almost 14% in 1998 to 2.2 million m<sup>3</sup>. Spain is the

largest importer of tropical sawnwood in the EU, absorbing 368,000 m<sup>3</sup> in 1997 and 426,000 m<sup>3</sup> in 1998. Netherlands (330,000 m<sup>3</sup>), the United Kingdom (300,000 m<sup>3</sup>) and France (276,000 m<sup>3</sup>) were other major EU tropical sawnwood importers in 1997. All these countries, except the United Kingdom, increased their imports of tropical sawnwood in 1998.

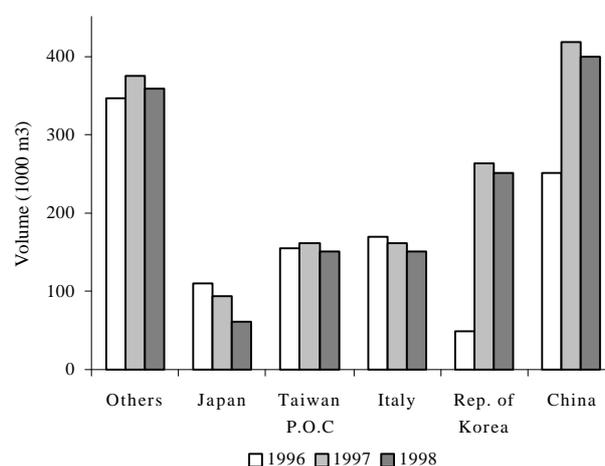
## (iii) Veneer

Many importing countries do not differentiate between the various types of veneer and plywood (e.g. softwood/hardwood, temperate/tropical). For plywood, different types of wood are increasingly used in panel production. This lack of resolution in trade statistics is compounded by the fact that countries use a wide variety of scales to measure trade in panel products. Some countries use volume, some use surface area and still others use weight. All of these can be reported in metric or imperial units, depending on the country. Some countries report trade in all veneers and panels (tropical and non-tropical) while others aggregate veneer and plywood into a single category. The adoption of a standard measurement system for panel products and veneer is a priority if improvements in the accuracy of these statistics are to be achieved.

Imports of veneer to most destinations declined in 1998, in aggregate by 7.6%, after a strong surge in 1997. Total ITTO imports of tropical veneer rose 37% to about 1.5 million m<sup>3</sup> (worth over \$760 million) in 1997. The large jump in imports was due primarily to surges in demand by China and Korea, which accounted for 28% and 18%, respectively, of this total (graph 13.4.4); Taiwan Province of China made up 11% and members of the EU (led by Italy) accounted for an aggregate 24%. Imports by all of these

GRAPH 13.4.4

## Major tropical veneer importers, 1996 to 1998



Source: ITTO, 1999.

destinations declined in 1998. Imports by Asian countries are primarily sourced from Malaysia (although China reported imports of over 111,000 m<sup>3</sup> from Cambodia), while the majority of European imports are from African producers (mainly Côte d'Ivoire, but increasingly also from Ghana and the Republic of Congo).

#### (iv) Plywood

Total ITTO imports of tropical plywood fell by 9% to almost 10.1 million m<sup>3</sup> (worth just under \$4.9 billion) in 1997. Plywood imports fell by 12.9% in 1998, to about 8.8 million m<sup>3</sup>, led by a 21% decrease in Japanese demand. Exports of tropical plywood by ITTO members continue to substantially exceed aggregate imports by members, indicating the dominant position of ITTO producers in world markets for this product (graph 13.4.5). The majority of all tropical plywood imports came from Indonesia and Malaysia (54% and 38% respectively in 1997 for the top importer, Japan). Japan continues to replace domestic plywood production with imported plywood (tropical and non-tropical) and substitutes like OSB

68% of which came from Indonesia. United States imports rose 15% to about 1.1 million m<sup>3</sup> in 1998.

EU imports of tropical plywood totaled just over 1.3 million m<sup>3</sup> (worth over \$715 million) in 1997, slightly up from the 1996 level. Most of this supply came from Indonesia and Malaysia, with Brazil, Guyana, and inter-European trade providing the bulk of the remainder. European imports of tropical plywood rose again by over 7% to just over 1.4 million m<sup>3</sup> in 1998. The major European importers (accounting for almost two-thirds of the total) are the United Kingdom, Germany and the Netherlands.

