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KUALA LUMPUR FURNITURE DESIGN WEEK 2018
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03


15



17

19


21


Contents

Highlights

Regular Features

***Cover** :*
YB Puan Teresa Kok, Minister of Primary Industries launched the KLFDW 2018. For more details, please read pages 3 and 7.

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KUALA LUMPUR FURNITURE DESIGN WEEK 2018

news

A group photo after YB Puan Teresa Kok, Minister of Primary Industries (fifth from left) launching the KLFDW 2018.

Kuala Lumpur Furniture Design Week (KLFDW) 2018 was held for the first time at Institut Latihan DBKL, Cheras, Kuala Lumpur. The exhibition took placed in conjunction with Kuala Lumpur Design Month (KUL Design) 2018, an annual October event currently in its fourth year, organised by Kuala Lumpur City Hall (DBKL). The design activities of KUL Design Month are held throughout the month in Kuala Lumpur. The activities include seminars, exhibitions, competitions and design related activities such as architecture, landscape, Urban Design, Interior Design and Art Design.

In accordance with its role as a government agency that promotes and develops the timber industry, MTIB has made efforts to strengthen the furniture design industry through the establishment of the TANGGAM label which has already established a Design Centre with products and furniture designed under its own label. Under the TANGGAM label, MTIB, with collaboration partner, Universiti Putra Malaysia was invited by DBKL to join KUL Design 2018 and lead the KLFDW from 12 to 17 October.

MTIB took this opportunity to boost the wood-based furniture industry, by gathering designers and enhancing public awareness of local furniture designs. The main objective of the event was to encourage the participation of the community in furniture design. This event also acted as a platform for interaction between designers, students, industry players and the community.

The opening ceremony of KLFDW 2018 was launched by YB Puan Teresa Kok, Minister of Primary Industries on 13 October. It was also attended by YBhg. Dato' Dr. Jalaluddin Harun FASc, Director-General of MTIB, the Mayor of Kuala Lumpur and the Deputy Director-General (Management) of FELDA. During the ceremony, the six winners of MOBILI

Cont. page 7

MYANMAR

Concerns Over the Decision to Sell Log Stocks Clarified

Concern has been raised by environmental commentators, such as the Environmental Investigation Agency, over the decision by the government to allow the Karenni National People's Liberation Front to sell log stocks.

The Myanmar Government Spokesperson, Zaw Htay, clarified this decision saying some Non-State Armed Groups which signed a National Ceasefire Agreement with the Government had approached the National Reconciliation and Peace Centre (NRPC) seeking approval for trading previously harvested logs from the areas that they controlled. These groups are slowly coming under the umbrella of the State but are still largely self-sufficient and need to generate income.

In respect to the request from the Karenni National People's Liberation Front for permission to sell log stocks, Zaw Htay said that this was the most recent case in which the Ministry of Natural Resources and Environmental Conservation (MONREC) accepted the recommendation of the NRPC that consideration be given to allow the sale of a specific volume of logs.

Myanmar Timber Enterprise (MTE) has a mechanism to allow this, known as the Modified Procedure (MP). MTE has stopped using this mechanism for harvesting in areas it controlled but from time to time the MP procedure has been used to allow Non-State Armed Groups to harvest and sell logs.

According to Khu Daniel, a member of Karenni National Progressive Party (KNPP) Central Committee, KNPP has received permission to harvest the logs now being offered for sale in 2013 and 2014 after signing a ceasefire agreement with the government of that time. He pointed out it was only now that the current government was considering allowing the sale of the logs.

www.fordaq.com, 3 October

VIET NAM

EU and Viet Nam Signed the VPA

On 19 October 2018, a Voluntary Partnership Agreement (VPA) between the European Union (EU) and the Socialist Republic of Viet Nam on Forest Law Enforcement, Governance And Trade (FLEGT) was signed in Brussels in the margins of the EU-ASEM summit.

The aim of the agreement is to stop illegal logging and, through the FLEGT licensing scheme, to guarantee that timber imported into the EU from Viet Nam is legally harvested. This is the second VPA that the EU has concluded with an Asian country after Indonesia and is particularly significant given the importance of Viet Nam in the global timber market, being one of the main hubs for processing and re-exporting of timber.

The agreement establishes a Timber Legality Assurance system to monitor the timber supply chain and a FLEGT licensing scheme to ensure that only timber coming from legal logging can be exported to the EU market. The agreement also establishes a mechanism for dialogue and cooperation between the EU and Viet Nam on the FLEGT licensing scheme, via a Joint Implementation Committee. Finally it establishes principles of stakeholder participation, social safeguards, accountability and transparency.

The VPA was signed by Sebastian Kurz, Federal Chancellor of the Republic of Austria, and Federica Mogherini, EU high representative for Foreign Affairs And Security, on behalf of the EU and Nguyen Xuan Cuong, Minister for Agricultural and Rural Development of Viet Nam.

www.fordaq.com, 24 October

CHINA

Wood Products Trade Up

Data from China Customs shows that in the first half of 2018 the value of China's wood product trade totalled

USD80.97 billion, up 9% from the same period of 2017 but this was a slower growth than in the first half of 2017.

Of the total, the value of exports in the first half rose 6% to USD39.1 billion. China's traders accelerated their wood product exports to beat the introduction of tariffs by the US.

The value of imports of wood products rose 13% to USD41.9 billion in the first half of 2017, down 9% year-on-year. Overall the pace of China's wood products imports was slower in the first half of 2018.

Main Wood Product Imports

Logs: In the first half of 2018, the volume of China's log imports totaled at 30.32 million m^3 valued at USD5.8 billion, a year-on-year increase of 17% and 28% respectively.

Sawnwood: In the first half of 2018 the volume of China's sawnwood imports totalled at 18.15 million m^3 valued at USD5.2 billion, a year-on-year increase of 0.1% and 9% respectively.

Wood pulp: In the first half of 2018 the volume of China's wood pulp imports totalled at 12.35 million tonnes valued at USD9.8 billion, a year-on-year increase of 2% and 33% respectively.

Main Wood Product Exports

Wooden furniture: The value of China's wooden furniture exports fell slightly to USD10.8 billion in the first half of 2018.

Plywood: In the first half of 2018, the volume of China's plywood exports was 5.6 million m^3 valued at USD2.7 billion, a year-on-year increase of 0.6% and 7% respectively.

Fibreboard: In the first half of 2018, the volume of China's fibreboard exports amounted to 893 000 tonnes valued at USD557 million, a year-on-year decrease of 19% and 4%.

www.fordaq.com, 10 October

JAPAN

Housing Starts Rise

Japans housing starts increased for the first time in three months in August, data from the Japanese Ministry of Land, Infrastructure, Transport and Tourism revealed.

Housing starts advanced 1.6% in August from last year, reversing a 0.7% drop in July. Annualized housing starts decreased to 957,000 from 958,000 in July.

The construction orders received by 50 big contractors rose 0.5% year-on-year in August in contrast to a 9.3% drop in July. Orders increased for the first time in four months.

www.fordaq.com,1 October

EUROPEAN UNION

Wood Furniture Sector Reinforcing its Dominance in the Home Market

The latest Eurostat trade data shows that the EU's wood furniture industry, having lost a little ground to imports in 2017, was struggling to increase sales outside the EU as global trade slowed. However, the sector is once again reinforcing its dominance in the home market this year.

The EU wood furniture sector recorded only slow growth in 2017. The value of EU wood furniture production was EUR40.3 billion in 2017, no change from the previous year. Total import from outside the region increased by 9% to EUR6.29 billion.

In 2017, EU wood furniture imports from the tropics increased by 7% to EUR1.75 billion while imports from China increased by 3% to EUR3.18 billion. However, most of the gains were made by other non-EU temperate countries, such as Ukraine, Bosnia and Serbia. Total imports from these countries increased 28% to EUR1.36 billion.

EU consumption of wood furniture was EUR37.6 billion in 2017, a gain of 2% compared to 2016. Despite the rise in imports in 2017 the share of domestic manufacturers in total EU furniture supply declined slightly last year. In 2017, domestic manufacturers accounted for 86.7% of the total value of wood furniture supplied into the EU market, down from 87.5% in 2016.

EU wood furniture production data is published only annually, so it is too early to assess how consumption is developing in 2018. However, EU monthly data on internal and external trade provides insights into the changing share of the various wood furniture supply countries, alongside changes in internal distribution patterns in 2018 which may have long term implications. Eurostat trade data reveals that internal EU trade in wood furniture, which increased 4% to EUR19.2 billion in 2017, increased a further 6% in the first half of 2018.

Meanwhile the pace of EU wood furniture exports to non EU countries, which were flat at EUR8.7 billion in 2016 and 2017, have continued at the same rate in the first half of 2018. Wood furniture imports into the EU from outside the region were rising in the second half of 2017, but began to dip in the first half of this year.

www.fordaq.com, 10 October

UNITED KINGDOM

Continue to Recognise Indonesian FLEGT Licenses

The UK Ambassador to Indonesia, Moazzam Malik, said in the post-Brexit period Indonesia's timber and wood product exports to the UK will not be disrupted and that the FLEGT licensing system will be upheld.

He also suggested to the Minister of Environment and Forestry, Siti Nurbaya Bakar, that post-Brexit, there could be a bilateral agreement that covers the timber trade. As a follow-up the UK Ambassador proposed beginning bilateral discussions as early as March next year when Britain officially leaves the European Union. In related news, a workshop/dialogue themed "Interactive Dialogue on the FLEGT Scheme: Boosting Indonesian Wood and Timber Products Exports to the EU" was recently held in Belgium. This event was hosted by the Indonesian Embassy in Brussels jointly with Fedustria, a Belgian non-profit federation representing the textile, wood and furniture industry.

The purpose of the dialogue was to review implementation of the FLEGT and discuss strategies to increase Indonesia's wood and timber products exports to the EU.

According to the Deputy General Manager of Fedustria, Filip De Jaeger, businesses in Belgium report that the FLEGT licensing system has helped promote trade in the timber sector between Indonesia and the EU because importers no-longer have to contend with due diligence requirements. However, some importers of Indonesian products said more needs to be done to inform end-users and consumers on the security the FLEGT system offers.

www.fordaq.com, 8 October

BRAZIL

Deforestation Rate Falling

Deforestation rate is falling, but it is still a challenge. Monitoring by the National Institute of Space Research (INPE) has revealed that between 2004 and 2017 the annual rate of forest clearing in the Legal Amazon fell 75%, from 27,700 square metres to 6,900 square metres.

According to INPE, between 2001 and 2017 deforestation in the Cerrado biome also declined from 29,400 square metres to 7,400 square metres per year. As in the Amazon biome, the downtrend was only up to 2012 after which the deforestation rate rose and moved up and down until 2017.

