2nd Regional Workshop on

Sustainable Value-Added Teak Products for Green Economy: Lessons from the BMEL-ITTO Teak Project in Mekong

09:00 – 16:30 h
2 September 2022, Rama Garden Hotel, Bangkok, Thailand

The project implementing team with five participating country coordinators

Alongside field visit to Teak Farm in Cambodia and the 4th PSC meeting from 30 Sept to 1st September, the BMEL-ITTO Teak project organized a one-day Regional Workshop on "***Sustainable Value-added Teak Products for Green Economy: Lessons from BMEL-Teak Mekong Project***" at Rama Garden Hotel on 2nd September 2022, Bangkok in conjunction with the 3rd FORTROP' International Conference to celebrate the 85th anniversary of the Faculty of Forestry, Kasetsart University, Thailand. In spite of many efforts to promote sustainable management of teak forests in the region, there has been an increasing need for the sustainable production of quality value-added teak products to contribute to the development

of green economy for a sustainable future. The BMEL-ITTO Teak Mekong project partners has worked together to enhance natural teak forest management, production and marketing through the establishment of legal and sustainable wood supply chains, as well as to improve local economy and local communities' livelihood in the Mekong sub-region.

The ambitious ITTO Teak project is highly relevant to the aim of the Bio-Circular-Green (BCG) Economic model that has been conceived by Thai Government and also conforms to the UN Sustainable Development Goals (SDGs), in particular SDG12 (Responsible Consumption and Production), SDG13 (Climate Change), and SDG 15 (Life on Land). The BCG Model aims to transform the country towards a value-based and innovation-driven green economy through capitalizing the country's strengths in biological diversity and cultural richness and employing technology and innovation. In this respect, the sustainable production of valued-added teak products through legal and sustainable supply chains can play an important role in the development of green economy in the Mekong region.

The specific objectives of the workshop were:

- to increase the role of teak forests and products in the development of green economy in the Mekong region, taking into account the experiences and lessons learned from the implementation of the BMEL-ITTO Teak project.
- to identify recommendations for the sustainable production and consumption of teak products in the framework of the Bio-circular Green Economic Model.

The four technical sessions covered altogether 12 oral presentations by the project members and invited scientists and policy makers.

Programme Schedule

08:00-09:00 **Registration**

Opening Ceremony

09:00-09:10 Introduction to the Regional Workshop
Prof. Dr. Yongyut Trisurat, Regional Project Coordinator, Kasetsart University, Bangkok

09:10-09:25 **Welcome Remarks**
- Dr. Hwan-ok MA, ITTO, Japan
- Mr. Stephan Wagner, German Federal Ministry of Food and Agriculture (BMEL)
- Mr. Surachai Achalaboon, Director-General of Royal Forest Department

09:25-09.30 **Opening Remarks**
Dr. Chongrak Wachrinrat, President of Kasetsart University, Bangkok

Keynote Presentations: Policy Drivers

Moderator: Prof. Yongyut Trisurat, Kasetsart University

09:30-10:00 *Economic Forest Plantation Master plan to Drive Thailand BCG Model*
Wanchai Jariyasetthachok, DDG of the Royal Forest Department, Thailand

10:00-10:30 *Green Economy with Plantations, especially with Teak for FLR*
Illias Animon, Forestry Officer, FAO Regional Office for Asia and the Pacific, Bangkok

10:30-10.45 Coffee Break

10:45-11:15 *Sustainable Teak Management for Mekong Sub-region - Teak Mekong Project Overview and Achievements*
Yongyut Trisurat, Regional Project Coordinator, Kasetsart University, Bangkok

Role of Private Sectors and Smallholders

Moderator: Asst. Prof. Dr. Kobsak Wanthongchai, Dean of the Faculty of Forestry, Kasetsart University

11:05-11:30 *FIO's Teak Plantation and Trading*
Mr. Narongchai Chonlapap, Su-Divisional Manager, Forest Industry Organization, Thailand

11.30-11:55 *Past, Present and Future of Private Teak Industry in Thailand*
Dr. Paiboolya Gavinlertvatana, President, Thai Orchids Lab Estates Company Ltd.

