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Published by Malaysian Timber Council Malaysia's Climate Agenda on Track **Enhancing Malaysia-China** Commodity Trade **Retro Rusticity** Where Old Timbers Inspire New Use

# Dear Readers,



he UN Climate Summit held in New York on 23 September 2014 stimulate a series of commitments by

businesses, governments and others on climate action including the adoption of a New York Declaration on Forests (details on page 3). Although not part of the UN Framework Convention on Climate Change (UNFCCC), the summit was an important event in that it 'forced' each of the leaders to make a public commitment to stronger action. Whether or not this would pan out remains to be seen, however, as there is already evidence that quite a few developed countries have started to lower their earlier-pledged CO, emission targets! If so, the new set of countries' climate targets feeding into the 21st Conference of Parties to the UNFCCC in Paris in 2015 will likely be contentious and regressive rather than progressive. (We will probably get a preview of the unfolding drama at the Climate Change Conference in Lima, Peru this coming December.) This concern on reneged promises by developed countries has already been voiced by Malaysia's Prime Minister (page 2 on the New York Summit), and who hoped that after Paris 2015, the developed countries will deliver the financial and technological assistance they had earlier pledged at Copenhagen in 2009, which has not been fulfilled. This is one area where Malaysia hopes it will be proven wrong, for the sake of the planet.

MTC was part of a 60-strong multicommodity promotion mission to China on 12-19 September 2014, led by His Honourable Datuk Amar Douglas Uggah Embas, the Malaysian Minister of Plantation Industries and Commodities (MPIC). A major focus of the Minister's visit was the large Chinese domestic market for furniture. The Minister was spot-on in saying that China with its vast market and an expanding middle class offers great opportunities for Malaysian exporters to tap into (report on **page 4**), and MTC is always there to guide the Malaysian industry members in forging joint ventures with Chinese partners.

MTC congratulates the Malaysian Panel Products Manufacturers' Association (MPMA) on the occasion of its fiftieth anniversary celebration this year. The MPMA is a Founding Member of MTC and is represented on the Council's Board of Trustees. The Council looks forward to continued collaboration with MPMA to further develop the Malaysian panel products sector. Accounting for RM7 billion or 35 per cent of the Malaysian timber industry's export receipts in 2013, the panel product sector has always been a strong contributor to the nation's timber-based export figures. Our coverage on their golden jubilee celebration is on page 5).

In FOR THE LOVE OF WOOD, we feature the creative application of reclaimed and re-purposed timber products at a pub-cum-restaurant named Tom, Dick and Harry situated in Ara Damansara, Selangor. With a passion for used and salvaged timber, old Chengal railway sleepers re-purposed as tabletops and benches, wooden wine barrels as table bases and wooden windows that made up a stage backdrop, amongst others, the owners have created a uniquely rustic yet welcoming ambience that sets itself apart from other watering holes and makes it stand out within the contemporary business park setting of its location. To know why we were awe-inspired by their reclamation proclamations made good, turn to pages 24-31.

Happy Reading!

# **The Editor**



PAGE 4 INDUSTRY FOCUS Enhancing Malaysia-China Commodity Trade.

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**SPOTLIGHT** Aiming High - Going Vertical with Timber

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# Malaysia's Climate Agenda on Track

he Prime Minister of Malaysia, The Right Honourable Datuk Sri Mohd. Najib Tun Razak, said Malaysia is well on

track to achieve its target of cutting the carbon emissions intensity of the country's Gross Domestic Product (GDP) by 40 per cent by 2020. Addressing the United Nations Climate Summit 2014 in New York, USA on 23 September, the Prime Minister said Malaysia had already reduced the emissions intensity of its GDP by more than 33 per cent despite facing difficulties in fulfilling the pledge made in Copenhagen six years ago.

"The country did not receive the financial and technological transfer assistance pledged by the developed countries during the Copenhagen meeting. That target we set in Copenhagen was conditional on finance and technology transfer from Annex I (developed) countries. Yet neither condition was met. We did not receive the assistance we were promised under Article 4.7 of the Convention," he told the summit which was attended by several world leaders at the United Nations headquarters.

In drawing his attention to Malaysia's initiatives in meeting the Copenhagen target, he said the country had implemented new national policies on climate change and green technology. Citing Malaysia's policies in this field, he



Gazetting new forest reserves is among the measures in the Malaysian government's agenda in mitigating climate change. Inset: Datuk Sri Mohd. Najib Tun Razak addressing the Summit.

said Malaysia had passed a Renewable Energy Act establishing a feed-in-tariff for renewables.

"We made adaptation and mitigation central to our water resources management. And we gazetted new forest reserves, reaffirming our commitment to a pledge we made at the Rio Earth Summit. In the past six years, Malaysia had taken a clear step towards a cleaner future and it had a more sustainable economy, and a more balanced energy mix currently. But this progress came at a cost. In allocating finite national resources, we have had to make painful decisions. Sometimes, we have had to choose between adaptation and mitigation.

"Malaysia had spent nearly US\$2.6 billion in the last decade adapting to more frequent floods. This money, we could have invested in green industries, or used to slow climate change. Malaysia also learned that mitigation without adaptation was

an exercise in futility. During a recent dry period, water shortages and fires combined to destroy thousands of trees planted to sequester atmospheric carbon. Malaysia had shown that its economy could grow whilst its emissions intensity fell. But we have had to divert finances from other sustainable development initiatives. And in those areas, we have lost valuable momentum," he said.

The Malaysian Premier added that his administration would continue to act on climate change. Further substantiating his point on the issue, he said the country had new policies to promote energy efficient vehicles, a new corporate greenhouse gas reporting programme, a building sector efficiency project and a low carbon city framework.

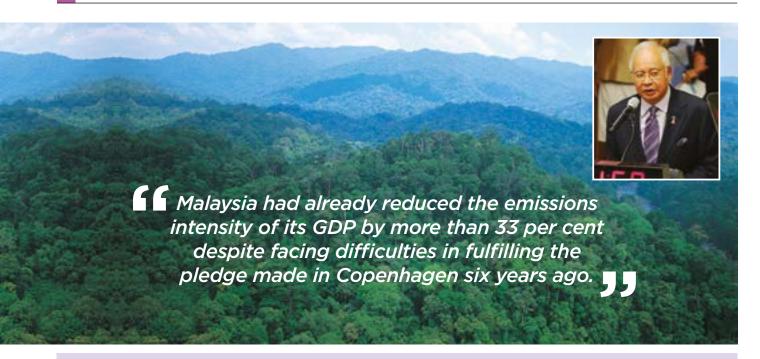
He said that in the face of growing climate impacts, Malaysia remained committed to the climate agenda and could have accomplished far more if promises made by developed countries under the convention were kept. He urged all countries to commit to an ambitious deal to reduce emissions and to follow up that commitment with consistent action.

"Malaysia, a fast-developing Asian nation, showed that economic growth needed not depend on emissions. We stand ready to work with other fast-developing nations to argue for greater ambitions in 2015, and to show that economic development and climate action are not competing goals, but common ambitions," he said.



Ban Ki-moon addressing the delegates at the closing session of the Summit.

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# **UN Climate Summit 2014**

he UN Climate Summit took place on 23 September 2014 at the UN Headquarters in New York, USA. The Summit brought together over 120 Heads of State and Government, as well as government ministers and leaders from multilateral organisations, the finance and business sectors, civil society, and sub-national authorities and local communities, to catalyse action on climate change and mobilise political will towards a global agreement under the UN Framework Convention on Climate Change by 2015.

Following the opening ceremony, the Summit convened in three parallel plenary sessions during which Heads of State and Government made national action and ambition announcements. A private sector forum took place during lunch. Two parallel sessions on national action and ambition announcements took place in the afternoon for governments that sent ministers to the meeting. In the afternoon, three parallel sessions addressed multilateral and multi-stakeholder action announcements organised around the themes: finance; energy; forests; agriculture; resilience; petroleum and industry; transport; and cities. Two parallel sessions engaged in thematic discussions of climate science; voices from climate frontlines; climate, health and jobs; and the economic case for action.

A number of major initiatives, coalitions and commitments were announced or launched during the Summit, such as the adoption of a New York Declaration on Forests; a total pledge of US\$2.3 billion made to the Green Climate Fund; the launch of the Global Alliance of Climate-Smart Agriculture; the announcement by the insurance industry of intention to create a climate risk investment framework by 2015 in Paris; and the launch of a new Compact of Mayors.

During the summit, Malaysia's Prime Minister Datuk Sri Mohd.
Najib Tun Razak lamented the fact that despite promises of financial and technological assistance made by developed countries during the Copenhagen Summit in 2009, Malaysia has not received anything at all to help the country tackle its climate agenda. Despite this, Malaysia has successfully cut her carbon emission's intensity of the country's GDP by more than 33%, and is well on track to achieve the 40% target by 2020.

The New York Declaration on Forests, issued by Governments, companies and civil society groups, is the clearest statement to date by world leaders that forests can be a major force in tackling the climate challenge.

Among the highlights, the Declaration proposes cutting the rate of natural forest loss in half by 2020 and eliminating it altogether by 2030; restoring 150 million hectares of degraded landscapes by 2020 and an additional 200 million hectares by 2030; and strengthening forest governance, transparency, and local and indigenous rights. Following through on this commitment has the potential to create massive benefits; recent analysis shows that restoring 150 million hectares of degraded land into productivity could feed 200 million people by 2030, raise US\$35-40 billion annually in farm incomes, strengthen climate resilience, and reduce emissions.

