

ISSN.0126-6632

perkasa

sarawak timber industry development corporation

Apr-Jun 2022

quarterly magazine

**Enhancing the management of
forests and natural resources in line
with the environmental sustainability
plans of Sarawak**



contents

Editorial

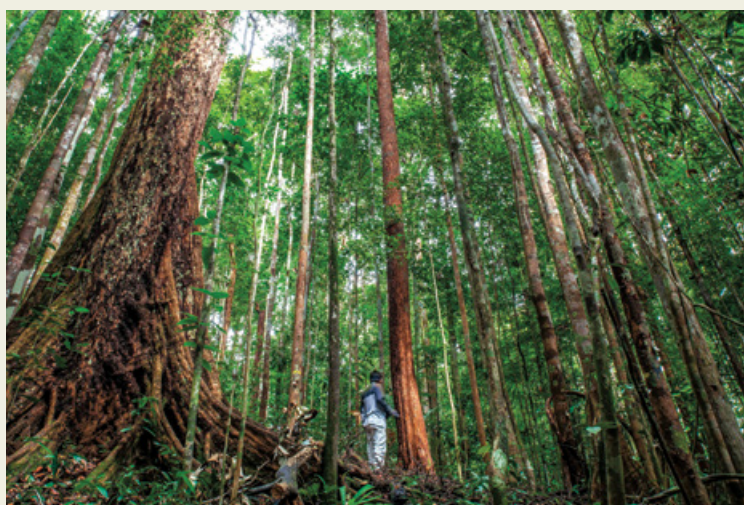
- 04 The Government Is Committed To Increasing Export Earnings By Promoting High Value-Added And Engineered Wood Products

Sarawak Forest

- 04 Enhancing The Management Of Forests And Natural Resources In Line With The Environmental Sustainability Plans Of Sarawak
- 07 Sarawak Committed To Mitigating Effects Of Climate Change
- 08 Grab The Investment Potential And What Sarawak Has To Offer
- 10 Commercial Timber Species Of Sarawak

Trade Statistics, Sarawak

- 16 January To March 2022 /
January To March 2021



Editorial Team

Chief Editor

Datu Haji Hashim bin Haji Bojet
General Manager

Editor

Sharifah Norolah Binti Wan Ahmad
Assistant General Manager
(Corporate Communication)

Writer

Norman Botes Noma
Manager
(Corporate Communication)

Trade Statistics

Domestic Trade Section



Sarawak Timber Industry Development Corporation (STIDC)

Wisma Sumber Alam, Jalan Stadium, Petra Jaya, 93050 Kuching,
P.O.Box 194, 93702 Kuching, Sarawak, Malaysia.

Tel: +60 82 473 000 Fax: +60 82 442 691 E-mail: stidc@pusaka.gov.my

quarterly newsletter is published by Sarawak Timber Industry Development Corporation (STIDC). All rights reserved. No part of this publication may be reproduced in any form without prior consent of the Publisher.

The title "PERKASA", its logo and contents remain the property of the Publisher. Opinions expressed by advertiser are not necessarily of the Publisher or Editor.

STIDC website:

www.sarawaktimber.gov.my

E d i t o r i a l

Sarawak experienced bullish market performance of timber and timber products in 2021 compared with the previous year despite COVID-19 pandemic. This was attributed by good prices of main export items such as plywood, logs, sawn-timber and fibreboard.

Export earnings from wood-based products of Sarawak grew by four percent to RM3.9 billion in 2021 compared with RM3.7 billion in 2020. Plywood contributed RM2.1 billion (55 percent) of the overall income in 2021. Japan being the main market contributed RM2 billion (53 percent) of the export earnings in 2021.

Export revenue from wood-based products of Sarawak grew by 26 percent to RM1.04 billion in the first quarter of 2022 compared with RM826 million in the corresponding period last year.

Japan remained the top consumer of wood-based products of Sarawak and contributed RM616 million (59 percent) to the overall export earnings in the first quarter of 2022.

Other key markets were India (RM119 million), USA (RM61 million), The Middle East (RM44 million), Taiwan (RM43 million) and The Philippines (RM41 million).

Export revenue of plywood increased by 23 percent to RM603 million in the first quarter of 2022 compared with RM488 million in the corresponding period last year.

The government is committed to increasing export earnings by promoting high value-added and engineered wood products such as furniture besides encouraging research and development initiatives in order to sustain the wood-based sector as the mainstay of the economy of Sarawak. This augured well with the State Post COVID-19 Development Strategy (PCDS) 2030 to boost export earnings of wood-based products to RM8 billion by 2030.

Research and Markets, US 2022 reported that the global furniture market value accounted for USD945 billion annually by 2030 compared with USD637 billion in 2021. Market value for engineered wood products was projected to reach more than USD400 million annually by 2030 compared with USD284 million in 2019 as reported by Allied Market Research, US 2022. Market value for bamboo-based products is poised to reach USD6.9 billion in 2022 and is expected to reach USD12.4 billion annually by 2032 according to report by Future Market Insights Global and Consulting, US 2022.

Industry players are urged to take this opportunity and boost their value-added products such as furniture, engineered wood and bamboo-based products. At the same time, they need to embrace IR4.0 and digital technology in order to reduce dependency on foreign workers and costs.

A furniture testing lab is under construction in Kota Samarahan to provide furniture testing services to meet the global standards for both domestic and international markets.

The government is also collaborating with the industry players to develop furniture parks in Kuching and Tanjung Manis to lure investors to develop furniture industry for export markets. This would bring RM500 million worth of investment to Sarawak besides generating RM4 billion export earnings by 2030.

Under the Sarawak Young Designers (SayD'SignerSarawak) Programme, STIDC is collaborating with Bandung Institute of Technology, Polytechnic University of Milan and UNIMAS to train and to produce world class furniture designers to support the timber industry and to produce furniture for global market.

At the same time the government through STIDC is promoting bamboo planting. The Bamboo Industry Development Masterplan was formulated in 2019 with emphasis on resource management, market development, technology adoption & commercialization, research & development, sustainable environment, capacity building, corporate social responsibility as well as policy and institutional strengthening. By 2030, Sarawak aspires to have various bamboo-based industries to produce charcoal, pharmaceutical, cosmetic, textile, pulp and paper, food, handicraft and engineered bamboo products such as bamboo ply, strand woven bamboo and glued-laminated-bamboo. We also aim to plant at least 20,000 hectares of bamboo for industrial purposes to generate RM200 million in export earnings by 2030 and to create 5,000 employments with household income of RM36 million per year.

In tandem with this STIDC is collaborating with research institutions such as FRIM and SIRIM as well as universities like UNIMAS, UiTM, UPM, UCTS and Swinburne in conducting research and development on local planted timber and bamboo species. The aim is to innovate production technology towards producing high value-added wood-based and bamboo-based products to generate high income.



*Datu Haji
Hashim bin
Haji Bojet*

Enhancing The Management Of Forests And Natural Resources In Line With The Environmental Sustainability Plans Of Sarawak

Sarawak is blessed with natural resources including the tropical rainforests. Forests are beneficial to our economy, social and environment. Sustainable forest management ensures natural habitat for flora and fauna, water catchments and climate stability.

The Forests (Amendment) Bill 2022 is to enhance management of forests and natural resources in line with the environmental sustainability plans of Sarawak.

The Bill paves the way for more recreational forests including forest reserves, protected

forests, communal forests or state land forests for educational, research and recreational purposes.

Licences will be issued for carbon activities in the permanent forests and on state and alienated land towards removing carbon dioxide from the atmosphere through carbon sequestration and storing it within the forests.

Currently 7.7 million hectares or 62 per cent out of 12.4 million hectares of Sarawak's landmass is still forested.

Under the Sarawak Land Use Policy, seven million hectares were earmarked for sustainable forestry



Natural forest of Sarawak.

and conservation. Permanent Forest Estates and Totally Protected Areas were allocated with six million hectares and one million hectares respectively.

Carbon sequestration can be carried out to form carbon stocks and to derive carbon credit units from forested areas. Through forest carbon activities, the state is poised to have a new source of revenue estimated at RM315 million annually. This is based on current World Bank Carbon Price of US\$5 per tonne.

The Bill will change the dynamics of the timber industry in Sarawak by enabling the state to monetise its forest resources in a non-destructive manner.

It is, therefore, crucial that the private sector support the government's new approach to ensure sustainability.

The Bill aimed to reduce the production of timber from natural forests besides encouraging the utilisation of timber from planted forests and forest carbon activities.

The Bill also focused on conservation, reforestation and restoration of forests in support of the global efforts to mitigate the effects of climate change and opportunities to secure new sources of revenue from our forests.

This will contribute to conservation of soil, mitigation of erosion, protection of water catchments and preservation of biodiversity.

The Kyoto Protocol allows for carbon sequestration by afforestation and reforestation under the Clean Development Mechanism within the Land Use, Land Use Change, and Forestry activities.

Recently the need for taking action against carbon releases from forests was incorporated into the Paris Agreement to the United Nations Framework Convention on Climate Change, 2015.



Malaysia is a signatory to the Paris Agreement in 2016 and has committed to a reduction of greenhouse gases by 45 per cent by 2030.

Forest Management Certification

In 2019, the State Government endorsed the forest management certification policy requiring all long-term forest timber licences to be certified. The policy aimed to ensure sustainable supply of forest resources. In tandem with this, all forest plantations in Sarawak were encouraged to undertake forest plantation management certification as reflected in the Policy Direction on Industrial Forest Plantation in Sarawak. In May 2022, 13 Forest Management Units (FMUs) covering 1.27 million hectares in Sarawak were certified under Malaysian Criteria and Indicators for Forest Management Certification (Forest Plantation) by SIRIM QAS International.

In addition, six Forest Plantation Management Units (FPMUs) covering 94,966 hectares were also certified.

Certification is vital to ensure good plantation management practices in order to boost the reputation of Sarawak and customers' confidence.

The State Government is committed to forest certification in line with Post-COVID-19 Development Strategy (PCDS) 2030 towards a thriving society driven by data and innovation so that everyone is able to enjoy economic prosperity, social inclusion and a sustainable environment.

Forest Landscape Restoration

The state government through the Forest Department, will continue to implement the forest landscape restoration programme which is now renamed Greening Sarawak Campaign.

The programme aimed to enrich degraded forest areas and involving all stakeholders including the local communities.

It is also in line with Greening Malaysia Programme to plant 100 million trees by 2025.

The Sarawak government is committed to plant 35 million a year within a period of five or seven years.

12,247,189 trees were planted in Sarawak since the beginning of this programme in 2021. The planting sites include government land, forest plantations, logging areas, NCR land and private land.

Sarawak Delta Geopark was established and the state government hoped it would be certified as a UNESCO Global Geopark.