One conservation strategy adopted by the government has been the creation of protected areas called Conservation Units (CUs). Currently, there are 335 federal CUs according to the Chico Mendes Institute for Biodiversity Conservation.

In April this year five new CUs were created. CUs are key to preserving native habitats but problems of falling budget allocations, insufficient staffing and poor infrastructure are putting the strategy at risk. Analysts write - it is not enough to control deforestation; the challenge is to recover the native vegetation and maintain biodiversity.

www.fordaq.com, 1 October

Cont. from page 3

2017 were announced and a total of RM31,000 of prize money was awarded to the winners. The winner will be representing the TANGGAM label at international and local furniture exhibitions. The winner of the FELDA 2.0 Timber Design Competition (F2.0TDC) 2018 was awarded prizes amounting to RM62,000. The objective of the F2.0TDC were to find the most creative architecture design for FELDA 2.0 through crowd sourcing of national talents; to enhance linkages between higher learning institutions, industry players, professionals and related government agencies in promoting the use of timber in the construction industry in Malaysia; and to challenge students and professionals from various disciplines to produce outstanding and inspiring timber structure designs, particularly for multipurpose buildings and playgrounds.

Throughout the event week, 16 exhibitors participated in the Furniture Design Exhibition arenas, showcasing products by TANGGAM Designers, furniture retailers, furniture manufacturers and local universities. Other activities were the Furniture Design Workshop for furniture design and mock up preparation from 12 to 14 October and Design Talk by speakers from IPT and the industry from 14 to 16 October.

Posing with one of the winners.

The five-day event drew very promising feedback from both industry players, students and the public. It is hoped that the event would be a platform for all the designers and industry players to gather and exchange information.

At the end of the fair, KLFDW had received 1,500 visitors which included students from 23 universities and colleges that have design related courses. More than 200 students joined the Furniture Design Workshop.

Attendees at the event.

Malaysia: Westports Malaysia Buys Undersea Land in Pulau Indah for RM116.185 Million

Source: The Star, 14 September

Westports Malaysia, a 100%-owned unit of Malaysia-based port operator Westports, is paying a cash total of MR116.185 million (EUR24.21 million, USD27.99 million) for the acquisition of an undersea land covering 154.2 hectares in Selangor's Pulau Indah from the Selangor State Development Corp (PKNS). Westports Malaysia would satisfy the purchase consideration fully in cash, financed by internally generated funds. The company would use the land for the expansion of container terminals, as the current preliminary port design for Container Terminal 10 to Container Terminal 19 needed extra land acreage to take in new wharf and container yard space to facilitate the new container terminals' effective operations.

Taiwan/US: Cosco Could Own Port of Kaohsiung, Approved to Buy Port

Source: Taiwan News, 18 September

The Nikkei Asian Review reported that regardless of tax loopholes being exploited in Bermuda risking the control by China's state-run shipping and logistics giant China Ocean Shipping Company (Cosco) on the largest harbour in Taiwan, the Port of Kaohsiung, it is reported that the port could be now be owned by the company. On a separate note, acquisition of the US' Port of Long Beach by Cosco of Hong Kong-based Orient Overseas (International) Limited (OOIL) and its unit Orient Overseas Container Line (OOCL) has been given green lights although the port is reserved by the Trump administration over its Chinese ownership. The USD6.30 billion (EUR5.42 billion) worth of acquisition is bound by a condition that the Long Beach facility to be included in a separate trust prior to its disposal.

China: Biggest Container Ships in World Being Built by Units of CSSC

Source: China Daily, 14 September

In China, the biggest container ships in the world are being constructed by Hudong-Zhonghua Shipbuilding Group (Hudong-Zhonghua) and Jiangnan Shipyard Group (Jiangnan) in Shanghai. The ships with a capacity of 220,000 metric tonnes of cargo feature a length and a width of 400 metres and 61.3 metres, respectively. The ships will deliver

Shipments of Timber and Timber Products through Ports in Peninsular Malaysia, September 2018

Products	Port Klang m^3	Port Klang % Change Sep 2018/ Aug 2018	Kuantan m^3	Kuantan % Change Sep 2018/ Aug 2018	Pasir Gudang m^3	Pasir Gudang % Change Sep 2018/ Aug 2018	Tanjung Pelepas m^3	Tanjung Pelepas % Change Sep 2018/ Aug 2018	Penang m^3	Penang % Change Sep 2018/ Aug 2018	Total all Ports m^3	% Change Sep 2018/ Aug 2018
Sawntimber	66,732	-7	15,678	61	1,147	4	755	-21	8,271	-6	92,583	1
MDF	21,718	-32	600	100	6,616	2	3,680	9	11,480	-7	44,094	-18
Mouldings	12,034	-6	187	19	1,579	-11	511	22	1,402	-1	15,713	-5
Plywood	4,987	-25	655	-48	0	-100	216	-17	12,782	-2	18,641	-13
Veneer	190	-43	312	103	0	0	134	287	1,368	-66	2,107	-54
Particleboard	32,738	-10	132	301	4,049	-9	2,090	80	2,706	-49	41,714	-12
TOTAL	**138,400**	**-13**	**17,564**	**55**	**13,391**	**-4**	**7,384**	**19**	**38,009**	**-16**	**214,748**	**-9**

Source : MTIB

a maximum speed of around 41 kilometres per hour or 22 knots. Under an agreement signed between the shipbuilders and their client CMA CGM, the shipbuilders will deliver nine ships for the French container transportation and shipping services provider in 2020. Hudong-Zhonghua and Jiangnan operate as a subsidiary of state-backed China State Shipbuilding Corp (CSSC).

United States: Gulftainer in USD600 million, 50 Year of Concession for Port of Wilmington

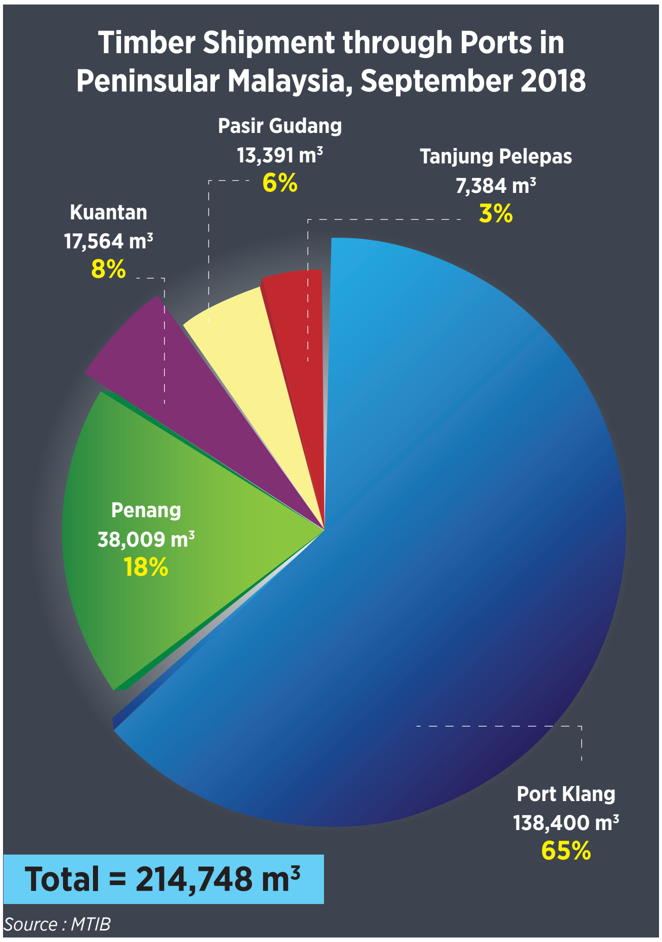
Source: Arabian Business, 22 September

UAE-based Gulftainer (via subsidiary GT USA) has signed a USD600 million (EUR510.10 million) concession to develop and operate the Port of Wilmington in Delaware, US, owned by Diamond State Port Corporation (DSPC), for 50 years. The investment includes USD400 million for a new 1.2 million twenty-footer equivalent unit (TEU) container facility, to be built on the old Edgemoor site of DuPont (currently belonging to DSPC). Gulftainer Chairman, Badr Jafr said the public-private partnership will help Wilmington become "the principle gateway" on the US eastern seaboard.

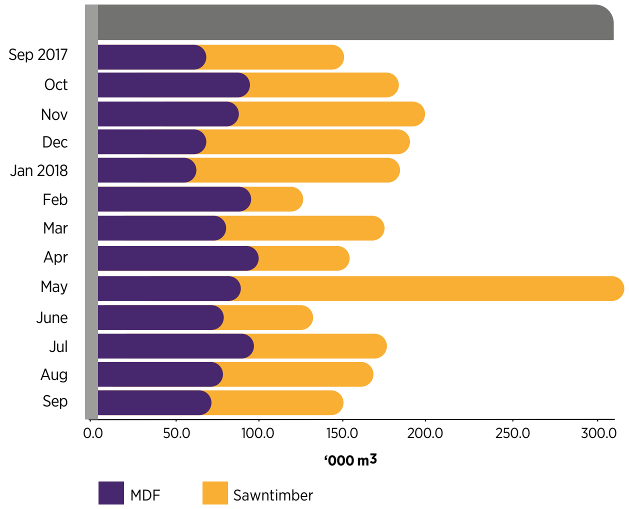
Southeast Asia : Singapore, Malacca Straits to See Higher Vessel Movements

Source: Straits Times (The) Singapore , 25 September

According to the International Maritime Organisation (IMO), Secretary-General Emeritus Koji Sekimizu, the straits of Malacca and Singapore are expected to see vessel movements increasing by at least 50% by 2030. The two straits record an annual maritime traffic of over 80,000 vessels, transporting one-third of traded goods in the world. He urged Singapore, Malaysia and Indonesia to continue working together to ensure proper vessel support and traffic control, and adequate training for seafarers to safely manage the growth in maritime traffic. Sekimizu also called on the countries to push for automation to prevent accidents caused by human error. Currently, seven in 10 maritime mishaps were caused by human error. The IMO hopes ships will sail around the world unmanned like the Maritime Autonomous Surface Ships (MASS) in the future.



Malaysia : Export of Sawntimber and MDF
(Sept 2017-Sept 2018/Volume ('000m^3)



Total export of Malaysian timber and timber products in September 2018 decrease 11% valued at RM1.8 billion over the previous month. Similary, cumulative export for the period of January to September 2018 decreased 5% valued at RM16.3 billion over the previous corresponding period.

SAWNTIMBER

Export of sawntimber in September 2018 decreased 9% in volume and 7% in value to 152,466 m^3 totalled RM302.7 million as compared to the previous month. Cumulative export for the third quarter of 2018 decreased 11% in volume and 6% in value to 1.4 million m^3 worth RM2.7 billion over the previous corresponding period.