UN Secretary-General Ban Ki-moon thanked delegates for their contributions and summarised the proceedings, underscoring that never had so many world leaders gathered in one place to address climate change. He outlined a number of initiatives and commitments made during the Summit and said that "as we walk the road to Lima and Paris, let us look back on this as the day we decided as a human family to put our house in order and make it livable for future generations".

Source: Climate Summit Bulletin (Vol. 172 Number 18, 26 September 2014) and World Resources Institute (23 September 2014). INDUSTRY FOCUS Vol. 20 No. 5 Timber Malaysia



Datuk Amar Douglas (centre) visiting the booth of a Malaysian exhibitor at 20th Furniture China 2014. On the left is Datuk Aaron.



is Honourable Datuk Amar Douglas Uggah Embas, the Malaysian Minister of Plantation Industries and

Commodities led a successful multicommodity promotion mission to China on 12-19 September 2014. The mission's objective was to strengthen bilateral trade in various commoditybased products between the two countries.

Apart from MTC, the agencies and councils that took part in the mission include the Malaysian Palm Oil Board, Malaysian Palm Oil Council, Malaysian Rubber Board, Malaysian Rubber Export Promotion Council and Malaysian Timber Industry Board. MTC Chairman, Datuk Aaron Ago Dagang, and CEO, Datuk Yeo Heng Hau, were part of the Ministerial delegation. Also among the delegates were representatives from the private sector.

MTC organised the timber segment's programme. Accompanied by the Malaysian Consul in Shanghai, Mr. Tan Yang Thai, the Malaysian delegation visited the 20<sup>th</sup> Furniture China 2014 held at the Shanghai New International Expo Centre and Shanghai World Expo Exhibition and Convention Centre.

Mr. Wang Ming Liang, the founder of Shanghai UBM Sinoexpo International Exhibition Co., Ltd., which organised the fair, was on hand to welcome Datuk Amar Douglas and his delegation. They exchanged views on expanding the trade of furniture between the two countries. Besides visiting the International Pavilion and

the Original Design Hall, Datuk Amar Douglas also held discussions with several Malaysian exhibitors at their respective booths.

Datuk Amar Douglas was optimistic that Malaysia could grow its share of China's vast furniture market. Last year, China exported furniture valued at RM252 million to Malaysia, but the world's second largest economy only imported RM33 million worth of furniture from Malaysia, he said. The Minister expressed his hope that with China's expanding middle class, the trend would reverse in the future with Malaysia's furniture exports to China surpassing the value of its imports from China.

The delegation also visited the Furen Timber Market, a raw material supply

base for timber products in Shanghai. General Manager of the Furen Group, Mr. Chen Yue Zhu, briefed the delegates on the business model of the Furen Timber Market. Datuk Amar Douglas showed interest in the way the company collaborated with the timber traders in the market.

To further understand the timber market's business model, Datuk Amar Douglas visited several timber traders in the Furen market, including distributors of Malaysian, North American and African timbers. Mr. Chen expressed his willingness to cooperate with more Malaysian suppliers of raw materials, and semifinished and finished products to broaden the range and quantity of Malaysian timber and timber products distributed through the market.



Datuk Amar Douglas being briefed on the business model of the Furen Timber Market.

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One for the album: Datuk Amar Douglas (centre), Datuk Himmat (sixth left), Datuk Sheikh Othman (sixth right) with members of the MPMA Executive Committee.

he Malaysian Panel
Products Manufacturers'
Association (MPMA) was
established five decades
ago, on 5 August

1965, as the Malaysian Plywood Manufacturers' Association with seven founding members. Through the years, the association's name was changed twice before adopting its present name in 1991 to represent the interests of the Malaysian panel industry as a whole. This year, the association is celebrating fifty years of developing the Malaysian panel sector into one of the main pillars of the Malaysian timber industry.

To celebrate its Golden Jubilee, MPMA held a gala dinner on 23 September 2014 in Kuala Lumpur, which was attended by 500 guests comprising its members as well as members from other timberbased associations in Malaysia and representatives from associated government ministries, agencies and councils. The occasion was graced by the Minister of Plantation Industries and Commodities, His Honourable Datuk Amar Douglas Uggah Embas. Also present was the Ministry's Secretary General, Datuk Himmat Singh.

In his address, Douglas complimented MPMA for creating a forum for panel products manufacturers to work collectively for the betterment of the sector and to overcome challenges faced by the industry. The Minister was pleased to note that the association, which represents the major panel products manufacturers in Peninsular Malaysia, Sabah and Sarawak, provides a platform for its

members to exchange views, discuss and address issues related to the panel products sector.

The Minister also congratulated MPMA on the successful collaborative work carried out between the association and the relevant agencies, name the Forest Research Institute Malaysia (FRIM), Malaysian Timber Industry Board (MTIB) and Malaysian Palm Oil Board in the Oil Palm Plywood Project, which he described as an excellent initiative for the future of the panel product industry. "On my recent visit to the plywood mill in Batu Kikir, Negeri Sembilan, I witnessed the oil palm plywood manufacturing process and its potential. It is my hope that MPMA will continue to be open to collaboration and work closely with various government and nongovernment agencies to ensure the industry continue to grow sustainably," said the Minister.

In highlighting the contribution of the panel product sector to the country's foreign exchange earnings, Datuk Amar Douglas said that exports of veneer, plywood, chipboard and fiberboard accounted for RM7 billion or 35 per cent of the timber industry's total export value of RM19 billion in 2013. "The unwavering trend in exports of these products for the past five years signifies the strong base provided by the association to the industry. The significance of plywood, in particular, is evident through its constant share of 25 per cent of the total exports of timber and timber products for the last five years. I congratulate and thank

the association for their immense contribution to the growth of the panel products sector," he added.

The Minister, however, delivered a timely reminder: "While we celebrate the contribution and achievement of the panel products sector, there are many issues and challenges the sector continues to face. These include legality of timber products; compliance to standards such as the Japanese Agricultural Standard; rising production cost; uncertainties in supply of raw materials and labour-related issues. We need to seriously address these critical issues for the long-term sustainability and competitiveness of the panel products sector. At the same time, I urge the industry to ensure compliance to all these market requirements, in order to ensure continued export and market opportunities. We will also continue to assist you in exploring new markets for our timber products."

Earlier, in his welcoming remarks, MPMA Honorary Chairman, Datuk Sheikh Othman Rahman acknowledged and appreciated the efforts expended by the Ministry and its various agencies, namely, MTIB and MTC together with FRIM for always prioritising the industry in their planning and policy-making.

MTC congratulates MPMA on their 50th Anniversary and looks forward to continued collaboration between the two organisations in furthering the interest of the Malaysian panel products industry in particular, and the timber industry in general.

# **Hup Chong Furniture**



he company started in 2001 specialising in manufacturing and marketing residential furniture, mainly from Rubberwood, entirely for export. Its main markets are the USA, Canada, Australia, UK and the Middle East countries, altogether accounting for 98.5 per cent of all shipments.

A fully Malaysian-owned and a private limited company, Hup Chong's manufacturing activities are operated from its three factories, with all plants located strategically in Jalan Kapar, Klang, in the State of Selangor within 30 minutes driving distance from Malaysia's biggest and busiest container and bulk cargo port, Port Klang.

The company has carved out a strong niche in the household furniture segment. From its humble beginnings as a manufacturer of component furniture parts for bedroom and pool table sets, the company has now grown into a manufacturer of complete high and mediumend bedroom sets for adult and youth as well as living and entertainment furniture.

Total production floor space is more than 550,000 sq ft, with a management team and trained workforce of more than 750 staff, coupled with computerised facilities. As such, Hup Chong Furniture is capable of expanding its market worldwide ensuring quality products with 'Just-In-Time' delivery and prompt service. With these current facilities, the company strives to be a 'Furniture One Stop





From its humble beginnings as a manufacturer of component furniture parts for bedroom and pool table sets, the company has now grown into a manufacturer of complete high and medium-end bedroom sets for adult and youth as well as living and entertainment furniture.

Centre', to cater to the ever-growing demand of customers to develop a furniture collection. The company also provides warehousing and 'direct or mixed container' services. With the company's manufacturing expertise and facilities, it is well positioned to develop products that meet customers' requirements and tastes in different markets.







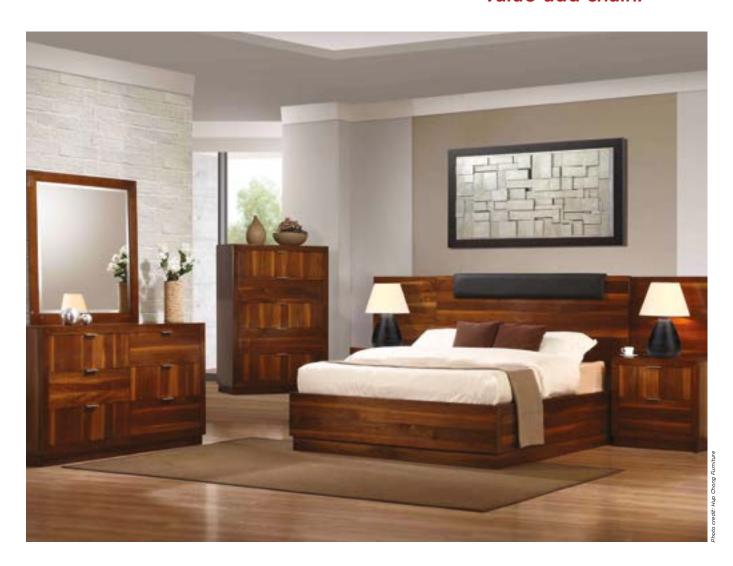


About 70% of Hup Chong's raw material is Rubberwood-based. The Rubberwood is finger-jointed and edge-glued, an efficient way to maximise yield.