The geopark covers 311,246 hectares of land and water with cultures special to Kuching, Bau, Siburan and Padawan.

Industrial Forests

Various initiatives were taken by the State Government of Sarawak to sustain the development of the timber industry and to ensure that it remain as the mainstay of economy.

Industrial forests are crucial in ensuring sustainable supply of raw materials for the timber industry of Sarawak.

This is in tandem with the objective to plant one million hectares of fast-growing tree species by 2025. These include *Acacia* spp., *Eucalyptus* spp., and several indigenous species such as Kelempayan (*Neolamarckia*), Batai (*Paraserianthes falcataria*), Rubber (*Hevea brasiliensis*), Meranti (*Shorea* species), Kapur (*Dryobalanops* spp.), Keruing (*Dipterocarpus* spp.) and many more.

552,369 hectares were planted as of May 2022. LPF holders were instructed by the

government to submit catch-plan in order to achieve the target.

The aim is to reduce log production from natural forests by producing 15-20 million m³ of raw materials from industrial forests to support downstream industry.

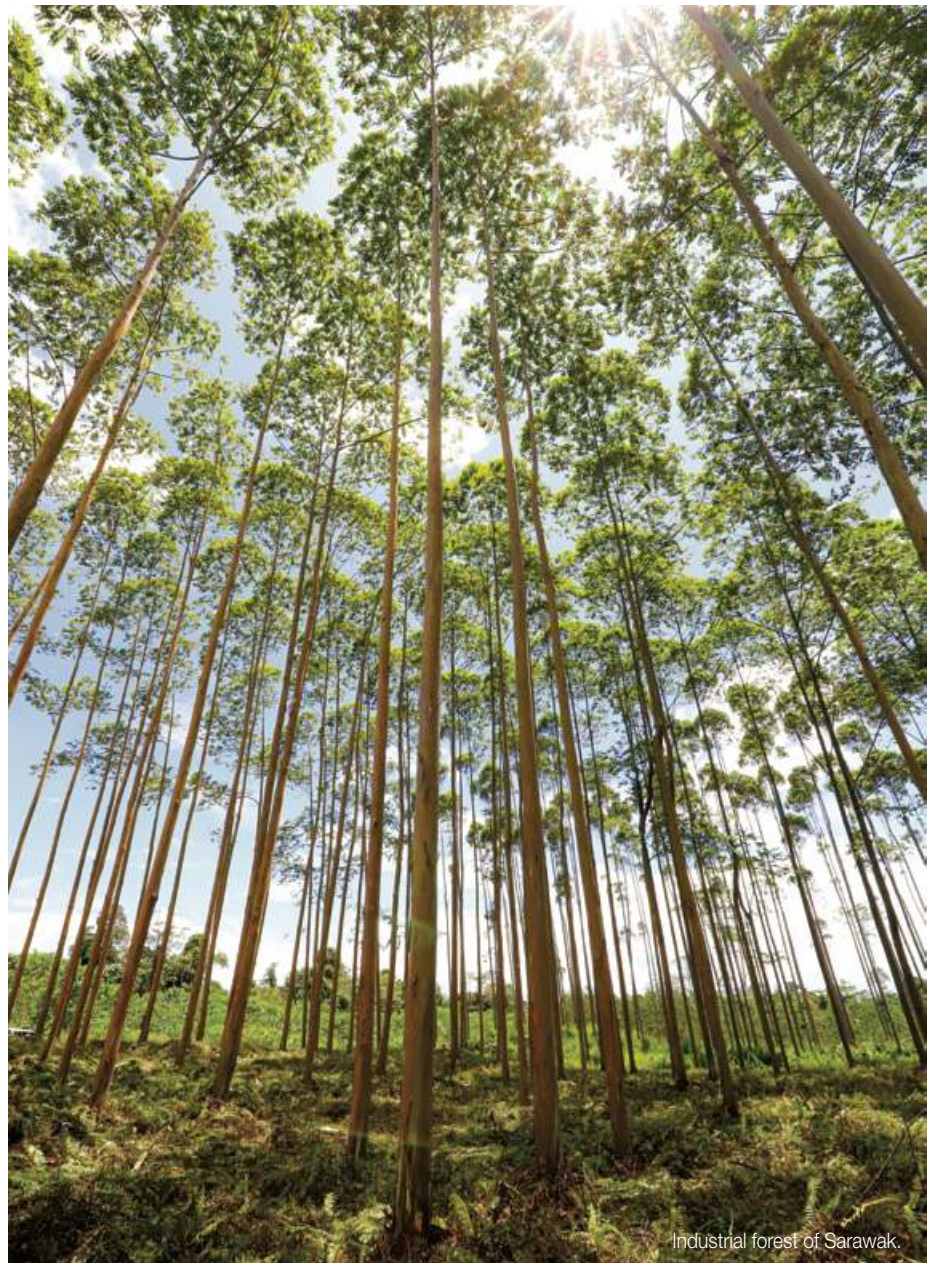
To ensure continuous supply of raw materials for the local industry, the government practises flexibility on log importation besides promoting non-timber such as rubber wood and bamboo as well as raw materials from industrial forests.

In addition, Log Reservation Quota is reviewed regularly for mutual benefit.

Presently, 80% of logs are reserved for local processing. The remaining 20% is for export.

Through this policy, the government hopes to gradually reduce log export and to impose total ban by 2022.

Towards that end, all Long-Term Timber Licencees are required to obtain Forest Management Certification (FMC) by 2022. By then, issuance of long-term timber licences shall cease. This augurs well with the government's aspiration for certification and sustainable forest management.



Industrial forest of Sarawak.

Sarawak Committed To Mitigating Effects Of Climate Change



Deputy Premier of Sarawak and Chairman of STIDC, Datuk Amar Haji Awang Tengah Ali Hasan (centre) showing his speech text emphasizing the Forest (Amendment) Bill 2022 tabled in the 19th Sarawak State Legislative Assembly.

Sarawak government is committed to mitigating the effects of climate change by adhering to environment sustainable protocols in its forest management.

The Kyoto Protocol allowed for carbon sequestration by afforestation and reforestation under the Clean Development Mechanism (CDM) within the Land Use, Land Use Change and Forestry (LULUCF) activities.

Recently, the need to take action against carbon releases from forests was incorporated into the Paris Agreement of the United Nations Framework Convention on Climate Change, 2015 (UNFCCC).

Malaysia is a signatory to the Paris Agreement in 2016 and is committed to reducing its greenhouse gases by 45 percent by 2030," he said during the Forest (Amendment) Bill 2022 reading at August House.

Malaysia had already participated voluntarily in the reducing emission from deforestation and forest degradation (REDD+) programme which was decided by UNFCCC in 2013 to enhance use of carbon sinks through carbon sequestration in forest areas.

As far as Sarawak is concerned, mandatory policy was enforced for forest certification for all long-term forest timber licences and forest plantations, embarking on the forest restoration programme and increasing conservation areas such as national parks, nature reserve and wildlife sanctuaries.

The Forests (Amendment) Bill 2022 was unanimously passed on the third day of the 19th Sarawak State Legislative Assembly (DUN).

STIDC supports this initiative and urged the wood-based industry players in Sarawak to do the same for mutual benefit.



Grab The Investment Potential And What Sarawak Has To Offer



Deputy Minister of Plantation Industries and Commodities, Datuk Willie Anak Mongin (seated in the middle) and the General Manager of STIDC, Datu Haji Hashim Haji Bojet (seated fourth right) posing with the industry players and potential investors.

Sarawak is the leading exporter of upstream timber products and plywood. The Honourable Datuk Willie Anak Mongin, Deputy Minister of Plantation Industries and Commodities disclosed that the state exported RM3.6 billion worth of timber and timber products in 2021 in which upstream products contributed more than 90%. He was addressing the Engagement Session for industry players and potential investors of the Sarawak Furniture Parks on 26 April 2022 in Kuala Lumpur.

According to him, Sarawak also has good potential to develop its downstream activities with emphasis on value-added products such as furniture to boost income.

"The COVID-19 pandemic has adverse impacts on the economy. It is, therefore, crucial to seek ways and seize

opportunities in this recovery phase. We need to rebuild our industry through strategic alliances in order to strengthen businesses", he said.

He added that the post-COVID-19 Development Strategy 2030 augured well with the target to generate RM8 billion in export earnings from value-added timber products.

"Apart from furniture, other value-added products identified to contribute to this export target were engineered wood products, plywood-based and bamboo-based products. I urge you to take a closer look at the investment potential and what Sarawak has to offer under its master plan for the Furniture Parks in Kuching and Tanjung Manis", he said.

In terms of raw materials, he said Sarawak aims to certify 4.5 million hectares of





long-term licence areas and 178,000 hectares of forest plantations under the Malaysian Timber Certification Council's (MTCC) programme to ensure sustainable supply of raw materials.

"I hope furniture manufacturers of Sarawak will focus on producing furniture with certified timber. As a marketing tool, certification also gives local industry players a competitive edge to compete at the global level. Both the state government and MTCC should foster better integration in steering the timber industry towards sustainability as envisioned by the Federal government", he said.

He emphasised that the government would also look into human capital and infrastructure development in order to expedite the development of Furniture Parks.

"Sarawak offers you the potential and stability and I hope the industry players from the Peninsular Malaysia will collaborate with STIDC in establishing the Furniture Parks. In addition, the Malaysian Investment Development Authority (MIDA) is offering several incentives such as Pioneer Status and Investment Tax Allowance for companies investing in the manufacturing sectors as well as the Small and Medium Enterprises and Reinvestment Allowance", he said.

Also present were Puan Hajah Norrida Yusoff (Chairman of Malaysian Timber Council), Mr. Muhtar Suhaili (Chief Executive Officer of Malaysian Timber Council), Ms. Habibah Ahmad (Deputy Under-Secretary Timber, Tobacco and Kenaf Division of the Ministry of Plantation Industries and Commodities), Ms Siti Syaliza Mustapha (Chief Executive Officer of Malaysian Timber Certification Council), Datu Haji Hashim Haji Bojet (General Manager of Sarawak Timber Industry Development Corporation), Presidents and Chairmen of Timber Associations.





Commercial Timber Species Of Sarawak

For more information, kindly contact
Sarawak Timber Industry Development Corporation (STIDC)
Wisma Sumber Alam, Jalan Stadium, Petra Jaya,
93050 Kuching, Sarawak.

Telephone: +60 82 473 000 . +60 82 441 169
Fax: +60 82 442 691
Website: www.sarawaktimber.gov.my

Sarawak is covered with diverse tropical rainforests and blessed with rich natural resources including timber. Some of the tropical timber were identified as commercial timber species.

