Tropical Timber Market Report

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Top Story

Increases in capacity pushing up plywood log prices in India

Many new plywood manufacturing licenses have been offered in various states across India and this is pushing up raw material prices.

As production costs escalate manufacturers margins are shrinking.

Plywood price increases for the domestic market have been announced but in the face of weak demand it is questionable if they can be sustained.

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Central and West Africa

Gabon investigates another timber company

The Forest Authority in Gabon has reportedly suspended the logging license held by Chinese company following revelations of breaches of forestry laws. This follows an investigation ordered by the Forestry and Environment Minister, Guy Bertrand Mapangou.

In a statement the ministry said investigators had concluded that the company had been illegally harvesting in two locations.

Growing shipping opportunities in the region

The Danish shipping company NORDEN will open an office in Abidjan, Ivory Coast,to generate new business. This new office will be NORDEN's 11th office.

The company says "As West Africa is a promising region for shipping business, NORDEN sees growing opportunities within dry cargo and is the regional hub connecting French-speaking Africa and the home to many major institutions working across Africa, Abidjan is a natural location for NORDEN's new office."

European and Middle Eastern markets stable

Producers have not reported any major price movements up to mid-April. Demand in European and other western markets is stable and stock levels are being maintained.

The trade is anticipating some major shifts in price structures and product sales as several countries in the region are about to implement new policies for the forestry and timber sector.

Drastic reduction in harvesting in Congo

The immediate effect of the log export ban in Congo Brazzaville has been a drastic reduction in harvesting operations and this has led to massive worker lay-offs say analysts.

Authorities in Gabon crack down

The forest authorities in Gabon have launched a campaign to crack-down on companies that allow infringements of the regulations. Currently some companies have been stuck with huge fines for misreporting the species and volumes being exported.

Chinese operators relocating

The closure of Chinese mills in Gabon has resulted in an increase in investment in Congo as mills have relocated and begun operation often under a new name. It is reported that company officials arrested for kevazingo export violations have been released in order to restart operations and pay workers.

Log export prices

West African logs	FOB Euro per cu.m		
Asian market	LM	B	BC/C
Acajou/ Khaya/N'Gollon	265	265	175
Ayous/Obeche/Wawa	250	250	225
Azobe & Ekki	275	275	175
Belli	300	300	-
Bibolo/Dibétou	215	215	-
Bilinga	275	275	-
Iroko	350	350	250
Okoume (60% CI, 40% CE, 20% CS) (China only)	220	220	200
Moabi	365	365	-
Movingui	210	210	-
Niove	160	160	-
Okan	220	200	-
Padouk	340	290	245
Sapele	310	310	265
Sipo/Utile	325	300	265
Tali	370	370	-

Sawnwood export prices

West African sawnwood	FOB Euro per cu.m
Ayous FAS GMS	440
Bilinga FAS GMS	540
Okoumé FAS GMS	460
Merchantable	310
Std/Btr GMS	340
Sipo FAS GMS	520
FAS fixed sizes	560
FAS scantlings	560
Padouk FAS GMS	850
FAS scantlings	900
Strips	650
Sapele FAS Spanish sizes	500
FAS scantlings	520
Iroko FAS GMS	640
Scantlings	720
Strips	400
Khaya FAS GMS	480
FAS fixed	540
Moabi FAS GMS	620
Scantlings	640
Movingui FAS GMS	420

Ghana

Wood exports dip

Wood product exports in the first two-months of 2019 dropped 7.5% in volume and 19% in value (Euro terms) year on year according to the Timber Industry Development Division (TIDD).

The cumulative volume and value figures for the first two months were 53,115 cu.m and Euro 28.03 million compared to 57,404 cu.m and Euro 34.88 million over the same period 2018.

Product	Jan/Feb 2018 cu.m	Jan/Feb 2019 cu.m	YoY Change (%)
AD sawnwood	39,393	34,817	-12
KD sawnwood	7,338	6,159	-16
Billets	4,146	4,697	13
Plywood (Overland)	2,741	4,465	63
Moulding	1,036	1,041	-
Sliced Veneer	1,619	1,100	-32
Rotary Veneer	803	528	-34
Other	328	307	-6
Total	57,404	53,115	-7.5

Source: TIDD

Product	Jan/Feb 2018 Euro	Jan/Feb 2019 Euro	YoY Change (%)
AD sawnwood	24,160,728	18,892,736	-22
KD Sawnwood	4,582,548	3,619,130	-21
Billets	1,629,011	1,739,927	7
Plywood (Overland)	1,029,160	1,540,559	50
Moulding	628,631	699,548	11
Sliced Veneer	1,912,970	1,142,450	-40
Rotary Veneer	317,868	281,645	-11
Other	526,289	112,961	-79
Total	34,787,205	28,028,956	-19

Source: TIDD

Sawnwood (AD and KD) were the leading export products in both 2018 and 2019. These two products contributed 40,976 cu.m to total exports representing 77% of the 2019 export volume. Billet exports expanded 13% to a volume of 4,697 cu.m in the first two months of 2019 from 4,146 cu.m in 2018. This roundwood was mainly exported to India.

In previous years Ghana's plywood exports went to regional and other international markets but for this year a volume of 4,465 cu.m was all shipped overland to regional markets to which there was a 63% rise in export volumes. Regional markets include Burkina Faso, Niger, Benin, Nigeria and Togo.

Protecting Volta Lake

The Forestry Commission (FC) and the Volta River Authority (VRA) will work together to plant bamboo to protect the catchment of the Volta Lake, which is home to the Akosombo hydro-electric Dam.

Under a project titled: "Bamboo for the Protection of the Volta Lake", the two institutions would collaborate to fight deforestation as a result of livelihood enhancement activities in the catchment areas of the Lake including the gorge which has the dam.

Bamboo and rattan constitute the two largest non-timber forest products in Ghana. The FC has established a bamboo and rattan unit to promote the sustainable development and utilisation of these resources.

Double taxation deal

The Government has signed double taxation agreements with Belgium, Denmark, France, the United Kingdom, Switzerland, Mauritius, South Africa, Italy, Netherlands and Germany. Eric Mensah, the Assistant Commissioner in charge of Legal Affairs and Treaties at the Ghana Revenue Authority said the agreements aim at eliminating juridical or economic double taxation.

Boule Export prices

	Euro per m^3
Black Ofram	330
Black Ofram Kiln dry	430
Niangon	580↑
Niangon Kiln dry	670

Export Rotary Veneer Prices

Rotary Veneer, FOB	Euro per m^3	
	CORE (1-1.9 mm)	FACE (>2mm)
Ceiba	350	363↑
Chenchen	431↑	479
Ogea	508↑	590
Essa	546↑	711
Ofram	350	435

Export Sliced Veneer

Sliced face veneer	FOB Euro per m^3
Asanfina	1,025
Avodire	807↓
Chenchen	2,833↑
Mahogany	1,204↑
Makore	1,188↓
Odum	1,708

Export Plywood Prices

Plywood, FOB	Euro per m^3		
BB/CC	Ceiba	Ofram	Asanfina
4mm	325↓	640	641
6mm	412	535	604
9mm	373	446	560
12mm	529	463	480
15mm	470↑	380	430
18mm	423	422	383

Grade AB/BB would attract a premium of 10%, B/BB 5%, C/CC 5% and CC/CC 10%.

Export Sawnwood Prices

Ghana Sawnwood, FOB	Euro per m^3	
FAS 25-100mm x 150mm up x 2.4m up	Air-dried	Kiln-dried
Afrormosia	860	925
Asanfina	490	564
Ceiba	405	600↑
Dahoma	424	492
Edinam (mixed redwood)	520	619
Emeri	475	571↑
African mahogany (Ivorensis)	930↓	996↓
Makore	775	874
Niangon	620	730
Odum	832	926↓
Sapele	700	878↑
Wawa 1C & Select	420↓	446↑

Malaysia

Plantation expansion in Sabah to get Federal help

Primary Industries Minister, Teresa Kok, said the Federal government will assist Sabah in its reforestation efforts. She said her ministry and the Sabah Forestry Department have identified a site in the east coast for part of the reforestation programme.

In advance, the two agencies will undertake a wildlife survey in the area proposed for plantation development. She also referred to the Federal government's decision to limit further oil palm cultivation and to ban the conversion of forest land for oil palm cultivation as well as a ban on planting oil palm on peatland.

Revised Pahang tax levels to stay say Chief Minister

The Pahang Chief Minister, Wan Rosdy Wan Ismail, said Pahang state has no intention of lowering its timber tax which was raised in June last year.

The Chief Minister said the latest increase was the first for 31 years and was considered reasonable and is lower than in some other states. Perak, Terengganu and Kelantan have raised their tax rates three or four times over the same period. The tax increase will raise State income from timber to around RM200 million from RM100 million.

Timber sector wants to be included in foreign worker regularisation programme

The Sabah Timber Industries Association (STIA) has indicated it hopes that the state government will consider applying the 'Regularisation Programme' for illegal foreign workers in the plantation and agricultural sectors to all sectors in Sabah, particularly wood-based manufacturing.

STIA President, Chua Yeong Perng, said the conditions of the new regulation should be applied to all so that employers in other sectors have the same benefits as plantation and agriculture sectors. STIA welcomed the decision of the Government to require the Immigration Department to introduce the new rules. Chua said local manufacturers in the wood-based sector cannot attract local workers and that the level of automation in the industry is still very low.

Tallest tropical tree

Scientists in the UK and Malaysia reported they have discovered the world's tallest tropical tree measuring more than 100m (328ft) high. The yellow meranti was found in Sabah by a team from the University of Nottingham last year.

https://www.nationalgeographic.com/environment/2019/04/worlds-tallest-tropical-tree-discovered-climbed-borneo/

Sarawak timber sector suffering reduced margins

Sarawak timber companies are seeing margins decline because of higher production costs of logging and the introduction of new tax structures in the timber sector.

According to the Sarawak Timber Association (STA) the increase in hill timber rehabilitation and development cess (tax), at RM55 per cu m has pushed up operating costs significantly.

In addition, rising wages, reduced harvest levels and implementation of forest management certification scheme had contributed to the current high cost of production.

By 2022, the Sarawak Forest Department wants all long-term forest timber licensees to achieve forest management certification to ensure sustainable management. Against this background the STA said the state forest industry is going through a period of transformation and a change from raw material supply from natural forests to supply from planted forests.

Bintulu Port expansion planned

Bintulu Port plans to expand capacity at its Bintulu International Container Terminal (BICT) to cope with rising demand. There has been a double-digit growth in container throughput for three consecutive years.

The BICT handled 349,792 TEUs (twenty-foot equivalent unit) last year, representing a 13% growth over 2017 and the highest ever traffic according to Mohammad Medan Abdullah the Bintulu Port chief executive. A feasibility study on the expansion is currently under way.

Indonesia

Indonesia and UK discuss trade agreement anticipating Brexit

Indonesia and the UK are beginning discussions on bilateral cooperation in anticipation of the UK leaving the European Union. Dino Kusnadi, Director (Europe) in Indonesian Ministry of Foreign Affairs said that one of the trade agreements being explored was for timber traded under the FLEGT-VPA between the EU and Indonesia.

Soewarni, the Chairman Indonesia Sawmill and Wood Working Association (ISWA), welcomed the government's move to expand timber and wood products trade with UK as this could boost exports of wood products.

See:
https://ekonomi.bisnis.com/read/20190401/99/906829/asosiasi-kayu-olahan-siap-optimalkan-pasar-inggris

APKINDO seeks unified tariffs for meranti/seraya plywood

The plywood industry has complained that import duties for Indonesian and Malayasian wood products in the EU should be unified.

