

Top story

Support Smallholders to Produce Quality Timber of Teak and Other Valuable Species

ITTO-BMEL Teak Regional Workshop held in Bangkok, Nan and Phrae province, Thailand during 18-21 September 2024

The Regional Workshop on “Enhancing smallholder plantations towards quality timber production of teak and other valuable species and carbon neutrality in the tropics” held in the Best Western Hotel, Bangkok during 18-21 September 2024. The workshop, as part of ITTO-BMEL Teak project phase II, advocated greater roles and supports by policy makers and private sectors to smallholders by extending viable financial schemes to the tree plantation to sustainably produce quality timber in their homesteads in longer rotations. Thailand, Vietnam, Cambodia, Indonesia, India and Togo are the target countries for the project’s interventions.

Dr. Nurudeen Iddrissu, ITTO Director of Trade and Industry Division, in his opening remarks lauded the BMEL for supporting the 2nd phase with the proven track record of the successful implementation of the ITTO-BMEL 1st phase of teak project in Mekong sub-region. He said that it is at the right time, the marginalised smallholders are targeted in the 2nd phase to improve the timber quality of teak and other valuable species production systems, support communities to build sustle and resilient local economies as well as contribute towards carbon emission reduction through promoting tree plantations. Dr. Nurudeen continued to emphasize that the development of management models for smallholder value chains in forest plantations and providing supportive financial mechanisms will definitely encourage smallholders to plan the sustainable management of plantations in longer rotations for better livelihood.

Mr. Stephen Wagner, the BMEL representative, in his opening remarks said that the project will address the pending issues facing the smallholders such as access to optimised financial mechanisms to promote longer rotations, value addition, and improved silvicultural practices, timber processing and legality throughout the supply chains.

Other speakers during the opening session, Mr. Bannarak Sermthong, Deputy Director General of Royal Forest Department, Thailand and Dr. Kobsak Wanthongchai, the Dean of Forestry, Kasetsart University highlighted Thailand’s recent policies and initiatives to increase the forest cover in the country and promote the bio-circular green economy model, which is a main strategy to drive the economy of the country after the COVID-19 pandemic.

In the keynote presentations, Dr. PK Thulasidas, TEAKNET Steering Committee member, who was involved in the global teak resources and market assessment made a detailed report of the study undertaken by IUFRO, Teaknet and FAO. after the FAO report of TRMA 2010, published a decade ago. He gave a glimpse of the salient findings as the majority of planted teak (94%) is less than 40 years old resulting in a significant increase in the supply of small diameter logs to the international market as a general utility timber. The assessment disclosed that the supply of high quality teak from natural forests is declining to below 0.5 million m³, while the supply of teak from planted forests is estimated to be around 2 million m³ annually. Meanwhile, Dr Tetra Yanuariadi, ITTO Projects

Manager, gave the audience the alarming situations of pandemics, continuing armed conflicts, broken supply chains, inflation, extreme weather events and ecosystems degradation that need higher awareness and more attention towards sustainable forest management. When sustainably managed, the forests are healthy, productive and renewable ecosystems that contribute to nature-based solutions. The sustainable management of forests (SFM) is of critical importance to the 2030 Agenda for Sustainable Development and meet almost all SDGs. Dr Tetra further explained the critical issues surrounding market access and market requirements, including the new European Union Deforestation Regulation (EUDR).

Dr. Osamo SAITO, from Institute of Environmental Strategies (IGES), Japan presented a highly simplified model of the complex interactions between the natural world and human societies on the topic 'Nature Futures Framework (NFF): Tool to support desirable futures for people, Nature and Mother Earth'. NFF was developed by IPBES (Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services) to facilitate building future scenarios and models desirable futures for people, nature and Mother Earth as a flexible tool for researchers, policy makers, and local stakeholders. The NFF presents three value perspectives of nature in a triangle; Nature for nature; Nature as culture/one with nature and nature for society. In short, NFF is conceptualised to generate narratives/storylines, to simulate different futures by modelling, and to monitor indicators for global, national and local policy frameworks.

Representative from teak countries, namely Vietnam, Cambodia, Lao PDR, Myanmar, Thailand and Togo briefed the workshop's participants on the status and progresses of teak development in their respective countries.



Dr. Tetra then gave an overview of recent trends in international trade and market access for tropical timber and timber products. Dr outlined the case for sustainable forest management (SFM) and trade in legally and sustainably produced tropical timber and wood products, noting the ecosystem services and economic benefits provided by forests, and the need to value them properly. He underlined ITTO's mission to support member countries – with work including policy guidance, market information, capacity building, and field projects – to master the challenges of SFM and to expand and diversify trade in sustainable, legally harvested wood.