Examples of the commercial timber species of Sarawak are Bindang / Damar Minyak / Malayan Kuari (*Agathis alba.*, *A.borneensis*), Bintangor (*Calophyllum spp.*), Dark Red Meranti (*Shorea spp.*), Durian (*Spp. Of Bombacaceae*), Geronggang (*Cratoxylum spp.*), Jelutong (*Dyera spp.*), Menggris / Kempas (*Koompasia malaccensis*), Kapur (*Dryobalanops spp.*), Kayu Malam / Kayu Arang (*Diospyros sppx*) and Keruing (*Dipterocarpus spp.*).

Details of the commercial timber species of Sarawak are documented and displayed at the Timber Museum, Wisma Sumber Alam, Petra Jaya, Kuching.





Texture



Cross Section

Bintangor

Calophyllum spp.

Anatomy

Pores : Simple perforation; medium size to moderately or very large; exclusively solitary in bunches or oblique radial festoons.

Wood Parenchyma : Apotracheal widely spaces as distinct terminal bands or concentric; visible to naked eyes.

Rays : Very fine or fine and not visible to naked eyes.

Physical Properties

Colour

- Heartwood : Light Pink-Brown to light red-brown or red-brown or orange-brown.
- Sapwood : Light yellow-brown with pink-tinge or pale pink-brown.

Grain : Interlocked and sometimes spiral.

Texture : Coarse or uneven.

Other Features : Figure on tangential surface - Zigzag markings caused by terminal bands; On radial faces - Ribbon like caused by interlocked grain.

Common Uses : General utilities, masts, spars and helms of boats; light constructions; furniture; panelling plywood etc. Excellent timber for diving boards.

Bindang (Damar Minyak / Malayan Kuari)

Agathis alba., A.borneensis

Anatomy

Pores : Absent.

Rays : Very fine and not visible to naked eyes.

Tracheids : Tracheids Radially grouped and loose in arrangement; visible with hand lens.

Growth Rings : Present but not clearly demarcated between the early wood and late wood.

Physical Properties

Colour

- Heartwood : Light yellow brown or straw colour, often with pink tinge weathering to gold brown or light pink brown.
- Sapwood : note clearly defined heartwood-light-yellow with pinkish tinge, darkening into light golden brown after exposure.

Grain : Straight.

Texture : Very fine and even.

Deposit : Gummy; reddish scattered on the cross section.

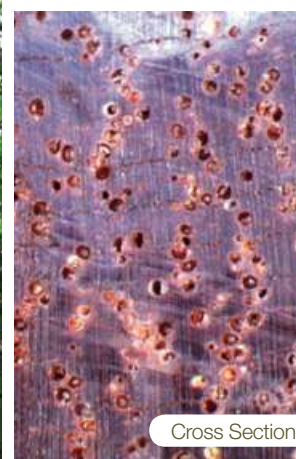
Fibers : Moderately dense.

Other Features : Cross section easy to cut-soft.

Common Uses : High class joineries; cabinet; internal fittings; battery separators; pattern making; high class furniture; excellent wood for panelling; and ceiling.



Texture



Cross Section



Texture



Cross Section

Dark Red Meranti

Shorea spp.

Anatomy

Pores : Simple perforation; moderately large; or moderately few; mostly solitary and in radial or oblique pairs and multiples of up to 4; filled with tyloses.

Wood Parenchyma Apotracheal :

Apotracheal: Irregularly spaced concentric bands enclosing the resin canals or diffused strands and scattered short lines.

Paratracheal: As incomplete border to the vessels, occasionally slight aliform.

Paratracheal : As incomplete border to the vessels, occasionally slight aliform.

Rays : Medium size; visible to naked eyes on cross section.

Physical Properties

Colour

- Heartwood : Red-brown weathering to dark-red.
- Sapwood : Pale yellow-brown.

Grain : Usually interlocked sometimes wavy.

Texture : Moderately coarse but even.

Confusable Woods : Alan and Light Red Meranti.

Differentiation : From Alan - by the darker colour • From Light Red Meranti - by darker colour and more conspicuously featured vertical resin canals and heavier in weight.

Common Uses : Joineries, building constructions; furniture; cabinets; office fittings; wall panelling; plywood and door & window frames.

Durian

Spp. Of Bombacaceae

Anatomy

Pores : Simple perforation; moderately large and individually distinct to naked eyes; very few or few in number; mostly in radial pairs or multiple of up to 8 and in clusters; few solitary; vessels with gum liked deposits.

Wood Parenchyma : Diffuse; moderately abundant; Apotracheal forming short lines between rays and forming a scalariform patterns.

Rays : Two distinct sizes; broader rays distinct.

Physical Properties

Colour

- Heartwood : Light reddish brown to deep red brown.
- Sapwood : Pale Brown.

Grain : Straight to slightly interlocked.

Texture : Moderately coarse and even in Neesia but uneven in *Durio* and *Coelostegia*.

Other Features : Faintly present ripple marks.

Confusable Woods : Mengkulang and Perah.

Differentiation : From Mengkulang: By the absence of tail-like appendages vessels. • From Perah: Apotracheal band line.

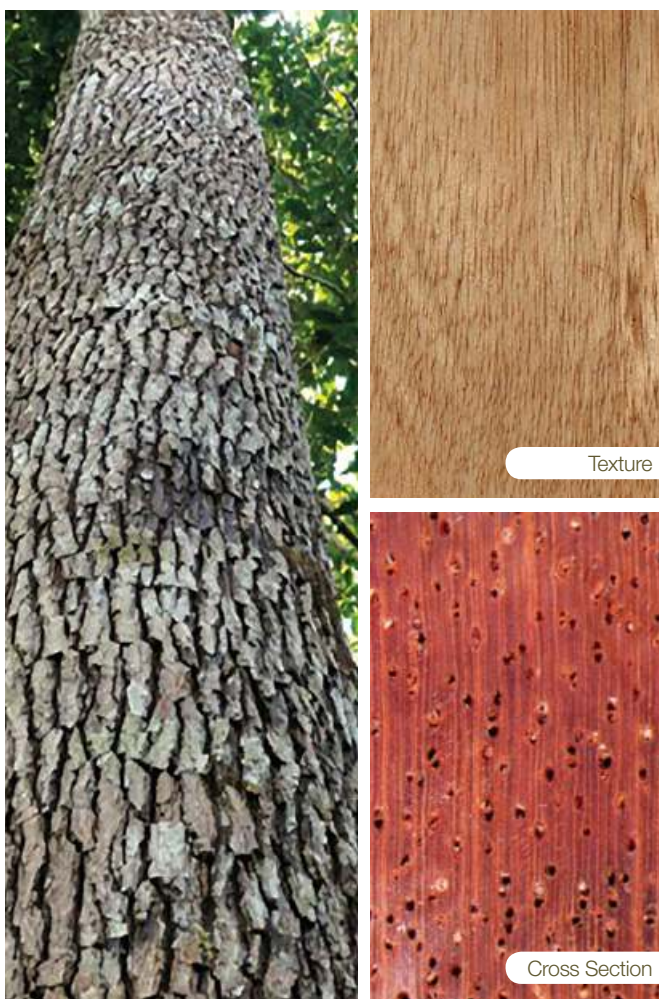
Common Uses : General utilities; door and window frames; furniture parts; plywood etc.



Texture



Cross Section



Jelutong

Dyera spp.

Anatomy

Pores : Simple perforation; medium size; moderately few; mostly in radial pairs and also multiple of up to 4 in cluster.

Wood Parenchyma : Apotracheal: fine; closely spaced; forming short lines extending from rays to rays.

Rays : Moderately fine and visible to naked eyes.

Physical Properties

Colour

- Heartwood : Cream white when freshly cut weathering to pale straw colour.
- Sapwood : Creamy white to pale straw.

Grain : Straight.

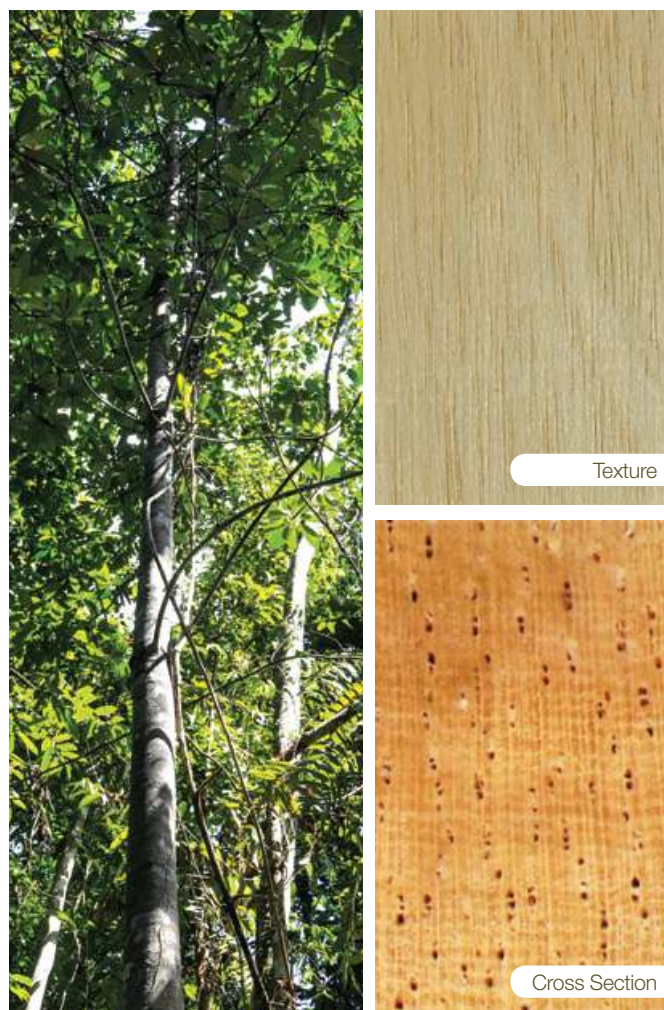
Texture : Fine and even.

Other Features : Latex traces on the tangential faces can be seen.

Common Uses : Pelai.

Differentiation : Easily differentiated by the absence of concentric bands.

Common Uses : Pattern making; toys; brush back; picture frames; lady shoe soles; battery separators; drawing boards etc.



Geronggang

Cratoxylum spp.

Anatomy

Pores : Simple perforation; medium size; moderately few; solitary; radial pairs; multiples of up to 4; some vessels with tail like appendages or small; radially arranged vessels.

Wood Parenchyma : Indistinct or as faint wings to the vessels (aliform) or narrow widely spaced bands.

Rays : Fine.

Physical Properties

Colour

- Heartwood : Pink brown, light red brown, brick red or deep pink.
- Sapwood : Light pink brown with a pale yellow tinge, well defined.