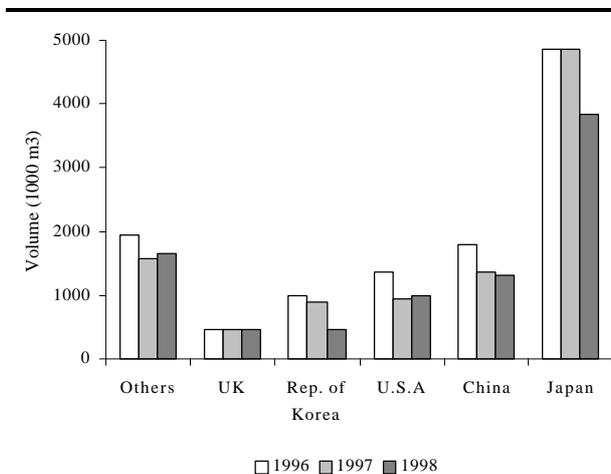
The Republic of Korea (895,000 m<sup>3</sup>) and Taiwan Province of China (363 257 m<sup>3</sup>) were also substantial tropical plywood importers in 1997. In Korea, tropical plywood imports fell by 10% in 1997 and again sharply in 1998 to 450,000 m<sup>3</sup>. Indonesia has traditionally supplied almost all of Korea's plywood imports, but Malaysia increased its share from 18% in 1994 to 31% in 1997.

### 13.5 Tropical timber consumption

As expected with the economic crisis in 1998, consumption of tropical timber in producing countries did not continue to rise, but rather fell in the Asia Pacific region. Lack of traditional Asian export markets meant cuts in production in Latin America too, with the resulting decline in apparent

GRAPH 13.4.5

#### Major tropical plywood importers, 1996 to 1998



Source: ITTO, 1999.

and MDF. Its imports dropped 21% in 1998, however, to 3.8 million m<sup>3</sup> due to the slowdown in construction accompanying the recession. China, with almost 1.4 million m<sup>3</sup>, continued as the second largest ITTO importer of tropical plywood despite a 24% drop in 1997. Chinese imports fell again in 1998 to 1.3 million m<sup>3</sup>. It appears that China is replacing at least part of its plywood imports with panels produced domestically using its increasing volume of imported logs and other raw materials. The United States imported 945,000 m<sup>3</sup> of tropical plywood in 1997,

TABLE 13.5.1

#### Tropical forest products consumption, 1997 and 1998 (1000 m<sup>3</sup>)

	1997	1998	% change 1998/1997
<b>AFRICA</b>			
logs	5,734	5,979	4.3
sawnwood	841	931	10.7
veneer	122	168	37.7
plywood	168	186	10.7
<b>ASIA PACIFIC</b>			
logs	76,015	72,327	-4.9
sawnwood	19,601	18,077	-7.8
veneer	656	652	-0.6
plywood	2,131	2,027	-4.9
<b>LATIN AMERICAN/ CARIBBEAN</b>			
logs	36,767	35,589	-3.2
sawnwood	13,686	13,233	-3.3
veneer	494	508	2.8
plywood	1,290	1,267	-1.8
<b>TOTAL</b>			
logs	118,516	113,895	-3.9
sawnwood	34,128	32,241	-5.5
veneer	1,110	1,328	19.6
plywood	3,589	3,480	-3.0

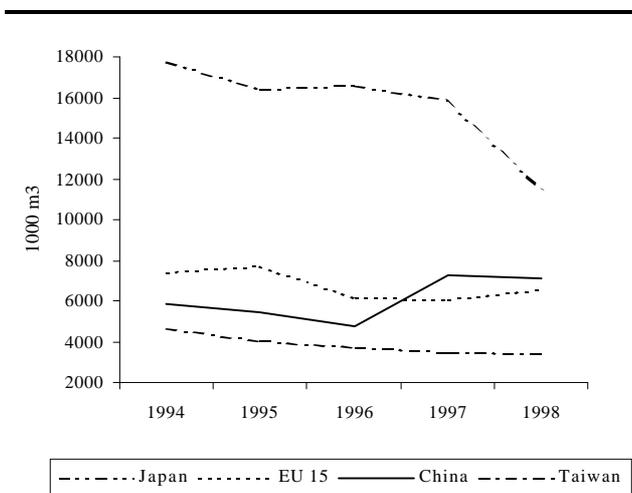
Source: ITTO, 1999.

consumption. Only in Africa was there an increase in consumption, albeit from a lower base, in 1998.