About 70% of Hup Chong's raw material is Rubberwood-based with the remaining being American Tulipwood (Yellow Poplar), European Beech, Pine and other wood-based materials. The Rubberwood is finger-jointed and edgeglued, an efficient way to maximise yield. Several years ago, the company also began importing American Tulipwood and European Beech as alternative hardwoods to improve their product range. Today, Hup Chong imports about 10 containers a month, of which Tulipwood is growing and Beech reducing.

"We found that Tulipwood stains well according to our requirements and we like its grain," says Alison Too, Senior Marketing Executive. The use of imported timbers provides Hup Chong with a diversified material supply, and its customers with a choice that extends their range of furniture. Tulipwood is mainly used as 'show wood' for bed headboards and fronts as well as for chests.

The success of Hup Chong in the marketplace hinges on how its activities are carried out at each level of the value-add chain.



As an entity, the company is an integral part of a community and the environment within which it operates. With regard to corporate integrity and responsibility, the company takes a holistic approach toward the marketplace, workforce, community and environment. The success of Hup Chong in the marketplace hinges on how its activities are carried out at each level of the value-add chain. In the procurement of business, the company interacts with both prospective and actual customers and end-users, a majority of whom require assurance that it operates in an ethical and environmentally sustainable manner. These requirements encompass the sustainable use of environmentally friendly raw materials, safe and conducive working environment and product safety.

As a major wood-based furniture manufacturer, Hup Chong believes in the sustainable use of environmentally friendly materials. The company complies with Chain of Custody (CoC) requirements and a majority of its products are certified as CoC-compliant. CoC is regarded as an information trail about the path taken by products from forest or, in the case of recycled materials reclamation site, to the consumer including each stage of processing, transformation, manufacturing and distribution. This is with a view of providing a credible guarantee to the consumer that the products originated from well-managed, sustainable forests or controlled sources.



Hup Chong complies with CoC requirements and a majority of its products are certified as CoC-compliant

With the company's manufacturing expertise and facilities, it is well positioned to develop products that meet customers' requirements and tastes in different markets.



Hup Chong's management says: "We are also working to further reduce the impact of our operations on the environment and to contribute to the realisation of a recycling-based society by achieving the targets set by world environment panels and organisations such as California Air Resources Board (CARB)."

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The company also feels a fundamental responsibility and commitment to ensure that all employees work in a safe and healthy environment. A Safety, Health and Environment Committee has been set up to lead the activities in accordance with the company-wide Safety, Health, Accident Prevention and Environmental Action Policy. This emphasises development of technical competency and enforcement of safe work practices for its workers in the production areas. Production layout and workflow are organised in an orderly manner to ensure optimum workers' movement, safety and a sustainable work rate. Production debris and hazardous materials are handled and disposed of in accordance with safety requirements and regulations to ensure a safe workplace and minimum harm to environment. In compliance with the Occupational Safety and Health Administration (OSHA) requirements, First Aid training sessions are organised to help staff and workers understand their role as Emergency First Responders.





Quality assurance of its furniture products are performed at specific check-points by incoming material inspections, process QC and pre-shipment inspection.

**INDUSTRY FOCUS** 



Hup Chong recognises the importance of product safety and quality assurance as a competitive edge in the marketplace. In this regard, it continuously emphasises the "Quality" and "Customer-focus" watchwords that reflect its quality commitment, using guidelines:

- No compromise on the quality on incoming raw materials;
- Total involvement at all company levels to commitment in quality awareness; and
- Total customer satisfaction as the main priority, by striving to make products more reliable and functional through continuous improvement.

Quality assurance of its furniture products are performed at specific check-points by incoming material inspections. process QC and pre-shipment inspection.

Hup Chong is a regular exhibitor at Export Furniture Exhibition (EFE) held annually in March in Kuala Lumpur, Malaysia. Through its participation in EFE, Hup Chong has established a wide distribution network via importers, wholesalers and retailers, many of whom are dealing with well-known brands such as Room To Go, Harvey Norman and John Lewis. For EFE 2015, Hup Chong will be launching at least eight new designs of bedroom sets. International buyers are invited to visit their booth at Hall 4-B01, Kuala Lumpur Convention Centre. 🗘

# **MALAYSIA**

# MTC Timber Talk



he third edition of the MTC Timber Talk Series for 2014 was held on 30 September at MTC Headquarters in Kuala Lumpur. Jointly organised with Rotho Blaas Australia Pty. Ltd., a

leading developer and provider of high technology solution to the timber building sector, the talk was attended by 52 participants comprising architects, building contractors, engineers, quantity surveyors, researchers, architecture lecturers and students as well as representatives from the Malaysian timber trade.

Silvia Pugnaloni, the Area Manager of Rotho Blaas for Australasia, in her presentation entitled "Massive Timber Construction" enlightened the audience on the modern technology in timber connectors applied in a special case study. She emphasised on the importance for the connections joining heavy timber members to be carefully designed as well as how a connection must be able to transfer the load and its effects from one member to the other within acceptable deformation limits.

Several samples of fasteners and special connectors for massive timber construction were showcased at the talk. The technical details shared by Silvia on massive timber construction were beneficial to the participants, many of whom were exposed to such information for the first time.

She also provided some acoustic solutions for timber buildings. These include the use of various types of soundproofing, made from synthetic materials such as ethylene propylene diene monomer or polyurethane, which serve to stop flooring stressed by footsteps from transmitting vibrations to the vertical walls, thereby limiting the diffusion of noise to nearby floors and spaces. At the same time, there is also the need to use resilient products beforehand in flooring pakages to further improve soundproofing and prevent them from becoming vehicles for sound conduction, she added.



Silvia (right) attending to enquiries on the sample fasterners and special connectors showcased at the talk.

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# **MALAYSIA**

# Debriefing Session on Philippine and Danish Markets



George Yap chairing the debriefing session on the Danish market.



TC jointly undertook two market research visits with three timber-based associations recently. The first visit was to the Philippines on 9 - 12 September 2014 and the second was to Denmark on 29 September - 3 October

2014. The visits were organised in collaboration with the Timber Exporters' Association of Malaysia (TEAM) and the Malaysian Wood Moulding Joinery Council (MWMJC) respectively. The Malaysian Wood Industries Association (MWIA) was represented by a member in both missions.

Following the market research visits, a full-day Debriefing Session was held in MTC HQ, Kuala Lumpur on 27 October 2014 to update members of the Malaysian timber industry on the Philippine and Danish markets. Panel members provided the industry attendees with detailed prospects for Malaysian timber and timber products in the two markets.

The morning session was dedicated to the findings on Denmark. The panel members, who were also delegates of the market visit, were George Yap (leader), Ricky Yap, R. Kupusamy and Ong Tiow Hui, all of MWMJC, and Datuk Lau Chen Nai of MWIA. A total of 27 participants from 15 companies and eight timber related government agencies and associations attended the debriefing session.

In the afternoon debriefing session on the Philippines, TEAM's George Tan (leader), Low Ching Cheong, William Wong, Nagaradran Ramathan and Gerry Lim, and MWIA's Saw Eng Thai constituted the panel. The debriefing session was attended by 41 participants from 25 companies and eight timber related government agencies and associations.



George Tan debriefing participants on the Philippine market.

# **INDIA**

# **INDEX Tradefairs**



MTC organised for the first time the participation of 10 Malaysian furniture companies under the MTC Pavilion.



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TC participated in the 26<sup>th</sup> edition of INDEX Tradefairs held on 9-12 October 2014 in Mumbai, India. The fair, one of the leading trade events in the Indian furniture and interiors industry, covered several sub-sectors

ranging from residential furniture and contract furniture for hospitality use, to office and commercial furniture, kitchens and appliances for home and contract fit-outs.

MTC organised for the first time the participation of 10 Malaysian furniture companies under the MTC Pavilion in INDEX Mumbai. The MTC Pavilion occupied a total area of 250m² and displayed a range of products such as living, dining, bedroom and outdoor furniture, some of which were new models making their debut launch.

The MTC Pavilion was well attended during the four-day event. Many enquiries and potential buyers were channeled directly to the Malaysian companies in the pavilion. Most of the companies reported encouraging potential sales from participating at the fair and have expressed interest to participate in the 2015 edition of the fair.

A total of 323 exhibitors, 30% of whom were foreign exhibitors, participated at the fair, representing 18 countries such as China, Italy, Malaysia, UK, Taiwan, Germany, Spain, USA, UAE, Hong Kong, Portugal, Australia, Austria, Korea, Japan, Turkey, Indonesia and Poland.

Traders, architects, interior designers, corporate leaders, builders, project management consultants and government representatives made up the profile of the 24,751 visitors who visited the fair.

# **GERMANY**

# **BHB Garden Summit**



MTC put up a joint booth with MTCC.

he German DIY Retail Association (BHB) organised its inaugural BHB Garden Summit 2014 on 3 September 2014 at Koelnmesse exhibition centre in Cologne, Germany. Known as the "garden congress" the event was

attended by over 200 participants, from large German DIY companies Toom, Hornbach, Globus, Hellweg, and 10 exhibitors from different sectors of the garden and DIY industry.

MTC together with the Malaysian Timber Certification Council (MTCC) put up a joint booth and displayed PEFC-certified timber products such as garden furniture and decking along with information materials in both German and English. The main objective of hosting the joint MTC-MTCC stand was to promote Malaysian wooden garden furniture and other outdoor products as well as to disseminate information on the latest developments with regard to timber certification in Malaysia to interested participants to the conference.

