

## **Partner Event on**

## Teak at XXVI IUFRO World Congress 2024, Stockholm, Sweden

28 June 2024 | 08.30-10:30 am (CEST) | Room K21 |



Participants and speakers of the teak session

A 2 hour Teak Session, T2.29 entitled "Strengthening Teak Forest Management for Sustainable Teakwood Supply Chains and Trade" was successfully organised by IUFRO Teakwood Working Party (Div 5.06.02) on 28<sup>th</sup> June 2024, from 08:30-10:30 am (CEST) in Room K21 alongside 26<sup>th</sup> IUFRO World Congress 2024 at Stockhom Congress Centre, Sweden during 23-29 June. The event was cosponsored by ITTO, Japan along with International Teak Information Network (TEAKNET) with the technical and financial support of the Food and Agriculture Organization of the United Nations, Rome. The session was attended over by around 50 participants across different countries. There were altogether 10 Oral presentations and two E-posters.

The session was opened by Dr. Michael Kleine, IUFRO Deputy Executive Director. Dr. Michael highlighted the long -standing collaboration of IUFRO's Teakwood Working Party and IUFRO-SPDC with Teaknet for over a decade and to support participation of scientists in many international teak conferences /workshops and projects organised in collaboration with international organizations such as ITTO and FAO. He emphasized IUFRO's network of scientific expertise spread across several research institutions and organisations in 120 countries worldwide have the capacity to pool and get data collected by eminent scientists at no extra cost and made such studies possible within a short span of time like the report on "Global Teak Resources and Market Assessment 2022" released as IUFRO Publication # 44 in the Innovation Stage during the IUFRO World Congress 2024 and is now

available for download from IUFRO website <a href="https://www.iufro.org/publications/series/world-series/article/2024/06/25/world-series-vol-44-global-teak-resources-and-market-assessment-2022/">https://www.iufro.org/publications/series/world-series-vol-44-global-teak-resources-and-market-assessment-2022/</a>

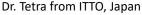




Opening remarks by Dr. Michael Kleine, IUFRO Dy. Executive Director, Vienna

TEAKNET Coordinator Dr. Sandeep S. presented the results of the "Global Teak Resources and Market Assessment 2022" (TRMA 2022). The major highlights of the study revealed that teak is now growing in over 80 countries worldwide and the area of natural teak and planted teak forests has expanded substantially, the harvest of teak roundwood has increased and teak's share of the global market is growing. India remains the dominant trading partner and imports 97 percent of the total trade volume. Comparing the TRMA 2010 assessment report of FAO, the present 2022 report highlights that area of natural teak forests have increased by 1.180 million ha globally while the global area of planted teak forests is estimated at 4.854 million ha, of which 80% in Asia, 13 % in Africa and 7% in Latin America.







Dr. Sandeep, S, Teaknet Coordinator

ITTO Projects Manager, Dr. Tetra Yanuariadi gave the audience an overview of recent trends in international trade and market access for tropical timber and timber products. Dr. Tetra 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 recent market trends, 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. He further explained the critical issues surrounding market access and market requirements, including the new European Union Deforestation Regulation (EUDR. Dr. Tetra said it would be a challenge for producers to meet the requirements of the EUDR, which is to be implemented starting 30 December 2024.

ITTO Consultant, Dr. Hwan-Ok Ma presented the market access issues in his topic "Promoting legal and sustainable supply chains for sustainable global teak markets". Certification requirements for teak and other tropical timber products imposed high transaction costs for developing countries and small producers. Challenges include the development of monitoring systems to demonstrate legality and sustainability, where the digitalization of forest management activities and cost-effective verification tools play an increasingly important role. Dr Ma also described ITTO-supported projects to improve teak silviculture, including smallholder enterprises; conservation of teak genetic resources; and promote value chains across the Greater Mekong Sub-region, as well as teak plantation development in countries including Brazil, Ghana and Indonesia.