Export of sawntimber to the EU for the month decreased 16% to 7,778 m^3 from 9,262 m^3 in the previous month. Export to the UK and Italy decreased 31% to 1,354 m^3 and 76% to 239 m^3 respectively. Similarly, export to Germany reduced 3% to 842 m^3 followed by Belgium at 28% to 680 m^3. In the meanwhile, purchases made by the Netherlands and France increased 3% to 3,074 m^3 and 36% to 1,101 m^3 respectively.

Total exports to West Asia increased 13% to 25,013 m^3 from 22,136 m^3 recorded in the previous month. Export to Yemen increased 61% to 7,348 m^3 followed by Oman 11% to 4,847 m^3 and Saudi Arabia 17% to 1,298 m^3. However, export to the UAE and Qatar declined 12% to 8,158 m^3 and 48% to 567 m^3 respectively.

Buying from ASEAN decreased 9% to 51,150 m^3 from 56,005 m^3 registered in the previous month. Export of sawntimber to Thailand, a major buyer of sawntimber from Malaysia declined 16% to 23,716 m^3 from 28,245 m^3 in the previous month. Similarly, export to Singapore decreased 33% to 4,356 m^3 followed by Viet Nam 2% to 2,392 m^3. Meanwhile, export to the Philippines increased 10% to 20,472 m^3 from 18,672 m^3 in the previous month.

Shipments to East Asia decreased 15% to 32,295 m^3 from 37,978 m^3 in the previous month. Export to China declined 20% to 17,524 m^3 from 21,851 m^3 in the previous month. Likewise, export to South Korea reduced 56% to 1,514 m^3. Meanwhile, export to Japan and Taiwan increased 3% and 5% to 5,139 m^3 and 7,864 m^3 respectively.

Elsewhere, exports to the US increased 3% to 1,349 m^3 whilst export to Australia also increased 2% to 784 m^3. Meanwhile, demand from South Africa decreased 15% to 4,556 m^3 from 5,363 m^3 in the previous month.

The average FOB price of sawntimber increased 6% to RM1,986 per m^3 from RM1,873 per m^3 in the previous month. Price of Dark Red Meranti (DRM) increased 5% to RM2,803 per m^3 from RM2,667 per m^3 in the previous month. Price of DRM to the Netherlands increased 8% to RM3,792 per m^3 from RM3,507 per m^3 in the previous month. Keruing was traded at RM2,176 per m^3, an increase of 1% from RM2,162 per m^3 in the previous month.

MEDIUM DENSITY FIBREBOARD (MDF)

Malaysia's exports of MDF for September 2018 decreased 8% in volume and 6% in value compared to previous month. Export totaled 68,231 m^3 at RM 88.7 million.

Exports to East Asia registered a decrease of 2% to 13,343 m^3 from 13,583 m^3 in the previous month. Exports to China including Hong Kong show negative growth by 22% to 237 m^3 followed by South Korea at 24% decreased to 375 m^3 and Taiwan at 65% to 390 m^3. Whilst, exports to Japan recorded an increase of 6% to 12,341 m^3.

Meanwhile, exports to West Asia decreased 15% to 21,466 m^3 from 25,309 m^3 in the previous month. Export to Saudi Arabia recorded negative growth of 28% to 1,483 m^3 followed by Oman at 36% to 1,819 m^3, Qatar at 73% to 171 m^3 and Kuwait 85% to 784 m^3. In contrast, export to the UAE, Jordan and Bahrain increased by 26% to 11,621 m^3, 50% to 1,220 m^3 and 87% to 1,362 m^3 respectively. Furthermore, Iran, Lebanon and Syria did not make any purchases for the month.

In addition, export to South Asia recorded negative growth by 44%. Export to India decreased by 23% to 4,127 m^3, followed by Sri Lanka decreased by 59% to 1,392 m^3 and Pakistan decreased by 71% to 1,646 m^3. Contrarily, Bangladesh increased by 9% to 2,169 m^3.

Elsewhere, exports to South Africa, Australia, the US, UK and Mauritius decreased by 6% to 739 m^3, 17% to 2,198 m^3, 22% to 1,167 m^3, 50% to 86 m^3 and 74% to 113 m^3 respectively.

In ASEAN, total export increased by 1% to 15,956 m^3 from 15,825 m^3 in the previous month. Exports to Indonesia, the Philippines and Viet Nam increased by 3% to 3,869 m^3, 65% to 4,840 m^3 and 599% to 61,747 m^3 respectively. Meanwhile, Singapore resume its intake by 182 m^3.

The FOB price of MDF increased to RM1,300 per m³ from RM1,273 per m³, an increase of 2% from the previous month.

PLYWOOD

Export of plywood in September 2018 decreased in volume and value by 21% and 19% to 159,240 m³ at RM362.8 million compared to the previous month.

EU countries have reduced their intake of plywood by 1% to 7,866 m³. The UK, the major buyer of Malaysian plywood has decreased intake by 7% to 6,772 m³. Belgium and Italy also have reduced intake by 56% and 26% to 132 m³ and 57 m³ respectively. In contrast, Denmark, Ireland and the Netherlands have increased their imports of Malaysian plywood by 100%, 45% and 245% to 374 m³, 241 m³ and 290 m³ respectively. Meanwhile, France and Germany didn't make any purchases for this month.

Exports to ASEAN and East Asia region recorded a decrease by 16% with 118,013 m³ compared to previous month. In East Asia region, Japan reduced its intake by 11% to 85,129 m³. Similarly, South Korea, Taiwan, China and Hong Kong have reduced their intake by 44%, 5%, 37% and 54% to 12,107 m³, 6,255 m³, 2,071 m³ and 1,256 m³ respectively for this month. Meanwhile, Malaysia's plywood trade with its ASEAN partners showed mixed trend this month. Exports to Thailand, the Philippines and Brunei Darussalam have increased by 34%, 3% and 11% to 6,439 m³, 1,357 m³ and 666 m³ respectively. Contrarily, export to Singapore has decreased by 35% to 1,911 m³ meanwhile Indonesia does not make any purchase this month.

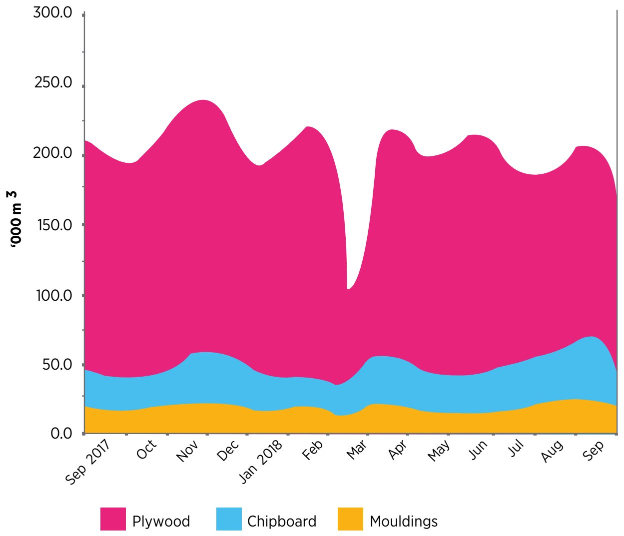
Exports to West Asia countries recorded a decrease by 55% to 11,171 m³ as compared to the previous month. Exports to Yemen, the UAE and Bahrain have decreased by 39%, 83% and 80% to 5,357 m³, 255 m³ and 85 m³ respectively. In contrast, exports to Saudi Arabia and Kuwait have increased by 69% and 72% to 3,686 m³ and 406 m³ respectively. Meanwhile, Qatar didn't make any purchases this month.

Export of plywood to the Americas region decreased by 23% to 15,299 m³ as compared to the previous month. The US has reduced its intake of plywood by 13% to 14,230 m³. Similarly, Mexico and Canada also have decreased its intake by 72% and 32% to 870 m³ and 199 m³ respectively. Moving to Oceania region, Australia has decreased its intake by 7% to 3,332 m³ however New Zealand has increased its intake by 110% to 86 m³.

Exports to African continent have decreased by 26% to 1,346 m³ for this month. South Africa has increased its intake of plywood by 165% to 342 m³ while Algeria and Mauritius didn't make any purchases this month.

The FOB price of plywood has increased by 3% to RM2,279 per m³ from RM2,209 per m³ in the previous month.

Malaysia : Export of Plywood, Chipboard and Mouldings
(Sept 2017-Sept 2018/Volume ('000m³)



MOULDINGS

Exports of mouldings for the month decreased by 15% in volume and 14% in value to 18,228 m³ and RM67.2 million respectively. However, cumulative exports for the period of January to September 2018 decreased by 15% in volume and 14% in value to 180,073 m³ and RM649.8 million respectively as compared to the previous corresponding period in 2017.

Exports to the EU for the month recorded at 6,653 m³, a decrease of 20% compared to the previous month. Germany, the UK and Netherlands increased their purchases by 31%, 24% and 20% to 717 m³, 499 m³ and 4,014 m³ respectively. Meanwhile, Belgium decreased its intakes by 14% to 446 m³ compared to the previous month. Meanwhile, Italy did not made any purchases for the month.

Exports to ASEAN region increased as Viet Nam intake of mouldings increased by 30% to 577 m³ compared to the previous month. However, Indonesia and Singapore decreased its purchases by 57% and 40% to 55 m³ and 1,027 m³ respectively.

Meanwhile, Hong Kong and Japan increased their intake by 7% and 5% to 318 m³ and 2,109 m³ respectively. China and South Korea decreased their purchases by 37% and 14% to 455 m³ and 1,230 m³ respectively. However, Taiwan did not make any purchases.

Elsewhere, export to Canada and the US increased by 3% and 0.4% to 79 m³ and 1,842 m³ respectively. However, Australia decreased its purchases by 9% to 2,607 m³ compared to the previous month.

FOB unit value increased 1% to RM3,688 per m³ compared to the previous month.

Cont. page 14

SEPTEMBER 2018

LOGS

Supply and price of logs continued to stable in the market. Most mills reported that they have adequate log inventories for current usage.

Log prices for the species of Chengal and Balau stood firm at RM4,500 per tonne and RM3,200 per tonne respectively. Similarly, prices of Keruing and Kapur continued to be traded at RM1,250 per tonne and RM1,700 per tonne respectively. Meanwhile, the prices of Keruing increased slightly by 1.6% to RM1,900 per tonne. Prices of Red Meranti fell slightly by 2.7% to RM1,800 per tonne whilst Mersawa and Jelutong increased slightly by 6.5% and 3.6% to RM1,650 per tonne and RM1,140 per tonne respectively. On the other hand, logs prices for Mixed Heavy Hardwood and Mixed Light Hardwood remained at RM940 per tonne and RM900 per tonne respectively.

SAWNTIMBER

The average sawntimber prices for most of the species in the domestic market continued to be firm.