11:55-12:20 *Transforming Wood-based Industry to BCG Econonmy*
Phichit Somboon, Faculty of Forestry, Kasetsart University, Bangkok

12:20-13:30 Lunch break

Teak Genetic Resource Improvement

Moderator: Dr. Tran Lam Dong, Director of Silviculture Research Institute, Vietnamese Academy of Forestry Sciences, Hanoi, Vietnam

13:30-13:50 *Teak Genetic Improvement and Plantation in Indonesia*
Anto Rimbawanto, Centre for Forest Biotechnology and Tree Improvement, Yogyakarta, Indonesia

13:50-14:10 *Teak Genetic Conservation and Improvement in Thailand*
Suwan Tangmitcharoen, Senior Expert of the Royal Forest Department

14:10-14:30 *Efforts of Teak Genetic Conservation and Improvement and Value Chain in Laos*
Vongvilay Vongkhamsao, Forestry Research Centre, NAFRI, Laos

14:30-15:00 *Myanmar Efforts in Teak Genetic Conservation and Improvement and Myanmar Timber Legality and Assurance System (MTLAS)*
Zar Chi Hlaing, Aung Zaw Moe and Thant Shin, Forest Research Institute, Yezin, Myanmar

Teak Value Chains and Trading

Moderator: Dr. Tetra Yanuariadi, Projects Manager, ITTO

15:00-15:20 *Development of Teak Plantation and Value Chains to Support Vietnam Forest Industry*
Tran Lam Dong, Dang Thinh Trieu and Nguyen Van Bich, Silviculture Research Institute, Vietnamese Academy of Forestry Sciences, Hanoi, Vietnam

15:20-15:40 *Cambodia's Teak Plantation and its Implications on Trade Access*
Chheang Dany[1], Kim Sobon[2] , Lim Sopheap[2] ,Say Sinly[2] Eugene Kraamwinkel[3]

[1] Forestry Administration, Cambodia,
[2] Department of Forest Plantation and Private Forest Development, Forestry Administration,
[3]Grandis Timber, Cambodia

15:40-16:00 *Wooden Furniture Design: Value-Added Products*
Doonyapol Srichan, Adjunct Professor at Faculty of Architecture, KMITL

16:00-16:30 Wrap-up and Closing Remarks
Dr. MA Hwan-ok, Officer-in-Charge Division of Forest Management, ITTO

Opening ceremony

Prof. Yongyut Trisurat gave a brief introduction about the topic selected for the Regional Workshop, the BCG economic model conceived by Thai Government which is in line with ITTO Teak project target achievements made. In the welcome remarks that followed, on behalf of the Director General of the Royal Forest Department, Mr. Wanchai Jariyasetthachok, DDG, Royal Forest Department, Thailand, hoped that the workshop outputs will increase the role of teak forests and products in the development of green economy in the Mekong region, empower local communities and smallholders in the sustainable management teak forest plantations throughout the legal supply chains. Mr. Stephen Wagner from BMEL, Germany reiterated that the experiences and lessons learned from the implementation of the BMEL-ITTO Teak project in the five participating countries not only contribute greatly to national economy development in the framework of the Bio-circular Green Economic Model, but also has empowered local communities and smallholders in teak forest plantation management and promoted public-private partnerships for legal and sustainable teak supply chains.