Grain : Straight to shallowly interlocked.

Texture : Moderately fine to moderately coarse but even.

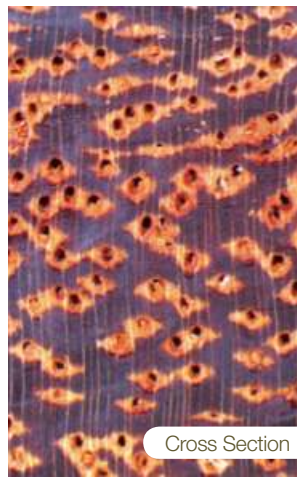
Confusable Woods : Light Red Meranti.

Differentiation : By the absence of vertical resin canals and the presence of tail-like appendage vessels and orange-yellow deposit.

Common Uses : Decorative works; joineries; furniture's; counter tops; toys; wooden clogs; plywood etc.



Texture



Cross Section

Menggris (Kempas)

Koompassia malaccensis

Anatomy

Pores : Simple perforation; large or very large; few or very few; partly solitary and partly in radial pairs and multiple up to 6; evenly distributed without any clear arrangement.

Wood Parenchyma : Apotracheal : Narrow terminal bands; rarely occur. • Paratracheal : Predominant conspicuous aliform and sometimes slightly confluent.

Rays : Fine.

Physical Properties

Colour

- Heartwood : Brick red-brown, reddish-brown, orange red-brown or dark red-brown.
- Sapwood : Cream white to light yellowish white often infested with stain.

Grain : Deeply interlocked.

Texture : Coarse but even.

Confusable Woods : Tapang (Tualang).

Common Uses : Railway sleepers (creosoted); parquet flooring; roof timbers; fence posts (when treated with preservatives); Menggris/ Kempas is suitable for all medium heavy constructions; telegraph and power line posts.

Kapur

Dryobalanops spp.

Anatomy

Pores : Simple perforation; medium size to moderately large; moderately few in number; exclusively solitary; evenly distributed with a tendency to form oblique line often blocked with tyloses.

Wood Parenchyma : Apotracheal: Irregularly spaced concentric bands; sometimes diffused strands. • Paratracheal: Aliform.

Rays : Moderately fine to medium size.

Physical Properties

Colour

- Heartwood : Red brown or purple red brown.
- Sapwood : Yellow brown and well defined.

Grain : Straight or shallowly interlocked and sometimes deeply interlocked.

Texture : Moderately coarse and even.

Other Features : Ripple marks and pinholes present. Freshly cut wood with camphor odour.

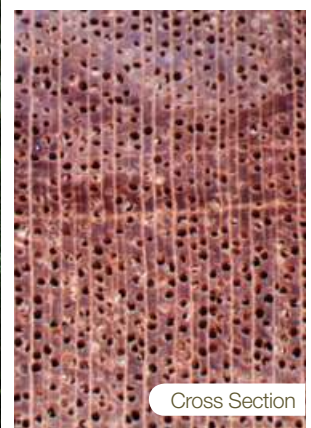
Confusable Woods : Keruing and Dark Red Meranti.

Differentiation : From Keruing - by concentric distribution of resin canals. • From Dark Red Meranti - by the exclusively solitary vessels.

Common Uses : Building constructions (posts, beams, joints, rafters, door and window frames, flooring, walling etc.) and furniture.



Texture



Cross Section



Texture



Cross Section

Kayu Malam (Kayu Arang)

Diospyros spp

Anatomy

Pores : Small to medium size; moderately numerous; mostly in radial pairs or groups of 3; but in some species group of up to 8 are within common.

Wood Parenchyma : Abundant; in narrow metatracheal (fine lines) layers closed together; usually less than the diameter of the vessel apart; not visible to naked eyes in any species; but moderately distinct with a lens in some and barely to just visible in other species.

Rays : Very fine.

Physical Properties

Colour

- Heartwood : Yellowish white to light buff or light yellow. Sometimes with a pink tinge. Some species having streaky core while some others produce jet black core.
- Sapwood : Grey white to yellow brown not well defined.

Grain : Straight to shallowly interlocked, occasionally wavy.

Texture : Fine and even.

Common Uses : Streaked heartwood - good for decorative works; high class cabinet works; decorative furniture and musical instrument.

Keruing

Dipterocarpus spp.

Anatomy

Pores : Simple perforation; exclusively solitary; moderately large to very large in size - numerous few or moderately few; evenly distributed with tendency to form short oblique line in some species; filled with tyloses - occasionally empty.

Wood Parenchyma : Scarce to abundant; both Apotracheal and Paratracheal.

- Apotracheal : Usually diffused but sometimes forming narrow metatracheal layers from ray to ray; associated with intercellular canals surrounding individual canals.
- Paratracheal : Forming only narrow or incomplete borders to vessels.

Rays : Two different sizes; very fine and medium. Resin odour, freshly sawn timber with waxy or oily surface.

Physical Properties

Colour

- Heartwood : Red brown to purple red brown weathering to darker colour.
- Sapwood : Lighter colour and well defined.

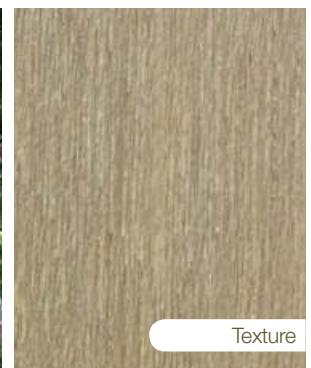
Grain : Straight to deeply interlock depending on the species.

Texture : Coarse but even.

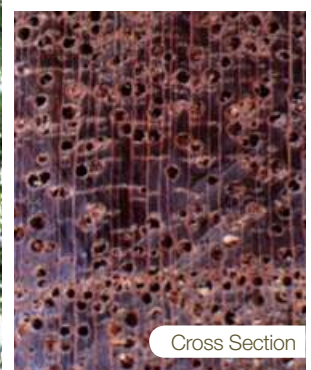
Confusable Woods : Kapur.

Differentiation : From Kapur - by the presence of two different ray sizes and tangential short series of resin canals.

Common Uses : Suitable for medium heavy construction, joints, rafters, vehicle bodies and plywood manufacture.



Texture



Cross Section

Table 1
Export Summary Of Timber And Timber Products From Sarawak

Products	2022* January - March			2021* January - March			% Change 2022 / 2021	
	Volume (M³)	FOB Value (RM'000)	Value %	Volume (M³)	FOB Value (RM'000)	Value %	Volume	Value
PLYWOOD	220,566	602,795	57.73	262,307	488,294	59.09	(15.91)	23.45
LOGS	132,190	127,046	12.17	101,813	85,914	10.40	29.84	47.88
SAWNTIMBER	36,132	69,367	6.64	35,781	65,765	7.96	0.98	5.48
FIBREBOARD	53,613	126,256	12.09	39,767	72,261	8.74	34.82	74.72
VENEER	438	1,119	0.11	9,263	11,750	1.42	(95.28)	(90.48)
DOORSKIN	9,783	25,642	2.46	9,844	21,661	2.62	(0.62)	18.38
LAMINATED BOARD/FLOORING	2,475	12,072	1.16	2,184	8,423	1.02	13.33	43.32
PARTICLEBOARD	4,286	4,185	0.40	2,089	1,586	0.19	105.12	163.90
DOOR PANELS & FRAMES	2,895	4,313	0.41	1,588	2,627	0.32	82.27	64.22
MOULDING	485	1,368	0.13	777	1,731	0.21	(37.51)	(20.92)
OTHER PRODUCTS*	4,958	7,681	0.74	7,082	9,624	1.16	(29.99)	(20.19)
OTHER PRODUCTS**[Units]	626,122	14,708	1.41	885,619	14,037	1.70	(29.30)	4.78
BRIQUETTE & CHARCAOL (Tonne)	946	2,262	0.22	2,465	5,202	0.63	(61.63)	(56.53)
WOOD PELLETS [Tonne]	3,049	1,639	0.16	-	-	-	100.00	100.00
WOODCHIP [Tonne]	97,150	43,791	4.19	87,950	37,485	4.54	10.46	16.82
TOTAL (m³) (RM)	467,820	1,044,244	100	472,496	826,361	100	(0.99)	26.37

***Other Timber Products:**

- Blockboard
- Chopping Board
- Densified Wood
- Dowels
- Finger jointed
- Lamin Board
- Laminated beam/post
- Laminated Veneer Cross Band (LVB)
- Laminated Veneer Lumber (LVL)
- Railways sleepers
- Wood Panels
- Wooden Fences
- Wooden Handle
- Wooden Lattice
- Wooden stakes

****Other Timber Products:**

- Furniture & Furniture parts

Notes:

- > Fibreboard include MDF and HDF
- > Total of volume (m³) does not includes woodchips (tonne) and other product (units)
- > a = actual data & total does not include application/permit to transport goods within the Federation [Customs Declaration Form No.3 (CDF3)]
- > p = preliminary data & total does not include application/permit to transport goods within the Federation [Customs Declaration Form No.3 (CDF3)]