Consumption of tropical timber (logs, sawnwood, veneer and plywood) by Japan in 1998 fell sharply while at much lower volumes, EU consumption increased slightly, aided by lower prices (graph 13.5.1). China's consumption of tropical timber is increasing with population and domestic harvesting constraints. Secondary wood products consumption rose, especially in the EU and the United States, aided by producers' currency devaluations.

GRAPH 13.5.1

### Consumption of tropical wood products\*, 1994 to 1998



\* Tropical wood products here are logs sawnwood, veneer and plywood together.

Source: ITTO, 1999.

## 13.6 Tropical timber price trends

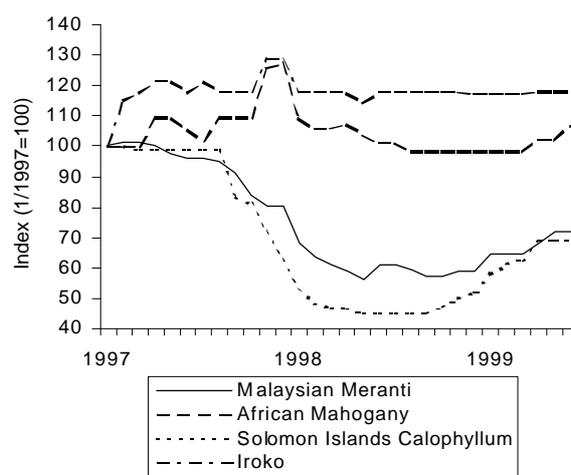
Real prices for most primary tropical timber products and species declined or at best remained stable during early 1998, although there were significant fluctuations in some prices. The sharp economic downturn in Asia, that began in mid 1997, resulted in a strong downward pressure on prices for most products from all regions.

The decline in prices has been much more severe for tropical primary products (logs, sawnwood and plywood) than for secondary processed wood products. By the end of the year prices had stabilised and there was a discernible upward trend in FOB prices as producers, especially in Asia experienced log shortages due to poor harvesting conditions. A steady and even firming of prices was also seen in Japan and to some extent in Korea as fiscal stimulus packages in Japan and rapid reforms in Korea stimulated construction activity.

Asian log prices declined for most major species during 1998, as did prices for major export species of Asian sawnwood (graph 13.6.1). Asian log and sawnwood prices were affected by the rapid depreciation in the currencies of the main Asian importers such as Thailand, Japan and the Republic of Korea since the second half of 1997 and by the consequent economic decline, which has caused a severe fall in demand.

GRAPH 13.6.1

### Tropical log price, 1997 to 1999

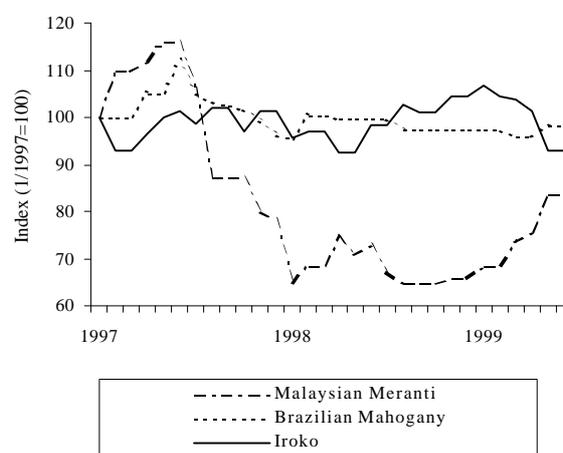


Source: ITTO, 1999.