Dr. MA on sustainable teak supply chains and markets

Dr. Dong Lam Tran, Dy. Director General from Vietnamese Academy of Forest Sciences, Hanoi, who presented "Development of Smallholder Teak Plantations in Vietnam" mentioned that 70% of the total 14.8 million ha of forested area (42% of the total forest area) in Vietnam is managed by smallholder farmers of 1-3 ha /household and the total timber harvest is around 30 million m³ annually. Teak is not indigenous to Vietnam and the current teak plantation area is approx. 7,650 ha only, spread mostly in Sona La Province, and 74% is managed by households and the rest by private entities.



Dr. Dong from VAFS, Hanoi

He elaborated that there exists high potential for development of smallholder teak plantation in Vietnam that requires:

- Improvement of germplasm quality and seedling production;
- > Technical capacity building to teak growers and stakeholders;
- Development of diverse silviculture options for diversifying income regime (teak-based agroforestry, intensive planting for short rotation, tree-outside-forest planting);
- Improvement of the value chain and marketing by building partnerships among the chain actors:
- Micro-finance mechanism for long-term investment, are some of the promising solutions.

Dr. Simone Vongkhamho, Forest Research Centre, NAFRI, Lao's People Democratic Republic whose talk was on "The Effect of Topographic Conditions on Teak Heartwood Quality in a Mountainous Area" demonstrated that planted teak have been established in various site conditions across the country; mountainous land in northern part, flat land in central and southern part and southern plateau land of Bolaven. However, northern part covers 64% of total area with planted teak. The main highlights of the study were:

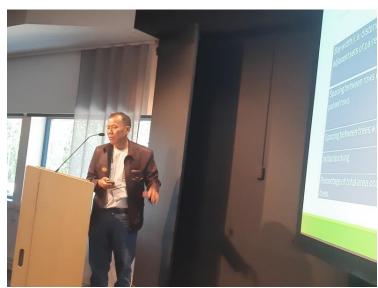
- ✓ Heartwood content of basal area increases with tree size.
- ✓ Lower shrinkage with higher basic density indicates better wood properties. Therefore, basic density and tangential shrinkage has an increasing quality with tree age.
- ✓ The darker color (low L\*) is associated with the south-west facing gentle slope in lower elevation. Red color (high a\*) showed a relationship with south-east facing straight slope. Yellowish color (high b\*) has higher value at south-west facing slope in lower elevation and lower stand density.



Dr. Simone Vongkhamho, NAFRI, Lao PDR

Mr. Outhai Soukkhy from Ministry of Agriculture and Forestry, Lao PDR presented the results of a Nelder wheel experiment in an agroforestry system in Luang Prabang province by reducing the initial stocking rates in smallholder teak woodlots for livelihood support to farmers in northern Lao PDR after 15 growing seasons. The results demonstrate:

- ✓ the potential for teak to be grown under shorter rotations, by either planting at around 625 tress/ha or adopting early pre-commercial thinning to reduce stocking levels to 500-600 tress/ha. This approach can allow intercropping with the developing teak for longer periods, increase diameter, thereby reducing time to first commercial harvest with increased profitability.
- ✓ woodlots can be commercially thinned at 12-15 years of age, or potentially clear-cut at 15
  years, and the coppice managed to regenerate, providing long-term, sustainable timber
  production, with limited management requirements.



Mr. Outhai Soukkhy from Lao PDR on Nelder wheel experiment in Luang Prabang



Dr. Andrew Callister, Treehouse Forest Research, USA on teak genomics

Dr. Andrew Callister from the United States of America who spoke next presented the paper "Genomic Selection of Superior Quality Teak Clone for Productivity Enhancement and Value" has

given important messages that genomic selection tools have improved tree improvement outcomes across species. Teak improvement programs could benefit enormously by :

- Correcting pedigree and identity errors;
- Pedigree reconstruction and population merging; Improved genetic value accuracy;
- Faster clone selection. Their study demonstrates pedigree reconstruction and genomic prediction for teak clone selection.