**Export Value (%) Of Major Timber & Timber Products
From Sarawak (RM'000) : 2022 / 2021**

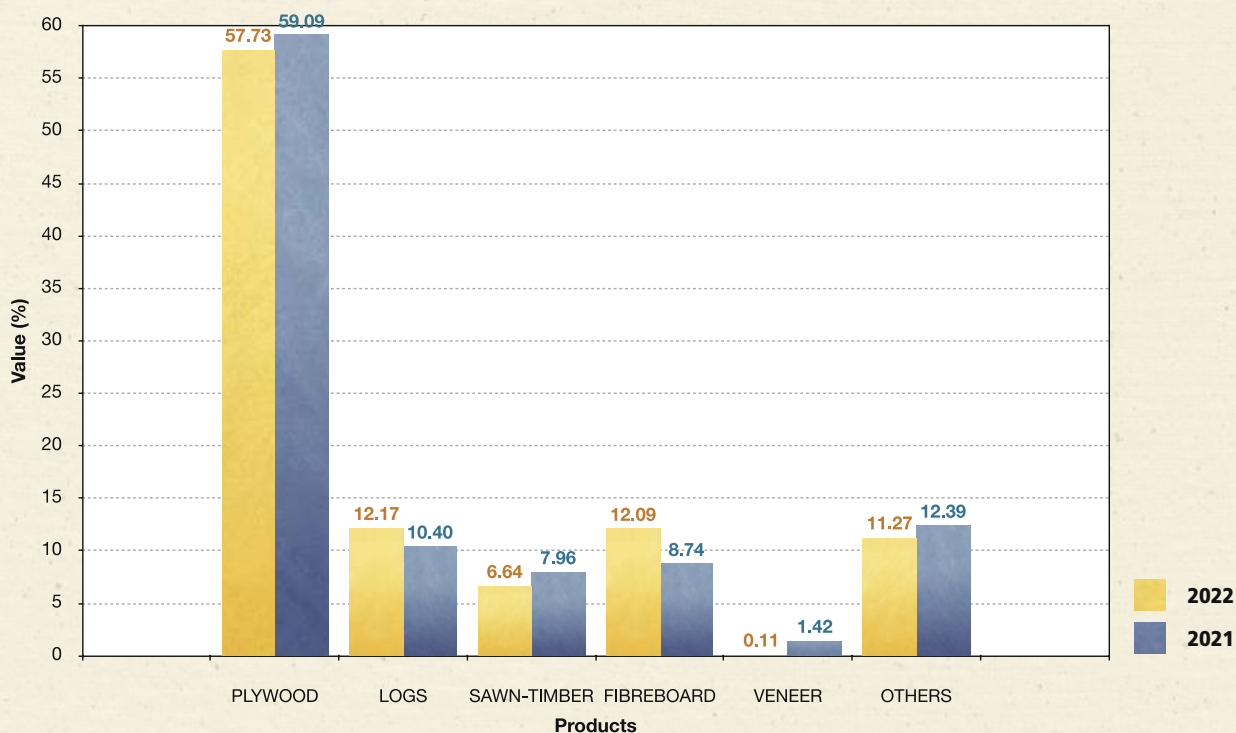


Table 2
Export Of Plywood By Country Of Destinations

Destinations	2022 ^P January - March			2021 ^P January - March			% Change 2022 / 2021	
	Volume (M³)	FOB Value (RM'000)	Value %	Volume (M³)	FOB Value (RM'000)	Value %	Volume	Value
JAPAN	174,748	482,521	80.05	174,064	340,495	69.73	0.39	41.71
UNITED STATES	11,043	44,243	7.34	10,808	22,753	4.66	2.18	94.45
TAIWAN	10,250	21,786	3.61	19,033	28,656	5.87	(46.15)	(23.97)
MIDDLE EAST	11,347	21,541	3.57	35,365	54,067	11.07	(67.92)	(60.16)
KOREA	8,335	18,977	3.15	11,519	17,764	3.64	(27.64)	6.83
PHILIPPINES	1,530	4,987	0.83	729	1,596	0.33	109.86	212.49
AUSTRALIA	790	2,504	0.42	2,548	6,735	1.38	(68.99)	(62.82)
VIETNAM	459	1,782	0.30	567	1,221	0.25	(19.00)	45.87
BRUNEI DARUSSALAM	979	1,311	0.22	1,539	2,171	0.44	(36.40)	(39.63)
INDIA	324	1,121	0.19	1,647	3,843	0.79	(80.35)	(70.85)
OTHERS*	762	2,024	0.34	4,490	8,992	1.84	(83.03)	(77.50)
TOTAL	220,566	602,795	100	262,307	488,294	100	(15.91)	23.45

***Other Destinations:**

- DJIBOUTI
- MEXICO
- SINGAPORE
- THAILAND
- CHINA
- NEW ZEALAND
- CANADA
- MALDIVES
- PAPUA NEW GUINEA
- HONG KONG

**Export Value (%) Of Plywood To Major Destinations
: 2022 / 2021**

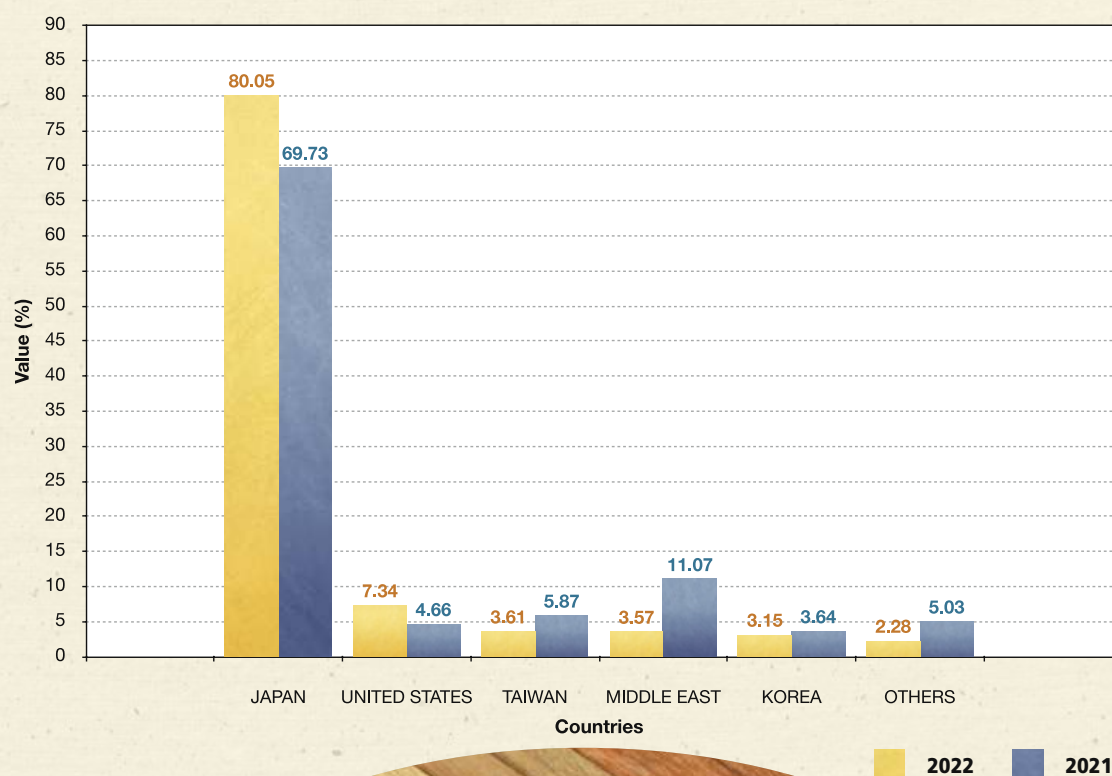


Table 3
Export Of Logs By Country Of Destinations

Destinations	2022 ^a January - March			2021 ^a January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
INDIA	120,111	113,891	89.65	92,806	77,715	90.46	29.42	46.55
JAPAN	5,963	7,026	5.53	-	-	-	100.00	100.00
TAIWAN	6,116	6,130	4.82	9,008	8,199	9.54	(32.11)	(25.24)
TOTAL	132,190	127,046	100	101,813	85,914	100	29.84	47.88

**Export Value (%) Of Logs To Major Destinations
: 2022 / 2021**

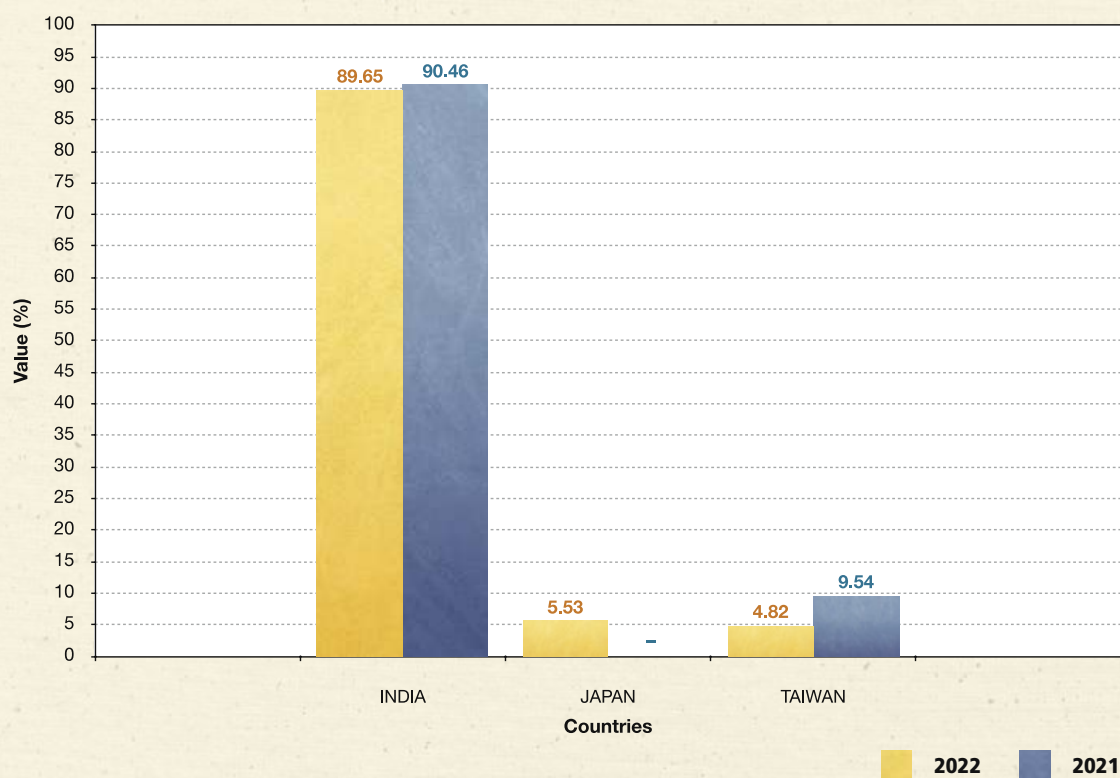


Table 4
Export Of Sawn-Timber By Country Of Destinations

Destinations	2022 ^P January - March			2021 ^P January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
MIDDLE EAST	9,141	22,530	32.48	9,676	20,234	30.77	(5.53)	11.35
PHILIPPINES	10,984	17,540	25.29	12,350	21,477	32.66	(11.06)	(18.33)
TAIWAN	5,076	10,396	14.99	5,826	10,211	15.53	(12.88)	1.81
CHINA	4,779	6,534	9.42	1,281	1,779	2.70	272.96	267.33
JAPAN	1,719	4,810	6.93	1,394	3,324	5.05	23.29	44.69
THAILAND	2,156	3,097	4.46	2,432	3,553	5.40	(11.38)	(12.85)
KOREA	1,519	2,767	3.99	997	1,596	2.43	52.35	73.40
SRI LANKA	391	766	1.10	651	1,317	2.00	(39.90)	(41.85)
SOUTH AFRICA	111	310	0.45	686	1,273	1.94	100.00	100.00
SINGAPORE	142	279	0.40	-	-	-	100.00	100.00
OTHERS*	114	340	0.49	486	1,002	1.52	(76.58)	(66.10)
TOTAL	36,132	69,367	100	35,781	65,765	100	0.98	5.48