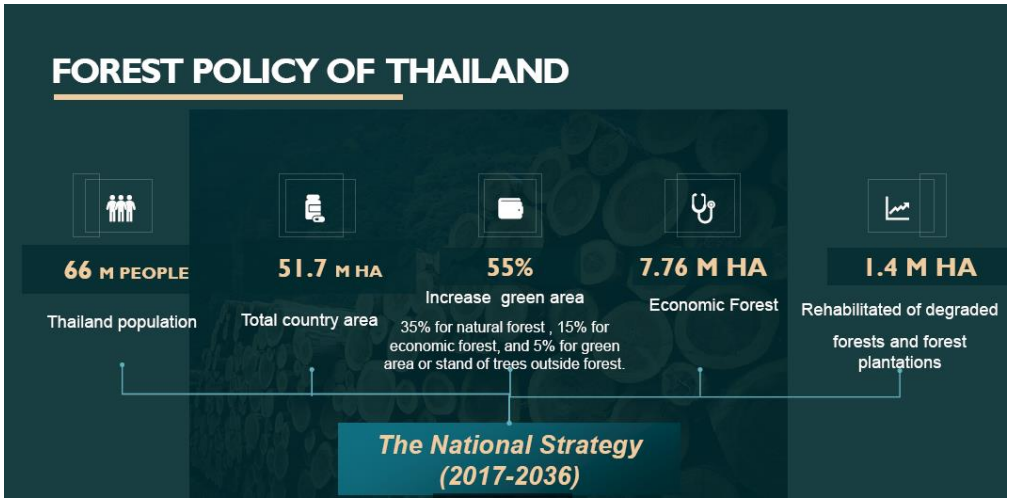
Welcome remarks by BMEL, ITTO, RFD and Kasetsart University

Dr. Ladawan Puangchit, Vice- President of Academic Affairs, Kasetsart University in her opening remarks, acknowledge the BMEL and ITTO for selecting her university to get engaged in the project, coordinating and communicating with the five participating countries and other partners in the region. The project activities are highly relevant to the university's missions to contribute to the conservation and sustainable management of natural resources, in particular teak forests. In addition, it fits well within the national strategy on the Bio-circular Green Economic Model.

Keynote presentations

The paper by Mr. Boonsuthe Jeranvongpanich of Royal Forest Department in his presentation highlighted an overview of forest resources of Thailand, the economic forest policy initiatives and Forest certification in Thailand, Forest management plan, government support for certified teak for smallholders and farmers plantation based on C & I approach and finally, implementation and support BCG model for socio-economic development.

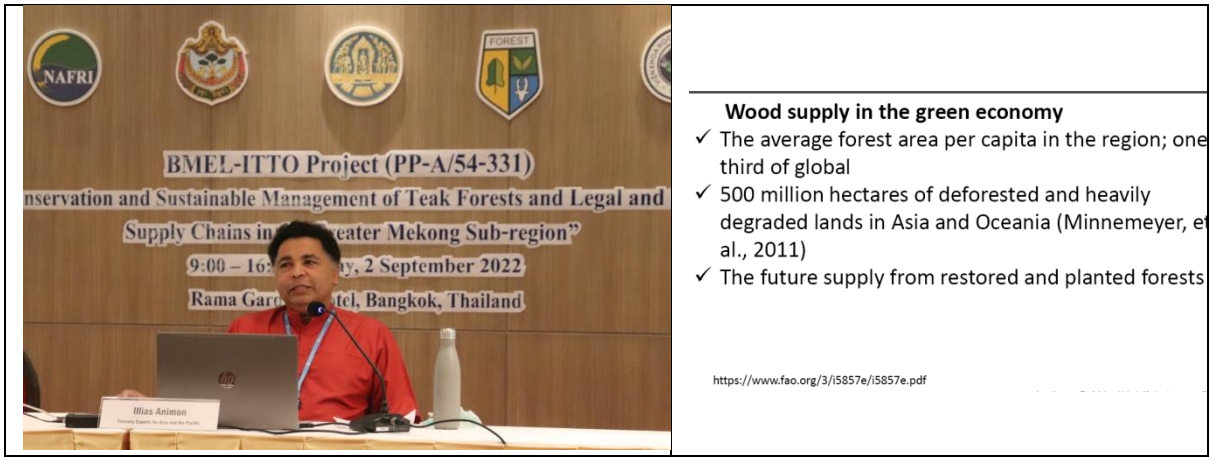
Mr. Boonsuthe Jeranvongpanich, RFD, Thailand



His talk concluded with the following key messages for the long-term policy support for BCG model in Thailand.