Besides the conference programme, BHB also organised a "Buyers Lounge", a B2B event for manufacturers and retailers of garden furniture. MTC, represented by its Market Correspondent in Germany, met with three of Germany's largest DIY and retailing companies to discuss possibilities of enhancing business opportunities for Malaysian manufacturers of wooden outdoor furniture and products in the German market.



The summit in progress

# **GERMANY**

# Spoga-Gafa



A high number of visitors to the stand wanted information on certified products.



TC participated in Spoga-Gafa 2014, Europe's main trade fair for the garden industry, held at Koelnmesse exhibition centre in Cologne, Germany on 31 August to 2 September 2014. MTC, as it had in recent years, once again

shared a stand with the Malaysian Timber Certification Council (MTCC) at the fair. A high number of visitors to the stand wanted information on certified products and on how the Programme for the Endorsement of Forest Certification and MTCC certification help meet the European Union Timber Regulation requirements. Others wanted product information on decking suppliers from Malaysia or on suppliers in Germany.

Eight Malaysian timber-based companies also exhibited at Spoga-Gafa 2014. The products displayed by these companies were mainly sets of garden furniture made out of dark, red natural wood such as Meranti, Nyatoh, Red Balau, Rengas and Acacia from the East Malaysian state of Sabah. Emerging product preference and trends by buyers at the show have prompted the Malaysian companies to re-strategise for better positioning of their products in the German and other European markets. The show recorded 36,800 visitors, with 54% of them coming from abroad. The visitors represented the following business areas: Furniture, Garden Accessories, Gardening Tools, Garden Centers, Garden Specialist Trade, DIY store, Garden Creation and Grill. Exhibitor numbers went up by 10.7% from last year to 2,012 from over 50 countries, occupying a total area of 241,000m<sup>2</sup>.



The joint MTC-MTCC stand.

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#### UK

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# **Timber Expo**



The MTC-MTCC stand co-hosted with Finewood Marketing.



TC participated in the fourth edition of Timber Expo held at the National Exhibition Centre in Birmingham, UK on 7-8 October 2014. This year, MTC and the Malaysian Timber Certification Council (MTCC)

co-hosted an 18m² stand with Finewood Marketing, an independent UK-based timber agent.

MTC had eight specific product enquiries over the course of the two-day show and close to 100 visitors to the joint stand. Visitors were primarily interested in certified timber products, including plywood and truck flooring. Several visitors wanted more information on the Malaysian Timber Legality Assurance System (MYTLAS), especially on how the system functions and the ways it could help them with their due diligence obligations under the European Union Timber Regulation.

The show attracted 200 exhibitors from over 30 different countries and an estimated 6,000 visitors who came from as far as Qatar, China, Ghana, Russia, Kuwait, India, Malaysia, Canada and New Zealand. There was an increase in architects, engineers, specifiers and contractors attending the show, many of whom were working on live projects. The increase in the number of visitors, of 30% compared with the previous year, made the 2014 edition the most successful in the fair's four-year history.

Compared with recent years, market conditions are definitely looking up for the UK construction industry. The Construction Products Association has forecast that construction output for 2014 is expected to increase by 4.8% and will increase a further 5.3% in 2015. Looking further forward, the construction industry is expected to grow by up to 23% by the end of 2018 and the sector will contribute some £12 billion to the UK economy during this time. This new-found optimism was reflected in the atmosphere at this year's Timber Expo, which definitely had more buzz than in previous years.

# **KUWAIT**

# Big 5 & Market Visit



TC participated in the second edition of the Big 5 Kuwait, an international showcase of building and construction products, held on 22-24 September 2014 in Kuwait. MTC received a good number of trade visitors

and enquiries, particularly from its target audience such as interior companies, wood joinery workshops, building contractors and importers of timber based products. However, the total turnout of visitors to the fair was below expectation. Based on feedback from MTC's contacts, the number of visitors could have been higher if the organisers had committed more resources to promote the fair.

In terms of exhibitors, the show attracted 186 companies, of which 60 were Kuwaiti companies while the rest were from India, China, South Korea, Turkey, USA and several European and GCC countries. The show featured the latest products, services and environmental technologies for the infrastructure and construction sector in Kuwait. MTC was the only Malaysian exhibitor at the fair.

In conjunction with MTC's participation in the fair, the Council also conducted a market visit to 27 timber-based companies in various districts of Kuwait. These include manufacturers of doors and furniture, importers of various timber-based products like sawntimber, plywood, MDF, joinery components and flooring as well as interior fit-out contractors. Besides gaining the latest updates on the Kuwaiti timber market, the market visit also explored the possibility of enhancing collaboration with Kuwaiti companies towards expanding the market for Malaysian timber products to Kuwait.



MTC received a good number of trade visitors and enquiries.

# CHINA

# 5th China-ASEAN Forest and **Wood Products Expo**

TC participated in the 5th China-ASEAN Forest and Wood Products Expo in Nanning, China on 24-28 September 2014. The exhibition, organised by the China-ASEAN Expo Secretariat, Administration of Forestry

of Guangxi together with the China National Forest Products Industry Association, is one of the many professional exhibitions residing under the China-ASEAN expo roof and is acclaimed as the most relevant platform for China-ASEAN cooperation.

MTC was the sole Malaysian exhibitor at the fair and received good response from Chinese timber traders, manufacturers of wooden doors, windows and furniture. and end-users of timber and timber products. Most of the Chinese timber product manufacturers who visited the MTC booth were interested to learn more about Malaysian timber and seek business opportunities with Malaysian suppliers.

This year, over 200 companies from China and ASEAN countries such as Vietnam, Laos, Myanmar, Indonesia and Cambodia participated in the show to promote collaboration between China and the ASEAN countries in the forestry and timber products industry. More than 200,000 visitors had visited each edition of the fair since its debut in 2010 and its trading value has reached RMB2 billion. Visitors to the exhibition comprised of 30 per cent professional timber traders and manufacturers while end-users made up the rest.



MTC was the sole Malaysian exhibitor at the fair.

# **VIETNAM**

# **Resource and Business Mission**



Participants at a veneer and plywood factory



Resource and Business Mission to Vietnam was organised by MTC from 7-11 October 2014. The mission, covering the cities of Hanoi and Ho Chi Minh, attracted the participation of 27 industry members

representing 26 timber companies from the furniture, plywood and flooring sectors. MTC Director for Raw Material Supply Division, Abdullah Malek, led the Malaysian delegation.

The mission itinerary, put together in collaboration with the Malaysia External Trade Development Corporation's offices in the two Vietnamese cities, included visits to manufacturers and suppliers of veneer, platform plywood, sawntimber, finger-jointed boards, MDF and furniture components. A B2B session was organised on the final day of the mission in Ho Chi Minh City for the Malaysian participants to meet with other potential Vietnamese suppliers of timber-based products.

Feedback from the delegates indicated that the mission had achieved its objective of identifying Vietnam as a potential source of timber raw materials and components for the Malaysian timber product and furniture manufacturing industries.



The mission itinerary also included visits to manufacturers of furniture components.



The 32-meter tall pagoda at Hōryu-ji, Japan is said to be one of the oldest existing wooden buildings in the world.

or over a century, the use of wood in building construction has been limited to light timber framing, generally no more than three to six storeys high. Literally aiming high for buildings out of wood is not a new idea. Even before modern engineered timber composites like laminated veneer lumber (LVL), laminated strand lumber (LSL), glued laminated (glulam) or cross laminated timber (CLT) were invented, wooden buildings have stood tall through the test of time, even in areas with seismic risks.

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Japanese pagodas built up to 19 storeys tall have withstood earthquakes and typhoons over centuries. The 32-meter tall pagoda at Hōryu-ji was built during Japan's Asuka period (538 to 710) and is said to be one of the oldest existing wooden buildings in the world. There have been claims that only two or so of Japan's 500 pagodas have collapsed in 1,400 years¹. Even taller is the 67-meter tall Sakyamuni timber pagoda in earthquake-prone Sichuan province in China which was built in 1056, and is still standing today.

# Walking Tall: The Leading Actors

**Cross laminated timber**: Engineered wood panel with 3, 5 or 7 layers of dimension lumber oriented perpendicular to one another and then glued to form structural panels. Extremely strong and rigid, CLT is also dimensionally stable.





Laminated Veneer Lumber: Thin wood veneers bonded together with the wood grains parallel to the length of the member. Free from warping and splitting, it has dimensional stability and predictable structural performance.

#### **Laminated Strand Lumber:**

Engineered structural composite lumber; thin chips or strands of wood up to 6" in length glued under pressure. The wood grains are oriented parallel to the length of the member, then machined to finished sizes. Particularly strong when face- or edge-loaded.





#### **Glued Laminated Timber:**

Composed of individual wood laminations; bonded together with durable, moisture-resistant adhesives. Grains run parallel with length of member. Used structurally as beams or columns.

 <sup>&</sup>quot;An engineering mystery: Why pagodas don't fall down" - The Economist, 18 December 1997

With the development of glulam, LVL, LSL and CLT, the door has been opened to taller and bigger buildings with wood playing a major structural load-bearing role. It is important to understand the micro-structural behaviour of timber, from how it dissipates energy and produces damping, to the movement of complete buildings, to achieve optimum performance of high-rise timber-based buildings. Timber engineering research thus far has proven tall wooden buildings as lightweight, efficient structures with the potential to respond dynamically to turbulent wind load.