***Other Destinations:**

- MALDIVES
- UNITED STATES
- BEUNEI DARUSSALAM
- AUSTRALIA
- INDIA
- PAKISTAN

**Export Value (%) Of Sawn-Timber To Major Destinations
: 2022 / 2021**

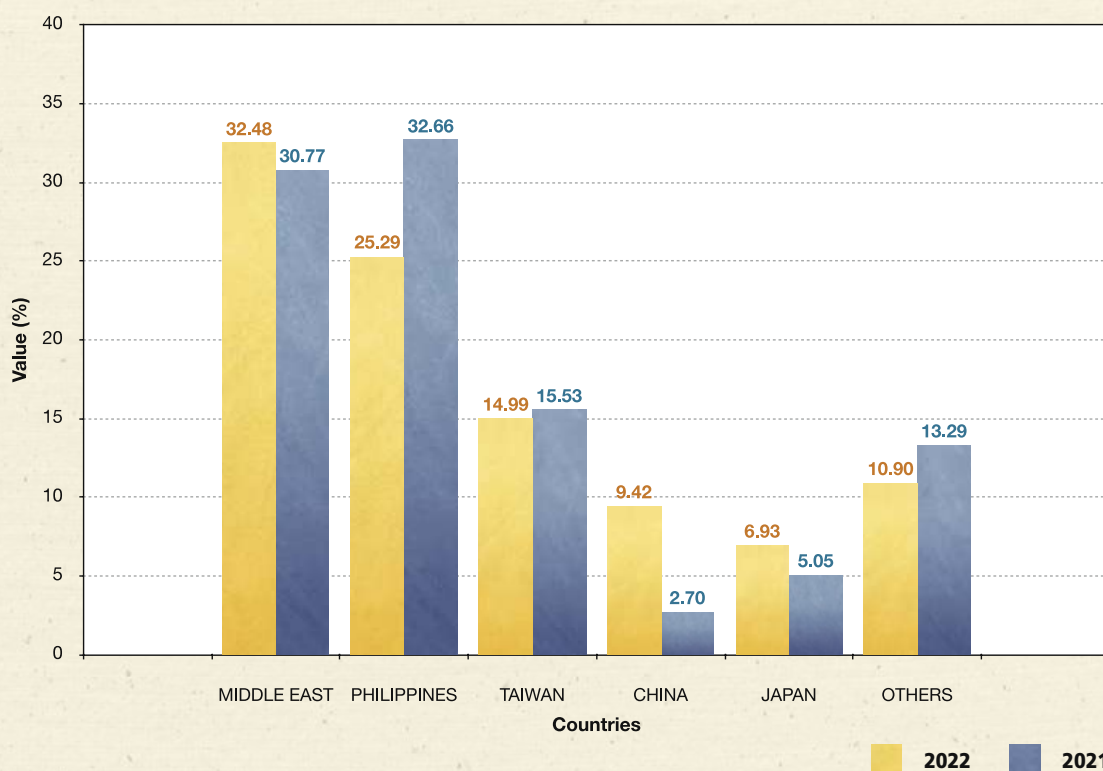


Table 5
Export Of Fibreboard By Country Of Destinations

Destinations	2022* January - March			2021* January - March			% Change 2022 / 2021	
	Volume (M³)	FOB Value (RM'000)	Value %	Volume (M³)	FOB Value (RM'000)	Value %	Volume	Value
JAPAN	36,979	90,827	71.94	25,954	50,714	70.18	42.48	79.10
PHILIPPINES	7,095	15,842	12.55	7,152	11,736	16.24	(0.80)	34.99
INDONESIA	3,587	6,596	5.22	2,245	2,911	4.03	59.76	126.64
VIETNAM	2,735	6,120	4.85	2,775	4,283	5.93	(1.45)	42.90
TAIWAN	988	2,143	1.70	511	783	1.08	93.27	173.88
UNITED STATES	629	2,011	1.59	-	-	-	100.00	100.00
OTHERS*	1,602	2,715	2.15	1,130	1,835	2.54	41.67	47.96
TOTAL	53,613	126,256	100	39,767	72,261	100	34.82	74.72

***Other Destinations:**

- KOREA
- AUSTRALIA
- INDIA
- CHINA
- BRUNEI DARUSSALAM
- CANADA

**Export Value (%) Of Fibreboard To Major Destinations
: 2022 / 2021**

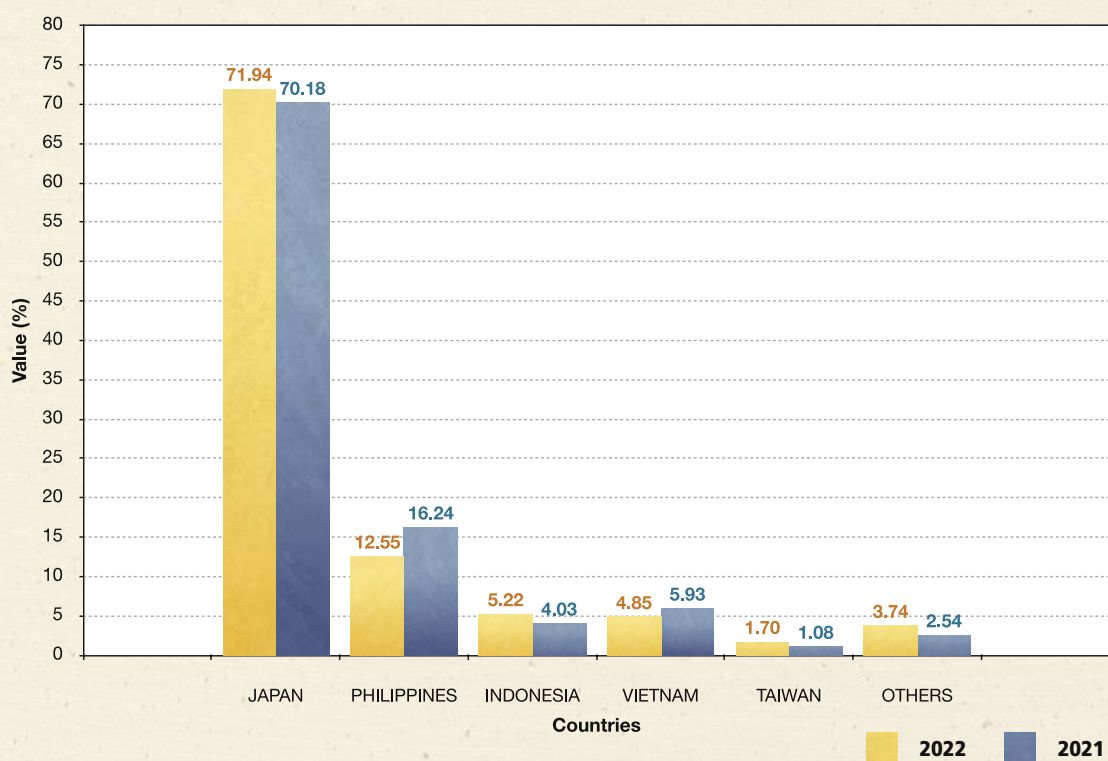


Table 6
Export Of Veneer By Country Of Destinations

Destinations	2022 ^P January - March			2021 ^P January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
VIETNAM	88	335	29.93	-	-	-	100.00	100.00
AUSTRALIA	49	266	23.75	138	301	2.56	(64.23)	(11.73)
KOREA	123	244	21.83	1,759	2,798	23.81	(93.03)	(91.27)
CHINA	158	226	20.16	975	1,106	9.41	(83.82)	(79.61)
BRUNEI DARUSSALAM	20	48	4.33	-	-	-	100.00	100.00
JAPAN	-	-	-	1,145	2,163	18.41	(100.00)	(100.00)
PHILIPPINES	-	-	-	1,035	961	8.18	(100.00)	(100.00)
TAIWAN	-	-	-	4,212	4,422	37.63	(100.00)	(100.00)
TOTAL	438	1,119	100	9,263	11,750	100	(95.28)	(90.48)

**Export Value (%) Of Veneer To Major Destinations
: 2022 / 2021**

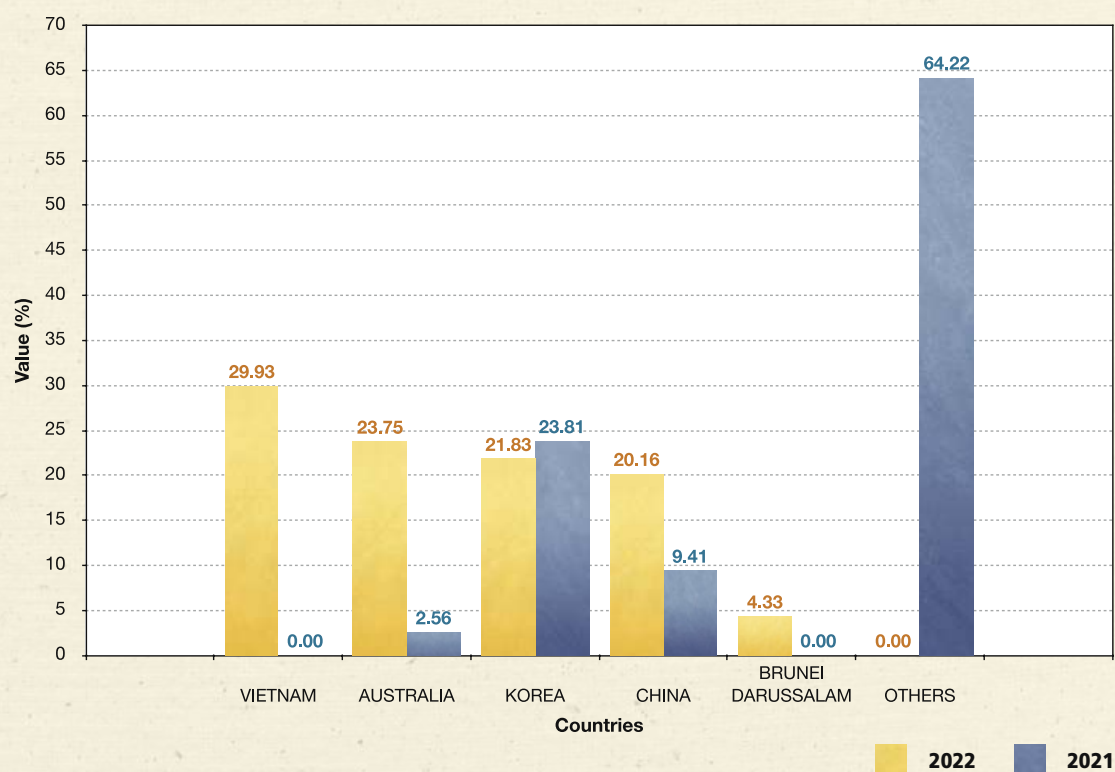


Table 7
Export Of Doorskin By Country Of Destinations

Destinations	2022* January - March			2021* January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
PAKISTAN	6,817	17,573	68.53	6,447	13,677	63.14	5.73	28.48
INDIA	1,523	3,918	15.28	1,890	4,169	19.25	(19.41)	(6.01)
TAIWAN	492	1,269	4.95	244	533	2.46	101.68	137.89
PHILIPPINES	373	1,129	4.40	425	1,039	4.80	(12.23)	8.63
SOUTH AFRICA	284	864	3.37	608	1,651	7.62	(53.20)	(47.65)
GUATEMALA	138	392	1.53	-	-	-	100.00	100.00
THAILAND	73	258	1.01	95	281	1.30	(23.27)	(8.09)
INDONESIA	67	188	0.73	69	155	0.71	(3.08)	21.47
OTHERS*	16	51	0.20	66	156	0.72	(76.06)	(67.23)
TOTAL	9,783	25,642	100	9,844	21,661	100	(0.62)	18.38