Gunawan Salim, Marketing and International Relations Executive in the Indonesian Wood Panel Association (Apkindo) said the issue of import duty differences between meranti plywood from Indonesia and seraya plywood from Malaysia to the EU needs to be addressed as Indonesian exporters are at a disadvantage.

He stated that the import duty on meranti plywood from Indonesia is 7%, while the import duty on seraya plywood from Malaysia is 3.5%. Gunawan explained that these two names are commercial names for the same timber.

See: https://ekonomi.bisnis.com/read/20190401/99/906911/flegt-vpa-lebih-efektif-bila-bea-masuk-sama

Furniture industry – please relax regulations

Indonesian furniture entrepreneurs have asked the government to relax a number of rules affecting production of processed wood saying the Ministry of Trade Regulation No. 110/2018 concerning imports without a Limited Prohibition (Lartas) license and SVLK implementation are some rules that need to be revised.

Trade Ministry Regulation 110/2018 regulates imports and this is a problem say manufacturers. If the regulation was removed, furniture entrepreneurs could more easily obtain production materials and would not have to wait for permits to be approved for the import of accessories used in furniture production.

In addition, the implementation of SVLK to downstream industries hampers the performance of furniture sector. The certificate should only be applied to the upstream industry as it is intended to prevent illegal logging.

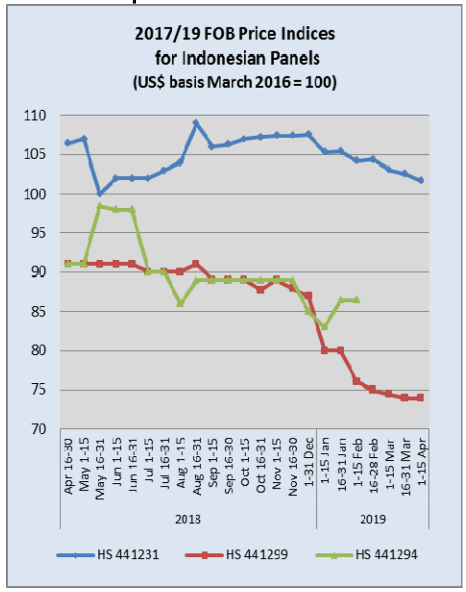
China's domestic furniture consumption an opportunity for Indonesia

Abdul Sobur, Secretary General of the Indonesian Furniture and Handicraft Industry Association (HIMKI), has projected that furniture consumption in China could reach US$225 billion annually and this represents an opportunity for Indonesian exporters if they are smart.

He said a product that can be immediately promoted for the Chinese consumer is rattan furniture, a segment where Indonesia has an advantage. In addition to exporting to China the furniture industry should also seek cooperation with Chinese enterprises to invest in the country.

See:
https://ekonomi.bisnis.com/read/20190408/257/909172/china-jadi-pasar-mebel-terbesar-dunia#

Indonesian panel indices



Data Source: License Information Unit. http://silk.dephut.go.id/

Myanmar

Anti-Corruption measures highlighted

In 2018, the Myanmar parliament enacted a tough forest law that threatens violators with up to 15 years in prison in a bid to conserve the country's fast-dwindling forest resources.

Under the new law, which was enacted on September 20 2018, forestry staff can also be punished for accepting bribes or for being involved in the extraction, transfer or possession of illegally harvested logs or forest products.

U Nyi Nyi Kyaw, Director General of the Forest Department under the Ministry of Natural Resources and Environmental Conservation, said an education campaign would be conducted to inform the public on the new law.

Union Minister for Natural Resources and Environmental Conservation U Ohn Win called for greater efforts to eliminate corruption in the country's forestry sector.

FDI on the rise after 2 year slump

According to Myanmar Investment Commission (MIC) the flow of foreign investment into Myanmar has started to rise after declining for the past two years. Between October 2018 and March 2019, Myanmar received US$1.9 billion in approved FDI. During the period October 2017 to March 2018 the equivalent number was US$1.3 billion for over 80 projects.

Singapore has overtaken China as the major investor in Myanmar. In February last year, Singapore invested US$20.88 million for 302 projects and China invested $20.41 million for 314 projects, according to DICA figures.

Myanmar is attracting more investment spurred by the new Myanmar Investment Promotion Plan and establishing a new ministry, the Ministry of Investment and Foreign Economic Relations with the objective of raising local and foreign investments and creating opportunities for entrepreneurs.

A UN-mandated Fact-finding Mission on Myanmar (UNFFM) recommended that all business enterprises active in Myanmar, trading with or investing in businesses in Myanmar should demonstrably ensure that their operations are compliant with the United Nations Guiding Principles on Business and Human Rights (UNGPs).

Log Tender Price for March 2019

Teak logs

Grade	H.tons	Average US$/H.ton
SG-1	-	-
SG-2	-	-
SG-4	43	3,664
SG-5	136	2,967
SG-6	167	2,630
SG-7	1157	1,475

Price for other hardwood logs

Species	Quality	H.ton	US$ Average/H. ton
Kanyin	1st	224	897
Kanyin	2nd	3,401	592
Pyinkado	2nd	1,346	747
In	2nd	227	305

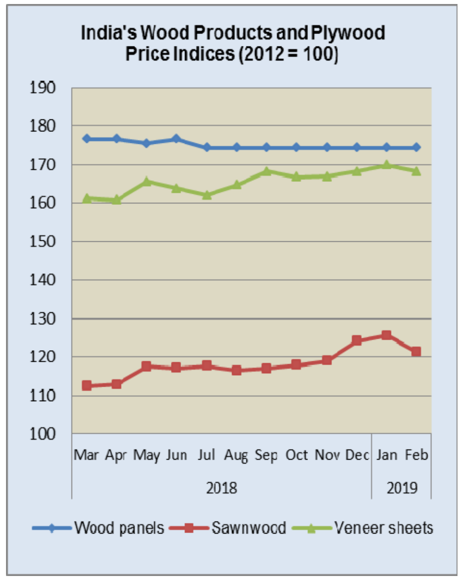
India

Higher particleboard prices lifts price index

The official Wholesale Price Index for 'All Commodities' (Base: 2011-12=100) for the month of February, 2019 rose to 119.5 from 119.2 for the previous month. The index for manufactured wood and cork products rose due to higher prices for particleboard. However, prices for sawnwood dropped pushing down the index.

The annual rate of inflation based on monthly WPI in February 2019 stood at 2.93% compared to 2.76% for January.

The press release from the Ministry of Commerce and Industry can be found at: http://eaindustry.nic.in/cmonthly.pdf



Data source: Ministry of Commerce and Industry, India

India not a DIY country - IKEA changes business format

The online retailer IKEA is changing its business model to suit the market as India is not a DIY market but rather a serviced market. IKEA will open mall style retail outlets and will address servicing by teaming up with Indian companies. The Swedish retail firm has been clear that it sees India as a long-term market and has made significant investments in the country.

The Indian retail industry is expected to grow to US$1.1 trillion by 2020 according to a report by Deloitte and the Retailers Association of India.

Gloomy prospects for home prices

According to a recent report by Liases Foras, a Mumbai-based housing research company, because home sales are unlikely to improve in the short term, construction companies are finding it difficult to escape the debt trap they are in as they cannot service their debt obligations because of low sales and high inventory.

https://www.liasesforas.com/

In recent years access to credit and funding has become a major problem for builders as the advances on homes from buyers and financing from investors is insufficient to service loans.

This problem has been made worse since the Reserve Bank of India (RBI) changed its guidelines to banks on the risks associated with loans to builders which resulted in banks offering less support to the sector.

According to a report from Liases Fores there is a housing inventory of about 41 months in the top eight cities in India and this has created a crisis for developers.

Plantation teak prices

The Rupee continues to firm against the dollar bringing cheer to importers. Traders still anticipate further strengthening of the Rupee.

Analysts report that demand for imported plantation teak is firm and recent delivers have been of good quality especially those from South American and African shippers.

C&F prices for plantation teak landed at Indian ports are within the same range as shown in the previous report.

	US$ per cu.m C&F
Angola logs	389-574
Belize logs	350-400
Benin logs	290-714
Benin sawn	530-872
Brazil logs	344-540
Brazil squares	333-556
Cameroon logs	405-616
Colombia logs	478-743
Congo D. R. logs	450-761
Costa Rica logs	357-780
Côte d'Ivoire logs	289-756
Ecuador squares	333-454
El-Salvador logs	320-732
Ghana logs	294-452
Guatemala logs	324-646
Guyana logs	300-450
Kenya logs	515-876
Laos logs	300-605
Liberia logs	265-460
Malaysian logs	225-516
Mexican logs	295-808
Nicaragua logs	402-505
Nigeria squares	434-517
Panama logs	335-475
PNG logs	443-575
Sudan logs	358-556
Tanzania teak, sawn	307-613
Thailand logs	511-700
Togo logs	334-590
Trinidad and Tobago logs	603-753
Uganda logs	411-623
Uganda Teak sawn	680-900

Price range depends mainly on length and girth.

Locally sawn hardwood prices

Prices for imported sawn hardwoods remain unchanged.

Sawnwood Ex-mill	Rs per cu.ft.
Merbau	4,000-4,200
Balau	2,500-2,700
Resak	1,750-1,950
Kapur	2,200-2,400
Kempas	1,550-1,750
Red meranti	1,450-1,550
Radiata pine	850-950
Whitewood	850-950

Price range depends mainly on length and cross-section of sawn pieces.

Myanmar teak prices

The pace of import growth from Myanmar is being sustained but demand is getting ahead of supply say analysts. The importers in India are appealing for greater output and exports from Myanmar.

Middle East demand for teak products from India is weakening as importers there have switched to iroko as a good substitute for Myanmar teak.

Prices continue as previously reported.

Sawnwood (Ex-yard)	Rs. per cu.ft
Myanmar Teak (AD)	
Export Grade F.E.Q.	14,000-20,000
Teak A grade	9,000-10,000
Teak B grade	7,000-8,000
Plantation Teak FAS grade	4,000-6,000

Price range depends mainly on lengths and cross-sections.

Sawn hardwood prices

Sawnwood, (Ex-warehouse) (KD)	Rs per cu.ft.
Beech	1,650-1,800
Sycamore	1,800-2,000
Red Oak	1,900-2,000
White Oak	2,500-2,600
American Walnut	5,000-5,500
Hemlock STD grade	1,500-1,600
Western Red Cedar	2,200-2,400
Douglas Fir	1,800-2,000

Price range depends mainly on lengths and cross-sections.

Indian importers are showing more and more interest in hardwoods from the US, Canada and some European countries such as Finland and Sweden.

This is helping to stimulate demand as buyers have wider range of timbers to choose from. Indicative prices for some imported timbers are shown above.

Increased capacity pushing up plywood log prices

Situation in the plywood sector is unsettled at the moment. Many new manufacturing licenses have been offered in various states such that production capacity has risen significantly without a corresponding increase in demand.

There has been a rise in the log raw material price and mills seek logs to sustain output and this, along with a shortage of labour and supervisory staff is testing the profitability of manufacturers which has resulted in plywood prices being increased. But whether the new prices can be sustained is questionable as demand is not expanding. Manufacturers have raised prices by about 10%.

Plants in Gabon continue to ship veneer to India. Production is increasing as more Indian companies invest in veneer production in Gabon.