#### Tall Ambitions: The Forté and the TREET

Currently, the Forté in Melbourne is officially the world's tallest contemporary timber building. Housing 23 boutique apartments over 10 floors, the walls, floors and ceiling of the Forté are all made of CLT. For its construction, 485 tons of timber and 759 CLT panels were used, proving that timber with its high strength-to-weight ratio, is strong and yet light enough for safe vertical construction. CLT's technical strength is similar to pre-cast concrete. However, cubic metre for cubic metre, concrete and steel have an energy-intensive production and construction process, creating a lot of greenhouse gases and contributing to the high carbon footprint of most buildings. By building more with timber and minimising concrete, the Forté's construction saved 1,451 tons of carbon.

Building in pre-fabricated timber is also more resource-efficient. The Forté was completed within just nine months, with 30% less piling, much-reduced on-site construction noise, and very little wastage on site. It also took four months shorter or 30% less time than a similar building made in concrete. This speaks volumes for timber construction's financial viability and eco-friendliness over concrete and steel in multi-storey building construction.

But the Forté will not hold the title of the tallest timber building for that much longer. The world's tallest timber high-rise building is currently being built in the city of Bergen, Norway. The 14-storey TREET ("tree" in Norwegian), is a government housing project using 385 m³ of CLT for its staircases, elevator shafts (for 15-storeys) and some inner walls and balconies. The CLT is not connected to the 550 m³ of glulam used to carry all vertical and horizontal loads. With foundations piled to bedrock, it will stand at 49 metres (160 feet) tall. Concrete decks were used on three levels to improve the building's dynamic behavior against wind-load. Prefabricated timberbased apartment modules are fitted in fourstorey per stack, and each apartment module comes pre-fitted with oak flooring, timber beams for the floor and roof, a kitchen with appliances, bathrooms and built-in cupboards. Construction is in progress and slated for occupancy in the spring of 2015. Cost-wise, the construction cost of TREET is comparable to that of a similar building using mainly concrete and steel, but timber wins hands-down in terms of its low carbon footprint.



The 67-meter tall Sakyamuni timber pagoda in Sichuan province, China.



The Forté in Melbourne is currently the world's tallest contemporary timber building.

SPOTLIGHT Vol. 20 No. 5 Timber Malaysia



The fire design of TREET is Eurocode-compliant and the glulam used is so thick that it would burn for at least 90 minutes before disintegrating.

#### **Timber High Rise = A Potential Towering Inferno?**

There, however, remains one obvious concern-combustibility. Just how fire-safe are tall timber structures really?

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Research has shown that timber used as structures, such as columns in large buildings, performs better during a fire compared to steel or concrete. This is because steel will buckle and concrete will crack and crumble very suddenly under high temperatures. Thick timber columns, on the other hand, will initially ignite but the charring of the outer layers of wood will cut off the oxygen supply and effectively slows down the burning of the deeper layers of the timber. The slow rate of burn is important because it gives the occupants enough time to evacuate during a fire. Timber columns have been found to be still standing and functioning after intense fires.

The speed and ease of ignition is dependent on the rate of accumulation of heat at the surface of the wood. Several factors influence this rate and they are the size of the piece of wood, the rate of heat loss from the surface, the presence of thin outstanding edges and the rate which heat is supplied to the surface of the wood. Small pieces with sharp projecting edges, such as matches, ignite easily. On the other hand, large pieces, with round edges, like a round glulam column catch fire at a much slower rate. In buildings with engineered timber panels, heat does not conduct from one side of the panel to the other.

For the Forté, fire-resistance has been achieved through, among others, the building's design through "disproportionate collapse", i.e., the CLT was designed in such a way that should a CLT wall section be damaged, the remaining structure is able to take the load.

Using fire grade plasterboard combined with the charring of the timber as sacrificial layers also ensures that the structural component required is maintained during a fire. Each CLT panel is either five-layer 128 mm thick (for the walls) or five-layer 146mm thick (for the floors). Structurally, only three layers are required. The use of five-layer CLT's provides two additional layers of protection from the sacrificial layers of timber.

In the construction of TREET, the fire design is Eurocode-compliant and the glulam used is so thick that it would burn for at least 90 minutes before disintegrating. Other initiatives include having pressurised escape stairs within the building. The Forté's fire isolated stair shaft and lift shaft achieves fire-resistance through the design of a double shaft system in which each shaft achieves the required fire rating but does not rely on the other for structural integrity.

In both buildings, sprinklers have also been installed and steel connectors hidden within the CLT or glulam to maintain the required fire-resistance ratings.

# Timber's Proof of its Fire-Resistance, is in the Burning

Shortly before midnight on 31 December 2012, a fire started in a strip mall in Salem, Oregon. The fire spread fast and destroyed everything, except for the glulam beams the building was designed around. Post-fire, the glulam beams were still so sound that crews had to use their backhoes and bulldozers to physically break the beams in half to get them down.

Glulam beams consistently outperform other leading materials in fire resistance tests. The average building-fire temperature ranges from 700° to 900°Celsius.

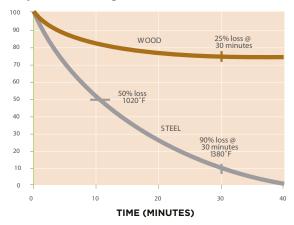


The glulam beams left standing after the fire at the strip mall in Salem, Oregon. Inset: In a 30-minute fire, only 19 mm of each exposed surface of the glulam is lost to charring, leaving most of the original cross section intact.

Steel weakens dramatically as its temperature climbs above 230° Celsius, retaining only 10% of its strength at about 750°C. Wood will not ignite until it reaches almost 260°C. Once heavy timber ignites, it chars at a slow rate of 0.635 mm per minute². The slowness of burn is due to the inherent property of wood to naturally insulate in a fire. Thus, in a 30-minute fire, only 19 mm of each exposed surface of the glulam is lost to charring, leaving most of the original cross section intact.

Unprotected metals lose their strength quickly in a fire and often collapse suddenly due to their rapid loss of strength. Studies have shown that within 10 minutes of a fire starting, steel loses its structural properties by over 50%, while glulam still holds over 80% of its strength. The truth is, no building is fire-proof since most fires start with the structure's contents. The goal of fire-resistive construction is to provide occupants adequate time to evacuate the structure safely.

#### Comparative strength loss of wood versus steel



Results from test sponspored by Natural Forest Products Association of the Southwest Research Institute, St. Antonio, Texas, USA

# Timber's Role in Housing a Rising Population: High Expectations

Building in timber is one of the most eco-friendly solutions for housing the earth's growing population. It is the only building material that can be grown and re-grown, requiring no special infrastructure apart from what nature readily provides: soil, water and the sun. It has been estimated that the current rate of 50% urbanisation in the modern world will reach 70% by the year 2040. Forward thinking urban architects are already developing blueprints and even the methodology for constructing timber high-rises.

A Vancouver-based architect<sup>3</sup> has put forth a compelling case for tall wooden buildings, as high as 70 storeys, through his study known as 'Finding the Forest Through the Trees' (FFTT). The FFTT solution employs solid wood panels engineered for structural strength through laminations of different layers. This building solution results in a significantly much lower carbon footprint compared to concrete and steel equivalents. The study also counters many preconceptions of mass timber construction, showing that such timber structures are more than capable of fulfilling fire and structural safety criteria while remaining cost competitive.

With more and more advances in timber engineering R&D, it is only a matter of time before construction begins on the next world's tallest timber building, and the next, and the next. •

<sup>2</sup> Under the American ASTM E-119 fire exposure.

<sup>3</sup> Michael Green, Principal at Michael Green Architecture



The pogost is a fenced-up area incorporating two large wooden churches and an octagonal bell-tower.

# WHOLLY-WOOD CHURCHES

# 300-Year-Old Churches in Kizhi Pogost, Russia Among World's Oldest Timber Buildings

izhi Pogost, a historical site dating from the 17<sup>th</sup> century, is located on Lake Onega in the Republic of Karelia, Russia. The pogost is a fenced-up area incorporating two large wooden churches and an octagonal bell-

tower. These buildings were constructed in the 18th century and are among the world's tallest and oldest wooden structures that are still standing. The pogost is famous for its beauty and age, and was built exclusively of wood. In 1990, it was crowned a World Heritage Site by UNESCO, which described it as an outstanding example of an architectural ensemble typical of medieval and postmedieval orthodox settlements in sparsely populated regions. In 1993, it was listed as a Russian Cultural Heritage Site.

The Church of the Transfiguration is the most outstanding building in the pogost. With a height of 37 meters, it is one of the tallest wooden buildings in Northern Russia. It was built exclusively using scribe-fitted horizontal logs with interlocking corner joinery – either round notch or dovetail - that were shaped using axes. It is also known as the summer church as it is closed in the winter. This church was built on the site of an old church which was burnt as a result of a lightning strike in 1693. The rebuilt church is a masterpiece of a multi-storey, multi-cupola, single-block structure, such as had already appeared in the high Middle Ages at Saint Sophia of Novgorod. Here, over a central volume covered with three octagonal frames, the architect placed bochkas (roofs whose peak



Over a central volume covered with three octagonal frames, the architect placed bochkas topped with 22 bulbous cupolas of different shapes and sizes.

flickr.com/christian toennesen2



Diamond-shaped wooden tiles were used for the cupolas of the two churches.

is shaped like a horizontal cyclinder with the upper surface extended into a pointed ridge) topped with 22 bulbous cupolas of different shapes and sizes. Diamond-shaped wooden tiles were used for the cupolas. Inside, under the so-called "heaven" - a superb vault shaped like a truncated pyramid - there is a gilded wood iconostasis holding 102 icons from the 17th and 18th centuries.

On the south of the pogost is the Church of the Intercession. It is a much simpler building, being described as 'octagonal prism on a cube' type. It is known as the winter church as it is heated in the winter, enabling services to be held during the cold weather. It was rebuilt with nine cupolas, as an architectural echo of the main Transfiguration Church.