The sawntimber prices of Chengal and Red Balau maintained at RM6,921 per m^3 and RM3,037 per m^3 respectively. Meanwhile, the price for Kempas increased slightly by 1.5% to RM2,436 per m^3 over the previous month. Prices for Keruing and Kapur were traded at RM1,215 per m^3 and RM1,746 per m^3 respectively. Similarly, the price for Dark Red Meranti remained at RM2,036 per m^3. However, prices for Red Meranti dropped by 1.8% to RM1,977 per m^3. On the other hand, sawn timber prices of Mixed Heavy Hardwood and Mixed Light Hardwood remained at to RM975 per m^3 and RM918 per m^3 respectively.

PLYWOOD

The supply of plywood to the domestic market remained adequate for the month under review. Plywood of 4 mm, 6 mm, 9 mm and 12 mm of thicknesses were continued to be traded at RM14.60, RM22.00, RM38.00 and RM48.00 per piece respectively.

MEDIUM DENSITY FIBREBOARD (MDF)

Industry reported that the supply of MDF to the domestic market continued to be sufficient whilst the prices were quoted at last month's level. MDF of 4 mm, 6 mm, 9 mm and 12 mm of thicknesses were traded at RM13.50, RM17.15, RM23.30 and RM30.40 per piece respectively.

INTRA-MALAYSIA TRADE - SEPTEMBER 2018

From	Product	AUG 2018		SEP 2018		% Change In Volume Sep 2018 / Aug 2018	% Change In Value Sep 2018 / Aug 2018
		Volume (m^3)	Value (RM '000)	Volume (m^3)	Value (RM '000)		
SABAH	Logs	0	0	0	0	0	0
	Sawntimber	794	1,305	962	824	21	-37
	Plywood	8,077	17,669	3,041	6,399	-62	-64
	Veneer	0	0	0	0	100	100
SARAWAK	Logs	0	0	612	945	100	100
	Sawntimber	1,183	1,981	0	0	-100	-100
	Plywood	3,265	4,112	3,141	4,149	-4	1
	Veneer	3,808	5,773	6,336	9,246	66	60

Source : Department of Statistics, Malaysia

INTRA-MALAYSIA TRADE * - SEPTEMBER 2018

The shipments of sawntimber from Sabah to Peninsular Malaysia increased by 21% in volume from 794 m^3 to 962 m^3 worth at RM824,000. However, plywood dropped by 62% to 3,041 m^3 worth at RM6.4 million.

Trade of logs from Sarawak to Peninsular Malaysia increased in volume to 612 m^3 worth at RM945,000. Meanwhile, plywood shipment reported to drop by 4% in volume from 3,265 m^3 to 3,141 m^3 worth at RM4.1 million, whilst trade of veneer increased by 66% in volume from 6,808 m^3 to 6,336 m^3 which valued at RM9.2 million.

No intra trade from Peninsular Malaysia to Sabah and Sarawak was recorded in September 2018.

** Source: Malaysian Timber Industry Board (MTIB) and Department of Statistics, Malaysia*

*AVERAGE DOMESTIC PRICES OF LOGS, SAWNTIMBER, PLYWOOD AND MDF IN PENINSULAR MALAYSIA SEPTEMBER 2018 (VALUE IN RM)

SPECIES	LOGS/tonne	SAWNTIMBER/m³		
	18" UP	GMS	STRIPS	SCANTLINGS
HEAVY HARDWOOD				
Chengal	4,500	6,921	5,487	7,486
Balau	3,200	3,390	2,825	2,743
Red Balau	2,200	3,037	2,613	3,355
Merbau	3,100	4,641	3,319	3,955
Mixed Heavy Hardwood	940	975	777	958
MEDIUM HARDWOOD				
Keruing	1,250	1,215	1,059	2,203
Kempas	1,900	2,436	2,331	2,472
Kapur	1,700	1,746	1,412	1,766
Mengkulang	1,350	2,189	1,066	2,126
Tualang	1,400	2,507	2,331	2,493
LIGHT HARDWOOD				
Dark Red Meranti	2,100	2,036	1,695	3,001
Red Meranti	1,800	1,977	1,730	2,119
Yellow Meranti	1,200	1,554	1,236	1,271
White Meranti	1,480	2,472	1,412	2,260
Mersawa	1,650	1,836	1,624	2,013
Nyatoh	1,300	1,518	1,059	1,130
Sepetir	1,370	1,695	1,003	1,624
Jelutong	1,100	1,780	1,215	1,730
Mixed Light Hardwood	900	918	742	1,059

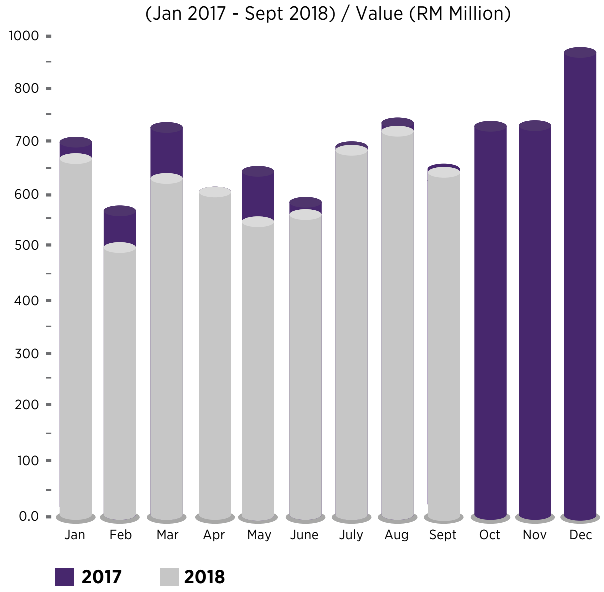
	LOGS/tonne	SAWNTIMBER/m³			
MALAYSIAN RUBBERWOOD *Heavea brasiliensis*		1" X 1"	2" X 2"	3" X 3"	4" X 4"
	180	1,126	1,255	1,414	1,585
PLYWOOD 4' X 8' (RM per piece)	**4mm**	**6mm**	**9mm**		**12mm**
	14.60	22.00	38.00		48.00
MDF 4' X 8' (RM per piece)	**4mm**	**6mm**	**9mm**		**12mm**
	13.50	17.15	23.30		30.40

Note: Log prices ex-batau. Sawntimber, plywood, MDF and Malaysian Rubberwood (*Hevea brasiliensis*) prices ex-mill

*** Prices are only indicative**

Cont. from page 11

Malaysia : Export of Wooden Furniture
(Jan 2017 - Sept 2018) / Value (RM Million)



Source : Department of Statistics, Malaysia

VENEER

Export of veneer for September 2018 reduced by 26% in volume and 29% in value to 13,891 m³ at RM25.0 million as compared to the previous month. Exports to South Korea and Taiwan have decreased by 28% and 18% to 4,616 m³ and 4,670 m³ respectively. Similarly, China also has decreased its intake of veneer by 35% to 2,236 m³.

Similarly, the Philippines and India have reduced its intake of veneer by 11% and 33% to 921 m³ and 179 m³ respectively. In contrast, Australia and Italy have increased its intake to 166 m³ and 14 m³ respectively. On the other hand, Viet Nam and Chile didn't make any purchases this month.

The FOB price of veneer for September 2018 is at RM1,797 per m³, a decrease of 4% from RM1,863 per m³ on the previous month.

BUILDERS JOINERY AND CARPENTRY (BJC)

Total BJC cumulative export from January to September 2018 decreased 14% to RM793.3 million as compared to RM918.6 million in the corresponding period last year. Export to the EU decreased 0.3% to RM273.8 million. Export to the Netherlands, France and Denmark increased by 139%, 56% and 17% to RM19.7 million, RM33.2 million and RM20.5 million respectively. Meanwhile, export to Turkey, Sweden, Germany, the UK, Italy and Belgium decreased by 80%, 50%, 21%, 15%, 11% and 3% to RM1.4 million, RM2.9 million, RM19.9 million, RM107.9 million, RM5.7 million and RM40.0 million compared to the previous year.

In Asia, exports to Pakistan, South Korea, Saudi Arabia, India and Taiwan decreased by 89%, 51%, 45% and 44% to RM3.1 million, RM819.5 thousand, RM1.2 million, RM23.8 million and RM7.2 million respectively. Similarly, exports to Thailand, Singapore, the UAE, Japan and Viet Nam also decreased by 29%, 26%, 18%, 11% and 3% to RM17.3 million, RM70.0 million, RM5.2 million, RM52.7 million and RM30.3 million respectively. However, Qatar resumed its purchases meanwhile Bahrain did not make any purchases.

Exports to Mauritius and South Africa increased by 79% and 51% to RM396.3 thousand and RM819.5 thousand respectively compared to the previous month. Meanwhile, exports to Reunion Island and Australia decreased by 99% and 6% to RM19.6 thousand and RM151.6 million respectively. On the other hand, the US increased its intake by 9% to RM84.1 million from RM77.0 million in the previous corresponding period.

FURNITURE

Exports of wooden and rattan furniture for the period under review in 2018 decreased 6% compared to the corresponding period of 2017. Total shipment recorded RM5.6 billion against RM5.9 billion in 2017. The US reduced its consumption by 9% to RM2.1 billion in 2018 from RM2.2 billion in the previous corresponding period.

Demand from Canada decreased 7% to RM193.6 million from RM209.1 million in the previous corresponding period. Australia also reduced its intake by 10% to RM391.4 million. In East Asia, China boosted its wooden furniture consumption by 33% with a purchase of RM170.6 million in 2018 from RM127.9 million in 2017. Meanwhile, Japan and South Korea reduced its consumption by 10% and 19% to RM409.4 million and RM70.3 million respectively.

On the other hand, shipments to ASEAN region such as the Singapore improved by 2% to RM329.8 million followed by the Philippines with 16% to RM152.8 million.

Elsewhere, export to the UAE and Saudi Arabia decreased by 30% and 19% to RM96.4 million and RM91.5 million respectively. Similarly, Kuwait and Bahrain also decreased their wooden furniture consumption by 6% and 26% to RM33.8 million and RM13.2 million respectively. On the other hand, shipments to Qatar increased 51% to RM16.2 million compared to the previous year. Shipment to India also recorded an increase of 9% to RM164.6 million.

In Europe, the UK and Belgium reduced its intake by 16% and 7% to RM277.8 million and RM28.6 million respectively. Meanwhile, France increased their import by 3% to RM50.0 million. Similarly, export to South Africa increased 26% to RM56.2 million compared to the previous year.

Rattan furniture shipments in September 2018 recorded a negative growth with a decrease of 82% from RM14.4 million to RM2.6 million. Export to Singapore, the UK and Australia decreased by 96%, 58% and 97% to RM79 thousand, RM261 thousand and RM52 thousand respectively. Similarly, other major countries did not make any purchase in September 2018. Elsewhere, exports to Belgium increased by 100% to RM49 thousand.