Prof. Yongyut Trisurat, from Faculty of Forestry, Kasetsart University, Thailand who presented paper on "Strengthening Smallholder Community-based Teak Plantations in Thailand" touched upon the challenges and prospects of smallholder teak plantations in the country with emphasis on the outcome of the completed ITTO Teak project, Phase I (2019-2022) and the newly initiated ITTO-BMEL Teak project, Phase II (2023-2026) in which it was envisaged:

- to improve the production of high-quality timber from teak and other valuable species plantations established by smallholders and communities;
- to improve livelihoods and social and environmental outcomes through better silviculture practices, financial schemes (long rotations) and access to voluntary carbon markets, etc.



Prof. Yongyut Trisurat, Kasetsart University, Bangkok

At the end of the project, it is anticipated that the legal supply chains of smallholder plantation improved with the production of high-quality timber making use of quality germplasm materials and adopting right silvicultural practices and micro-finance (land- and tree collateral schemes) available to smallholders. Thereby, the livelihood enhancement and social and environmental concerns are well addressed.

Prof. Mario Tomasiello Filho, from University of Sao Polo, Brazil spoke on the comparative study on the wood quality of 22-year old fast-grown teak plantations in three different locations in Brazil emphasized that:

- The heartwood production is proportional to the diameter growth.
- The growth ring width is constant from the 10th ring onwards.
- The average density ranged from 550 to 650 kg/m³

Wood density is higher at the base and apex, and low near the pith, increasing radially towards the bark. However, growth is not directly associated with wood density.

He informed that 6% of the global teak plantations are in Latin America and Brazil top in the list with 76,000 ha mostly found in Mato Grosso state.



Prof. Mario Tomasiello Filho, Brazil

In addition to the Oral presentations, there were two E-Posters presented by Prof. Mario Tomasiello Filho from University of Sao Polo, Brazil and Mr. Mark Hanewinkel, University of Freiburg, Germany.



Mr. Mark Hanewinkel, University of Freiburg, Germany in the poster session

The Teak Session was moderated and chaired by Dr. PK Thulasidas with Prof. Mario Tomasiello Filho from the University of Sao Polo, Brazil, both Dy. Coordinators of IUFRO Teakwood Working Party. All the presentations of the Teak Session is available for download from Teaknet website <a href="https://teaknet.org/events/event-0.html">https://teaknet.org/events/event-0.html</a>

**Announcement of 5<sup>th</sup> WTC 2025**: Dr. Thulasidas announced the gathering the upcoming 5<sup>th</sup> edition of the World Teak Conference to be held in Cochin, India during 16-20 September 2025 being organised by Kerala Forest Research Institute and TEAKNET with the financial support of ITTO in association with IUFRO and FAO of the United Nations and welcomed the participants to the 5<sup>th</sup> WTC and watch announcements in the WTC website <a href="www.worldteakconference2025.com">www.worldteakconference2025.com</a>. The previous 4<sup>th</sup> WTC was held in the Republic of Ghana, W. Africa in 2022.



5<sup>th</sup> WTC announcement by Dr. Thulasidas

**TEAKNET Steering Committee Meeting:** On the occasion of IUFRO World Congress, Steering Committee Meeting of TEAKNET was also convened with the available SC members who were attending the congress to discuss the progress of upcoming ITTO funded 5<sup>th</sup> WTC in 2025 in India.



SC members in ITTO exhibition booth, Stockholm

The XXVI World Congress of the International Union of Forest Research Organizations IUFRO was successfully organised in Stockholm during 23-29 June 2024 that brought together 4,300 participants from 102 countries with over 3,500 presentations. This global event was conducted by IUFRO once in 5 years. It provided a global forum for the exchange of knowledge, perspectives, and visions between scientists across a broad spectrum of disciplines, and dialogue with youth, policy makers, forest managers, business representatives, and civil society organizations. The next 27<sup>th</sup> IUFRO World Congress will be held in Kenya 2029. The outcome of the 26<sup>th</sup> IUFRO World Congress is briefly summarized in the Stockholm Congress Statement which is available in the congress website www.iufro2024.com



## Report by

## Dr. PK Thulasidas & Prof. Mario Tomosiello Filho

Dy. Coordinators, IUFRO Teakwood Working Party (Div 5.06.02)