Domestic ex-warehouse prices for locally manufactured WBP plywood

Plywood Ex-warehouse	Rs. per sq.ft
4mm	69.00🡅
6mm	92.00🡅
9mm	115.00🡅
12mm	143.00🡅
15mm	190.00🡅
18mm	201.00🡅

Domestic ex-warehouse prices for locally manufactured MR plywood

	Rs. per sq.ft	
	Rubberwood	Hardwood
4mm	35.00🡅	50.00🡅
6mm	52.00🡅	66.00🡅
9mm	66.00🡅	81.00🡅
12mm	81.00🡅	95.00🡅
15mm	95.00🡅	115.00🡅
19mm	111.00🡅	132.00🡅
5mm Flexible ply	70.00	

Brazil

Rising log demand for export production

Against the background theme of "Forests and Log Market", a workshop, arranged by the Brazilian Agricultural Research Corporation (EMBRAPA) and the Paraná State Forest Based Companies Association (APRE), concluded that there has been a sustained rise in demand for logs for domestic processing.

Demand for roundwood is high despite the low level of domestic economic growth and this is because more companies are exporting. Log consumption is estimated at around 14 million cu.m annually.

Most log consumers are vertically integrated but also purchase between 30% and 40% from the open market. Participants at the workshop reported some problems with supply as logs have become of smaller diameter and transport distance are rising.

Paraná and Santa Catarina states have expanded eucalyptus plantations by 190,000 hectares because of demand from forestry companies that prefer eucalyptus which offers shorter rotations and increased yields comaperd to pine.

Increasing planted forests areas

The National Forest Development Plan prepared by the Brazilian Agricultural Research Corporation (Embrapa Florestas) aims at a 20% increase in the area of planted forest to achieve a national target of 20 million hectares of commercial forests by 2030.

Currently, according to the Brazilian Tree Industry (IBA), the planted forest area is 7.8 million hectares of mainly eucalyptus, pine and acacia. The area with planted forests occupies only 1% of the national territory but accounts for 91% of all wood produced for industrial purposes. The planted forest productivity averages of 35.7 cu.m/ha./year.

New measures from the Brazilian Forest Service and the National Plan for Development of Planted Forests (known as PlantarFlorestas) were discussed at a recent meeting of the Production Chain of Planted Forests at the Ministry of Agriculture, Livestock and Food Supply (MAPA).

One issue raised was the need to preserve and protect natural vegetation in some 5.6 million hectares of natural forests under private ownership.

2019 Furniture Fair BtoB events yield results

An “International Buyer Project” has been developed by the Brazilian Furniture Industry Association (ABIMÓVEL) and the Brazilian Trade and Investment Promotion Agency (APEX - Brazil) and this was introduced at the 2019 Furniture Fair (Movelpar) arranged with the support of the Union of Furniture Industries of Arapongas (SIMA) and EXPOARA.

Movelpar brought together 60 Brazilian industries and 30 importers from 11 countries including North America and the Middle East to build business and commercial partnerships.

According to ABIMÓVEL, 740 business rounds were held of which 60% were new commercial contacts between Brazilians and international buyers. The projections are of orders for US$13.6 million of Brazilian products.

So far this year two events under the International Buyer Project have already been carried out by ABIMÓVEL and APEX-BRASIL.

Exports increase from in São Bento do Sul

In 2018 a furniture industrial center in São Bento do Sul municipality, in Santa Catarina State, one of the main furniture export regions, registered an increase in exports. 2018 export revenues from industries in São Bento do Sul, Campo Alegre and Rio Negrinho region reached US$165 million, up 30% compared to 2017. São Bento do Sul is a top Brazilian municipality for furniture exports with a 16% share of national exports.

Export revenues in the region represented 58% of the total furniture exports from Santa Catarina State and 23% of the national total. The country's furniture industries exported US$723 million, up 9.9% over the previous year and Santa Catarina state US$283 million, up 19.5.

According to the Union of Construction and Furniture Industries of São Bento do Sul (SINDUSMOBIL) export growth was mainly driven by two factors; the exchange rate has been favourable to exports and over the last few years more companies started to export because of weak domestic market.

Domestic Log Prices

Brazilian logs, mill yard, domestic	US$ per m^3
Ipê	213
Jatoba	119
Massaranduba	114
Miiracatiara	114
Angelim Vermelho	113
Mixed redwood and white woods	94

Source: STCP Data Bank

Domestic Sawnwood Prices

Brazil sawnwood, domestic (Green ex-mill)	US$ per m^3
Ipé	858
Jatoba	445
Massaranduba	415
Muiracatiara	399
Angelim Vermelho	372
Mixed red and white	246
Eucalyptus (AD)	197
Pine (AD)	147
Pine (KD)	168

Source: STCP Data Bank

Domestic Plywood Prices (excl. taxes)

Parica	US$ per m^3
4mm WBP	553
10mm WBP	436
15mm WBP	361
4mm MR	429
10mm MR	305
15mm MR	280

Prices do not include taxes. Source: STCP Data Bank

Prices For Other Panel Products

Domestic ex-mill Prices	US$ per m^3
15mm MDParticleboard	226
15mm MDF	260

Source: STCP Data Bank

Export Sawnwood Prices

Sawnwood, Belem/Paranagua Ports, FOB	US$ per m^3
Ipe	1,421
Jatoba	865
Massaranduba	841
Muiracatiara	848
Pine (KD)	199

FOB Belém/PA; Paranaguá/PR; Navegantes/SC and Itajaí/SC Ports. High quality wood (no cracks / without knots) / Measuring 2,50 m in length; 15 cm wide; and 30 mm thick.

Source: STCP Data Bank

Export Plywood Prices

Pine Plywood EU market, FOB	US$ per m^3
9mm C/CC (WBP)	311
12mm C/CC (WBP)	290
15mm C/CC (WBP)	270
18mm C/CC (WBP)	268

Source: STCP Data Bank

Export Prices For Added Value Products

FOB Belem/Paranagua Ports		US$ per m^3
Decking Boards	Ipê	2,795
	Jatoba	1,436

Source: STCP Data Bank

Peru

Responsible utilisation the key to sustainability

During a recent Spain/Peru Business Meeting, Erik Fischer, Vice president of the Association of Exporters (ADEX), emphasised the economic strengths of the country and the Government's commitment to further development of the forestry and timber sectors as a new driver of growth.

Fischer commented that the development of forest plantations and the responsible and sustainable use of Peru's extensive natural forests can be effectively managed through closely monitored forest concession models.

Fischer pointed out that it has been observed by several agencies that most of the deforestation in Peru is due to shifting agricultue which is not sustainable.

January exports at new high

According to ADEX, January 2019 exports of Peruvian wood products totalled US$11 million FOB. This compares to the US$7.1 million exports in January 2018.

Of the US$11 million exported in January 2019, China was the main destination with a 34% share but demand in China has fallen sharply (-60%) compared to 2018. France was the second placed market with 15% share.

Sawnwood exports in January this year were US$1.9 million FOB, up 4.3% on the previous year.

The main destination for export sawnwood was the Dominican Republic with a 32.4% share; second was Mexico followed by China.

SERFOR and WWF cooperation in promoting SFM

The National Forestry and Wildlife Service (SERFOR) of the Ministry of Agriculture and Irrigation and WWF Peru have signed an agreement for cooperation in promoting mechanisms for sustainable management of forests and wildlife in Peru.

This cooperation will strengthen coordination of work between both institutions with the aim of contributing to scientific research, promoting the restoration of degraded landscapes, supporting the development of local capacities and promoting the management and sustainable use of flora and fauna resources, through alliances with our indigenous people and other stakeholders.

Transport control system improved

In order to improve the supervision and control of the Forest Transport Guides (GTF) the National Forestry and Wildlife Service (SERFOR) has introduced a computer application that will improve the tracking of wood from its origin to mill gate.

The tool is called the 'Application for the Issuance and Registration of GTF' and the system is compatible with cell phones and tablets and has been tested in the departments of Madre de Dios, Puno, Arequipa and Lima (Pucusana) whose Regional Forestry and Wildlife Authorities (ARFFS) and Technical Forestry and Wildlife Administrations (ATFFS) have been trained.

With this system, it will be possible to track the transport of the wood in real-time and recover data on the type of product, the volumes, the species, the destination and transport used and the point extraction.

Export Sawnwood Prices

	US$ per m^3
Peru Sawnwood, FOB Callao Port	
Mahogany S&B KD 16%, 1-2" random lengths (US market)	1570-1655
Spanish Cedar KD select	
North American market	958-977
Mexican market	946-965
Pumaquiro 25-50mm AD	
Mexican market	604-641🡅

Peru Sawnwood, FOB Callao Port (cont.)	US$ per m^3
Virola 1-2" thick, length 6'-12' KD	
Grade 1, Mexican market	534-599
Grade 2, Mexican market	489-502
Cumaru 4" thick, 6'-11' length KD	
Central American market	951-972
Asian market	999-1049
Ishpingo (oak) 2" thick, 6'-8' length	
Spanish market	542-561
Dominican Republic	671-681
Marupa 1", 6-11 length KD	
Asian market	551-599

Domestic Sawnwood Prices

Peru sawnwood, domestic	US$ per m^3
Mahogany	-
Virola	254-268🡇
Spanish Cedar	339-379
Marupa (simarouba)	218-228

Export Veneer Prices

Veneer FOB Callao port	US$ per m^3
Lupuna 3/Btr 2.5mm	221-249
Lupuna 2/Btr 4.2mm	234-266
Lupuna 3/Btr 1.5mm	219-228

Export Plywood Prices

Peru plywood, FOB Callao (Mexican Market)	US$ per m^3
Copaiba, 2 faces sanded, B/C, 8mm	346-374
Virola, 2 faces sanded, B/C, 5.2mm	478-508
Cedar fissilis, 2 faces sanded.5.5mm	766-783
Lupuna, treated, 2 faces sanded, 5.2mm	389-412
Lupuna plywood	
B/C 15mm	449-495
B/C 9mm	379-399
B/C 12mm	350-360
C/C 4mm	389-425
Lupuna plywood B/C 4mm Central Am.	370-393

Domestic Plywood Prices (excl. taxes)

Iquitos mills	US$ per m^3
122 x 244 x 4mm	508
122 x 244 x 6mm	513
122 x 244 x 8mm	522
122 x 244 x 12mm	523
Pucallpa mills	
122 x 244 x 4mm	503
122 x 244 x 6mm	511
122 x 244 x 8mm	513

Domestic Prices for Other Panel Products

Peru, Domestic Particleboard	US$ per m^3
1.83m x 2.44m x 4mm	282
1.83m x 2.44m x 6mm	230
1.83m x 2.44m x 12mm	204

Export Prices for Added Value Products

Peru, FOB strips for parquet		US$ per m^3
Cabreuva/estoraque KD12% S4S, Asian market		1304-1391
Cumaru KD, S4S	Swedish market	979-1098
	Asian market	1085-1115
Cumaru decking, AD, S4S E4S, US market		1188-1222
Pumaquiro KD Gr. 1, C&B, Mexican market		479-554
Quinilla KD, S4S 2x10x62cm, Asian market		523-545
	2x13x75cm, Asian market	732-815

Japan

Private consumption held back by slow wage growth

Revised figures show that Japan's economy expanded in the last quarter of 2018 mainly due to increased capital expenditure. The final quarter 2018 figures indicate that there was a rebound in growth following a series of natural disasters that resulted in a steep slowdown.

Despite the positive numbers on overall growth, private consumption, which traditionally accounts for a large slice of the economy, barely moved as disappointing wage growth cut household spending.