FURNITURE EXPORT TO RECEIVE BOOST THROUGH ODM/OBM

news

YB Datuk Seri Shamsul Iskandar Md Akin, Deputy Minister of Primary Industries (right) being briefed on the furniture design.

The evolution and diversification of businesses and industries, and making them more sustainable and eco-friendly are the main agenda of the world today. Consequently, we will need to understand the requisites of sustaining our businesses and the basics of making our products friendly to the environment while maintaining commercial viability. To ensure the sustainability of the furniture industry of Malaysia, the government aspires to innovate the furniture industry to become more design-based by shifting to Original Design Manufacturer (ODM) and consequently to the Own Brand Manufacturing (OBM) model from the current traditional Original Equipment Manufacturer (OEM) model.

In line with that, MTIB organised the Conference on Wood-based Furniture Design 2018: Sustainable and Commercial on 30 October in Kuala Lumpur. The theme of the conference was "The Sustainability of the Design Industry and the Commercial Value of Design-based Furniture Production Especially the Local Furniture Industry". The conference aimed at addressing and acknowledging these challenges

Posing with the speakers during the conference.

Cont. next page

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especially in making sure that Malaysia stays in the top 10 list of the furniture exporters of the world as more than 80% of Malaysia's furniture export is wood-based.

In his welcoming speech, YBhg. Dato' Dr. Jalaluddin Harun FASc, Director-General of MTIB, stated that the export value of Malaysia's timber products in 2017 registered an increase of 5.0% to RM23.21 billion, compared to 2016, contributing 2.5% of Malaysia's total export of goods amounting to RM935.39 billion. Most timber products also recorded an increase in terms of export value. The largest export growth recorded was saw logs with 14.8% at RM3.9 billion, followed by fibreboard with 9.4% at RM437 million and timber furniture with 6.6% at RM8.1 billion.

Dato' Dr. Jalaluddin also noted that the major export markets of Malaysian timber and timber products were Japan with RM3.9 billion (19%), followed by the USA with RM3.7 billion (16%), the European Union with RM2.2 billion (10%) and India with RM1.6 billion (7%). The high percentage was contributed by the wood furniture sector with an export value of RM8.08 billion. In 2017, Malaysia ranked ninth in the world with a value-added export of furniture of RM10.1 billion, while China, Germany and Italy ranked first, second and third. Up to now, there are 1,708 furniture factories nationwide producing furniture for local use as well as for the international market.

YB Datuk Seri Shamsul Iskandar Md Akin, Deputy Minister of Primary Industries, in his opening speech, stated that the government was optimistic that the export performance of furniture products would continue to grow in the coming years. He added that all industry players in the furniture industry and its related industries would need to combine efforts to strengthen the supply chain and the production of new market-oriented value-added products, as well as to explore new markets. The aggregation of these efforts will definitely contribute towards strengthening the timber industry and achieving its long term target by 2020.

The Deputy Minister also stated in his speech that design plays an important role in determining whether the furniture is accepted or otherwise by the customer. The designs have to meet the needs of users in terms of ergonomics, safety, stability and user-convenience. He also stated that at the present time, demand is focused on quality, 'value for money' and green or eco-friendly products. The furniture industry in Malaysia generally relies heavily on existing designs in the market, working in accordance with the requirements and designs set forth by importers, based on the OEM method. The government's intention is to change this tradition to the production of furniture via ODM.

More than 100 participants registered for this conference, many of which came from the local designer community. Also supporting the conference were associations and industry players from furniture-related industries. The conference offered both the local and international audience a clearer understanding of the challenges and future hopes for the Malaysian furniture industry. With the participation of international and local speakers who are practicing designers and entrepreneurs, the conference was a significant meeting point for industry stakeholders. It was also a discussion venue for many captains of industries, linked directly and indirectly to the furniture industry.

The key-note speaker, YBhg. Dato' Dr. Jalaluddin Harun FASc, started off the conference with his presentation entitled "OEM to ODM – What Does it Take?" with a brief introduction to ODM/OBM and how it could shift the local furniture development to a more higher valued furniture export in the future.

The international speakers were Mr. Stefan Schoning (stefan.schoning.studio) from Belgium and Mr. Giorgio Biscaro (Giorgio Biscaro Studio) from Italy. Mr. Schoning spoke of "The Adaptation of Culture in Furniture Design" while Mr. Biscaro presented a paper on "The Sustainable Design". Both speakers spoke of the sustainability of furniture design in today's culture through eco-friendly approaches and culture-based economics.

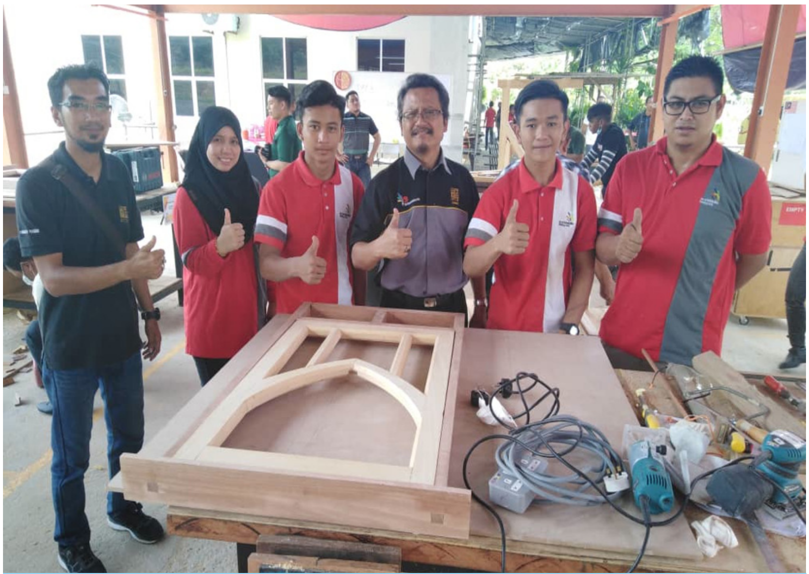
The local speakers were Tuan Haji Zainal Rahman, Encik Alan Ng and Assoc. Prof. Dr. Hariri Abdullah. Tuan Haji Zainal Rahman, the Chairman of Side FX Sdn. Bhd, spoke on "Cross-Continent Furniture Design Culture" which gave the audience an insight into the possibilities of producing designs that can appeal to all cultures and continents of the world.

Encik Alan Ng of the Ignition Lab (Malaysia) spoke of the many perceptions and definitions of designs in his lecture entitled "The Art of Designing". Finally, Assoc. Prof. Dr. Hariri Abdullah, Director

Cont. page 22

WORLDSKILLS MALAYSIA COMPETITION 2018

news



MTIB officials with joinery participants.

The WorldSkills Malaysia Belia (WSMB), formerly known as *Pertandingan Kemahiran Malaysia* (*PKM*), is an annual skills competition. It is aimed at selecting and recognising skills that trainees need to be recognised as skilled workers and to elevate skills level in Malaysia to meet international level standard. This competition is conducted in two stages: the pre-feasibility stage and the final stage.

The terms of application are:

- Malaysian Citizen
- Open to trainees or skilled workers
- Aged 21 years and below (except for Mechatronics, aged 23 and below)
- Each participant is entitled to apply for one field only.

MTIB through WISDEC has been involved in the skills competition for more than 10 years. To develop human capital in the timber industry, MTIB was appointed as Industry Lead Body (ILB) by the Department of Skills Development (JPK), Ministry of Human Resources in 2012. As ILB, MTIB has conducted many training programmes and activities to elevate the level of human resources skills in the timber industry. WISDEC, the training arm of MTIB had been selected by JPK to host the cabinetmaking trade category of the competition on 29 September-2 October. The joinery trade competition was held at the Malaysian Buildings Academy (ABM) Northern Region, Kedah on 26 September-1 October. In addition, MTIB also organised a demonstration on carpentry trade at ABM Northern Region.

Three students from Furniture Processing Technology under the Vocational Training Programme in WISDEC Banting and two students from Furniture Processing Technology under the Vocational Training Programme in WISDEC Sabah took part in WSMB 2018 and underwent intensive training at WISDEC Banting and Sabah. The cabinetmaking trade category was represented by Muhammad Aizat bin Romli, Muhammad Adib Asyraaf bin Azhar and Slyvon Leon Slyvester while the joinery trade category was represented by Mohd Nor Haiqal bin Mohd Nor Farizan and Mohammad Rozaimie Hamri bin Md Ruslan. Nine students took part in the cabinetmaking competition and they were from Politeknik Sultan Salahuddin Abdul Aziz Shah (1 competitor), Institut Kemahiran MARA Sungai Petani (2 competitors), Institut Kemahiran

Participant preparing his project.

Cont. from previous page

MARA Alor Setar (1 competitor), Terengganu Timber Industry Training Centre (1 competitor), Institut Latihan Perindustrian Kota Bharu (1 competitor) and WISDEC (3 competitors).

Nine contestants took part in the joinery competition and they were from Institut Latihan Perindustrian Kuala Terengganu (1 competitor), GIATMARA Keningau (1 competitor), Advanced Technology Training Centre (ADTEC) Kemaman (1 competitor), GIATMARA Tumpat (1 competitor), Akademi Binaan Malaysia Wilayah Timur (1 competitor), Terengganu Timber Industry Training Centre (1 competitors), Politeknik Sultan Salahuddin Abdul Aziz Shah (1 competitor) and WISDEC (2 competitors).

Successful participants received the following prizes:

- Gold medal - Certificate and RM5,000.00
- Silver medal - Certificate and RM2,500.00
- Bronze medal - Certificate and RM1,500.00

Certificate of Excellence - Certificate and RM500.00

The medals and certificates were awarded during the Prime Minister's Gold Award Ceremony (MATEPM) 2018 on 5 October 2018 at the Malaysia International Trade and Exhibition Centre (MITEC), Kuala Lumpur.

The following is the list of the winners for the cabinetmaking trade:

- Gold medal - Muhammad Afiq bin Yusaini (TTITC)
- Silver medal – Burhanuddin bin Bukhori (IKM Sungai Petani)
- Bronze medal - Muhammad Aizat bin Romli (WISDEC Banting)

The following is the list of the winners for the joinery trade

- Gold medal - Muhammad Yusri Aiman bin Nasir (ABM Wilayah Timur)
- Silver medal – Muhammad Firdaus bin Azmy (ILP Kuala Terengganu)

The bronze medal winner for the cabinetmaking trade from WISDEC.

INBAR'S SEMINAR ON TECHNOLOGY INNOVATION OF BAMBOO AND RATTAN 2018

news

Photo session during opening ceremony.

Bamboo resources have high ecological, industrial and cultural value. Worldwide, there are more than 1,200 species with over 70 bamboo genera, many lying in the tropical and sub tropical areas, and a few located in the temperate and boreal zones.

