

Global Teak Support Program for conservation and sustainable use of teak genetic resources



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Context

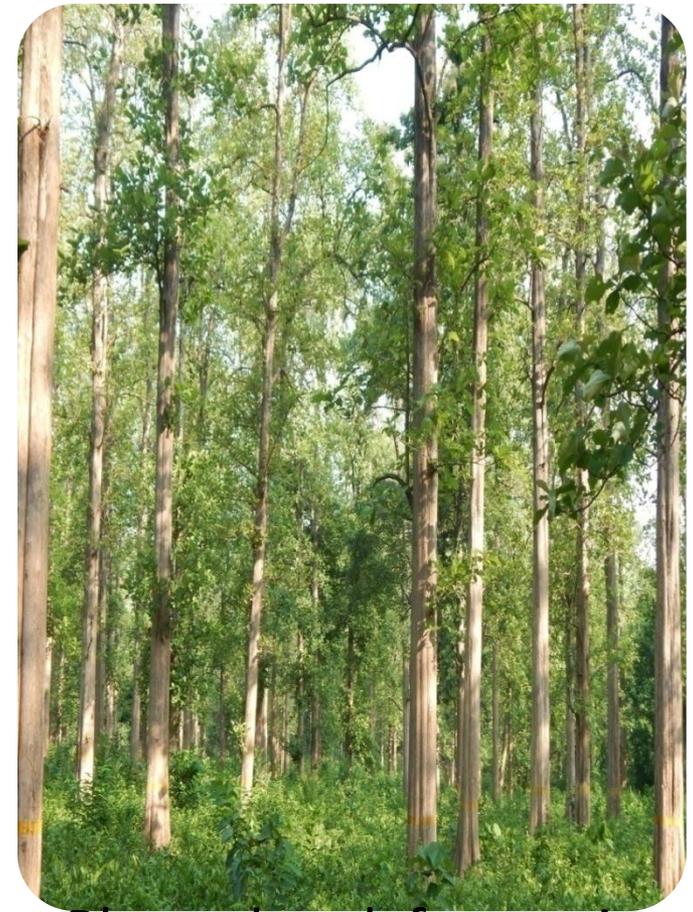
- Natural teak forests, in particular old-growth high-quality stands are on a continuous decline due to over exploitation, deforestation, land conversion etc and that threatened its gene pool.
- Teak is one of the few emerging hardwood species widely planted in about 70 countries in the tropics.
- According to FAO's Global Action Plan for the Conservation, Development and Sustainable Use of Forest Genetic Resources, teak is also a national priority species in many countries



Natural teak forests

contd...

- Planted teak forests cover an area between 4.35 to 6.89 million ha , of which 83% are in Asia, 11% in Africa, and 6% in tropical America.
- Most of these plantations are established with seeds of unknown origin that ultimately affects the timber quality and productivity.



Planted teak forests in Kerala, India

This situation calls for the implementation of a global program for the conservation, development and sustainable use of teak genetic resources.

International initiative

World Teak Conferences
Bangkok (2013)
Ecuador (2015)



International partners – IUFRO- FAO- TEAKNET

Initiated a large-scale international research, development and cooperation program - Global Teak Support Program (GTSP)

- to **strengthen the conservation and sustainable use of teak genetic resources** for the benefit of teak growers, forest industries, investors and local communities in different country contexts in Africa, Asia/Oceania and Latin America



Global Teak Support Program (GTSP)

Objectives

- Preserve the existing native teak resources before they decline further
- Widen the genetic resource base of natural and planted teak forests
- *in-situ* and *ex-situ* conservation programs through international assistance and research collaboration.



What has happened so far ?



IUFRO sponsored Project formulation workshops conducted at Bangkok (2014) and Guayaquil, Ecuador (2015)

Representatives from different teak growing countries in Africa, Asia and Latin America participated

Outcome and Output of the Workshops

Outcome

- National capacities of teak growing countries are enhanced to conserve, develop and sustainably use teak genetic resources

Outputs

1. Countries growing teak forests establish and implement long-term programs for
 - a) the conservation, development and sustainable use of natural and planted teak, and
 - b) for widening the genetic resource base
2. Capacities and capabilities of teak growing countries are enhanced to support research and development programmes with the aim of producing superior quality reproductive material
3. TEAKNET has been strengthened as an international teak information sharing and partnership network platform

