

FST/2016/151 Project Information Sheet



Name of the project	Advancing enhanced wood manufacturing industries in Laos and Australia
ACIAR project number	FST/2016/151
Start date and duration (years)	May 2017 – July 2021
Location	Lao PDR
Budget	\$2,800.067
Project leader(s) and Commissioned Organisation	Prof Barbara Ozarska, The University of Melbourne
Partner country project leaders and their institutions	Assoc. Prof. Latsamy Bouphe, National University of Laos Dr Adam Redman, Department of Agriculture & Fisheries, Qld Prof Peter Kanowski, ANU Mr Bounchanh Lattanavongkot, Luang Prabang Timber Program
ACIAR Research Program Manager	Tony Bartlett, Forestry Program

Overview (100-200 words)

The Government of Lao PDR strongly supports the development of a sophisticated wood processing industry, as expressed in the Forestry Strategy to 2020 and the Agricultural Master Plan (2011-2015). The Prime Minister Order (No. 15/PM/2016) specifies that all types of wood must be turned into finished products that meet defined standards before they can be exported. The implementation of this Order will require strong support to wood processing enterprises through capacity building, training and product development.

The wood manufacturing industries in Laos are in their infancy compared to those in neighbouring countries. Research and development is needed to support the development of new processing capability and a range of Engineered Wood Products (EWPs) that can be produced from small diameter timbers. Specific skills and knowledge are lacking on the processing of wood for appearance, structural and housing construction purposes and on enhancing termite and decay resistance in the timber products. Further research is needed on aspects of the timber value chain between the plantation and processing industry to ensure efficient supply of wood resources and provide necessary information to support business cases for the investment in new processing facilities.

Research

The aim of the project is to support the development of innovative wood processing industries to enhance markets for planted timber resources within Lao PDR and Australia.

Supporting Objectives are to:

1. Identify the key elements of the policy, governance and administrative environment that constrain the development of plantation forests and value chains in Lao PDR, and other constraints to improving plantation value chains, and develop strategies for engaging with this environment and improving plantation value chains.
2. Develop and adapt innovative technologies for the production of high performance EWPs, based on veneer and laminated wood from small diameter logs, and also composite products based on wood and other materials.
3. Improve capacity, in both Lao PDR and Australia, with respect to value chain analysis and the development and production of EWPs based on veneer, laminated wood and other composite materials.

Achievements (<250 words)

Analysis of relevant policy, governance and administrative environment is well advanced. Many changes have been identified to governance structure, law, policies and strategies occurring simultaneously. Some of the regulations have adopted recommendations from the previous ACIAR project in Laos, FST/2010/012.

Analysis of value chains of the Lao PDR smallholder plantation resource is well advanced. The field work and draft reports have been completed for teak value chains in Luang Prabang and Xayaboury, and network mapping has commenced.

The characterisation of the current plantation resource in Lao PDR, and options for modelling future wood supply the Luang Prabang is in progress. Landscape analysis of teak is complete and the impact of current and future major land developments on the teak resource is ongoing. Mapping of plantations of different species in other provinces has begun.

The new building for research facility at the National University of Laos (NUoL) has been completed and equipment purchased and installed. The enhancement of the NUoL research facility provides an opportunity for interdisciplinary research in wood processing and manufacturing of appearance and structural wood products thereby enabling Laos to develop the technical knowledge and skills necessary to underpin the development of a EWPs industry in Laos. The facility will provide linkages between government, researchers, private sector enterprises and other actors along the timber value-chain to facilitate interchange of knowledge, expertise and information between the key stakeholders that need to be involved in the development of this industry in Laos.

Impact story (if applicable and <250 words)

Recommendations from the previous ACIAR project FST/2010/012 described in a paper "Teak plantation smallholders in Lao PDR: what influences compliance with plantation regulations?" have been adopted in the revised draft to the Forestry Law. This study explored the policy and regulatory environment for smallholder plantation teak to understand how instrumental and normative factors may influence compliance with plantation regulations and affect participation in new governance structures such as grower groups. The results emphasised the need for policies, regulations and governance to take into account the human factor if value chains that depend on smallholder plantations are to be effective.

Many companies in Lao PDR are currently in the process of either investigating the potential of setting up veneer and veneer-based engineered wood-product facilities, or are actually setting up such facilities.

- Burapha company has already developed a detailed plan for the company establishment. The Project Manager from Sweden has been appointed and the machinery ordered. During discussions with Burapha managers it was mentioned that the company will employ 300 employees within 3 years and they hope that NUoL students will be able to work in the company after their graduation. There is a great opportunity for the project to train future experts in the veneer processing and veneer products development and manufacturing.

- Phenmounkhoun company has also showed interest in investing in veneer production facility. The owner of the company is exploring opportunities for purchasing veneer peeling machinery to run profitable veneer production.

Photos

Photo 1: ACIAR project FST/2016/151 Advancing enhanced wood manufacturing industries in Laos and Australia.

The photo shows the field practice on strategic inventory of mapped teak plantations in Luang Prabang Province. Population is defined by the area of teak plantations mapped in VALTIP 2. Aim is to provide estimates of standing volume of teak in the province and the general location of teak volume.

Names of people on the photo:

- From left to right: (1) Hongkham Senanachak (expert on GIS for teak mapping); (2) Phatthakon Phengchanh (field work crew for teak mapping activity); (3) Tik Phetlamphanh (field work crew for teak mapping activity).

The photo was taken on 8 February 2018 in Ban Phahnorn village, Luangprabang City by Ken Beo.



Photo 2: ACIAR project FST/2016/151 Advancing enhanced wood manufacturing industries in Laos and Australia.

The photo shows the project researchers from the Faculty of Forestry, the National University of Laos, conducting wood recovery study for plantation eucalypt.

Names of people on the photo:

- From left to right: (1) Phouluang Chounlamounty; (2) Lothim Xetern and (3) Buangern Phommakoun (ACIAR project researchers from NUoL).

The photo was taken on 22 August 2017 at the Faculty of Forestry, NUoL, by Dr Benoit Belleville, ACIAR project researcher, The University of Melbourne.



Photo 3: ACIAR project FST/2016/151 Advancing enhanced wood manufacturing industries in Laos and Australia.

An intensive training in termite and fungal durability was conducted at the Faculty of Forestry (FoF), the National University of Laos for the project researchers and FoF students. The photo shows the preparation of long-term termite and fungal durability trials at the FoF grounds.

Names of people on the photo:

- From left to right: (1) Outhit Sayavong (FoF), Mr Vansy Phengthajaim (FoF); (2) Bounchanh Lattanavongkot (LPTP); (3) Jack Norton (consultant conducting the training); (4) Oudone Sychaleun (FoF) and (5) Khamtan Phonetip (FoF) (at the back).

The photo was taken on 31 May 2018 at the Faculty of Forestry, NUoL, Vientiane, by Dr Adam Redman, Department of Agriculture and Fisheries, Qld, the Deputy Project Leader.



I, Prof. Barbara Ozarska, The University of Melbourne, authorise ACIAR to use the attached images in its ongoing program of communication of achievements of ACIAR-funded projects to a wide audience of Australian and overseas stakeholders.