The bamboo industry in Malaysia has a huge potential to be further developed and penetrated into the international market. Cultivation and management of the natural stands of bamboo is one of the means to ensure the continued supply of raw material for the development of the wood-based industry. Bamboo, as a fibre source, represents an average of 7% of the total non-wood forest products in the country. Presently bamboo is widely utilised by the cottage industry to produce basketry, furniture and handicraft for the domestic market.

Meanwhile, China is rich in bamboo resources and a major producer of bamboo products for the world market. Currently, the area of bamboo forest in China has reached 6.7274 million ha in the major bamboo provinces , accounting for 0.7% of the total national land area and 3.48% of the total forest area.

To explore the latest developments in China's bamboo industry, five participants from Malaysia took part in the Seminar on Technology Innovation of Bamboo and Rattan for Green Sector Development for Developing Countries 2018 organised by the International Network for Bamboo and Rattan (INBAR) from 19 August to 18 September. INBAR is an intergovernmental organisation dedicated to improving the livelihoods of the producers and users of bamboo and rattan, within the context of sustainable natural environment. INBAR connects a global network of partners from the government, private and non-profit sectors in over 50 countries and promotes sustainable development of bamboo and rattan by consolidating, coordinating and supporting strategic and adaptive research and development.

The seminar organised by INBAR is an annual event held since 2005. This year's event attracted 43 participants from eleven countries: Malaysia, Indonesia, Viet Nam, Thailand, South Sudan, Ethiopia, Cuba, Bangladesh, Nepal, Sri Lanka and Ghana. The objectives of the seminar were to gain a better sight of the establishment of bamboo plantations and its value-added processing industry as well as skills training activities.

Cont.next page

Briefing on production and processing of bamboo charcoal at Jhizu Biotechnology Co. Ltd.

The next venue was Anji Jitai Machinery Company Limited, a manufacturer of machinery equipment for the production of bamboo and wood flooring. Their products include machinery and equipment for the production of bamboo flooring in regular format, and in vertical and horizontal grains for construction. The company can also customise the machine according to customer requirement and usability.

The programme comprised a combination of lecture and field trips. The delegation first visited the bamboo plantation in Anji Country of Zhejiang Provinces. The bamboo industry in Anji Country covers eight major product series of bamboo-structural materials, decorative materials, daily necessities, fibre products, bio-products, bamboo-wood machines, art craft and bamboo shoots food, with 3,000 varieties. The seminar participants observed that the bamboo plantations in Anji were well developed and mostly owned by the farmers.

The seminar participants were brought to Shang An, a bamboo primary processing factory that produces semi-finished bamboo products for blinds, mats and flooring purposes. Bamboo manufacturing companies in China mostly use Moso bamboo, a species native to China.

The delegation members were brought to Yoyu, a world-leading bamboo product company dedicated to research and development, manufacturing and sales of bamboo-made floor, furniture and decorations. Their products have reached the international market in Europe, US, Middle-South Asia and Japan.

The participants also visited Zhejiang Jizhu Biotechnology Co. Ltd., a major producer of high quality charcoal and bamboo vinegar. These products are highly demanded in Japan where the charcoal is used as barbeque, fuel or an odour-absorbing material while bamboo vinegar is used in bio-pesticides, soaps and medicine.

The articipants then visited Fenghui Bamboo Art Fashion Company, China's largest manufacturer and exporter of bamboo and wood products. The company is also the biggest manufacturer of green food packaging and kitchen utensils. In terms of production, this company has advanced equipment and machinery in areas of material treatment, production and new product development.

The participants were then brought to the International Centre of Bamboo and Rattan (ICBR) Bamboo and Flower Germplasm Base at Huangshan, Anhui Province to obtain a better understanding on bamboo cultivation. From the knowledge gained, participants will be able to plan for greater development in the local bamboo industry by promoting the production of value-added products which offer brighter export market prospects.

Through the implementation of the strategy as outlined in the 10 Year Bamboo Action Plan as formulated by MTIB, Malaysia's bamboo exports is expected to grow as well as provide more job opportunities particularly for rural dwellers in the country.

Malaysia was represented by Cik Nor Azreena Mahmud (Ministry of Primary Industries), Puan Nor Liza Mat Yasok (MTIB), Encik Izani Abdullah (Forest Department Peninsular Malaysia), Puan Betrece Johnlee (Sabah Forest Department) and Encik Zairul Amin (Forest Research Institute Malaysia).

INCREASING PRODUCTIVITY AND ACHIEVING SAVINGS THROUGH LEAN AND GMP

news

Attendees smiling for the camera.

MTIB had always been committed towards encouraging the timber industry to adopt best practices methods in ensuring its sustainability, removing wastage and creating a conducive work environment. This is to dispel the negative notions of the 3D (Dirty, Dangerous and Difficult) image of the timber industry which discourages local talents to participate in the industry. In 2018, MTIB organised two programmes to achieve this: the Lean Management and Good Manufacturing Practices (GMP) – 5S. As of 2018, 54 and 61 timber companies have joined the aforementioned programmes respectively and thus far have all shown promising results. In Lean Management, a total amount of savings amounting to RM47.8 million was recorded whilst GMP – 5S recorded savings of RM570,940. The savings involved higher efficiency which contributed to less wastage, movement, inventory and space.

To promote the programmes and encourage participation from the Malaysian timber industry, MTIB went on a series of one-day roadshows throughout Malaysia. This venues included Muar, Johor (5 October); Kuala Lumpur (9 October) and Seberang Jaya, Penang (12 October). The roadshow also served as an introduction to the concepts of Lean Management as well as GMP – 5S to the visitors who mainly consisted of timber-based company owners and staff.

In her opening speech during the Seberang Jaya session, Puan Hjh. Noor Laila Mohamed Halip, Deputy Director-General of MTIB (Development and Commercial), stated that MTIB had initiated a series of productivity-related programmes. Therefore, it was highly important for the timber industry to take heed of this and participate in the programmes in order to achieve higher economic growth. MTIB believes that the Lean Management and GMP-5S programmes will encourage the timber industry to have higher productivity and reduce wastage.

The roadshow also included a knowledge sharing session with previous companies that had completed their Lean Management programme with MTIB such as Chen Feng Enterprise, and A&A Chesterfield Sdn. Bhd. These companies explained in detail about their experience in participating in the programme and the overall impact it had on their factories. They also talked about the importance of commitment from all levels of management in order to successfully complete the programme. The session was an eye opener for the participants as they learnt how both programmes, although requiring a great deal of effort and cooperation, were highly rewarding, as

A case study session held at MTIB, Kuala Lumpur.

Cont. from previous page

evident by the amount of savings the companies managed to obtain throughout the six-month programme.

Following the sharing session was the Lean Kando workshop. This workshop was a competitive, engaging and energetic activity that introduced the principles of lean processing through experiential learning. It provided a firsthand experience in understanding the principles and fundamental concepts of lean processing. It also demonstrated how lean could improve job and customer satisfaction, and business performance. The Lean Kando session also encouraged the participants to identify how lean processing could improve their workplaces in real situations at their companies.

This was followed by a theory explanation of the concept of Lean Management and GMP – 5S as well as a briefing on how to participate in both the programmes in 2018.

The roadshow was attended by 87 people from 70 timber-based companies. Overall, the programme was well received by the participants as it increased their awareness of the cost savings benefits of lean management. It also signaled MTIB's commitment in transforming the Malaysian timber industry to become more productive and competitive, thus able to better compete with international timber-based companies in the global market.

One of the roadshows held in Muar, Johor.

Timber **News**

Cont. from page 17

of the Malaysian Design Council (MRM) gave his presentation on "The Challenges of Timber-based Product Design" where he highlighted the issues related to timber-based furniture production and the many options to overcome them.

During the conference, MTIB urged the furniture industry to undertake efforts to transform from OEM to ODM and OBM. According to a study conducted by MTIB in 2012, 53% of exported furniture fell under the ODM category. The data showed an increase in the value of Malaysian furniture; the same survey in 2007 indicated that furniture exports in the ODM category were only 33%. Accordingly, the government has targeted, by the year 2020, for exports of furniture under the ODM category to reach 70%. This will increase the possibility of achieving NATIP's target of exporting RM10 billion worth of furniture by 2020. As such, MTIB urged the industry

Attendees at the event.

to employ qualified furniture designers with skills and experience to enhance company performance through improved sales, higher margins and reduced operating expenditure.

PROFESSIONAL COURSE ON THE ART AND TECHNOLOGY OF PERFUMERY

news

Group photo of participants from Malaysia and Mr. Stephen V. Dowthwaite (centre).

The Malaysian Karas and Agarwood industry has become more prominent, partly due to the efforts of the government, in particular MTIB, in promoting and encouraging the growth of the industry. The government recognises that in order to have a thriving and sustainable Karas and Agarwood industry, a more systematic and structured development programme is needed. For this reason, MTIB has developed the Strategic Plan of Action for the Development of the Karas and Agarwood Plantation Industry in 2011.

One of the more notable products of the Karas and Agarwood industry is the Oud oil which is used in perfumes. The white-Karas wood is separated from the resinous Agarwood to form Oud during the distillation process. Once the Oud oil has gone through the distillation process, it is kept in open sunlight for excess moisture within the Oud oil to evaporate. This ensures that the Oud oil is as pure as possible for use in perfume production.

In view of the growing importance of perfumery in the local Agarwood industry, MTIB participated in the Professional Course on the Art and Technology of Perfumery held at Los Angeles, United States from 8 to 19 October. The 10-day course included theoretical training sessions followed by workshops with access to thousands of commercially available perfumery materials including essential oils, absolutes, isolates, aroma chemicals and specialty key bases. Objectives of the course were :

- To understand the majority of perfumery jargon and terms
- To be aware of major legislation, safety and stability affecting perfumery
- To create independently a range of perfumes in all major perfume families
- To modify creations for odour, cost and product applications
- To be able to decipher perfume enquiries systematically and successfully

Fourteen topics were discussed during the course :

- Advanced smelling techniques
- Developing your own product line concept
- Creation of all important single florals using aroma chemicals and naturals
- Recreating new or unknown florals
- The secrets of creating accords quickly
- Creating floral bouquets
- Creating examples of all modern fragrance groups, i.e; Aldehydics, Fougeres, Chypre, Oriental, Gourmande etc.
- Tweaking many famous landmark perfumes
- Reverse-smelling techniques and decoding a perfume
- Safety and legislation considerations, i.e; IFRA, EEC and other regulatory bodies
- Commercial aspects of your own product
- Testing the perfume in products
- Interpreting a GCMS report
- Presenting your own product line

The course was conducted by the team from Perfumers World, led by Mr. Stephen V. Dowthwaite, a perfumer with 40 years' experience. The course provided the participants with a better understanding of how famous perfumes are developed and how to produce your own line of perfume products. Seventeen participants from the United Kingdom, Germany, Romania, Netherlands, Russia, Korea, the United States of America and Malaysia attended the course.