Dr. Illias Animon, Forestry Officer from the FAO Regional Office for Asia and the Pacific (FAO_RAP) talked in length about *Green Economy with Plantations, especially with Teak for Forest Landscape Restoration*. He said, forests are at the

heart of low–carbon forest economies and forest products play a key role in mitigation and adaptation. Demand for wood products; increase further in line with green economy.



In the context of restoring about 2 billion hectares of degraded forests globally, teak is an ideal choice wherever, feasible. It has adaptability to a wide range of edaphic/climate factors suitable for diverse landscapes, including in farms. Teak is a popular highly priced timber species, and teak plantations attract investments in the private sector, an ideal species for FLR. It supports farmers/smallholders for their economic upliftment and livelihood in many countries.

In Asia- pacific region, the future supply of wood will be from restored and planted forests. Dr. Animon elaborated the opportunities in the teak sector gaining importance in the context of the following reasons.

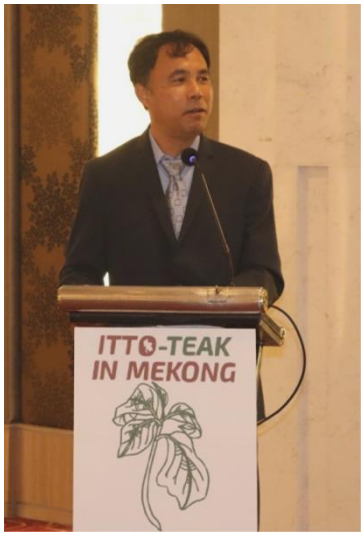
Promoting teak for restoration

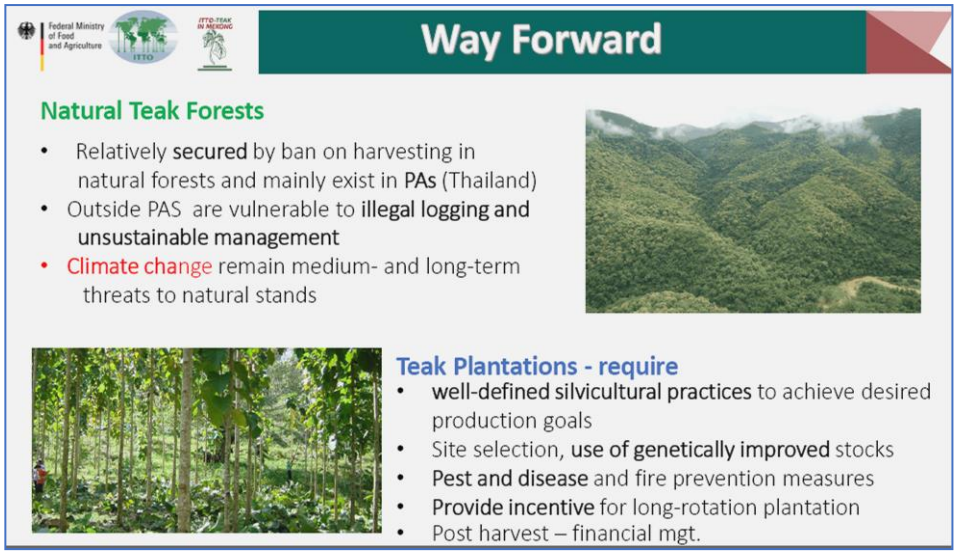
- Improve policy support and incentives; action plans
- Enhance market access (e-markets), information (e.g. price) and quality standards
- Improve access to good planting material, knowledge, innovations and technologies
- Promote better management practices (biodiversity & climate-smart oriented)
- Communicate success stories to inspire further action

- Enhance capacity of smallholders to access financing
- Enhance collaboration and networking among investors, producers, processors and traders and learning from each other (e.g. through TEAKNET)
- Research - policy- practice - continuum
- Molding teakpreneurs with required skills, especially on value addition among the youth to contribute towards a green economy

He called upon the international community to promote teak to advance a green economy.