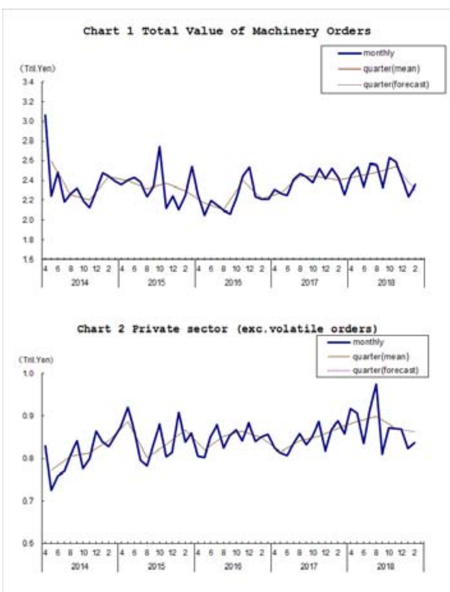
Looking ahead, Japanese business confidence was assessed at a two-year low in the first quarter of 2019, largely the result of weak global demand and declining imports in China.

The negative sentiment was most obvious among large companies where sentiment dropped at its fastest pace in more than six years. Continued weakness of the Japanese economy will likely ensure the Bank of Japan maintains, or even expands, its stimulus policy.

Short-term rise in machinery orders

The value of machinery orders received by 280 manufacturers operating in Japan increased by 5.4% in February compared to a month earlier. Private-sector machinery orders, excluding those for ships and from electric power companies, increased a seasonally adjusted by 1.8% in February.

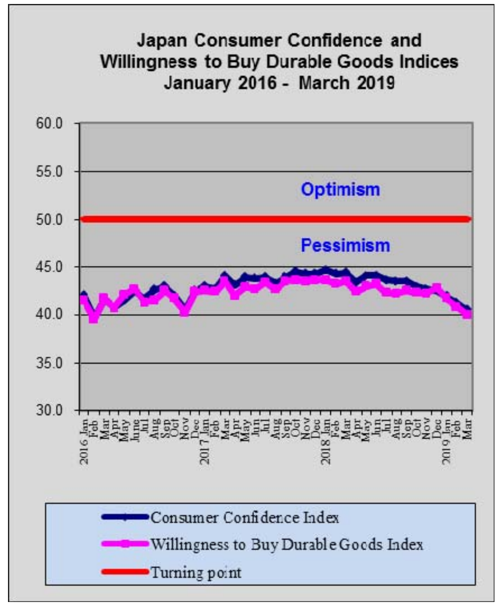
A government official told a press conference that an order for a large ship engine was the main factor lifting the February data. Despite the rise, the Cabinet Office maintained its assessment for the third consecutive month that orders are "stalling". Machinery orders are considered a leading indicator of capital expenditure, a key driver of Japanese economic growth in recent months.



Source: Cabinet Office, japan

Consumer confidence drops to 3 year low

Japan's Consumer Confidence Indices in March 2019 were weaker than the previous month dropping to the lowest in three years. The overall livelihood index fell as did income growth, employment prospects and the willingness to buy durable goods. The latest survey was conducted on 15 March and covered 8,400 households.

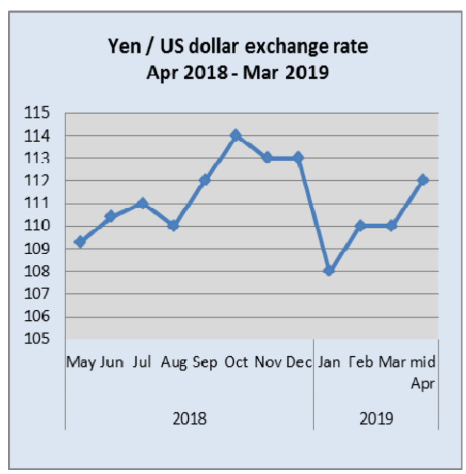


Data source: Cabinet Office, Japan

Bank of Japan tightening forecast by economists

A group of economists were recently surveyed on their opinion as to whether the Japanese government will raise the consumption tax in October this year as planned. Most thought yes and most raised concerns about this pushing the economy into recession. The government is aware of this risk and has planned a yen 2 trillion budget to boost spending.

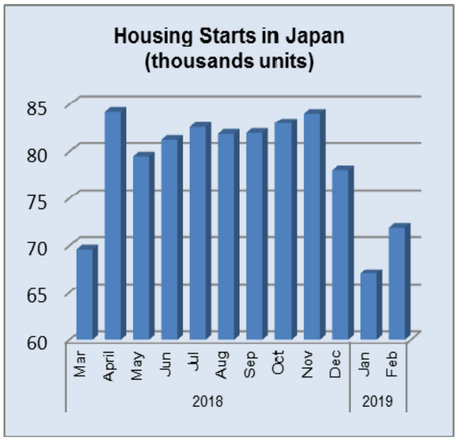
In the same survey most economists said they believe the Bank of Japan will soon begin easing away from its loose monetary policy. The impact of this on exchange rates could be significant; a strengthening of the yen is the most likely outcome.



Encouraging housing starts in past 3 months

Year on year, February housing starts rose 4.2% the third consecutive year. The increase was led by starts for owner-occupied housing and condominiums.

Starts for owner-occupied housing, such as custom-built houses, rose 10%, the fifth year on year rise. Interest rates continue to be very low in Japan and banks are willing to extend loans as they try and increase business.

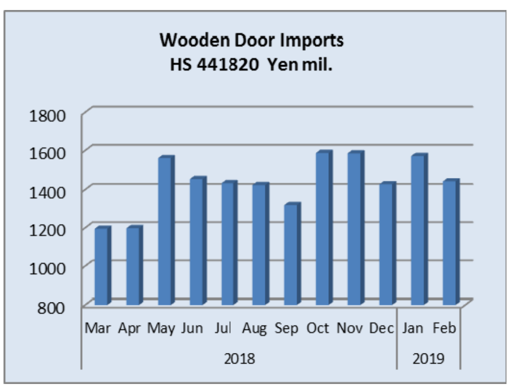


Data source: Ministry of Land, Infrastructure, Transport and Tourism, Japan

Wooden door imports

Year on year, the value of Japan's February wooden door imports dropped 6% and compared to the value of imports in January there was a 7% decline in February.

In February shippers in three countries accounted for 90% of all wooden door imports with China delivering 64% of the total, the Philippines 20% and a further 6% was shipped from suppliers in Indonesia.

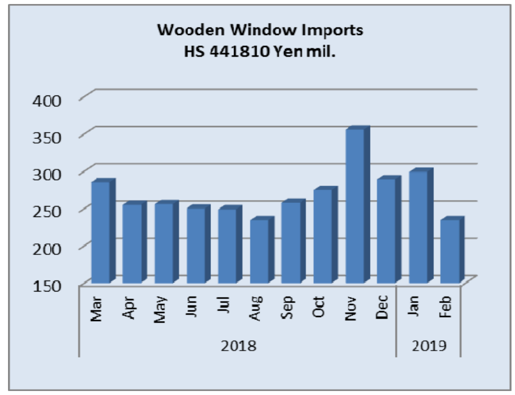


Data source: Ministry of Finance, Japan

Wooden window imports

As was the case with wooden doors, the value of Japan's imports of wooden windows declined year on year and month on month (-6% and -22% respectively).

As in previous months the top shippers were in China, the US, the Philippines and Sweden. Shipments from China in February accounted for 40% of all wooden window arrivals followed by the US (24%) the Philippine (20%) and Sweden. The top four delivered 97% of the total value of Japan's wooden window imports in February.

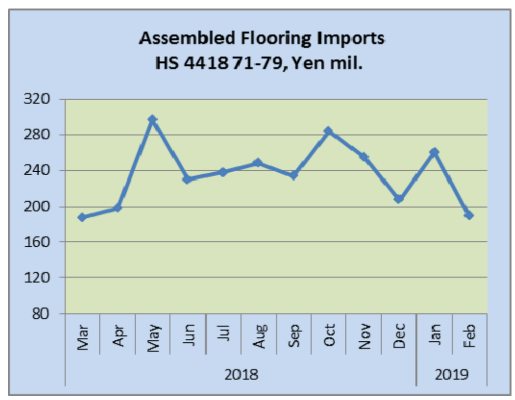


Data source: Ministry of Finance, Japan

Assembled wooden flooring imports

The value of assembled flooring imports nosedived in February with year on year imports dropping 17% and month on month there was a 19% decline.

In February 2019 imports of HS441875 accounted for 75% of all imports in the range of HS441871-79. As in previous months the main shippers of HS441875 were China (50%), Indonesia (28%) and Thailand (13%).



Data source: Ministry of Finance, Japan

Plywood imports

Despite the intense activity in the construction sector as Japan readies for the 2020 Olympics, plywood imports in February were only up 3% year on year and there was a surprising drop in month on month imports (-3%).

This provides a measure of the growth in domestic production from domestic logs.

Main sources of Japan's plywood imports (000's cu.m)

		China	Malaysia	Indonesia
2016	Jan	16	101	75
	Feb	10	81.5	70.8
	Mar	8	84	64
	Apr	12	85	72
	May	12	95	62
	Jun	11.6	95.6	66
	Jul	10.7	92.8	71.3
	Aug	11.9	82.3	52.8
	Sep	10.3	79.9	79.3
	Oct	12.9	98.3	72
	Nov	14.9	80	71
	Dec	13.7	85	65
2017	Jan	16	130	80
	Feb	7.5	93.3	59
	Mar	11.5	99	76.5
	Apr	11.2	92.6	58
	May	12.9	99.2	73.8
	Jun	11	74.8	65.0
	Jul	10.6	100.0	54.8
	Aug	12.3	91.8	64.5
	Sep	9.9	86.7	56.6
	Oct	12.2	86.4	63.7
	Nov	10.7	112.4	82.0
	Dec	12.0	95.2	50.0
2018	Jan	12	100.5	80.0
	Feb	12.5	83.0	69.0
	Mar	4.9	79.4	66.5
	Apr	13.4	92.4	84.4
	May	15.2	94.0	82.0
	Jun	12.4	77.5	79
	Jul	14.3	79.2	58.3
	Aug	12.4	86	70.5
	Sep	9.7	68.6	62.6
	Oct	12.3	108.2	75.6
	Nov	14.5	97.1	81.1
	Dec	13	68	74.7
2019	Jan	14	91.2	66.4
	Feb	11.1	85.3	75

Data source: Ministry of Finance, Japan

The top three suppliers Malaysia, Indonesia and China continue to dominate plywood imports. In February the volume of plywood imports from Malaysia accounted for 46% of all imports of products in the categories of HS441810-39.

The other shippers were Indonesia (40%) and China (6%). Vietnam consistently supplies around 6% of Japan's plywood imports. Almost 90% of Japan's plywood imports fall within HS 441234.

Trade news from the Japan Lumber Reports (JLR)

The Japan Lumber Reports (JLR), a subscription trade journal published every two weeks in English, is generously allowing the ITTO Tropical Timber Market Report to reproduce news on the Japanese market precisely as it appears in the JLR.

For the JLR report please see:
http://www.n-mokuzai.com/modules/general/index.php?id=7

European lumber import in 2018

Total import volume of European softwood lumber in 2018 was 2,565,528 cbms, 9.2% less than 2017. This is the first decline after three years.

In the first half of 2018, the supply volume did not increase due to robust demand of North America and China. The market in Japan did not feel supply shortage and the market lacked vividness.

Supply of whitewood KD stud and other processed lumber was 858,582 cbms, 7.3% less. Semi-finished products like genban and lamina were 1,706,941 cbms, 10.2% less. One of two major suppliers of stud had stayed low supply by about 20-30% and other supplier skipped the supply for January, September and November so the export prices increased from Euro 320-325 per cbm C&F for January and February shipment to Euro 345 for November and December shipment.

This is due to oversupply and dropped prices in 2017. The inventories in Japan did not dropped as much as supply reduction so the market prices in Japan increased only by 1,000 yen from 47,000-48,000 yen in the first half to 48,000- 49,000 yen in the second half.