African log and sawnwood prices remained stable or declined only slightly, being buoyed by steady demand in Europe. Any decline was largely as a consequence of lower demand in Japan and Southeast Asia, coupled with increased competition from low cost Asian logs. Only African mahogany sawnwood prices showed some recovery in 1998 as the furniture

GRAPH 13.6.2

### Tropical sawnwood prices, 1997 to 1999



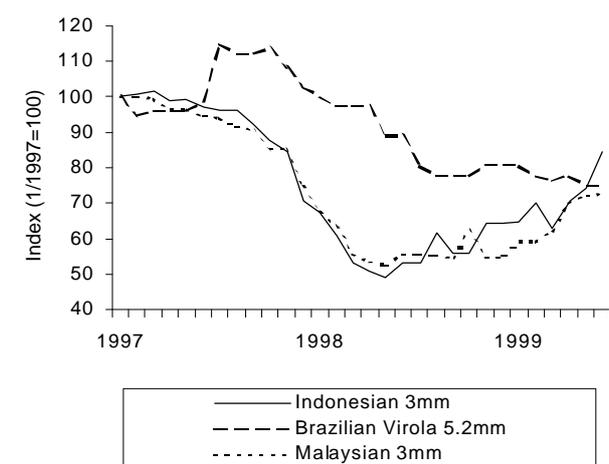
Source: ITTO, 1999.

sector of some EU countries boosted imports (graph 13.6.2). Teak log prices have remained fairly stable as the demand for this product remained firm in many markets.

Latin American exports have been drastically affected by low prices in Asia. Nonetheless, prices of mahogany sawnwood exports remained relatively stable in the first half of 1998, in part due to an announcement extending the moratorium on new felling of mahogany. Strong demand in the United States allowed plywood producers in Brazil to improve prices and, in particular, prices of Brazilian pine plywood rose significantly

Asian plywood prices continued to free fall during the first half of 1998 but showed signs of steadying in the latter part of the year (graph 13.6.3). Prices for thin boards from Indonesia and Malaysia into the Asian market plummeted over 30% in 1997

GRAPH 13.6.3

**Tropical plywood prices, 1997 to 1999**

Source: ITTO, 1999.

and fell another 25-30% in 1998. Prices in the region of \$205-210 per m<sup>3</sup> were certainly below production cost for many mills as evidenced by the sad closure of many mills in the producer countries. The consequences of low prices have also been severe in Japan and Korea where mill closures are running at record levels. Domestic mills using tropical logs cannot compete because of the higher production costs and have been forced to close.

One consequence of production declines and mill closures in the industries around the world has been the serious loss of jobs in the sector at a time when job opportunities are weak because of the general economic downturn in most countries.

In the first half of 1998 Asian plywood prices continued to be at very low levels and stagnant

demand in Japan suggested no real improvement in the short term. Apart from the economic turmoil in Asia and supply and demand determinants, the recorded prices for tropical timber products in all regions in 1998 have also fluctuated due to exchange rate variations.

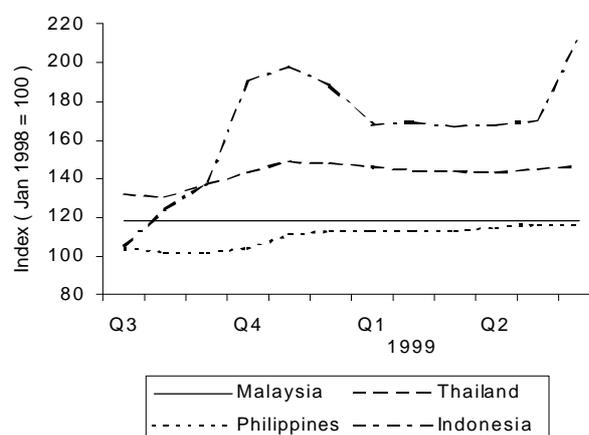
**13.7 Strengthening Asian currencies**

Over the past 12 months currencies in the Asian producer countries have strengthened considerably the lows at the height of the "crisis". There now seems to be real momentum in strengthening of the currencies and over the past six months some of the wide fluctuations, a feature of the trends in early 1999, are now under control.