The crown of the eight cupolas encircling the 27-metre high central union cupola, and which covers the central parallelepiped space, gives it a more static appearance. As with the Church of the Transfiguration, the cupolas used diamond-shaped wooden tiles. To the east, a fivesided small apec contains the altar, and to the west is a long nave accessible by a single stairway.

The third structure in the pogost is the bell tower that stands 30 meters tall with a 6×6 meter perimeter. It has a square wooden frame resting on a foundation of rubble with lime mortar. The frame is divided inside by two walls into three rooms: antechamber, stairs and a storage place. Above the square frame there is an octagonal part with the zvonnitsa on top. There is also a pyramidal (octagonal) roof resting on pillars.

Thousands of logs were brought from the Russian mainland for the construction of the Kizhi Pogost, a complex logistical task at that time. The timber species used were Pine, Spruce and Aspen. The wooden structures, all built without using a single nail, have withstood the Earth's elements for more than 300 years, showing just how resilient this construction material is.



The gilded wood iconostasis holding 102 icons from the 17th and 18th centuries inside the Church of the Transfiguration.



The house showcases a clear hierarchy within the structure. As visitors approach the house, they will first notice that the facade features solely a letterbox.

# Letter Box House, Australia



ocated in south of Melbourne on the Mornington Peninsula, Australia, this property is no ordinary beach house. It was built in 2009 as a holiday gateway by an Australian architecture firm called McBride Charles Ryan.

The house showcases a clear hierarchy within the structure. As visitors approach the house, they will first notice that the facade features solely a letterbox. When walking along the side the house, the spatial dimension 'expands' into a stretch of wall made of raked timber that leads them to the westerly veranda and the entrance of the house.

According to the architects: "We like the buildings that make you smile (not laugh). It makes people smile, a building with the smallest façade on the peninsula – the building begins as the letterbox and unfurls to become this healthy scaled veranda. To some, it is an upturned boat. To others, it's a wave or a cliff. We like it being many things – people stop and ask us, we just say it is what it is to you.

"The structural engineer played a critical part in the development and details of the 'programmed' wall through its primary structure of raked box beams, with the plan organised so as to allow the members of a large family to occupy the house simultaneously."

The Letter Box house is also built for sustainability; it uses a passive ventilation system that takes up sea breezes for comfort and cooling. It minimises the carbon footprint of the building through the use of local timbers from sustainably-managed forests, specification of renewable resources and systems, like rainwater harvesting, high insulation values to the walls, roof and glazing, and energy- and water-saving fittings.



When walking along the side the house, the spatial dimension 'expands' into a stretch of wall made of raked timber that leads them to the westerly veranda and the entrance of the house.



The Nature Boardwalk's star attraction is the open-air pavilion that straddles the boardwalk on the east side of the pond.

# South Pond Pavilion, USA

rchitect Jeanne Gang, in 2010, transformed the previously neglected and polluted pond located to the South of Lincoln Park Zoo, Chicago, Illinois

into a native Midwestern, selfsustaining ecosystem, featuring an array of prairie plants and 100 new trees. She achieved this and increased the habitat for wildlife via a re-engineered pond with naturalised shorelines and depths to attract more wildlife.

As part of the transformation, an area called the Nature Boardwalk was created and built. The Nature Boardwalk's star attraction is the open-air pavilion that straddles the boardwalk on the east side of the pond. Jeanne was inspired by the form and related structural strength of milkweed pods. This inspiration is manifested in the fibreglass domes that shield the 17-foot-high pavilion, built to integrate with the boardwalk.

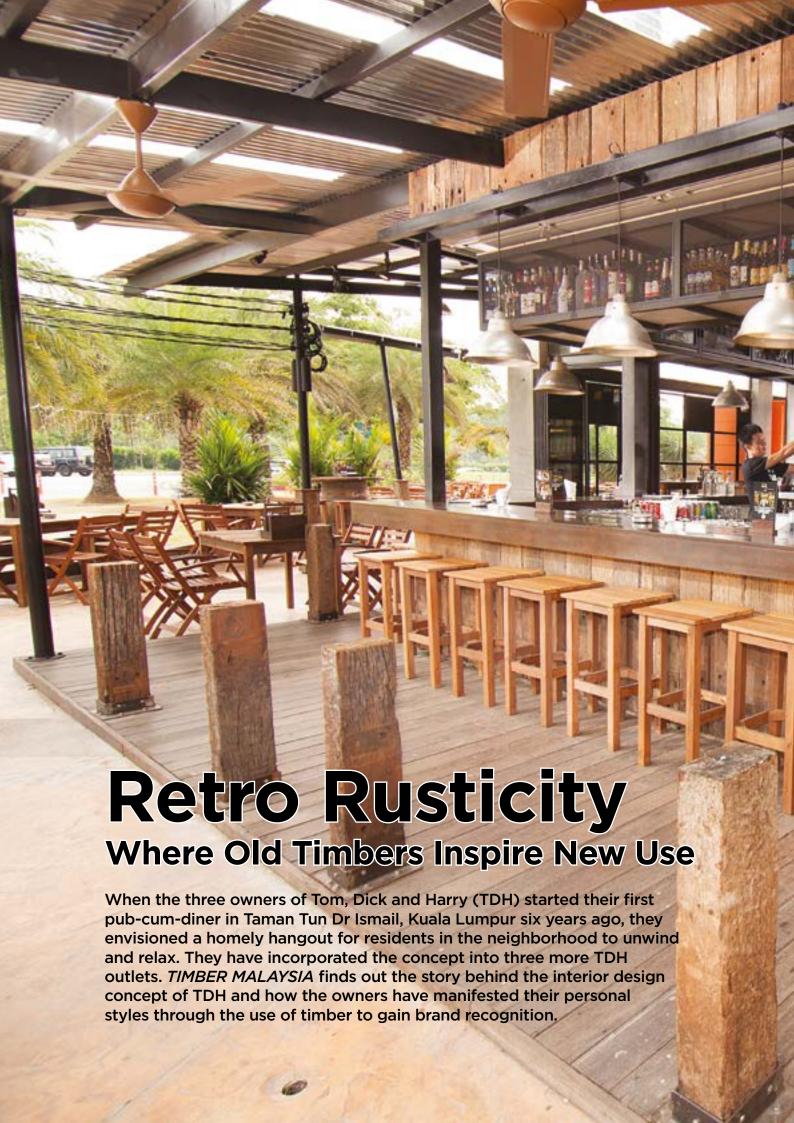
This pavilion consists a series of pre-fabricated glulaminated timber members interconnected and milled



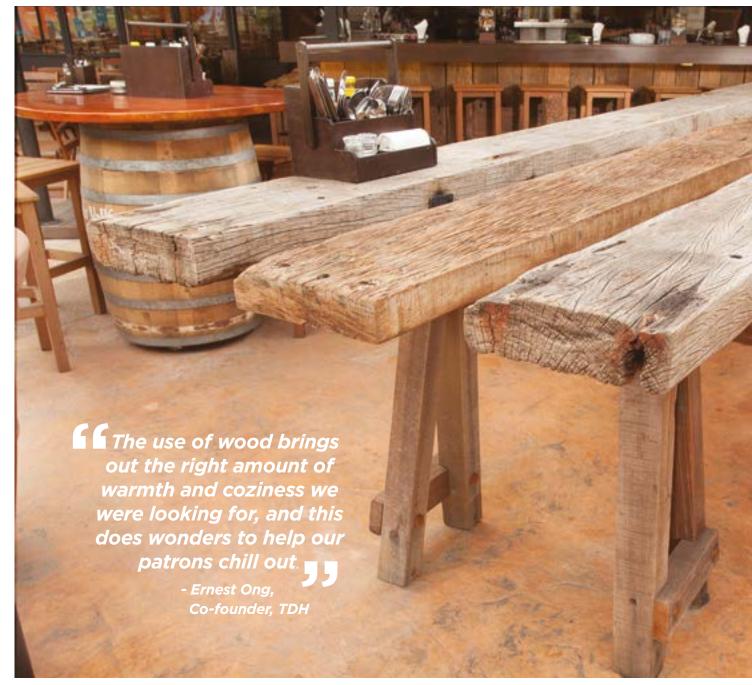
This pavilion consists a series of pre-fabricated glulaminated timber members interconnected and milled to give global curvature to the wall and 'roof'.

to give global curvature to the wall and 'roof', creating a column-free space that provides shelter for open-air classrooms and meetings on site. Openings at the base of the structure promote natural ventilation

across the space. While adding an exclamation point to the Nature Boardwalk, the pavilion also provides a reason for visitors to pause a while, reflect and take in the zoo's "return to nature". 🔷







One of the features that first strikes a patron is the chunky custom-made furniture such as rustic-looking tables, benches and bar stools, all made of reclaimed timber.



e focused on TDH's latest outlet located in a business park called Oasis Square, in Ara Damansara, Selangor,

with 8,000 sq ft of space. The bigger area allowed the owners more creativity to create a warm and cosy ambience, with a very rustic feel that sets it apart from regular watering holes. And having the outlet face a lovely feature fountain (courtesy of the developer of the business park) certainly raises TDH's welcoming quotient by a few notches.

One of the features that first strikes a patron is the chunky custom-made furniture. Rustic-looking tables, benches and bar stools - all made of reclaimed timber or wooden wine barrels - remind one of a "wild, wild West" saloon that could have been appropriated straight from the high street set of "Zorro", and guests might just half-expect to see a masked hero sword-crossing with a bandana-clad baddie!