Export prices of lamina and genban stayed high due to high log cost and strong demand by Europe, North America and China. Lamina prices were Euro 250-260 per cbm C&F and genban prices were Euro 280-290 per cbm C&F. On redwood, orders dropped after the third quarter due to ample supply.

Supply from major sources decreased across the board as shown in the chart. Scandinavian countries lost supply volume of lamina in the second half. In central Europe, supply of quality logs was tight because of clean-up of blowdown timber and beetle damages so mills were not able to increase the supply for Japan.

North American lumber import in 2018

Total import of North American lumber in 2018 was 2,066,084 cbms, 6.1% less than 2017. This is five straight years decline. Compared to recent peak year of 2013, it was 27.9% less.

Impacted by record high lumber market prices in North America, import of all major species decreased. SPF was 5.2% less. Douglas fir was 7.8% less. Hemlock was 10.2% less and yellow cedar (cypress) was 17.1% less.

After North American lumber market nosedived in the second half of the year, SPF lumber prices dropped but the prices of all the other species like Douglas fir remained high. SPF lumber volume in 2018 was 1,300,382 cbms, lower than recent bottom year of 2014 and this is the lowest since 2009.

Imported volume of SPF remained the same as 2017 until October with strong purchase by component companies then the volume plunged in the fourth quarter after the export prices dropped sharply.

Douglas fir lumber volume was 387,799 cbms. The supply from the U.S.A. was 190,863 cbms, only 1.1% less but the Canadian volume dropped to 196,936 cbms, 13.4% less.

Log harvest was steady in Canada without much negative factor by weather but strong demand by veneer plants on the coast tightened log availability and sawmills produced more hemlock lumber so supply from Canada was much less.

Hemlock lumber supply was 224,324 cbms, 10.2% less. Hemlock log harvest in Canada was steady but because of purchase competition with China, the prices of green hemlock square and genban soared so in Japan, demand of preservative treated sill of green hemlock sharply decreased by high prices.

After the fourth quarter, Chinese purchase slowed down so the supply volume for Japan increased but the market prices of KD hemlock weakened by ample supply and demand for green sill lumber has not come back by high prices. Cypress lumber was 45,127 cbms, 17.1% less.

South Sea (tropical) logs and Lumber

Sizable logs from both PNG and Sarawak, Malaysia arrived in late 2018 so plywood mills and sawmills now carry reasonable amount inventories. Malaysian log prices go up after 2019 with increase of minimum wage and harvest tax so it was last minutes rush-in import for December arrivals and
2019 will be different with high prices.

PNG log export prices are weak in general as main buyer, China is curtailing log purchase. China buys
all the harvested logs from forest while Japan buys selected logs so prices of mersawa logs selected for plywood remain high. Some sawmills started using low priced dillenia from PNG for lumber. Inventory of laminated free board finally drop so new orders are placed.

January plywood supply

Total plywood supply in January was 515,500 cbms, 2.8% less than January 2017 and 4.6% more than December 2018.

Domestic production continued steady from beginning of the year with 258,400 cbms, 0.7% more and 2.4% less. Imported plywood supply in January was 257,000 cbms, 6.1% less and 12.8% more.

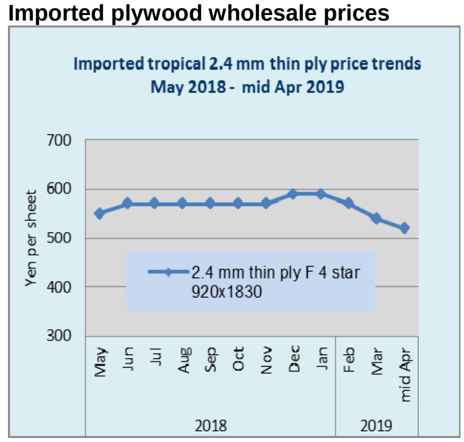
In domestic production, softwood was 247,500 cbms, 0.8% more and 2.1% less. In this, non-satructural panel production was 19,400 cbms, 25.6% more and 0.9% more. Despite decrease of total production, production of non-structural panel maintained the same as December to respond to increasing orders of floor base by floor manufacturers.

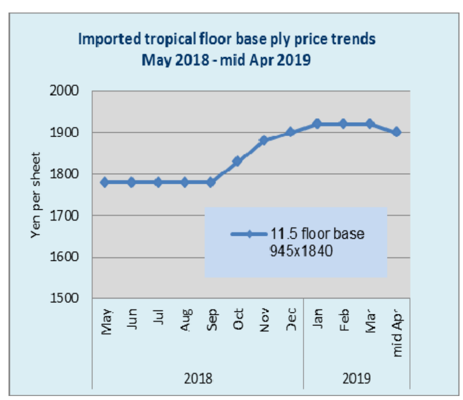
Shipment of softwood plywood was 271,300 cbms, 7.6% more and 5.1% more. Shipment of non-structural plywood was 19,300 cbms, 22.5% more and 14.0% more. The inventories of softwood plywood were 114,200 cbms, 20,900 cbms drop from December. The inventories have been dropping for four straight months since last October after they increased to 179,300 cbms in September last year.

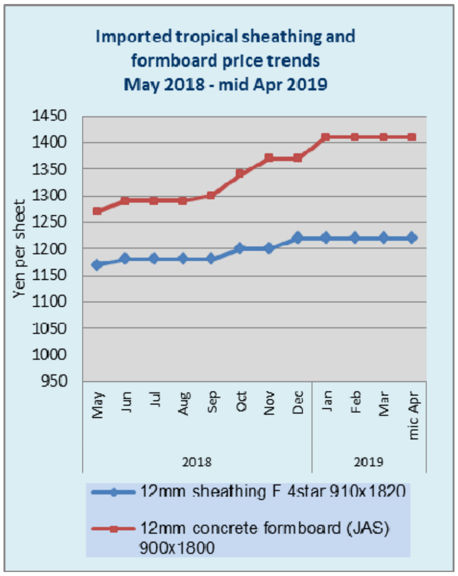
Imported plywood in January increased by 9.7%. 93,200 cbms from Malaysia, 9.9% less and 32.0% more. 76,400 cbms from Indonesia, 12.7% less and 7.2% less. 65,200 cbms from China, 2.6% more and 19.2% more. 22,100 cbms from others, 16.0% more and 9.7% more. Usually, January arrivals are high because of the delayed custom clearance from December.

Compared to monthly average arrivals to December and January arrivals from Malaysia and Indonesia, Malaysian was 81,900 cbms, 7.4% less and Indonesian was 79,400 cbms, 2.5% less so the decrease was small.

Imported plywood wholesale prices







Mitsubishi Real Estate built condo with CLT

Mitsubishi Real Estate (Tokyo) completed building 10 stories rental condominium building in Sendai. This is the first high rise condo with CLT floor. By using CLT, building time is shortened by three months.

In ten stories building, CLT is used as floor for fourth to tenth floor and also part of bearing wall of first and fifth floor. Some posts are one hour and two hour fire proof.

CLT floor is wrapped with fire proof film but Mitsubishi Estate intentionally used wood in many places and some are exposed. Actually some rooms with wooden interior is classified as premium grade and rental is higher than the others. It made survey through potential users and they are willing to pay 5% premium for wood used rooms.

China

Decline in 2018 sawnwood imports

According to China Customs, 2018 sawnwood imports totalled 36.74 million cubic metres valued at US$10.13 billion, a year on year decline of 2% in volume and a slight increase (1%) in value.

The average price for imported sawnwood was US$216 per cubic metre, up 2% on 2017. Both sawn softwood and sawn hardwood imports declined in 2018.

Of total sawnwood imports, sawn softwood imports fell 1% to 24.88 million cubic metres, accounting for 68% of the national total. The average price for imported sawn softwood was US$201 per cubic metre, up 3% year on year.

Sawn hardwood imports fell 4% to 11.86 million cubic metres because China's sawn hardwood imports from the top sources, Thailand and USA, fell 4% and 8% respectively. The average price for imported sawn hardwoods was US$433 per cubic metre, up 3% year on year.

Of total sawn hardwood imports, tropical sawnwood imports were 7.19 million cubic metres valued at US$2.678 billion, down 2% in volume and 3% in value and accounted for about 20% of the national total. The average price for imported tropical sawnwood was US$372 per cubic metre, a year on year decrease of only 1%.

China's sawnwood imports in 2018 (vol)

Volume	2018 mil. cu.m	% change 2017-18
Total sawwood imports	36.74	-2
Sawn softwood	24.88	-1
All sawn hardwood	11.86	-4
of which tropical	7.19	-2

Data source: China Customs

China's sawnwood imports in 2018 (val)

Value	2018 US$ mil.	% change 2017-18
Total sawwood imports	10,131	1
Sawn softwood	4,992	2
All sawn hardwood	5,139	-1
of which tropical	2,678	-3

Data source: China Customs

Average sawnwood prices, 2018

	2018 Av. Price US$/cu.m	% change 2016-17
Average sawnwood price	216	2
Sawn softwoods	201	3
All sawn hardwood logs	433	3
of which tropical	372	-1

Data source: China Customs

Surge in Russian sawn softwood imports

Russia was the main sawn softwood supplier to China in 2018 and China's sawn softwood imports from Russia rose 10% to 15.65 million, accounting for 63% of the national total, surging 6% year on year. China's sawn softwood imports from Ukraine surged.

Average prices for all sawn softwood suppliers rose. Average prices for imported sawn softwood from Chile, Finland and USA rose 13%, 12% and 10% respectively.

Main countries shipping sawn softwood to China

	2018 sawn softwood Imports cu.m	% change 2017-18
Total imports	24,880	-1
Russia	15,650	10
Canada	4,170	-16
Finland	1,160	-32
Chile	720	-21
Sweden	710	2
USA	480	-23
Ukraine	420	264
New Zealand	360	-15
Brazil	350	8
Germany	150	-24

Data source: China Customs

Average sawn softwood prices from top suppliers

	Average price US$/cu.m	% change 2017-18
Russia	184	1
Canada	211	9
Finland	256	12
Chile	256	13
Sweden	259	6
USA	217	10
Ukraine	194	5
New Zealand	261	3
Brazil	221	7
Germany	226	9

Data source: China Customs

Vietnam fades from list of main sawn hardwood suppliers

China's sawn hardwood imports from Vietnam plummeted 73% to 150,000 cubic meters in 2018 from 540,000 cubic metres in 2017. Vietnam disappeared from the list of main countries shipping sawn hardwood to China because most was utilised by Chinese furniture factories in Vietnam.

Main countries shipping sawn hardwood to China

	2018 sawn hardwood imports 000's cu.m	% change 2017-18
Total	11,860	-4
Thailand	4,440	-8
USA	2,420	-6
Russia	1,490	14
Gabon	570	38
Indonesia	340	7
Philippines	320	-2
Malaysia	267	-9
Romania	265	-3
Germany	190	-1
Cameroon	170	33

Data source: China Customs

Average sawn hardwood prices from top suppliers

	Average price US$/cu.m	%change 2017-18
Thailand	317	0
USA	640	4
Russia	258	-7
Gabon	530	-4
Indonesia	805	-6
Philippines	137	-3
Malaysia	382	2
Romania	418	12
Germany	434	7
Cameroon	601	4

Data source: China Customs

Substantial growth in China's tropical sawnwood imports from Brazil

Thailand still is the main tropical sawnwood exporter to China. China's tropical sawnwood imports from Thailand in 2018 were 4.44 million cubic metres valued at USD1.407 billion. However, the proportion of Thai tropical sawnwood exports to China plummeted 8%.

The top 5 countries supplied 84% of China's tropical sawnwood requirements in 2018, namely Thailand (62%), Gabon (8%), Brazil (6%), Indonesia (5%) and the Philippines (4.5%).