Ex-post analysis

- ITTO, Japan supported the initiative taken by the consortium of IUFRO-TEAKNET-FAO for GTSP.
- The project partners agreed upon to conduct Ex-post analysis and evaluation of previous teak projects funded by ITTO from 1996 to 2006.
- Projects included natural and planted teak forests in Myanmar.
- The evaluation mission completed the task in September 2016 and submitted a report that was published in the recent issue of Tropical Forest Update

Conserving teak for future generations

An ex-post evaluation has found that an ITTO-supported project in Myanmar helped the conservation of high-quality teak genetic materials but would have benefited from more attention to social and policy aspects

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Review: A project officer and a district forest officer discuss "lessons learned" in a village-managed seed production area. *Photo: R. Glauner*

This article presents the results of an ex-post evaluation of an ITTO-supported project implemented in Myanmar to encourage the sustainable management of the country's teak resources. ITTO commissioned the ex-post evaluation in 2016 from a consortium composed of scientists and experts from the International Union of Forest Research Organizations, the Food and Agriculture Organization of the United Nations, and TEAKNET.

Sustainability of teak resources under threat

Myanmar is home to one of the world's most valuable commercial timber species, teak (*Tectona grandis* L.f.). The harvesting and processing of teak has contributed significantly to Myanmar's economic development, but the country's forest cover is declining: it is now at 43% of the total land area (29 million hectares), down from 66% (45 million hectares) about 90 years ago (Figure 1). The reasons for the decline are well known and include unsustainable logging, illegal

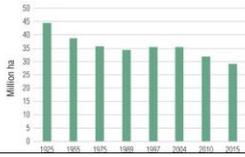
harvesting, and the expansion of agricultural activities among local communities.

In the mid 1800s, the community use of teak forests in the country's Pegu area led Sir Dietrich Brandis—a German forester who was then the area's superintendent of forests—to conclude that the Karen communities could do better by applying the taungya system¹, a temporary agroforestry approach still widely practised today. This proved a major leap forward in the establishment of planted forests in the tropics under the concept of community forestry (as it is called today).

Despite a trend towards greater community involvement, however, reforestation has been unable to keep pace with deforestation, and valuable teak forest resources remain under threat. To address this issue, the Myanmar Forest Department implemented ITTO project PD 270/04 Rev.2 (F): "Ex-situ and in-situ conservation of teak (*Tectona grandis* L.f.) to support sustainable forest management" from 2006 to 2009. ITTO's financial contribution amounted to US\$475 000, and the Government of Myanmar contributed 50 million Myanmar kyat in in-kind support.

Today, the Myanmar Forest Department is fully aware of the need for tree improvement and the systematic collection of quality seeds for the establishment of teak plantations. Despite a (time-limited) logging ban, Myanmar aims to maintain its market for high-quality teak wood and downstream products. It has embarked on a serious effort to control harvesting and ensure the legality of timber, and it has commenced a timber certification initiative.

Figure 1: Myanmar's forest area, 1925-2015



Year	Forest Area (Million ha)
1925	45
1955	40
1985	35
1998	32
2004	30
2010	28
2015	29

Courtesy: ITTO Tropical Forest Update 26/1 15: 2017

Expert Consultation meeting

- Along with the Ex-post analysis, a Technical Report was also prepared by the IUFRO team of teak experts during the Expert Consultation meeting held at Vienna in Dec 2016.
- This Global Teak Study Report included Policy recommendations and Guidance for future ITTO funded projects in promoting sustainable management of natural and planted teak forests in the tropics.



*The Report has been released as **IUFRO World Series Publication No. 36** and will be soon available online*



Policy recommendations

In view of the imminent threat of losing natural teak forests, it is imperative to organise and implement a global program for the conservation, improvement, development and sustainable use of teak resources.

- Such Global Teak Support program (GTSP) would contribute to preserve the native teak resources still existing before they decline further.





Policy recommendations

- The GTSP will strengthen the understanding and knowledge of teak genetic resources, promote their sustainable use and management and contribute to develop and strengthen *in-situ* and *ex-situ* conservation programs through research collaboration at national, regional and global level.



- This will contribute towards the achievement of the Millennium Development goals, the post 2015 Agenda and the Aichi Biodiversity Targets.



What next ...???

- GTSP will have distinct tasks and program outputs, recommendations for all relevant national and international forestry institutions and other concerned stakeholders
- The consortium of IUFRO-TEAKNET-FAO will facilitate the implementation of results of GTSP project in the teak growing countries with the financial support of donor agencies like ITTO in the next few years.



Thank you for your kind attention !

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