The restaurant is thoughtfully carved out into a few distinct areas, to cater to its patrons' varying moods. The indoor dining shares its space with a stage for live bands, perfect for a party-like atmosphere. An extensive outdoor alfresco dining area provides patrons with a choice to be closer to the music during live band shows, or

nearer the feature fountain for some soothing splashing sounds, or away from the madding crowd for serious business discussions or a private tête-à-tête. The rectangular bar is centrally located to effectively serve all areas.

In terms of design, most of the furniture and interior fit-outs are kept within simple linearity. It is the use of timber as the key player that has helped achieve a wonderful infusion of rusticity, warmth and homeliness in the overall ambience.

"We wanted to create a space that is welcoming and friendly," said Ernest Ong, one of the founders of TDH.





Near the bar, a wooden wine barrel has been used as the base of a table, enhancing the rusticity of the design language.



Steps, posts and flooring at the patio are all made from reclaimed Chengal and former railway sleepers.

"When you come to TDH, it's like going to a friend's house for a party and you immediately relax. The use of wood brings out the right amount of warmth and coziness we were looking for, and this does wonders to help our patrons chill out."

Reclaimed Chengal salvaged from demolished buildings was used for making benches and tables, especially those that are meant to be exposed to the elements. Former railway sleepers are given a fresh lease of life as seats or tables.

"Every piece of timber item used tells a story. We are thinking of placing little explanatory plaques on these table tops so our patrons know there's a history behind certain pieces of furniture. Apart from providing a good conversation topic, it also tells them that we believe in recycling," explained Ernest.

At a little hidden corner are a few vintage chairs and coffee tables repurposed for a new dining experience. Diners may choose to sit at this area, as it is a bit secluded from the main dining areas, providing a little quiet and privacy.

The outdoor dining area nearest to the indoor stage is a patio with raised flooring and balusters made of recycled Chengal. Here, washroom doors (scrubbed clean and disinfected, we were told) recovered from an old church in Penang have been repurposed into table tops, complete with their original pull handles and the 'vacant-occupied' indicator bolt lock! These are paired with vintage steel chairs salvaged from a torn down cinema. Foldable steel doors can separate the patio from the interior dining space, if need be.

The indoor dining space sports a more eclectic-funky feel with its black and white checkered floor tiles coupled with fancy panels and random-sized mirrors on the wall. Square wooden tables custom-made from yet more recycled timber are paired with bar stools or old cinema chairs. Although less rustic, it is nonetheless equally welcoming, especially with the stage so close by.

The patio with raised flooring and balusters made of recycled Chengal and washroom doors recovered from an old church in Penang and used as table tops. Inset: The original pull handle and the 'vacant-occupied' indicator bolt lock found on one of the washroom doors.







A collection of colourful old wooden windows nailed into a collage creates an eccentric backdrop for the stage.

The stage itself was designed with proper acoustics for superior sound performance. Timber again, lends itself well to this function. Apart from its wooden flooring, a collection of colourful old wooden windows are nailed into a collage to create an eccentric backdrop that also functions as a vibration-dampener.

Timber's natural ability to damp vibrations is due to its minute interlocking pores in its cellular network, which converts sound energy into heat energy by frictional resistance within the pores and by vibration of the fibres. Damping reduces the magnitude of resonant vibrations, improving the performance of wood panelling as a reflective surface.

One of the main features of TDH is the well-designed bar that is centrally and strategically located for all dining areas. Heavyset wooden bar stools are placed all around the rectangular bar.



Square wooden tables custom-made from yet more recycled timber are paired with bar stools or old cinema chairs in the indoor dining space.



**Every piece of timber** item used tells a story. We are thinking of placing little explanatory notes on these table tops so our patrons know there's a history behind certain pieces of furniture.

> - Ernest Ong Co-founder. TDH

Chengal strips are used for the bar counter-top, which is stylishly lit by large pendant lamps. Near the bar, a wooden wine barrel has been used as the base of a table, enhancing the rusticity of the design language.

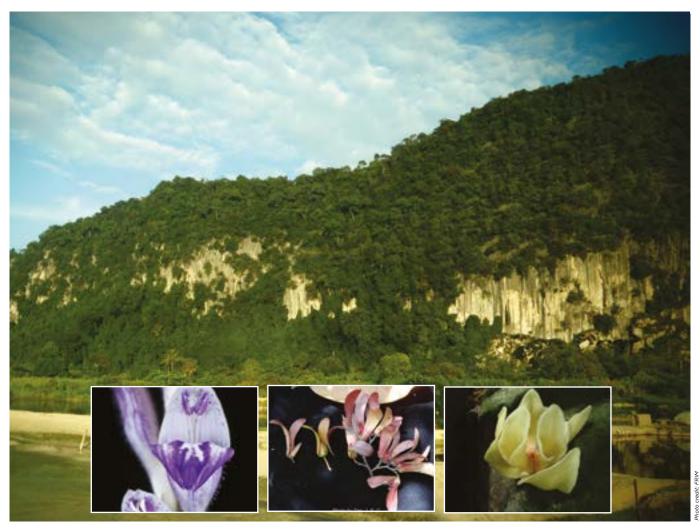
It is said that TDH reflects three different personalities: Tom, Dick and Harry, with Tom being the complete gentleman, Dick the cunning one and Harry is the laidback, grubby person. TDH's timber-based décor is like a tribute to the establishment's multi-faceted personality, where gentlemen, wheeler dealers or easy-goers will equally feel at home.



At a little hidden corner are a few vintage chairs and coffee tables repurposed for a new dining experience.

Many residential and commercial structures enhanced by the use of Malaysian timber are featured in MTC's triple award-winning book "ReThink: A New Paradigm for Malaysian Timber". Co-published with MPH and available at MPH and leading bookstores in Malaysia and Singapore, the book showcases breathtaking projects in Malaysia, Singapore, Mauritius and the Maldives. Please email Andrew Kong (andrew@mtc.com.my) or Kuraibah Zakaria (kuraibah@mtc.com.my) if you wish to purchase a copy.





Mount Kanthan is one of many limestone mountains in the northern state of Perak with rich biodiversity as well as beautiful cave formations and landscapes. Inset (L-R): Gymnostachyum kanthanensis, Vatica kanthanensis and Meiogyne kanthanensis.

# **New Plant Species Found on Mount Kanthan, Perak**



ount Kanthan is one of many limestone mountains in the northern state of Perak with rich biodiversity as well as beautiful cave formations and landscapes. As part of conservation efforts by the Perak state

government to preserve Mount Kanthan, botanists from Forest Research Institute Malaysia (FRIM) undertook several plant surveys to document the inventory of flora in the mountain.

Inventorying the plants on limestone hills and mountains is very challenging due to the steep terrain and jagged rocks but the stakes are high, and the backlog of all the varied microhabitats living on the hill is inimitable and the axial of biodiverstiy conservation.

Under the "Flora of Peninsular Malaysia" and "Documentation and Inventory Flora of Malaysia" survey projects, Dr. Ruth Kiew, a plant toxonimist and consultant for the projects, took on the challenge together with FRIM research officers Joanne Tan and Ummul Nazrah Abdul Rahman. The projects were aimed at providing a comprehensive revision of all vascular plant species not just on Mount Kanthan but throughout Peninsular Malaysia, thereby providing baseline data necessary for

decision-makers to fulfill the country's commitments in line with the National Biological Diversity Policy. Based on the intensive plant surveys, which started in May 2013, a total of 223 species of ferns and seed plants were recorded.

During a plant survey in the southern end of the mountain, the team discovered three new and rare species, which are listed as Critically Endangered by the International Union for Conservation of Nature. They are a small herb with purple flowers (*Gymnostachyum kanthanensis*), a hardwood tree (*Vatica kanthanensis*) and a large flowering tree with a complex scent of pomelo, citrus, lychee and plum (*Meiogyne kanthanensis*). The three new species are hyper-endemic to Mount Kanthan and can only be found on the mountain and nowhere else in the world.

The team's inventory confirms the conclusions of an earlier survey done by the Malaysian Nature Society, which stated that Mount Kanthan is indeed one of the most bio-diverse hills not only in terms of the total number of species but also in the number of species of conservation importance, such as 19 species endemic to Peninsular Malaysia, 12 species that are paramount to conservation and 11 species that are rare.



One for the album: Datuk Yeo, Hapsah (dressed in blue), Suria with some teachers and students of the school who took part in the event.

ver 100 students of SMK Bandar Sunway took time off their regular classes to be enlightened by MTC on Malaysia's sustainable forest and the timber industry. MTC's Senior Director for Communications, Suria Zainal spoke on

"The Forest, the Environment and Me", which explored the various functions of the forest, Malaysia's sustainable forestry practices as well as the versatility and benefits of timber.

The engaging and interactive session was part of MTC's public awareness programme to educate the public including school children on Malaysian forestry, timber and sustainable living.

"Children today, especially those living in the city, rarely get the opportunity to explore the forest and experience its beauty. Through the talk, we reach out to teens and give them a broader understanding on Malaysia's invaluable natural resources and how these are managed sustainably.

"As the young are our future, it is our responsibility to educate and help them discover Malaysia's globally recognised strength in sustainable forest management (SFM) and how the use of certified timber can help conserve the environment. Through this, we hope to empower them to make conscious decisions that can contribute towards a better tomorrow," she added.

At the talk, MTC also distributed The Forest, the Environment and Me brochures, which provides further explanation on the topics discussed in an easy-to-read handbook for students to take home and share with family and friends.

Datuk Yeo Heng Hau, Chief Executive Officer of MTC also presented the school a copy of Re-Think: A New Paradigm for Malaysian Timber, the Council's multiple award-winning book on timber applications, and several sets of posters on Malaysia's forests, its SFM system, its timber certification scheme, timber's 'green' credentials and intelligent recycling.