In Contrast, just 5 countries supplied over 92% of China's tropical sawnwood requirements in 2017 namely, Thailand (72%), Gabon (6%),the Philippines (5%), Indonesia (5%), Malaysia (4%).

China's tropical sawnwood imports from Brazil grew substantially in 2018 but the average price fell 54% year on year as much of this was plantation timber.Tropical sawnwood imports from Myanmar, Nigeria, Gabon and Cameroon rose 70%, 69% , 38% and 33% year on year respectively and imports from Vietnam, Malaysia and the Philippines, fell 73%, 9% and 2% year on year respectively.

Main countries shipping tropical sawnwood to China

	2018 tropical sawnwood imports cu.m	% change 2017-18
Total	7,190	-2
Thailand	4,440	-8
Gabon	570	38
Brazil	400	812
Indonesia	340	7
Philippine	320	-2
Malaysia	270	-9
Cameroon	170	33
Vietnam	150	-73
Myanmar	63	70
Nigeria	61.5	69

Data source: China Customs

Average tropical sawnwood prices from top suppliers

	2018 Average price	% change 2017-18
Thailand	317	0.4
Gabon	530	-4
Brazil	270	-54
Indonesia	806	-6
Philippines	137	-3
Malaysia	382	2
Cameroon	601	4
Vietnam	408	24
Myanmar	353	-11
Nigeria	795	7

Data source: China Customs

Guangzhou Yuzhu International Timber Market Wholesale Prices

	Logs	yuan/cu.m
Merbau	dia. 100 cm+	4-6000
Bangkirai	dia. 100 cm+	3200-4600
Kapur	dia. 80 cm+	2700-3000
Ulin	All grades	6500
Lauan	dia. 60 cm+	-
Kempas	dia. 60 cm+	2000-3000
Teak	dia. 30-60 cm	8500-8600
Greenheart	dia. 40 cm+	2300-2400
Purpleheart	dia. 60 cm+	3000-4500
Pau rosa	dia. 60 cm+	2800-3000
Ipe	dia. 40 cm+	3200-3400
yuan per tonne		
Cocobolo	All grades	40-70000

Sawnwood

	Sawnwood	yuan/cu.m
Makore	Grade A	9800-11800
Zebrano	Grade A	9500-12500
Walnut	Grade A	9500-15000
Sapelli	Grade A	5000-7500
Okoume	Grade A	3700-4700
Padauk	Grade A	15000-18000
Mahogany	Grade A	6500-7500

Sawnwood		yuan/tonne
Ulin	all grades	9000-10000
Merbau	special grade	7500-9500
Lauan	special grade	4300-4700
Kapur	special grade	5000-6000
Teak	special grade	14000-22000

Zhangjiagang Timber Market Wholesale Prices

Logs, All grades	Yuan/tonne
Sapelli	3000-4000
Kevazingo	8000-32000
Padouk de afric	2400-3100
okoume	1400-1800
Okan	2400-2800
Dibetou	2200-2500
Afrormosia	5500-6500
Wenge	4700-5500
Zingana	3400-4800
Acajou de afica	3000-3500
Ovengkol	3100-3600
Paorosa	5900-6600
Merbau	3500-5800
Lauan	1800-2020
Kapur	2020-2500
Keruing	1700-2200
Geronggang	1600
kauri	1700-1850
Amoora	1900-2080
Calophyllum	2150-2350
Red ganarium	1300-1400

Sawnwood		yuan/cu.m
Cherry	FAS 2 inch	9000-10000
Black walnut	FAS	15000-18000
Maple	FAS	8200-10000
White oak	FAS	7500-13000
Red oak	FAS	6500-8300
Finnish pine	Grade A	2600-2900
Maple	Grade A	9000-9500
Beech	No knot	9000-9500
Ash	No knot	5600-6300
Basswood	No knot	2800-3300
Oak	No knot	5300-5700
Scots pine	No knot	2100

Europe

IMM survey examines trade impact of FLEGT licensing

The FLEGT Independent Market Monitor (IMM), hosted by ITTO and supported by EC funding, has reported some preliminary results of the 2018 survey of the European trade (for more see www.flegtimm.eu).

Based on structured interviews with around 150 companies in the seven main EU markets for tropical timber products (Belgium, France, Germany, Italy, Netherlands, Spain and the UK), the survey assessed trade views of the current and potential future market impact of FLEGT licensing.

The survey built on and updated results of the 2017 IMM survey which covered 126 companies in the same EU countries. Reflecting the significant contribution of furniture in the mix of tropical wood products imported into the EU, the 2018 survey included coverage of a larger range of furniture companies compared to the 2017 survey.

The survey highlights that the FLEGT licensing system is now operating smoothly and easing access to the EU market for wood products from Indonesia, which became the first country to start issuing licenses in November 2016.

The survey also highlights that the combination of FLEGT licensing and the EU Timber Regulation (EUTR) is changing purchasing practices in the EU. However, the survey also highlights that licensing, in isolation, is unlikely to transform the EU market for tropical timber, and that broader market development strategies will be required to drive significant increases in EU imports of licensed products.

Compared to the previous year, a much higher proportion of respondents to the 2018 survey found the administrative process of importing FLEGT-licensed timber easily understandable and manageable. This confirms expectations from 2017, that the process was unlikely to present significant bureaucratic challenges once importers became accustomed to it.

The market introduction of FLEGT-licensed timber had no negative impact on importers' tropical timber procurement, according to survey respondents. 12% of respondents reported a small increase in share and 1% a big increase.

Furthermore, in 2018, nearly all respondents said that FLEGT-licensing made importing wood products from Indonesia easier compared to the steps required for non-licensed wood to comply with EUTR due diligence procedures. In 2017, a significant number of respondents had partially (12%) or fully (20%) disagreed that licensing simplified EUTR compliance.

On the other hand, responses to the question of whether companies would actively prefer FLEGT-licensed timber from Indonesia over unlicensed timber from competing sources was more mixed.

Respondents remarked that FLEGT-licensing was a factor that could impact purchasing decisions but only where other product criteria were equal. Respondents emphasised that legality assurance was one of several critical criteria – including price, quality, specification and logistics – that drove purchasing decisions.

The IMM 2018 EU trade survey asked for views of whether FLEGT-licensing and the introduction of the EUTR has had any direct impact on the share of tropical timber in their overall timber imports.

A majority of respondents found that the share had not been directly affected by either.

However, where EUTR is concerned, the proportion of companies saying the share of total tropical timber in their imports had decreased slightly (19%) or even substantially (16%) because of its introduction was quite significant.

There was also a small proportion of respondents (2%) that stated that the share of tropical timber in their imports had increased following introduction of EUTR. This may be explained by a shift in the market as some smaller importers gave up direct purchases in tropical countries in response to legality risks and instead purchase from landed stocks of the larger importers. The latter are importing more to make up the shortfall.

The 2018 survey shows that private certification schemes, especially FSC, have profited from the introduction of EUTR. Several survey respondents remarked that they gave preference to certified timber since the EUTR came into force and have used certification as a means of compliance with EUTR due diligence requirements.

This effect was particularly pronounced in markets where (FSC) certification of tropical timber products has previously had a lower level of market penetration. Several traders in Germany, France and Italy, for example, reported "big increases" in FSC certified timber purchases due to the introduction of EUTR.

This contrasts with the Netherlands and the UK, traditionally larger markets for certified wood, where very few respondents reported significant increases in procurement of certified wood due to introduction of EUTR.

However, when trying to source (additional) certified timber, several companies reported significant supply restrictions, especially when sourcing from Africa.
When asked whether the market introduction of FLEGT-licensed timber from Indonesia had had any impact on their purchases of certified timber the overwhelming majority of companies answered "no change".

UK agrees to recognise FLEGT licenses in event of "no-deal" Brexit

The UK and Indonesia have signed an agreement committing the former to continued recognition of FLEGT licences after Brexit. The UK Department for Environment (Defra) confirmed the arrangement on its twitter page on March 29.

The UK government committed to incorporating both the FLEGT and EU Timber Regulations in UK law after Brexit in 2018. However, Defra also advises online that in the event of a 'no deal' departure from the EU, while UK law for trading timber will have the same requirements as existing EU rules, timber businesses will have to follow different trading processes.

Operators will have to undertake due diligence on timber and wood product from inside as well as outside the EU and European Economic area, the only exception being timber with a FLEGT licence or CITES permit.

If exporting to an EU or EEA country, UK companies may also need to provide documentation verifying source and legality of the timber so that customers can meet EUTR due diligence requirements.

Also in the event of a no deal, the UK will continue to recognise Monitoring Organisations based in the UK, but will not automatically recognise those operating in EU or EEA countries. The EU has indicated too that it will not recognise Monitoring Organisations based in the UK in a no deal scenario.

In the year ending November 2018, the EU imported 422,000 tonnes of Indonesian wood products, valued at €794 million, of which the UK accounted for over 180,000 tonnes.

STTC and ATIBT to collaborate in marketing of “verified sustainable” tropical wood

The Sustainable Tropical Timber Coalition (STTC) and ATIBT’s Fair & Precious (F&P) branding campaign are to collaborate in communications and marketing. Both initiatives promote “verified sustainable” tropical timber in Europe and highlight the role demand for it plays in incentivising the uptake of sustainable forest management in tropical supplier countries and in preserving tropical forest.

The two initiatives commend FSC or PEFC certification as procurement criteria. But while both have voiced support for the FLEGT VPA initiative and FLEGT licensing, with the latter advising the African private sector on implementation of VPAs and their impact on business, neither is willing currently to endorse licensed products in conjunction with certified timber.

In its latest strategy ‘roadmap’, the STTC lists as a key action point the need to ‘align where FLEGT stands in relation to promoting verified sustainable tropical timber’. It acknowledged FLEGT as ‘an important stepping stone to sustainability’ but said ‘timber trading companies need clarity on how to sell it”.

Under their cooperation agreement, the two will exchange information and coordinate websites. They will jointly produce six to eight newsletters annually, which will be distributed to a combined database, and develop and distribute a sustainable tropical timber marketing toolkit to certified operators and F&P brand users.

They will also share and co-brand the annual STTC data market report monitoring European sales share of certified timber.

Building on tropical hardwood’s construction potential

Advocacy for using timber as a mainstream modern construction material is increasing in Europe and other regions.

Faced with the need to satisfy growing global housing need, while simultaneously reducing the construction industry’s environmental footprint, wood is becoming the building material of choice for a growing number of architects, engineers, designers and contractors.

Adding impetus to this trend are the development and increasing application of more technically advanced structural timber products. These are allowing the construction sector to build bigger and ever more ambitiously in wood and enabling it to compete head-on with energy intensive rival materials, steel and concrete.

At the same time, there are early signs that architects and others are looking to broaden their timber building product palette, exploring the structural capabilities of hardwood as well as softwood and, while it is yet to hit the headlines, considering the possibilities of using tropical as well as temperate species.

This could not only help provide much needed, affordable, low carbon housing, but also act as an added incentive to sustainably manage forests for timber production.

These are the main conclusions of interviews with leading architects just undertaken by Mike Jeffree, a freelance journalist and timber specialist who is consulting editor of the UK Timber Trades Journal (TTJ).

While tropical timber has been used extensively in solid form in bridges and other marine applications for a long time, Netherlands-based Boris Zeisser is one architect who sees its potential, in Europe and around the world, for a broader spread of construction applications, including in engineered formats.

Zeisser has used tropical species extensively in his buildings, and not just in more conventional applications, such as cladding, roofing, decking, joinery and interior fixtures. Where it’s suited and the client wants it, he also uses it in structurally, usually expressing the building frame to complement other wood elements in the project.