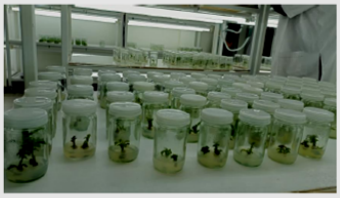
Prof. Yongyut Trisurat presented the salient achievements of the BMEL-ITTO Teak project implemented in 5 participating countries of Mekong sub-region. The way forward for future of natural and planted teak genetic resource conservation and management are summarized in the following slides.





Conservation of Teak Genetic Resources and Tree Improvement

- Investigate the **genetic variations** in the planted and natural populations
- Continuing breeding of **selected clones** to improve timber quality & **pest and disease resistance**



Community-based Smallholders Teak Mgt.

- Capacity building on production of **good quality seedlings** & silviculture
- **Intercropping** with other species in agroforestry systems provide **short-term benefits**
- Added-value of **small sized thinned teak** (furniture design) to earn interim income
- Supportive tenure policies eliminating **excessive regulatory burden**
- Provide incentive programs, enhance their **access to finance** and long-term investments,
- improve networking (co-op), and strengthen market support for effective value chains dev.

Legality, Certification and Trade

- Require **simple legal supply chains** and CoC certification of timber
- FSC & PEFC, EU FLEGHT for **international trade**
- Innovative certification systems: **Simplify system/certification** for domestic use

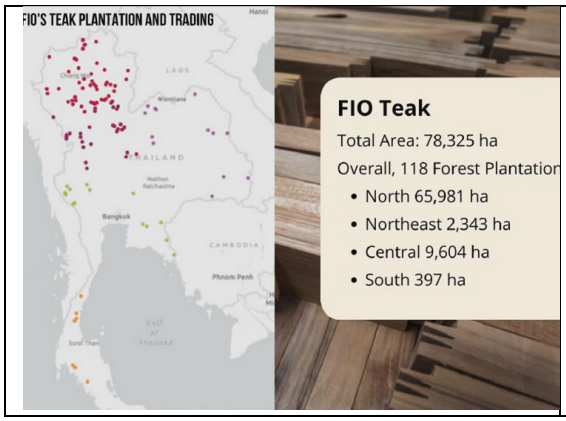
Regional Network and International Collaboration

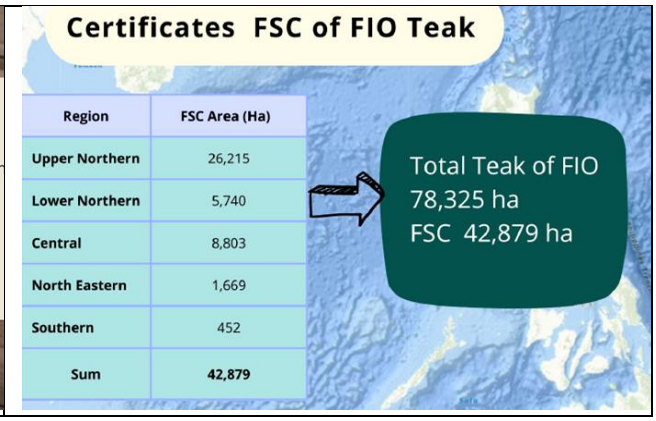
- Periodically organized **conferences/meetings** (online & onsite)
- Dissemination of **teak grower's manuals and online info** in local languages for different target groups
- Sharing research outcomes and policy briefs (e,g,. Teak newsletters)