***Other Destinations:**

- VIETNAM
- MIDDLE EAST
- NEPAL

**Export Value (%) Of Doorskin To Major Destinations
: 2022 / 2021**

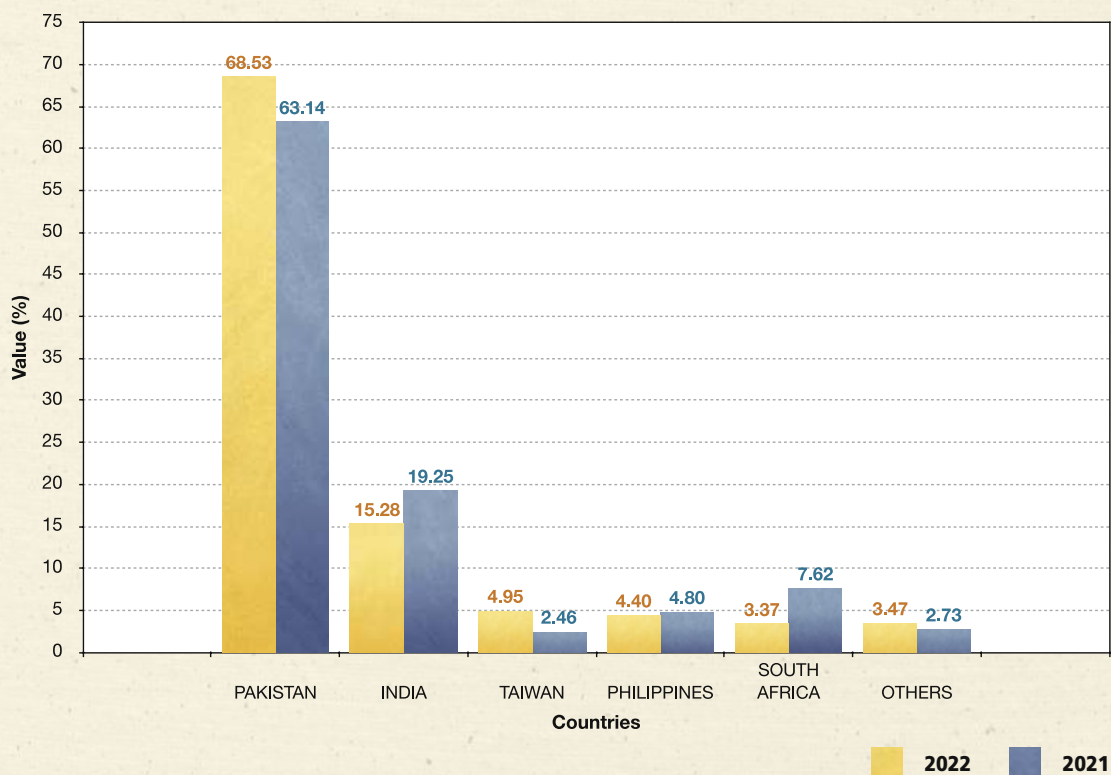


Table 8
Export Of Laminated Board / Flooring By Country Of Destinations

Destinations	2022 ^P January - March			2021 ^P January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
UNITED STATES	1,953	10,211	84.59	1,507	6,304	74.85	29.59	61.97
TAIWAN	286	687	5.69	286	706	8.38	(0.18)	(2.71)
VIETNAM	84	349	2.89	172	636	7.54	(51.05)	(45.10)
AUSTRALIA	50	334	2.77	-	-	-	100.00	100.00
INDONESIA	45	217	1.80	23	81	0.96	95.60	167.53
INDIA	17	197	1.63	-	-	-	100.00	100.00
OTHERS*	39	77	0.64	195	696	8.27	(79.98)	(88.92)
TOTAL	2,475	12,072	100	2,184	8,423	1a00	13.33	43.32

***Other Destinations:**

- KOREA
- MACAU
- SINGAPORE
- EU

**Export Value Of Laminated Board / Flooring To Major Destinations
: 2022 / 2021**

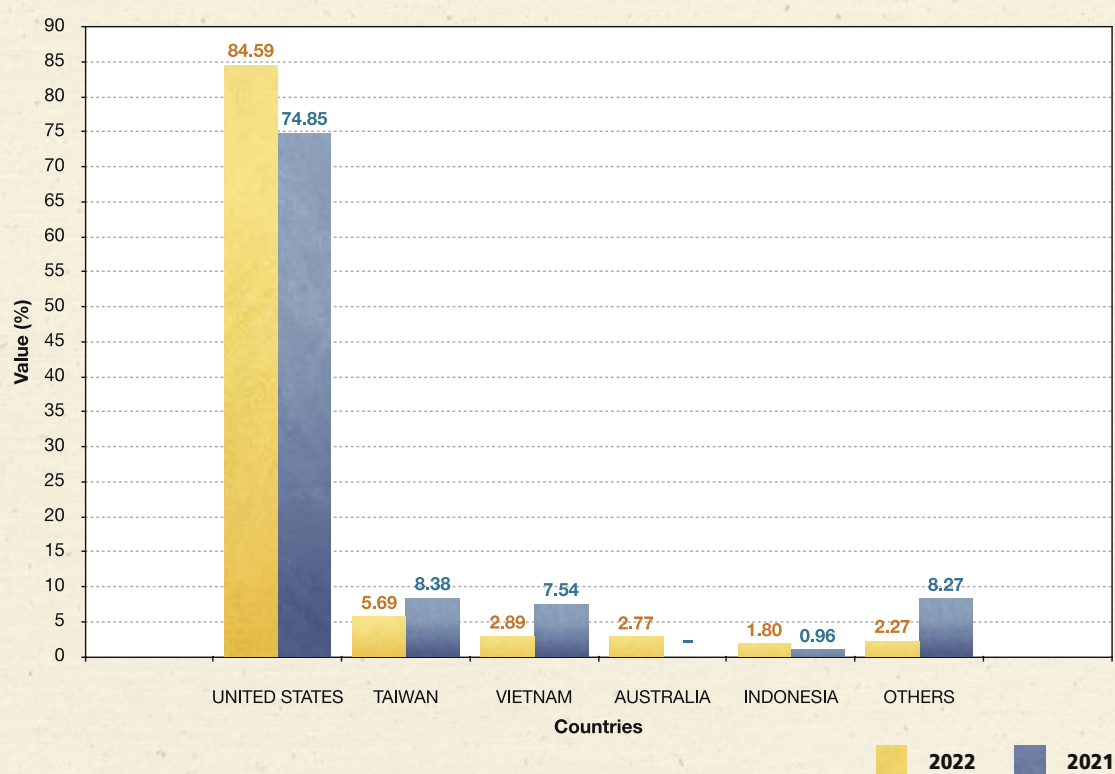


Table 9
Export Of Particle Board By Country Of Destinations

Destinations	2022 ^a January - March			2021 ^a January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
INDONESIA	1,752	1,579	37.72	1,196	928	58.51	46.43	70.13
JAPAN	1,496	1,551	37.07	258	206	13.01	480.27	651.75
PHILIPPINES	1,037	1,055	25.21	350	275	17.33	196.13	283.99
CHINA	-	-	-	21	17	1.07	(100.00)	(100.00)
KOREA	-	-	-	64	48	3.04	(100.00)	(100.00)
VIETNAM	-	-	-	199	112	7.03	(100.00)	(100.00)
TOTAL	4,286	4,185	100	2,089	1,586	100	105.12	163.90

Export Value Of Particle Board To Major Destinations
(RM'000) : 2022 / 2021

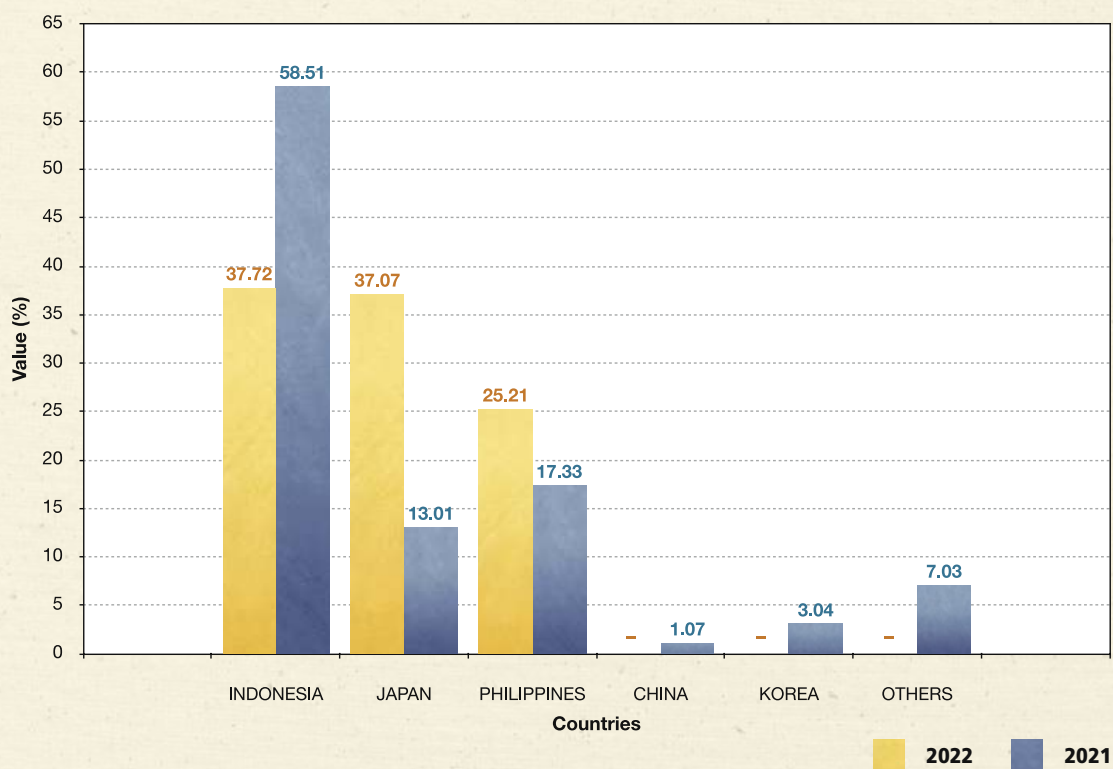


Table 10
Export Of Door Panel & Frame By Country Of Destinations

Destinations	2022 ^P January - March			2021 ^P January - March			% Change 2022 / 2021	
	Volume (M ³)	FOB Value (RM'000)	Value %	Volume (M ³)	FOB Value (RM'000)	Value %	Volume	Value
JAPAN	2,872	4,288	99.41	1,538	2,441	92.92	86.76	75.69
BRUNEI DARUSSALAM	23	25	0.59	24	29	1.10	(5.38)	(12.01)
THAILAND	-	-	-	26	157	5.98	(100.00)	(100.00)
TOTAL	2,895	4,313	100	1,588	2,627	100	82.27	64.22