Describing trends on tropical timber production, consumption and trade (2000–2023), Dr Yanuariadi reminded the audience of how major crises had impacted the sector like the COVID-19 pandemic which severely affected supply chains, demand and prices for tropical timber and wood products, including teak. The global financial crisis of 2008–2009 hurt demand for tropical wood products, though the damage was offset by demand from China and India. A major trend has been the growth in roundwood production from plantations in tropical producer economies and a decline in production from natural forests. India's import of teak logs and sawn timber increased all time high due to heavy demand from the booming housing sector and the trend will continue in the foreseeable future. Growth in the value of exports of secondary processed wood products (SPWPs) export from tropical countries is rapidly growing up from USD 1.7 billion in 1990, to USD 14.7 billion in 2000, to USD 36.1 billion in 2022.

Dr Tetra further explained the critical issues surrounding market access and market requirements, including the new European Union Deforestation Regulation (EUDR. Dr Yanuariadi said it would be a challenge for producers to meet the requirements of the EUDR, which is to be implemented starting 30 December 2024. The challenge is the evidence that the wood is legally harvested and sustainably sourced. However, he said forestry enterprises in the tropics were well prepared to meet the regulation, given that many already use GIS systems, can provide compliance documents, and have experience under the existing European Union Timber Regulation.

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Dr. PK Thulasidas from TEAKNET Steering Committee who was involved in the global teak resources and market assessment (TRMA 2022), made a detailed report of the study undertaken by IUFRO, Teaknet and FAO after the FAO report of TRMA 2010, published a decade ago. He gave a glimpse of the salient findings as:

- Teak grows in nearly 80 countries in tropical regions and natural teak forests in India, Lao PDR, Myanmar and Thailand combined was estimated at 30.215 million ha, of which more than half is in Myanmar. Over a decade, natural teak forests have increased by 1.180 million ha globally (+4.1

percent). Asia holds more than 97% of the world's natural and planted teak resources, and holds 80percent of the world's planted teak.

- The global area of planted teak forests is estimated at 4.854 million ha, of which 80 percent is in Asia, 13 percent in Africa and 7 percent in Latin America. The global area of planted teak forests has increased by 507 thousand ha compared to 2010. Significant increases were recorded in Asia (+261 thousand ha) and Africa (+156 thousand ha).
- Among the top ten countries accounting for the 88 percent of the plated teak, India top the list (1.693 million ha) followed by Indonesia (1.269 million ha) and Myanmar (0.447 million ha).
- The majority of planted teak (94%) is less than 40 years old resulting in a significant increase in the supply of small diameter logs to the international market as a general utility timber.
- The TRMA 2022 report suggest that the supply of high quality teak from natural forests is declining to below 0.5 million m³ , while the supply of teak from planted forests is estimated to be around 2 million m³ annually.
- Majority of planted teak are young, 80% fall under 0-20 years old. Nearly 14% falls within the age class 21-40 yrs, indicating increased planting efforts for short rotation management over the past 30 years. This pattern is likely to continue in future. The reported rotation periods is short between 20- 30 years in most countries leading to production of small diameter logs and these logs have high demand on the international market as multi-purpose timber for less demanding construction purposes, furniture, flooring, reconstituted wood products and transmission poles.
- Concerning log removals, Asian countries reported the highest log volumes removals of about 835,443 m³, of which the largest volume is cut in Indonesia followed by Brazil and Ghana. These three countries account for 65% of the globally harvested teak.
- In 2022, the international trade in teak roundwood was governed by India that imported 97% of the total trade volume from 43 source countries. The second largest importer is China with 2.5% of the total. All other importing countries together account for less than one percent. More than two thirds (72.5%) of India's import volume was sourced from Latin American countries and African countries covered the remaining onequarter (25%). The roundwood quality of the imports appears to be good with average values (CIF) ranging from 363 USD/m³ for logs imported from Latin America to 458 USD/m³ from Africa.
- India imports sawn timber from 39 countries, mainly from Africa and Latin America. Singapore is an important trading hub for teak roundwood and sawntimber, and Netherlands serve as trading hub for teak sawntimber to European markets; without having teak resources on their own.
- Dr. Thulasidas concluded the talk by saying that an increasingly important issue affecting the trade in plantation teak is forest management certification and legality. Meeting consumer expectations and legal requirements significantly influence growers and processors, particularly those dependent on the markets in North America and Europe.

The TRMA 2022 report is available for download from IUFRO, TEAKNET and FAO websites

<https://www.iufro.org/publications/series>

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culture/one with nature and nature for society. In short, NFF is conceptualised to generate narratives/storylines, to simulate different futures by modeling, and to monitor indicators for global, national and local policy frameworks.