MTC also donated five Salam (Syzygium polyanthum) trees to beautify SMK Bandar Sunway's compound. Hapsah Safian, principal of the school, Datuk Yeo and Suria planted the Salam saplings together to mark the support of the Council in greening the school's environment.

"It is a great opportunity for us to help the students discover more about our forests. We are touched by the openness of the school and the keen interest shown by the students and teachers. We look forward to continuing this effort and hope to extend our reach to more schools," said Datuk Yeo.

Hapsah thanked the Council for the educational talk and its contributions to the school. She looked forward to seeing more nature-themed activities organised by MTC for the students in the future.



Suria speaking on "The Forest, the Environment and Me".



Several of the new students taking part in the activity.

# Tree-Planting Activity for Undergrads

project to clean the surrounding area.

ore than 1,650 new students from Malaysia Pahang University (UMP) recently planted about 1,000 pine saplings along Sepat Beach in Kuantan, Pahang in an effort to protect the coastline from erosion. Besides planting the saplings, the students were also involved in a community

The "green" initiatives were organised in conjunction with the university's induction week for the new students. Professor Datuk Dr. Daing Nasir Ibrahim, UMP Vice Chancellor said that the university encourages students to be involved in environmental and community services.

State Forestry Deputy Director for Development, Azmeer Mohamad, said such activities could also help the students understand the importance of maintaining a balanced environment and apply the knowledge in their working careers later.



Officials and students posing for the camera after the tree-planting event.



HRH Nazrin Muizzudin Shah speaking to some of the volunteers.

ver 1,000 volunteers comprising nature enthusiasts and environmentalists from Malaysia and Japan took part in a 'Forest Tree Diversity Planting' programme at the Forest Research Institute Malaysia's (FRIM)

research station in Bidor, Perak on 23 September 2014. Organised by AEON Co. (M) Bhd., the event was also to commomerate AEON's 30<sup>th</sup> anniversary as well as to contribute to FRIM's continuous effort in rehabilitating the former tin-mining area into a lush mixed green forest hosting a variety of tree species and a diversity of wildlife.

HRH Sultan of Perak, Nazrin Muizzuddin Shah, officiated the event and planted a Merawan Bunga (*Hopea pubescens*) sapling, which was among about 8,000 saplings of 30 species of trees and shrubs planted. Besides FRIM officers, AEON employees and business associates, the tree-planting activity was also participated by students of SMK Bidor, SMJK (C) Choong Hua and SMK Syeikh Abdul Ghani, local residents and Universiti Malaya undergraduates.

AEON Environmental Foundation Japan Founder and Chairman, Takuya Okada, hoped that through the tree-planting activity, the company will be able to increase awareness on the importance of environmental conservation. To date, AEON has planted around 500,000 trees in Malaysia and more than 10 million trees worldwide. Some of its notable efforts include planting approximately 25,000 trees in the Paya Indah Wetlands in Dengkil, Selangor, and 1,000 trees in the reforestation and rehabilitation of an orang utan habitat in the East Malaysian state of Sabah.

FRIM Director-General, Datuk Dr. Abdul Latif Mohmod, said the planting of the samplings would contribute to the establishment of a lowland bio-diversity depository at the 121.4-hectare research station for nature-based recreational and educational activities.



The trees, which would mature in about five years, include species such as the Tower Tree (Bucida molineti), Palma Serdang (Livistonia) and Palma Raja (Royal Palm).

ithin two years since commencing construction works on its LRT Extension Project, Prasarana Malaysia Berhad (Prasarana) has replanted 6,000 of its target number of 15,438 trees. This is in

line with the company's objective of replacing each tree affected by the construction of the LRT Extension Project with 10 new trees.

"We embrace our responsibility as a corporate citizen wholeheartedly and we are glad to be able to do our part towards enhancing the environment through this tree-planting initiative," said Zulkifli Mohd. Yusoff, Group Director of its Project Development Division.

Carried out in collaboration with the Subang Jaya Municipal Council, the activity has resulted in trees planted at various locations within the Klang Valley. The trees, which would mature in about five years, include species such as the Tower Tree (Bucida molineti), Palma Serdang (Livistonia) and Palma Raja (Royal Palm).

Another aspect that requires careful planning by Prasarana is the landscape design within and surrounding the upcoming LRT stations. Landscaping within the station grounds will focus on improving their aesthetic value and should be practical with minimal maintenance.

"Our landscape design will feature plants, trees and shrubs that are suitable for our local weather and are easy to maintain. The trees will provide shade for pedestrians and complement the surrounding environment," added Zulkifli.



The event was organised by MBSA in collaboration with UMW Toyota Motor, Eco Warriors, several colleges and universities, and the Kota

# **400 Plant** rees for Life"



bout 1,400 nature lovers recently took part in a "Trees For Life" event which saw 1,500 saplings planted at the Kota Kemuning Lake Garden in Shah Alam, Selangor. The event was organised by the Shah Alam City Council

(MBSA) in collaboration with UMW Toyota Motor, Eco Warriors, several colleges and universities, and the Kota Kemuning community.

Shah Alam Mayor, Datuk Mohd. Jaafar Mohd Atan, officiated the event which was also attended by several councillors. The saplings, which were provided by MBSA, were specially selected according to their suitability for a city park. The planted trees will be cared for and monitored by MBSA and UMW staff to ensure that they grow well.

UMW Toyota Motor's Executive Director, Ravindran K., said: "We have always been passionate about treeplanting and have been participating in tree-planting activities in the last few years. When we heard about MBSA's Tree For Life event, we knew it was right up our alley."

With the city park located close to the company's headquarters and manufacturing plant in Shah Alam, the project provides UMW's participating staff a sense of proud ownership and responsibility towards the trees they had planted. \*\*



Some of the participants also took part in a cycling event to promote a cleaner environment in the neighbourhood



The natural ecosystem of the island serves as a great lesson for visitors and makes it a paradise for nature lovers.

region of Johor, is one of the world's largest uninhabited mangrove island. Kukup Island is 647ha in size but surrounded by intertidal mudflats totalling 800ha. To preserve this unique mangrove habitat, the Johor state government gazetted it as a national park in 1997. It was granted the Wetland of International Importance status by the Ramsar Convention Bureau in 2003. The natural ecosystem of the island - an extraordinary array of wetland-associated plant and animal life - serves as a great lesson for visitors and makes it a paradise for nature lovers.

ukup island, which lies in the south-western

There are a variety of mangrove species on the island. Among them are Bakau Kurap (*Rhizophora mucronata*), Bakau Minyak (Rhizophora apiculata), Berus (Bruguiera cylindrica), Perepat (Sonneratia sp.) and Tumu Merah (Bruguiera gymnorhyza).

The island shelters at least 67 bird species, providing a good opportunity for bird lovers to witness different species of birds in their natural habitat. Water birds such as Grey Heron, Collared Kingfisher and the Brahminy Kite are frequent visitors to the island. Apart from that, the island also serves as a stop-over site for various species of migratory birds such as Greenshank, Whimbrel, Redshank and Common Sandpiper. Visitors who are eager to watch these magnificent birds should make it a point to visit the island between the months of February to September. Migration of raptors like the Oriental Honey Buzzard can be observed between September to December. With its mudflats and dense foliage, Kukup Island also attracts other kinds of animals including mudskippers, crab and wild boar.

In 2003, the Johor State Park Corporation took the initiative to develop a few facilities around Kukup Island. A 800m boardwalk was built to enable visitors to observe at close range the different types of vegetation that make up the mangrove forest. Long-tailed macaques, mudskippers, skinks slithering along driftwood and a whole host of aquatic organisms can also be seen. A 35-foot suspension bridge built over the mangrove vegetation is one of the main tourist attractions in the park. From the middle of the bridge, there is a picture-perfect view of Kukup Village on the mainland and the boats at the quay.

A tourist information-cum-education centre has also been set up at Kukup Laut town. Here, visitors can obtain practical information about Kukup Island, its rich social history, and make enquiries about guided tours.



The Collared Kingfisher is among the many species of water birds that are frequent visitors to the island.



A 800m boardwalk was built to enable visitors to observe at close range the different types of vegetation that make up the mangrove forest.

A tower located along the pathway of the mangrove forest takes visitors up to the suspension bridge for a little adventure. Visitors can get a bird's eye-view of the whole island from the tower. The treetops and the neighbouring islands paint a serene picture from that vantage point.

Another attraction are the fish farms which stretch between Kukup mainland and the island. Most visitors stop over to check out these fish farms after visiting the Kukup Island National Park. The fishes are supplied to seafood restaurants in Kukup and also to Singapore, Hong Kong and other countries.

Certainly Kukup Island National Park is not just a place with breathtaking views for leisure and birdwatching, but has an excellent spot for people to reflect on Malaysia's rich natural heritage.



A 35-foot suspension bridge built over the mangrove vegetation is one of the main tourist attractions in the park.

# **LOCATION**

Kukup is a small fishing village located about 40km southwest of Johor Bahru, in the district of Pontian, Johor, on the Straits of Malacca.

# **HOW TO GET THERE**

From Kuala Lumpur to Kukup, exit the North-South Expressway at the Simpang Renggam toll and head for Pontian/Benut. Thereafter, follow the signages to Kukup.

From Johor Bahru, take the Jalan Skudai Highway and head for Pontian/Pontian Kechil, and follow the signages to Kukup.

From Kukup town, visitors can reach Kukup Island by boat from Kukup Jetty. A short boat ride to the island costs between RM3.00-5.00.

# **FURTHER INFORMATION**

For further information, please contact:

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