Nor, unlike some, does he see tropical timber in construction being limited to a market niche. Natrufied uses it for mainstream public and commercial buildings, private and social housing and it sees its combination of looks, performance and environmental benefits (which, he also believes, if sustainably sourced, include encouraging maintenance of tropical forests) giving them potential for increasing uptake in architecture generally.

“What we need is more training in their application, and in timber use generally, at architectural schools,” said Zeisser. “I’m now teaching at the Rotterdam Academy and I, of course, cover tropical timber.”

He had little exposure to wood at college in the Netherlands and the US, but his first job at the practice of Erik van Egeraat gave him his initial experience. He worked on the wood interiors of a concert hall in Breda and a college in Utrecht and they featured more unusual species for the time, including red cedar and bamboo.

"Then van Egeraat used padouk cladding on his own house, which caused a stir and caught my interest," said Zeisser.

He went on to launch his first practice 24-H, later leaving to set up Natrufied.

With experience, his interest in wood use grew – as did the range of types he used. Projects included the Soneva Kiri resort in Thailand which featured river red gum for floors, stairs and other timber elements, a bamboo frame structure and a variation on rattan for the roofs.

He also specified cumaru for cladding and balcony flooring on a 13-storey block of flats in Nijmegen and sucupira amerela and lauro gamela for joinery and cladding in an eco-community housing project in Leiden. In the same town he designed Marecollege. This is another multiple species project, using keruing for flooring and interior cladding, sucupira amerela for windows and doors and lauro gamella for exterior cladding.

Zeisser described discovering the potential of tropical hardwoods as a step by step process; use in flooring, joinery and interior cladding led to exterior application, then structural.

The first project where Mr Zeisser used engineered tropical hardwood structurally was a private house in Cadzand. This includes seven different tropical species; mahonie and wenge for interior cladding, coromandel for interior furnishings, padouk for sunscreening, afromosia for window frames and jatoba for doors, flooring and decking.

The seventh species is iroko which comprises the glulam structural frame. "Where we use a glulam frame, it's mostly larch, but we always show clients samples of tropical wood as an option," said Zeisser.

"Our tropical glulam is made by a contractor and doesn't seem to pose any technical problems in manufacture. The main issue is cost. Its strength means we use less, but it's still about 1.5 times as much as larch. Even so people still want it."

Natrufied has iroko structural frames for other buildings. "And other tropical species would have been suitable for the glulam, such as jatoba," said Zeisser.

He stresses that he does not use tropical timber regardless. "We aim to build in wood as much as possible, but that could also be softwood, or a combination. We propose tropical where its relevant and appropriate structurally and aesthetically – it won't do us, or tropical suppliers, any good if it's used for applications where it's not suited."

With that proviso and better timber training for architects, Zeisser believes tropical wood can make a still greater structural impact. Even more so if the construction sector and consumers understand that 'in creating a market for sustainably sourced tropical species it can underpin sustainable forestry'.

Mike Jeffree's interview with Michael Green, a leading Canadian architect, suggests that the opportunities for timber in construction are literally "sky high". Green authored the influential book 'The Case for Tall Wood Buildings' which has boosted worldwide interest in the potential for high rise timber construction.

While the mass timber market that this would create would likely be dominated by softwoods, Green reckons there will be good niche opportunities for tropical hardwoods, particularly plantation-grown.

He also emphasises the strong potential for modern forms of timber construction to satisfy the massive demand for high density, cost-effective, energy-efficient, carbon neutral, low-pollution, fire-proof and earthquake resistant buildings in emerging markets.

Green's architectural practice MG-Architecture (MGA) has been one of the leading lights in North American timber building since its establishment in 2012. Among MGA's projects are the Wood Innovation and Design Centre in Prince George, British Columbia, formerly, at 29.5m, the world's tallest modern, all-wood structure.

MGA was also responsible for 220,000 ft2 T3 office development in Minneapolis, billed as the first modern timber building in the USA for a century. The practice is now aiming higher still. Its entry for the Réinventer Paris urban regeneration architectural competition comprised a large-scale commercial and residential complex featuring the 35m Baobab Building.

In 2018, MGA became part of the $3 billion Silicon Valley tech and construction group Kattera, the company behind a 250,000ft2 cross laminated timber (CLT) plant in Spokane, Washington. The move, said Green, would grow MGA's impact in North America and beyond and 'advance our agenda on design, quality, sustainability and affordability'.

The basis of Green's confidence in the capacity of timber to 'disrupt' the modern construction industry lies in the development of the new generation of mass/engineered wood products, including CLT, laminated veneer and strand lumber and glulam.

These, he says, present architects with the ‘first legitimate reason to revisit what the future of building looks like’ in 150 years and have the potential to revolutionise construction globally as much as the dawn of building in steel and concrete.

“Mass timber represents a major shift,” said Green. “These panels and beams that come in large formats and perform so much better in fire and structurally than established lightweight timber frame, enable us to build bigger. Not only that, they can be better understood and assimilated in building cultures where wood construction is not prevalent and concrete and steel are the default structural materials.”

Green also maintains that, due to its suitability for prefabrication, rapid build times, low waste, relative lightness, plus, critically, its low environmental footprint, mass timber building is ideally suited to development of urban centres at a time when urbanisation and urban construction densification are accelerating worldwide.

“Wood is the ultimate in rapid renewable building materials. It’s got the lowest water footprint and the lowest carbon footprint – it actually sequesters carbon.

It’s low energy to process and transport, delivers energy efficient buildings and you’re not hauling non-renewable resources out of the ground when using it, as you are in the case of concrete, steel and the fossil fuels you need to make them,” he said.

“So, as urbanisation happens, wood is finding this new form ideally suited to urban environments, with new products and approaches that are easier for other building cultures to comprehend.”

Modern mass timber building has its origins in central Europe and may now be growing most rapidly there, in North America and other developed regions using temperate softwoods. But Green sees its greatest potential economic and environmental impacts coming in developing countries, including in the tropics.

“My personal interest is in how this whole movement in construction will ultimately address the needs of the developing world,” he said. “In South America and Africa, for instance, there is great opportunity.

In both regions, urbanisation is happening much faster than Europe and North America and, at the same time, the rate of deforestation is among the highest in the world, with the loss of habitat and carbon emissions that causes.

“But they have these fast growing species, such as blue gum, which are renewable on a 10-12 year cycle and could be ideal for making products like laminated veneer and strand lumber. Currently there isn’t the technical capacity to manufacture and use these materials at scale in these regions, so they’re building more and more in old school, unhealthy ways to cope with urbanisation.

But industries from areas where mass timber is established could share their expertise and help develop that capacity.” This in turn, according to Green, could be part of the solution to halting, even reversing deforestation.

“Certification schemes have advanced sustainable forest management to a degree in these regions, but alone they’ve struggled to create a sound argument for not taking the immediate financial return of a deforestation and redevelopment programme,” said Green.

“Often currently a better economic argument is seen in selling off the trees for initial financial benefit, then converting the land to more profitable agriculture, soya or palm oil plantations or development. But these new higher added value engineered timber products could provide the incentive to adopt sustainable forest management and even reforest, plus the materials to develop the lower carbon building approaches so urgently needed.”

What could also give added impetus to wood building in the developing world, he said, is a change in mindset on the value of timber plantations.

“I certainly don’t want to see the destruction of old growth forest to accommodate plantations. But properly located, managed well, with the right rotation and restoration of nutrients to the soil, they can be beneficial, both in terms of reducing the attraction of clearing natural forest and in providing the construction timber needed.”

To achieve this shift in attitude and assist the spread of wood construction internationally, Green also advocates greater accord and cooperation between the timber and timber building industries, environmental certification schemes and NGOs.

“There is already growing appreciation that they have shared values; timber companies are recognising that environmental groups can be valuable partners and environmental groups that timber companies have an economic incentive and a commitment to managing forest sustainably, but there’s still room for improvement,” he said.

“In particular we need to move on from the view that one size fits all when it comes to certification. There should be more adaptation to regional and local environments, conditions and needs, and to develop the understanding for this in turn requires greater investment in forest science and forest schools worldwide.”

Looking forward there is growing consensus in the construction sector that, given the volume of housing needed, particularly in urban centres, combined with ever more stringent environmental controls, the move to building in wood can only accelerate.

“We’re making this construction soup and the only ingredient you can throw in flat out and come out carbon neutral is timber,” said Michael Green.

Meanwhile, Boris Zeisser reiterates his belief that wood construction can also become an increasingly potent tool for adding value to forests worldwide and helping avert conversion to alternative uses, such as cattle farming, particularly in tropical regions.

"That's how I explain to clients and students why using sustainably sourced tropical hardwood can be among the most environmentally positive ways of building," he said. "As our Netherlands Timber Trade Association says on tropical wood, it's a case of 'use it or lose it'. It's a choice between having forests full of trees or fields full of cows."

North America

US hardwood plywood imports dip in January

US imports of hardwood plywood declined by 15% in January from the previous month but were nearly even with totals from January 2018. While China remains the largest supplier, import volume continue to fall being down 51% from December and 35% from the previous January.

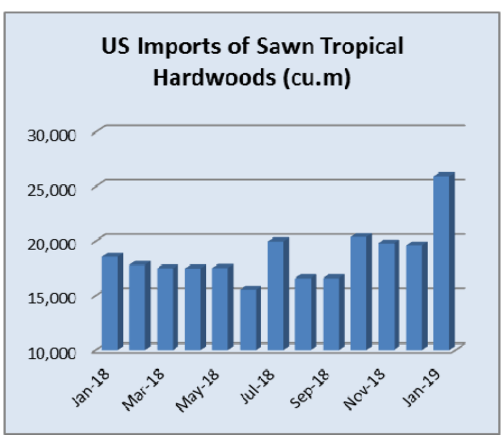
Vietnam and Russia continue to make up the difference with gains of 13% and 22% respectively. Imports from Vietnam were nearly three times higher in January 2019 than in January 2018.

Sawn tropical hardwood imports surge

After showing no growth in 2018, US imports of sawn tropical hardwood had a promising start for 2019. January imports rose by 32% over December and were 40% higher than January 2018.

The volume of imports from Ecuador, Brazil, Cameroon and Malaysia were all up sharply.

Monthly imports of teak, keruing, ipe and acajou d'Afrique were all more than double that of January 2018.



Data source: US Census Bureau, Foreign Trade Statistics

Tropical veneer imports disappoint

US imports of tropical hardwood veneer fell by 10% in January, starting the year sluggishly after a strong 2018. Imports lagged 18% behind that of January 2018. While imports from China improved by 53% over a poor December showing, they remain down nearly 70% from 2018 levels. Imports from Italy fell by 35% in January and lag behind last year by 17%.

Imports from India and Cote d'Ivoire both saw strong gains in January.

Weakening Chinese imports drives down flooring

Hardwood flooring and assembled flooring panel imports were weaker in January. US imports of hardwood flooring declined by 29% from December totals, but were still ahead of January 2018 by 30%. A sharp decline of 67% in Chinese imports brought down the totals, despite strong gains from Malaysia, Indonesia and Brazil.

Imports of assembled flooring panels were down by 10% in January, but ahead of January 2018 by 17%. Falling Chinese imports were again the culprit. Imports from China were down by nearly 60%.

Moulding imports start 2019 badly – the worst month this decade

US imports of hardwood mouldings fell sharply in January. Imports declined by 33% in January and trail January of 2018 totals by 35%.

Imports of US$10.9 million January were the lowest of this decade. Imports from Brazil and China fell by 41% and 53% respectively.