Summary

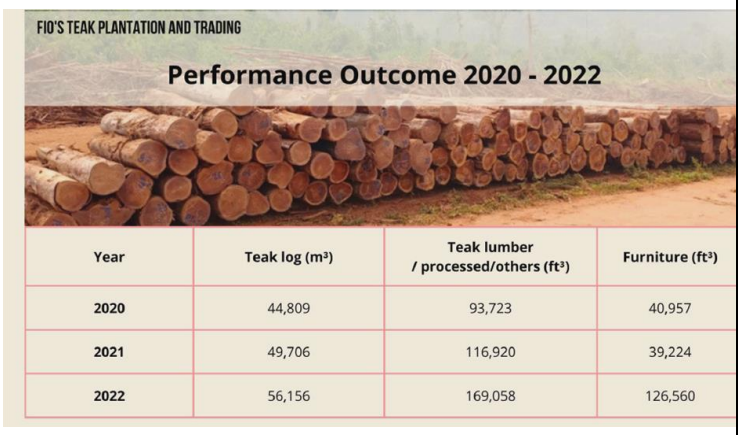
BCG Model (agriculture sector)	BMEL-ITTO Teak in Mekong
Resource- and land-use efficiency	PAs, seed orchard and plus tree collection
R&D and technologies	Genetic improvement (good seedlings)
Smart farming/**innovation**	Site selection and intensive irrigation (shorten rotation)
Product diversification	Short-(intercrop), medium- (thinning) and long-term benefits (final cut) - silviculture
Traceability, food and product safety	Legal supply chains and certification (nat/int)
Waste reduction	C&I, SFM (circular wood-based ind.)
High-value and premium-quality products	Added-value of small sized thinned teak (**furniture design**)

Mr. Narongchai Chonlapap, Sub-Divisional Manager of Forest Industry Organization, Thailand gave brief background of FIO's plantations, its logging and trading activity. He informed that teak plantation comprised of 78,325 ha of different age classes, mostly distributed in north and north-eastern province, of which about half of it is FSC certified plantations.



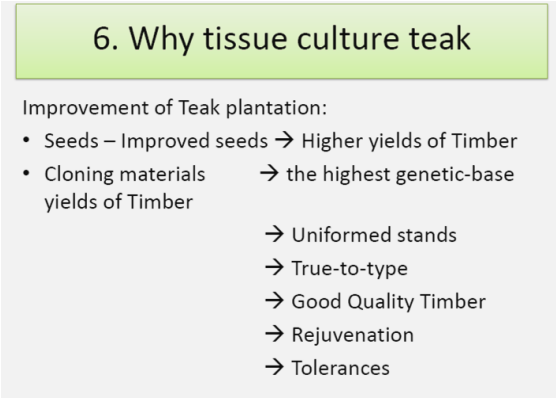


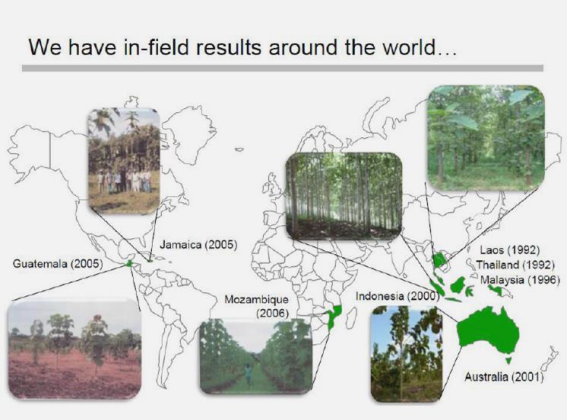
He further elaborated the performance outcome of the processed teak logs into lumber and furniture during the period 2020-2022 as shown in the slide. Major quantity of process logs were traded in the domestic market and a minor quantity gone into the export market, mostly to China.