**Export Value (%) Of Door Panel & Frame To Major Destinations
: 2022 / 2021**

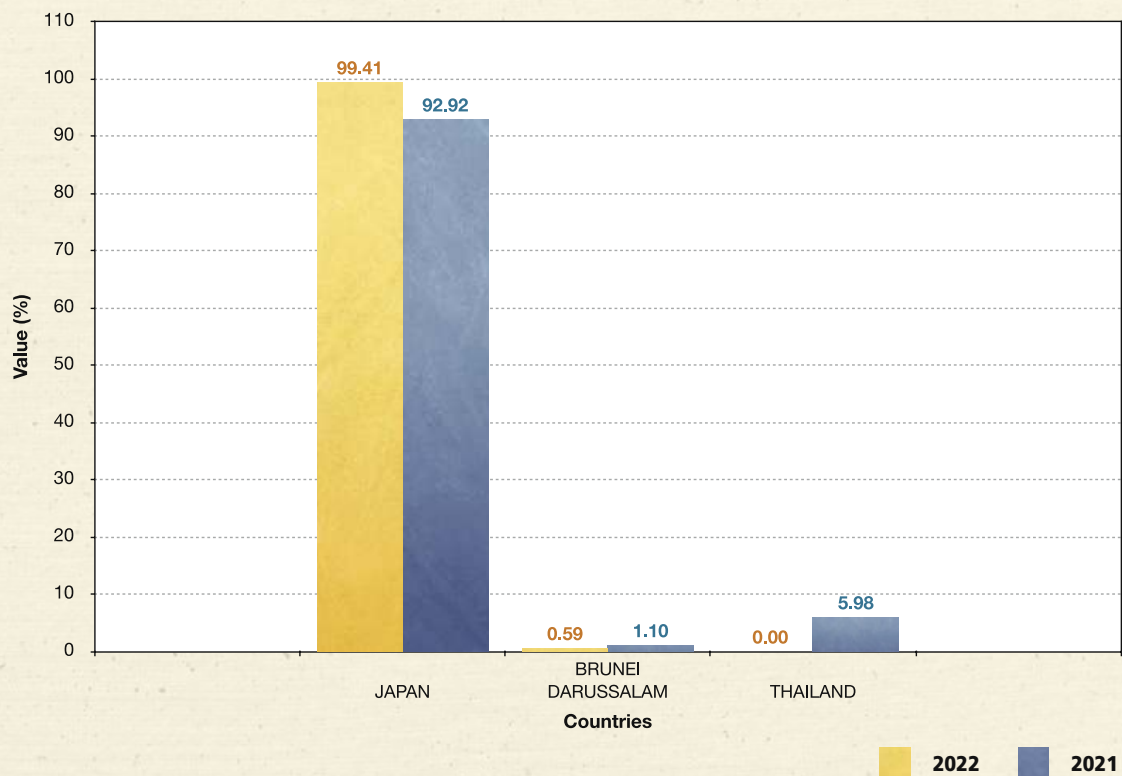
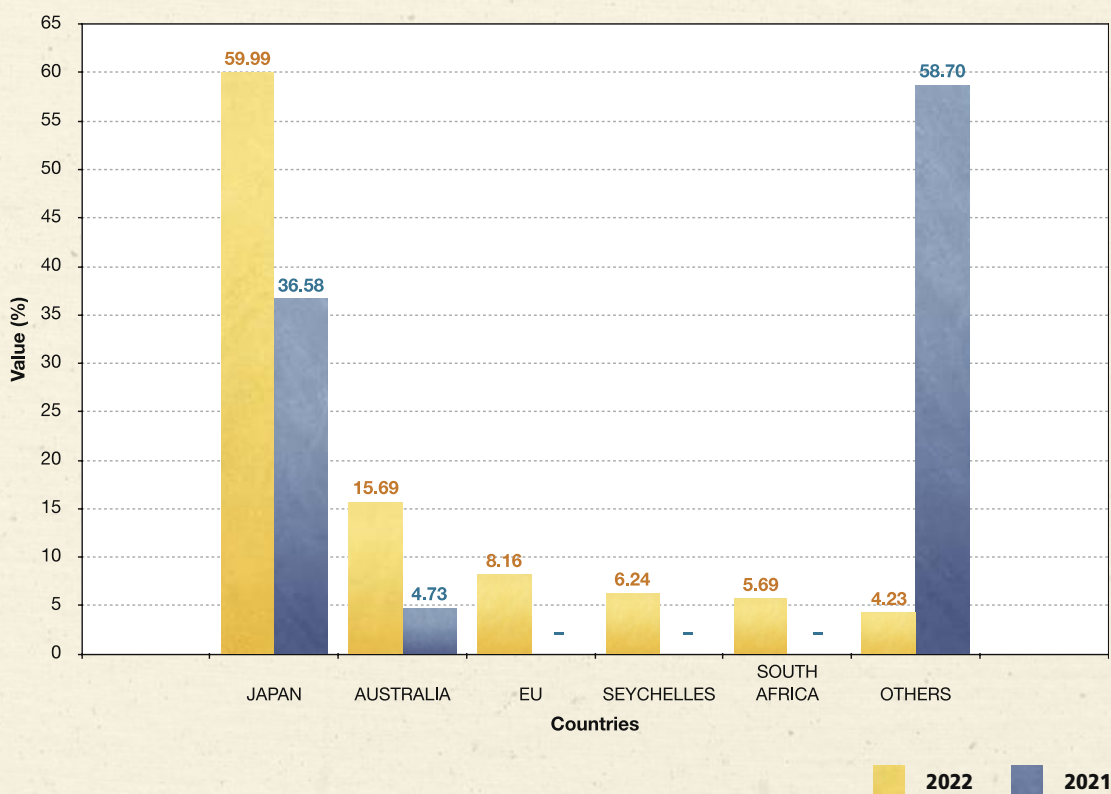


Table 11
Export Of Moulding By Country Of Destinations

Destinations	2022* January - March			2021* January - March			% Change 2022 / 2021	
	Volume (M³)	FOB Value (RM'000)	Value %	Volume (M³)	FOB Value (RM'000)	Value %	Volume	Value
JAPAN	353	821	59.99	270	633	36.58	30.54	29.70
AUSTRALIA	39	215	15.69	20	82	4.73	97.72	162.58
EU	23	112	8.16	-	-	-	100.00	100.00
SEYCHELLES	19	85	6.24	-	-	-	100.00	100.00
SOUTH AFRICA	19	78	5.69	-	-	-	100.00	100.00
TAIWAN	32	58	4.23	21	43	2.48	57.80	34.70
CHINA	-	-	-	73	131	7.54	(100.00)	(100.00)
KOREA	-	-	-	394	842	48.67	(100.00)	(100.00)
TOTAL	485	1,368	100	777	1,731	100	(37.51)	(20.92)

**Export Value Of Moulding To Major Destinations
: 2022 / 2021**



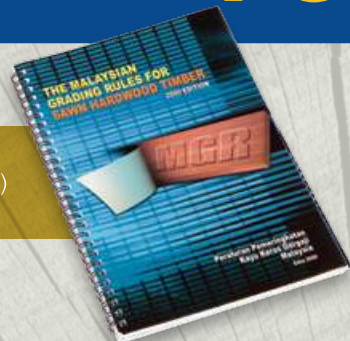
Publication Items

For Sale

Order Form

RM 25

The Malaysian Grading Rules For Sawn Hardwood Timber (English) (2009 Edition)



RM 25

Commercial Timber Species Of Sarawak (a set of 3)



RM 90

Glossary Of Classification Timber & Timber Products Of Sarawak (2nd Edition)



RM 70

Sarawak Timber Species



RM 100

Timber Samples Box



Publications Catalogue:

The Malaysian Grading Rules For Sawn Hardwood Timber (English)

☐

Commercial Timber Species Of Sarawak (a set of 3) (English)

☐

Glossary Of Classification Timber & Timber Products Of Sarawak (2nd Edition)

☐

Sarawak Timber Species

☐

Timber Samples Box

☐

To :

Sarawak Timber Industry Development Corporation (STIDC)

We wish to purchase the items indicated. Please quote us the total cost inclusive of postage and bank commission. (if any).

Name: _____

Designation: _____

Company: _____

Address: _____

Country: _____

E-mail: _____

Tel: _____

Fax: _____

Date: _____

Signature: _____

Company's Stamp

Mode Of Payment

Quotation includes airmail postage and bank commission (for overseas payment only)

Payment should be made in the form of Telegraphic Transfer to our **Maybank Current Account No. 51111 3408 936**




* Fax to : 6082-441169 / 442691
Email : sharinwa@pusaka.gov.my



**to us,
Nothing Should**

go to

WASTE



Utilising technology and innovations for timber products are the hallmarks of STIDC's continuous pursuit of excellence for the timber industry and rightly, nothing should go to waste. In this aspect, STIDC has strived to make use of every part of the log for useful purposes and further enrich downstream industries for the benefit of the State and its people, now and for the future. STIDC firmly believes that forest resources should be optimally utilised for a sustainable future.

**PERBADANAN KEMAJUAN PERUSAHAAN KAYU SARAWAK
Sarawak Timber Industry Development Corporation (STIDC)**

Wisma Sumber Alam, Jalan Stadium, Petra Jaya, 93050 Kuching,
P.O. Box 194, 93702 Kuching, Sarawak, Malaysia.
Tel: 6082-473000 Fax: 6082-442691 E-mail: stidc@pusaka.gov.my



www.sarawaktimber.gov.my