Between January-June 1998 the Thai baht strengthened by around 35% against the dollar while the Philippine peso and the Indonesia rupiah posted more modest gains of between 5-10% (graph 13.7.1). The Malaysian ringgit fell to below 4.5 to the dollar in 1998 but was taken out of trade at a fixed rate of 3.8 to the dollar in late 1998. At the present time the ringgit at 3.8 to the dollar is considered undervalued against the dollar (in relation to the baht and peso) and an adjustment of the fixed rate of exchange is anticipated before year end.

Between January and June 1999 the Asian currencies have maintained their strengthened positions and, with the exception of the Indonesian rupiah, have traded against the dollar in fairly narrow bands. The Indonesian rupiah, the worst affect during the currency crisis in late 1997 and early 1998 has moved rapidly from a low of 14,750 rupiah to the dollar in January 1998 to around 8,500 in mid 1999.

GRAPH 13.7.1

**Trends in exchange rates for Asian currencies, 1998-1999**

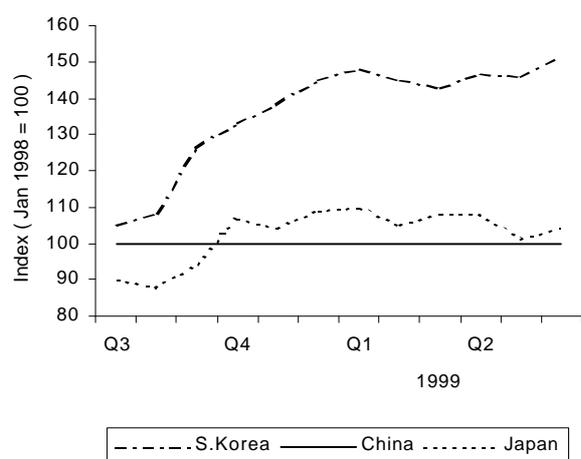
Source: ITTO, 1999.

Currently the rupiah is at a high of 6900 to the dollar, but still well below the 2500 level before the crisis.

In the main Asian consumer countries, Japan Korea and China the fortunes of the currencies have been mixed (graph 13.7.2). To the relief of suppliers the yuan has been maintained at around 8.27 to the dollar despite periodic rumors of devaluation. The Korean won has stage a welcome comeback moving from a low of 1750 to a level of 1150-1160 in June 1999. As imports have grown cheaper, Korean buyers are a welcome sight in the market. In Japan, after erratic swings in the value of the yen between 140 and 120 to the dollar the currency is being held in a narrower range of between 120-125 and the Japanese central bank has been intervening in the market to buy dollars when the yen has strengthened too much. The managed stability in the yen has encouraged buyers to risk longer term commitments and there is an encouraging stability in the market as a result.

GRAPH 13.7.2

**Currency fluctuations for Asian currencies, 1998-1999**



Source: ITTO, 1999.

### 13.8 Conclusion

Tropical timber markets have undergone tremendous changes in 1997 and 1998 and appear to be recovering in 1999. The lessons learned during the economic crisis will persist and both producers and consumers are maintaining lower stocks, restructuring their corporations, diversifying their markets and in general, changing the methods and means of tropical timber production and trade. Eventually, with growing populations and strengthened economies, additional tropical producers will become tropical consumers and domestic consumption should rise in all countries, but at varying degrees. Tropical timber markets are directly influenced by large differences in wage rates and other costs of production between producers and

consumers and countries like Japan keep expanding their production capacity—but not domestically, but rather through joint ventures and off-shore investments.

The ITTO did not have statistics for secondary wood products in their *Annual Market Review* this year, but the trends for importing tropical furniture, mouldings and other products appear, based on both consumer and producer reports, seems to have been reinforced due to currency devaluations. Some countries like Malaysia weathered the economic storm through production of further value-added products.

ECE region countries which export to Asian countries have not fully recovered from the 1997/1998 crisis. However, signs were optimistic in early and mid 1999, but exporters remained cautious and do not express the same optimism as in 1997 when this *Review* described Europe's rise to second largest sawn softwood supplier to Japan. Still with Japan's construction of over 1 million houses per year, the market for wood and wood products is the world's second largest (preceded by the United States). As other Asian economies rise out of recession tropical timber markets are re-emerging in a restructured form characterized by new trading channels, more value-added production and increased domestic consumption.