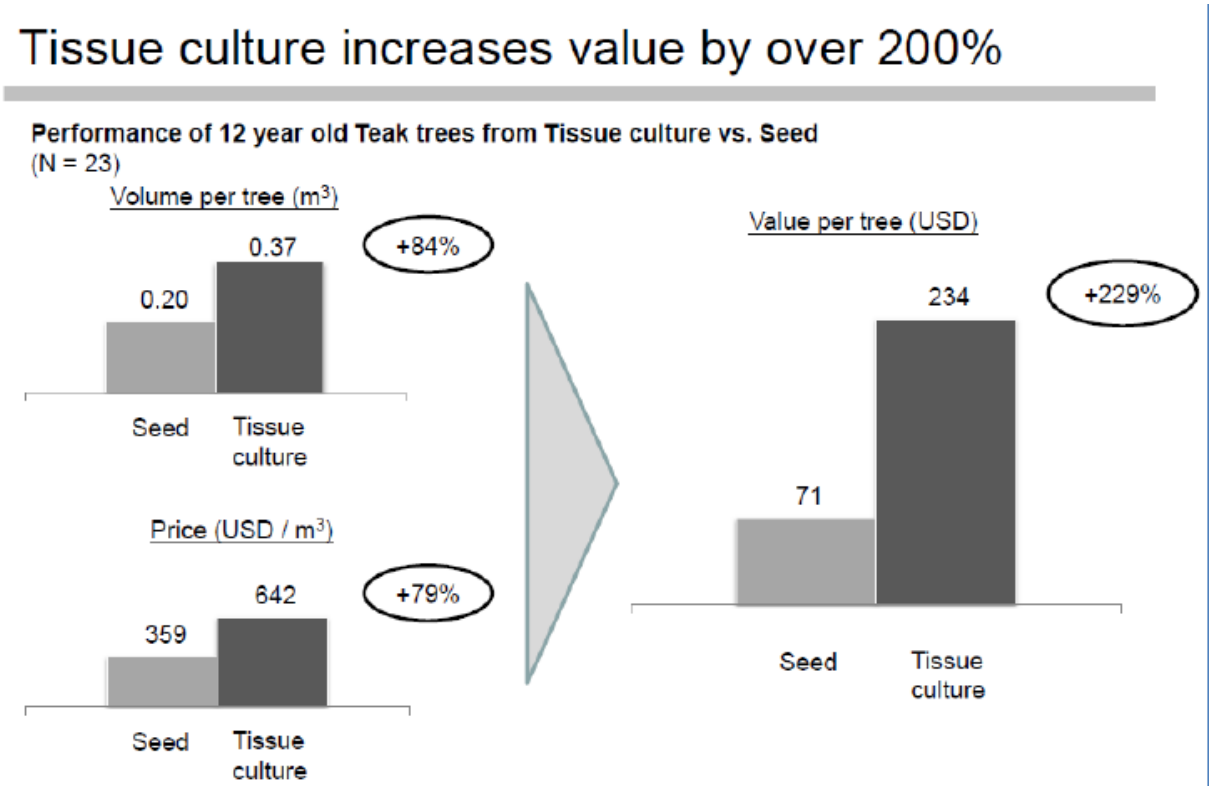
Dr. Paiboolya Gavinlertvatana, President, Thai Orchids Lab Estates Company Ltd., on

commercial teak plantation development in Thailand presented the advantageous of Tissue culture teak which yielded over 200% than seed origin teak if the genetically superior mother teak plus trees were used for the purpose. The company has deployed tissue culture teak in many countries across S-E Asia, Latin America and Africa and yielding good results.





Flat-sawn board from 16 year old Tissue cultured teak (Note the uniform wood colour)



Mr. Doonyapol Srichan, Adjunct Professor at Faculty of Architecture, KMITL gave an impressive presentation on *'Wooden Furniture Design: Value-Added Products'* giving examples of various ergonomic simple designs which increases the value of the wood products which are acceptable in the domestic and international markets. Teak timber from short rotations can be made use of for such designs.

Mr. Doonyapol Srichan, KMITL on wood designs

Besides the keynote presentations, all the country partners presented the outcome

and achievements of teak project in their country perspectives for contributing to the sustainable green economy. In the concluding ceremony, the keynote presenters were rewarded with a copy of the Teak Book.

Mr. Stephen Wagner, BMEL gave away rewards to the keynote speakers

The fruitful deliberations and key messages of Regional workshop will be shared among the participants of the 4th World Teak Conference in Ghana during 5-8 September in Accra in Ghana in which 17 delegates of ITTO project team will be attending the conference. The closing remark was delivered by Dr. Hwan-ok Ma, ITTO, Japan and vote of thanks by Prof. Yongyut Trisurat.

Photo Gallery

The project implementing team partners line up during the opening ceremony

DDG, Royal Forest Department to Media

View of the audience

From exhibition stand: Furniture products from teakwood


Hardened Tissue culture teak for field planting

[photo credit: Thulasidas & Yongyut Trisurat]

Report by
PK Thulasidas
international Consultant, ITTO Teak Mekong Project

The selected PPT can be downloaded here