MTIB was represented by Encik Mohd Zamakhsyary Mustapa from Forest Plantation while the industry was represented by representatives from Oud Agarwood Sdn. Bhd. and Grow Project Works Sdn. Bhd.

SOUTH AFRICA :
LAND OF PROMISING OPPORTUNITIES

Quick facts

Capital	Cape Town
Population	97,041,072
Official Languages	11 languages (Zulu, Xhosa, Afrikaans, English, Tswana, Southern Sotho, Tsonga, Swazi, Vendi and Southern Ndebele
GDP per capita	USD13,840
Currency	South African Rand (ZAR)

South Africa, officially the Republic of South Africa (RSA), is the southernmost country in Africa. It is bounded to the south by 2,798 kilometres of coastline of Southern Africa stretching along the South Atlantic and Indian Oceans to the north by the neighbouring countries of Namibia, Botswana, and Zimbabwe; and to the east and northeast by Mozambique and Swaziland (Eswatini) and it surrounds the enclaved country of Lesotho. South Africa is the largest country in Southern Africa and the 25th-largest country in the world by land area and, with over 57 million people, is the world's 24th-most populous nation. It is the southernmost country on the mainland of the Old World or the Eastern Hemisphere. About 80% of South Africans are of Sub-Saharan African ancestry, divided among a variety of ethnic groups speaking different African languages, nine of which have official status. The remaining population consists of Africa's largest communities of European (White), Asian (Indian), and multiracial (Coloured) ancestry.

Economy

The World Bank classifies South Africa as an upper-middle-income economy, and a newly industrialised country. Its economy is the second-largest in Africa, and the 34th-largest in the world. In terms of purchasing power parity, South Africa has the seventh-highest per capita income in Africa. However, poverty and inequality remain widespread, with about a quarter of the population unemployed and living on less than USD1.25 a day. Nevertheless, South Africa has been identified as a middle power in international affairs and maintains significant regional influence.

Shipping Facilities

South Africa has eight ports which capable of handling cargo including five major ports namely Cape Town (ZACPT), Durban (ZADUR), Naval Base Simon's Town (ZASMN), Port Elizabeth (ZAPLZ) and Richards Bay (ZARCB). Other small ports include East London (ZAELS), Nggura (ZAZBA) and Saldanha (ZASDB).

Durban Port is the major port entry for Malaysian timbers which handling four times of Cape Town Port, the largest container port in South Africa and the busiest port in the sub-Saharan Africa as well as the fourth largest container terminal in the Southern Hemisphere.

Forest Resources

In South Africa, only 0.4% of its land is covered by natural forest, that is equal to 500,000 hectares. It is home to some 649 woody and 636 herbaceous natural plant species. Timber plantation are also famous through South Africa with 1% of its land covered with timber plantation that is approximately 1.2 million hectares. Locally, there are three main types of trees that grow on South African plantations. They are Pine (44%), Eucalyptus (44%) and Wattle (12%). Most of the timber plantation are in Mpumalanga (41%) and KwaZulu-Natal (40%). Others are in Eastern Cape (11%), Western Cape (4%) and Limpopo (4%).

Timber Production

According to the FAO latest forest statistics on South Africa, the country produced large quantity of logs around 4.23 million m³ in 2017. Apart from logs production, South Africa also produces 1.98 million m³ of sawntimber, 1.02 million m³ of particleboard, 280 thousand m³ of fibreboard, 83 thousand m³ of plywood and 13 thousand m³ of veneer. Details of production are as per **Table 1**:

Table 1 - South Africa: Production of Timber Products, 2013 - 2017

(Volume : m³)

Product	2013	2014	2015	2016	2017
Logs	4,231,590	4,348,795	4,348,795	4,227,049	4,227,049
Sawntimber	1,419,498	1,730,393	1,818,673	1,982,277	1,982,277
Particleboard/Chipboard	565,276	646,104	691,195	1,015,031	1,015,031
Fibreboard	205,000	280,000	298,000	280,000	280,000
Plywood	104,660	82,091	83,395	83,395	83,395
Veneer	14,802	13,674	13,891	13,234	13,234

Source: FAO Stats

Import of Timber and Timber Products

According to **Table 2**, South Africa imports of timber and timber products increased 2.6% to USD532.3 million in 2017. Since, South Africa supply of timber is inadequate to meet the domestic demand, there is a need to import particularly furniture and timber for structural purposes. Furniture was the main product imported valued at USD170.5 million followed by sawntimber (USD107.6 million), plywood (USD48.0 million) and fibreboard (USD42.2 million).

Referring to **Table 3**, Swaziland and China are Malaysia's main competitor for timber and timber products (Chapter 44) to South Africa market. Malaysia constitute 9% of total market share of South Africa's import. In terms of furniture import, Malaysia main competitor are China and Italy, constitute 7% of South Africa furniture market.

Table 2 - South Africa: Import of Timber and Timber Products, 2013 - 2017

(Value : USD'000)

Product	2013	2014	2015	2016	2017
Furniture	228,918	215,141	210,039	171,140	170,478
Sawntimber	118,166	117,000	120,182	104,121	107,600
Plywood	46,881	60,179	50,377	45,941	48,028
Fibreboard	52,212	50,225	40,199	37,494	42,194
BJC	29,337	27,789	29,393	20,123	22,387
Mouldings	30,423	28,160	19,417	16,484	19,717
Logs	5,026	5,978	9,842	9,333	12,283
Veneer	15,553	14,661	14,478	15,225	11,964
Particleboard/Chipboard	12,193	8,865	9,325	6,890	8,351
Wooden Frames	3,823	2,906	2,230	1,757	1,686
Others	79,423	80,758	79,020	88,267	85,556
Total	**623,968**	**613,676**	**586,517**	**518,791**	**532,261**

Source: ITC Statistic

Table 3 - South Africa: Major Import Partner for Timber and Timber Products (Chapter 44), 2013 – 2017

(Value : USD '000)

Destination	2013	2014	2015	2016	2017
World	393,039	396,521	374,462	345,634	359,764
Swaziland	58,850	59,600	67,508	82,024	91,058
China	66,365	65,109	64,991	53,369	54,084
Malaysia	51,671	47,325	47,806	36,239	32,815
Brazil	25,926	35,833	22,253	20,721	27,319
France	17,812	19,512	17,423	19,260	17,900
Others	172,415	169,142	154,481	134,021	136,588

Source: ITC Statistics

Table 4 - South Africa: Major Import Partner for Furniture, 2013 – 2017

(Value : USD '000)

Destination	2013	2014	2015	2016	2017
World	228,918	215,141	210,039	171,140	170,478
China	134,340	119,936	109,675	85,400	88,164
Italy	12,726	12,323	15,614	15,812	13,898
Malaysia	16,461	15,210	15,846	10,208	11,889
Germany	9,692	8,864	10,064	10,494	11,185
Viet Nam	7,432	9,807	12,760	7,722	8,834
Others	48,267	49,001	46,080	41,504	36,508

Source: ITC Statistics

Export of Timber and Timber Products

South Africa's exports of timber and timber products were valued at USD739.0 million in 2017. Furniture was the main product exported, valued at USD117.8 million followed by BJC at USD57.2 million, logs valued at USD56.4 million and sawntimber valued at USD52.4 million. Refer **Table 5** for further details. Major market for South Africa export of timber and timber products (Chapter 44) were Japan, Botswana and Namibia, whilst major market for furniture were Botswana, Namibia and Zambia.

Table 5 - South Africa: Export of Timber and Timber Products, 2013 -2017

Unit: USD '000

Product	2013	2014	2015	2016	2017
Furniture	137,346	147,724	140,146	113,210	117,821
BJC	49,570	58,511	55,231	55,862	57,215
Logs	51,372	75,145	56,473	46,437	56,443
Sawntimber	38,782	48,186	44,071	43,515	52,398
Particleboard	27,161	31,425	31,177	33,549	42,240
Plywood	10,816	10,412	12,410	10,366	16,958
Fibreboard	25,254	21,612	18,691	14,910	13,902
Mouldings	7,874	11,202	9,856	6,597	6,141
Veneer	6,373	6,790	5,655	5,706	4,278
Wooden Frames	1,543	1,488	1,296	971	1,084
Others	358,104	414,509	377,021	333,139	370,497
Total	**714,195**	**827,004**	**752,027**	**664,262**	**738,977**

Source: ITC Statistics

Malaysia's Export of Timber and Timber Products to South Africa

In 2017, Malaysia's exports of timber and timber products to South Africa increased 6% to RM219.3 million over the previous year. South Africa ranked 20th with 0.9% market share. Sawntimber was the main product exported with a total value of RM 105.4 million, followed by wooden furniture at RM64.5 million and BJC at RM19.0 million. Refer **Table 6** and **Table 7** for further details.

Table 6 - Malaysia: Export of Timber and Timber Products by Value to South Africa, 2013 -2017

(Value: RM)

Product	2013	2014	2015	2016	2017
Sawntimber	124,245,035	109,880,877	134,975,487	110,122,967	105,354,386
Wooden Furniture	60,937,825	61,068,607	74,283,862	50,352,465	64,478,692
BJC	15,974,574	12,489,276	21,223,551	17,420,231	19,015,185
Mouldings	7,814,882	9,320,077	12,162,681	12,336,542	11,127,128
Plywood	9,474,813	10,285,215	10,833,614	11,488,428	9,704,223
MDF	6,774,898	11,661,469	6,458,599	4,241,958	8,799,022
Veneer	0	0	133,822	135,618	312,277
Chipboard	0	0	0	0	29,930
Wooden Frame	0	87,376	62,441	0	0
Rattan Furniture	125,359	0	33,333	58,661	0
Logs	228,669	0	0	0	0
Others	318,612	1,287,286	1,341,871	1,275,005	446,195
Total	**225,894,667**	**216,080,183**	**261,509,261**	**207,431,875**	**219,267,038**

Source: MTIB & DOSM

Table 7 - Malaysia: Export of Timber and Timber Products by Volume to South Africa, 2013 – 2017

(Volume: m^3)

Product	2013	2014	2015	2016	2017
Sawntimber	70,575	68,582	73,062	58,480	56,914
MDF	5,359	7,824	3,821	2,733	5,716
Plywood	4,794	5,028	4,701	4,869	4,056
Mouldings	2,844	3,241	3,967	3,678	2,748
Veneer	0	0	60	62	172
Chipboard	0	0	0	0	36
Logs	136	0	0	0	0
Total	**83,572**	**84,675**	**85,611**	**69,822**	**69,642**

Source: MTIB & DOSM

Malaysia's Import of Timber and Timber Products from South Africa

In 2017, Malaysia's imports of timber and timber products from South Africa decreased 29% to RM2.5 million over the previous year. BJC was the main product imported with a total value of RM2.5 million. Refer **Table 8** and **Table 9** for further details.