Other speakers in the event which was nested under **the Technical Session 1-: *Smallholder plantations towards quality timber production*** that included Mr. Say Sinly, Forestry Administration, Cambodia who spoke on the Cambodian component of the project activity; Dr. Narongchai Chonlapap, Forest Industry Organisation (FIO), Thailand who presented on Long-term teak plantations towards good quality timber; Mr. Boonlert Srisikai, Technical Advisor to Sri. Trang Group, Nan province, Thailand presented a model commercial smallholder teak plantations using intensive silvicultural practices; Dr. Dang Thinh Triew, Vietnamese Academy of Forest Sciences, Hanoi on development of smallholder teak plantations in Viet Nam; Mr. Vongvilay Vongkhamsao, NAFRI, Lao PDR on natural teak forests and plantations in Lao PDR, and Dr. Zar Chi Hlaing, Forest Department, Myanmar talked on management of natural teak forests and teak plantations in Myanmar.

In **Technical Session 2: *Forest plantations and restoration contributing to carbon neutrality and teak value chains & microfinance***, 5 papers presented are: Enhancing teak value chains: challenge and opportunities by Mr. Nattawin Phongspettrarat, Managing Director of TPS Garden Furniture Co. Ltd; Dr. Michael Jenkee. Kasetsart University on Advancing the sustainability and quality of Thailand's forest through innovative silviculture and governance; Dr. Ponthep Meunpom, KUFF on Low-cost UAV as a tool for aboveground biomass assessment in teak plantations: Pros and Cons; Dr. Decha Wiwatwitaya, KUFF on Monitoring and prevention of insects pest in teak plantations; and Prof. Kokutse from University of Lome, Togo talked online on A comparative study of historical and newly introduced provenances.

The field visit on 19-21 September to Nan, Phrae and Lampang provinces gave more insights into the challenges faced by the smallholder teak plantations, and visit to commercial teak plantations established in Nan province in the year 2021. Generally, the smallholder wood lots established by farmers are not productive and earnings depend on the middlemen who negotiate the price with the farmer as the small dimensional teak quality is poor as no silvicultural practices were undertaken by them and sold at low price.



A poorly managed 18- yr old smallholder teak plantation in Nan province, northern Thailand (Photo: PK Thulasidas)

The visit to smallholder commercial teak plantation established in 2021 at Pua district in Nan province in about 180 hectares at an espacement of 7x4 meters managed by M/s. Sri Trang Group showcase the best example of

intensive silvicultural practice with periodic fertilizer applications and the farmers in the adjacent villages were allowed free access to plantations and the company allocated land space below 10 hectares based on their capacity to each farmer for cultivating pumpkin, corn or upland rice as intercrops of their choice which they harvest and sold in the market on their own 100 percent free. The farmers built roads to carry the harvested crops to the market and the plantation owners used the roads for silvicultural management of their teak trees. This intercropping pattern involving farmer groups is beneficial to both the parties and without incurring extra cost for weeding, the teak plantation owners were able to look after the teak silvicultural management more effectively. Farmers were not involved in the silvicultural practice of teak trees which is being engaged by the trained manpower of the company alone. This commercial teak plantation is a kind of family enterprise.



Teak intercropping with pumpkin and upland rice. The harvested pumpkin by farmers loaded in vehicle to market (Photo: PK Thulasidas)



3.4 year- old commercial teak plantation in Nan province (Photo: Prof. Yongyut Trisurat)



The visit to smallholder teak wood-based furniture enterprise in Phrae province gave an insight into the furniture manufacture aimed for domestic market. They obtain teakwood partially sourced from FIO plantations in Phrae province in public auction/bidding and from farmer's woodlots. With limited machineries available, quality furniture products are manufactured and sold in domestic market with marginal profit that sustained the community based enterprises. There was no incentive mechanism available to farmers to keep the tree for longer rotations.



ITTO Director of Trade and Industry listening to smallholder teakwood- based community enterprises at Phrae province (Photo: PK Thulasidas)

While at the same time, average teak based medium enterprise in Phrae province used sophisticated machineries imported from Germany and quality teakwood products are manufactured for both domestic and export market alike. Design products are manufactured by qualified and trained skilled designers. Almost 60% teakwood are obtained from FIO plantations and often 40 percent sourced from smallholders wood lots as in the case of small, medium enterprises.



Dr. Nurudeen Iddrissu, ITTO Director of Trade and Industry interacts with teakwood manufacturers at Phrae province (Photo: PK Thulasidas).



(Photo: Prof. Yongyut Trisurat)



Special design teak products manufactured for international market (Photo: Prof. Yongyut Trisurat)

The visit to the FIO's log yard at Lampang province showcased different quality class of teak timber graded according to Thai grading rules was a fascinating experience for the participants.



Participants at FIO teak log yard at Lampang province, northern Thailand (Photo: Prof. Yongyut Trisurat)



Photo: PK Thulasidas