Wooden furniture imports drop – prospects dim

US imports of wooden furniture dropped by 11% in January to US$1.73 billion. That figure is still up 3% from January 2018. Imports fell 26% from China and 19% from India in January. Imports from Vietnam and Malaysia both rose by more than 10%.

The results of the latest Smith Leonard survey of residential furniture manufacturers and distributors showed an 8% increase in new orders in January 2019 compared to January 2018. Yet the survey found that not all participants are benefitting. Only half of the respondents reported increased orders for the month. Many reported slight declines.

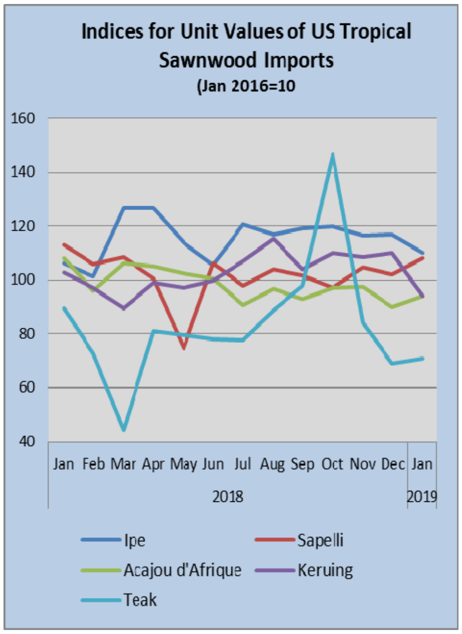
Furniture shipments were up by 14% over January 2018 and nearly three quarters of respondents reported increased shipments for the month.

Consumer confidence improving

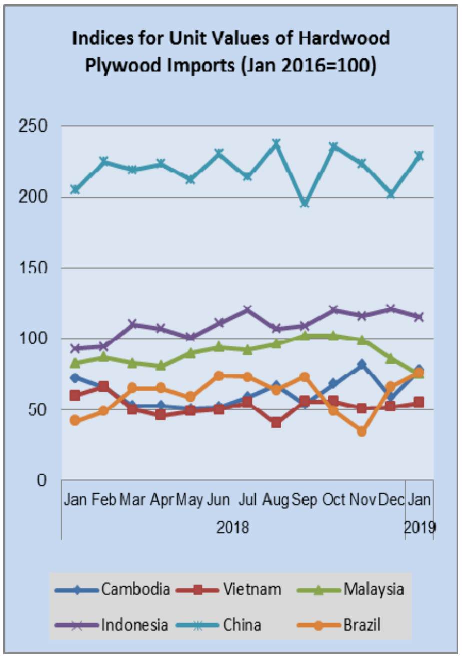
US consumer confidence is improving faster than most Wall Street economists had expected following the stock market's selloff in December. The University of Michigan's Index of Consumer Sentiment for March jumped to a reading of 97.8, up from 93.8 in February.

Economists had expected a reading of 95.5, based on estimates from the data provider FactSet.

The gains came largely from households in the bottom two-thirds of the income distribution. The new reading comes amid reports that despite a projected slowdown this year in the economy American workers are seeing faster wage increases, with the US unemployment rate currently at 3.8%, close to the lowest in a half century.



Data source: US Census Bureau, Foreign Trade Statistics
Note: Unit values are based on Customs value and exclude shipping, insurance and duties.



Data source: US Census Bureau, Foreign Trade Statistics
Note: Unit values are based on Customs value and exclude shipping, insurance and duties.

Disclaimer: Though efforts have been made to ensure prices are accurate, these are published as a guide only. ITTO does not take responsibility for the accuracy of this information.

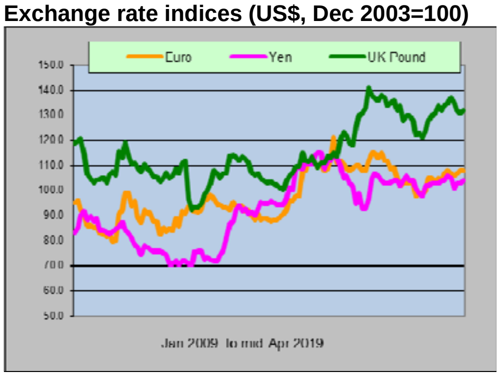
The views and opinions expressed herein are those of the correspondents and do not necessarily reflect those of ITTO.

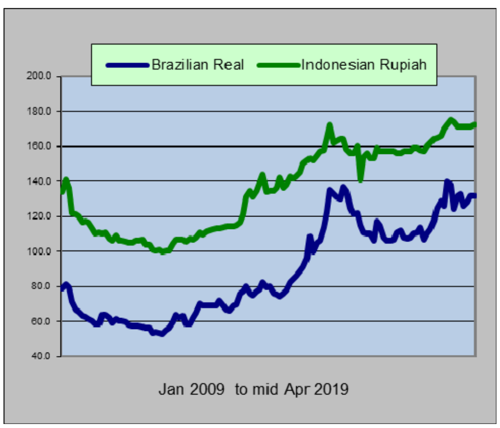
Dollar Exchange Rates

As of 10 April 2019

Brazil	Real	3.8550
CFA countries	CFA Franc	579.42
China	Yuan	6.7042
EU	Euro	0.8849
India	Rupee	69172
Indonesia	Rupiah	14093
Japan	Yen	112.00
Malaysia	Ringgit	4.1145
Peru	New Sol	3.33
UK	Pound	0.7649
South Korea	Won	1134.72

Exchange rate indices (US$, Dec 2003=100)



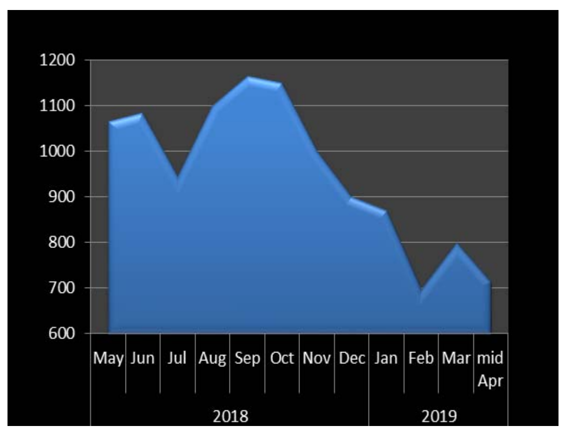


Abbreviations and Equivalences

Arrows ⬇⬆	Price has moved up or down
BB/CC etc	quality of face and back veneer
BF, MBF	Board foot, 1000 board foot
Boule	bundled boards from a single log
TEU	20 foot container equivalent
CIF	Cost insurance and freight
C&F CNF	Cost and freight
cu.m cbm	cubic metre
FAS	First and second grade of sawnwood
FOB	Free-on board
Genban	Sawnwood for structural use in house building
GMS	General Market Specification
GSP	Guiding Selling Price
Hoppus ton	1.8 cubic metre
KD, AD	Kiln dried, air dried
Koku	0.28 cubic metre or 120 BF
LM	Loyale Merchant, a grade of log parcel
MR., WBP	Moisture resistant, Weather and boil proof
MT	Metric tonne
OSB	Oriented Strand Board
PHND	Pin hole no defect
QS	Qualite Superieure
SQ,SSQ	Sawmill Quality, Select Sawmill Quality

Ocean Freight Index

Baltic Supramax Index
May 2018 – mid April 2019

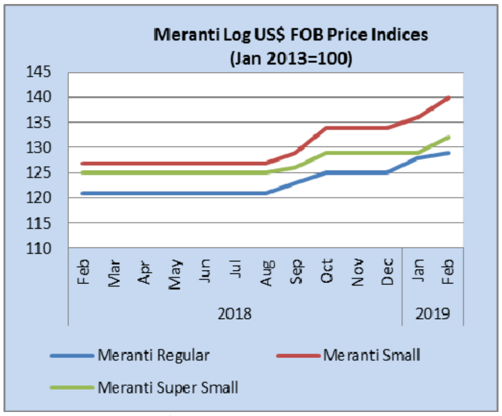


Data source: lloydslist.maritimeintelligence.informa.com

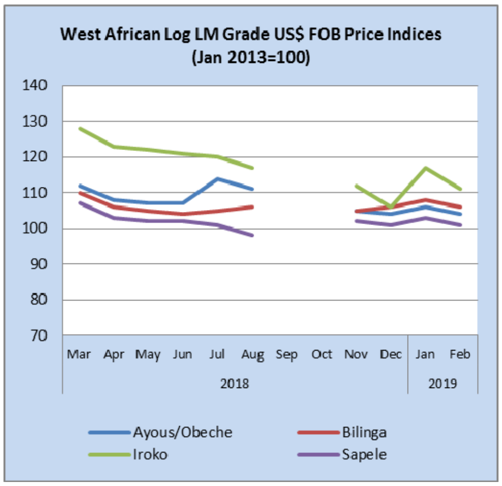
The BSI (Baltic Supramax Index), published by the Baltic Exchange, is the weighted average on 5 major time-charter routes.

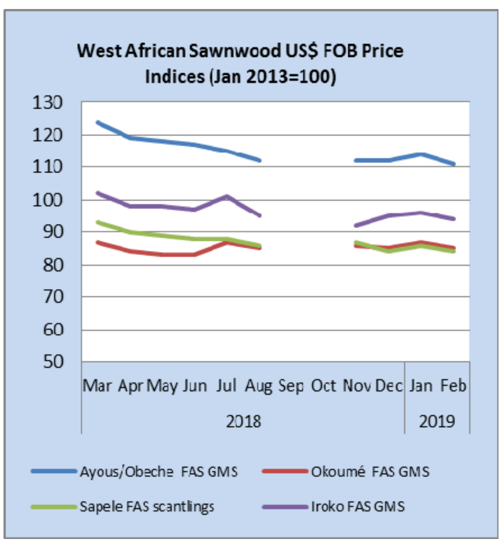
Price indices for selected products

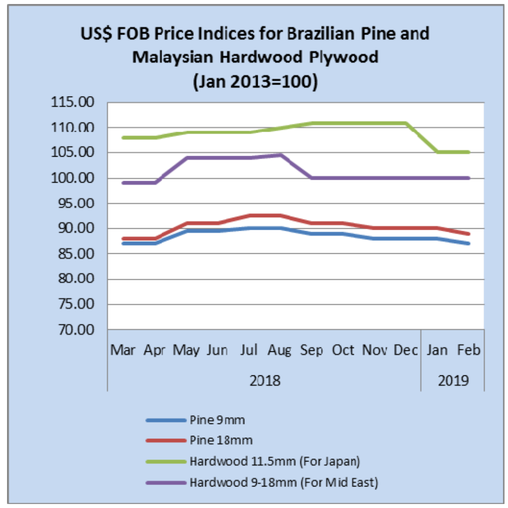
The following indices are based on US dollar FOB prices

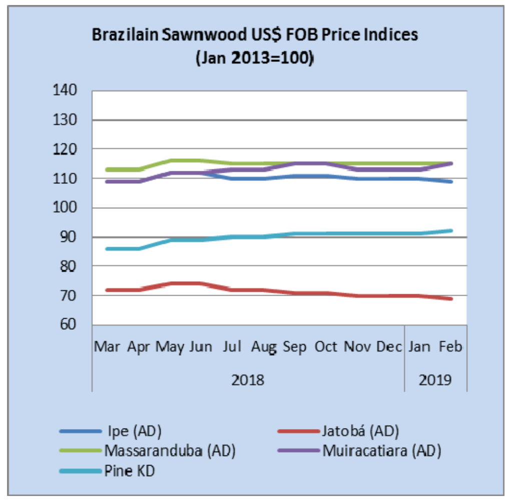


Note: Sarawak logs for the Japanese market









Note: Jatobá is mainly for the Chinese market.

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