Table 8 - Malaysia: Import of Timber & Timber Products from South Africa by Value, 2013-2017

(Value: RM)

Product	2011	2012	2013	2014	2015	2016	2017
BJC	0	0	962,944	1,957,027	2,396,527	2,800,506	2,452,312
Mouldings	0	368,454	1,147,367	482,198	0	13,428	13,056
MDF	134,257	328,852	0	0	303,787	0	0
Veneer	140,645	162,414	10,044	75,002	56,553	26,802	0
Logs	18,933	68,670	25,046	0	45,803	0	0
Chipboard/Particleboard	156,339	446,480	255,124	267,709	0	294,183	0
Wooden Furniture	0	24,086	0	6,144	0	79,086	0
Sawntimber	1,290,783	5,508,980	828,406	1,347,259	0	237,319	0
Plywood	0	0	0	0	0	0	0
Rattan Furniture		0	0	0	0	5,542	0
Others	4,527,790	152,563	172,513	113,711	166,758	46,179	34,890
Total	**6,268,747**	**7,060,499**	**3,401,444**	**4,249,050**	**2,969,428**	**3,456,866**	**2,465,368**

Source: MTIB & DOSM

Table 9 - Malaysia: Import of Timber and Timber Products from South Africa by Volume, 2013-2017

(Volume: m³)

Product	2011	2012	2013	2014	2015	2016	2017
Mouldings	0	175	568	227	0	2	3
MDF	43	304	0	0	84	0	0
Veneer	106	71	1	53	72	20	0
Logs	21	68	28	0	35	0	0
Sawntimber	598	2,553	370	320	0	77	0
Plywood	0	0	0	0	0	0	0
Chipboard/Particleboard	159	423	210	212	0	341	0
Total	**927**	**3,594**	**1,177**	**812**	**191**	**440**	**3**

Source: MTIB & DOSM

Import Tariffs

South Africa's import duty on timber and timber products ranges from 0 – 20%. Details are as follows:

HS Code	Product	Duty (%)
4403	Logs	0
4407	Sawntimber	0
4408	Veneer	10
4409	Mouldings	0
4410	Chipboard/Particleboard	15
4411	Fibreboard	10
4412	Plywood	10
4414	Wooden Frame	10
4418	Builders Joinery & Carpentry	15
9403	Furniture	20

Source: WTO

Prospects

The construction industry in value terms is expected to record a CAGR of 14.9% to reach USD41 billion by 2022. In 2018, South African forecast that the construction industry can look forward to a moderate growth as the government's plan to spend more than R940 billion on infrastructure development. Affordable housing projects are also on the cards to cater for the country's lower and middle-income citizens. The Human Settlements Housing Programme spearheaded by the Department of Human Settlements is an example of this and involves the construction of 1.6 million housing units by 2019.

Tourism also plays an important role in South Africa economic growth with contribution of R118,928 million or 3% of its GDP and has created more than 700, 000 direct employment opportunities. Through National Tourism Sector Strategy, the department aims to achieve over 200% growth in direct contribution to the 2015 GDP figure of R118 billion to R302 billion in 2026.

These positive trends of tourism infrastructure and construction activities plus the young population offer great opportunities for Malaysian exporters to penetrate South Africa's building materials market and take full advantage to further promote Malaysian timber and timber products especially value-added products such as furniture, MDF and BJC, in addition to only promoting building materials namely plywood and sawntimber. Malaysian timber exporters also need to take this chance and make their presence felt to enhance networking with South Africa's timber and furniture importers while at the same time undertake market research on current South Africa importers' market preferences and taste.

References:

- *Encyclopedia of the nations*
- *Department of Statistics Malaysia*
- *Department of Statistics Malaysia (DOSM)*
- *WTO*
- *CIA Factbook*
- *International Trade Centre (ITC)*
- *Food and Agriculture Organisation (FAO Country Report)*
- *South Africa's Economic Prospects and Challenge*
- *South African Government, www.gov.za*

Tapang tree

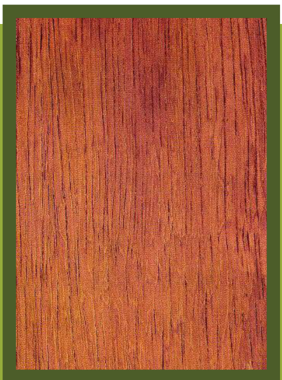
TAPANG

SUITABLE FOR HEAVY CONSTRUCTION

INTRODUCTION

The scientific name of Tapang timber is *Koompassia excelsa* (*Leguminosae*). Vernacular names applied include Kayu Raja (Sarawak), Mengaris (Sabah) and Tapang (Sarawak). This is a monospecific timber. The sapwood is buff-coloured or yellow-brown, often with a pink tinge and is sharply differentiated from the heartwood, which is reddish brown to deep brick-red-brown when fresh and darkens with age to a deep chocolate-brown.

It is also known as Mengaris (Brunei); Bengaris, Mengaris, Menggeris, Sialang, Tualang and Wehis (Indonesia); Koompassia (Papua New Guinea); Ginoo and Manggis (Philippines); and Tulae and Yuan (Thailand).



Wood colour and texture

Cross section of Tapang

General Characteristics

The sapwood is well-defined while the heartwood is reddish brown to deep brick red-brown when fresh, weathering to a deep chocolate brown. Its grain is interlocked, often deeply. The texture is rather coarse but even except in areas where included phloem occurs. The vessels are moderately large with simple perforations, generally few in number, solitary and in radial multiples of two to three with a tendency to arrange in tangential lines; deposits are common. Its texture is rather coarse but even except in areas where included phloem occurs.

Density

The timber is a Medium Hardwood with a density of 800-865 kg/m^3 air dry.

Natural Durability

Tapang is classified as moderately durable under exposed conditions. The durability rating is based on the standard graveyard tests conducted at the Forest Research Institute Malaysia (FRIM) in Kepong, Selangor on specimens with dimensions of 50 mm x 50 mm x 600 mm. In the first series of such tests, all six specimens were completely destroyed after 3.5 years (Foxworthy & Woolley, 1930). In the second test, 60 specimens were used and the average service life was three years (Jackson, 1965). The sapwood of the timber is susceptible to both powder-post beetle and fungi attacks, while the heartwood is readily destroyed by termites.

Axial Parenchyma

Wood parenchyma is abundant and visible to the naked eye, mainly with paratracheal as wavy confluent bands and occasional narrow terminal bands of apotracheal type. Rays are moderately fine and generally not visible to the naked eye.

Preservative Treatment

The timber is amenable to preservative treatment and is classified as easy to treat.

Strength Properties

The timber falls into Strength Group A (Engku, 1988b) or SG 3 (MS 544: Part 2:2001).

Test Condition	Modulus of Elasticity (MPa)	Modulus of Rupture (MPa)	Compression Parallel to Grain (MPa)	Compression Parallel to Grain (MPa)	Shear Strength (MPa)
Green	16,400	102.0	53.4	7.17	11.3
Air dry	17,800	121.0	62.0	8.00	16.3

Machining Properties

It is easy to resaw and cross-cut when green but is slightly difficult to resaw when dry. Planing is easy in either condition and the surface produced is smooth to moderately smooth.

Test Condition	Sawing		Planing		Boring		Turning	
	Re-sawing	Cross Cutting	Ease of Planing	Quality of Finish	Ease of Boring	Quality of Finish	Ease of Turning	Quality of Finish
Green	easy	easy	easy	smooth	easy	rough	-	-
Air dry	slightly difficult	easy	easy	moderately smooth	slight difficult	rough	easy	moderately smooth

Air Drying

The timber dries moderately slowly to slowly with slight end-checking, surface-checking and insect attacks as the main sources of degrade. Thick boards of 13 mm take 3.5 months to air dry, while 38 mm thick boards take six months.

Shrinkage

Shrinkage is average, with radial shrinkage averaging 1.5% and tangential shrinkage averaging 1.7%.

Defects

The major defect that is associated with the timber is the presence of hard abnormal tissues commonly known as included phloem. It is observed that it is even more severely riddled with included phloem than Kempas (*Koompassia malaccensis*). In sawntimber, bands and patches of included phloem similar to those found in Kempas can often be seen (Ser, 1981). These zones of abnormal tissues are likely to result in seasoning degrade and mechanical weakness in the timber. Some minor defects that have been recorded are shot holes, pin holes, heart rot and hollow pith. Apart from these, the logs of freshly-felled *K. excelsa* are generally free from other defects.

Uses

When treated, the timber is suitable for all heavy construction, like posts, beams, joists, columns (heavy duty), piling, railway sleepers and power transmission poles. Untreated, the timber is suitable for flooring (heavy traffic), panelling, mouldings, heavy duty furniture, fender supports, office and shop fittings, tool handles (impact) and plywood.

References:
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- *Foxworthy, F. W. & Woolley, H. W. 1930. Durability of Malayan Timbers. Malayan Forest Record No. 8.*
- *Jackson, W. F. 1965. The Durability of Malayan Timbers. Malayan Forest Service Trade Leaflet No. 28.*
- *Menon, P. K. B. 1986. Uses of Some Malaysian Timbers. Revised by Lim, S. C. Timber Trade Leaflet No. 31. The Malaysian Timber Industry Board and Forest Research Institute Malaysia, Kuala Lumpur. 48 pp.*

MTIB organised Sabah Wood and Lifestyle Fair held on 10-14 October 2018 in Kota Kinabalu, Sabah.


Safety Talk : Fire Prevention and Emergency organised by MTIB for its personnel on 16 October 2018 at MTIB, Kuala Lumpur. The speaker was from FPC Fire Prevention Service Sdn. Bhd.


Students from Politeknik Sultan Abdul Aziz Shah, Shah Alam visiting FIDEC 3, Banting, Selangor on 16 October 2018.

YBhg. Dato' Dr. Jalaluddin Harun FASc, MTIB Director-General (fourth from right) posing with MTIB personnel during the Terengganu Wood and Lifestyle Fair held on 22-26 September 2018 in Kuala Terengganu, Terengganu.


YB Datuk Seri Shamsul Iskandar Md Akin, Deputy Minister of Primary Industries (centre) posing with MTIB officials after officiating the "Sayangi Komoditi, Bual Bicara dan Kerjaya" programme . The event organised by Ministry of Primary Industries was held on 24 October 2018 in Lahad Datu, Sabah.


Course on Wood Identification for HRDF personnel, jointly organised by MTIB with Human Resource Development Fund (HRDF) held on 23-25 October 2018 at WISDEC Selangor in Banting.