



Forestry

# Advancing enhanced wood manufacturing industries in Laos and Australia



## Overview

The Government of Lao PDR strongly supports the development of a sophisticated wood processing industry as a way to improve economic growth in rural areas. A recent Prime Minister Order specifies that all types of wood must be turned into finished products that meet defined standards before they can be exported.

The wood manufacturing industries in Lao PDR are in their infancy compared with those in neighbouring countries. There is already some 215,000 ha of planted teak, rubber, eucalyptus and acacia for which there are limited markets, but the wood processing sector has not yet adopted new processing technologies widely used in Vietnam and China.

Research and development are 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 an efficient supply of wood resources and provide necessary information to support investment in new processing facilities.

## KEY FACTS

**ACIAR Project No.** FST/2016/151

**Duration:** April 2017 to September 2021 (4 years)

**Target areas:** Lao PDR and Australia

**Budget:** AU\$2,800,067

### Project Leader

Prof Barbara Ozarska, University of Melbourne

### Key partners

- National University of Laos
- Department of Agriculture and Fisheries
- Australian National University
- Luang Prabang Teak Program

### ACIAR Research Program Manager

Dr Nora Devoe

## Research/Objective

**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.**

### The specific objectives are to:

- Identify the key elements of the policy, governance and administrative environment that impact 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.
- Develop and adapt innovative technologies for the production of high performance and commercially competitive EWPs, based on veneer and laminated wood from small diameter logs, and also composite products based on wood and other materials.
- Improve capacity, in both Lao PDR and Australia, with respect to the development and production of EWPs based on veneer, laminated wood and other composite materials and their profitability and competitive position vis-à-vis other building materials.

## Expected scientific results

- Better understanding of the extent of plantation grown wood and the suitability of existing biometrics and growth models for the existing teak plantation resources in Lao PDR.
- Scientific publications on the principal value chains for Lao PDR plantation resources, identifying major impediments to resource availability for domestic processing and suggesting strategies to overcome these constraints to stimulate competitive business development.
- Adaptation of innovative emerging technologies for the production of novel, high performance EWPs, suited in particular to the resources and industrial conditions of Lao PDR and Australia.

## Expected outcomes

- An improved policy, regulatory and administrative environment for appropriate plantation development, more efficient value chains and the expansion of an internationally competitive Laos PDR forest industry.
- Improved knowledge on plantation timber resources together with more effective policy and regulatory arrangements facilitates new investments in innovative wood processing facilities in Lao PDR.
- The Lao PDR forest industry becoming larger, more diverse and profitable, and benefiting from production of EWPs for domestic markets.
- Australian wood processing industry expanding through the production of innovative EWPs.
- Improved livelihoods of plantation growers, and greater and more secure opportunities for employment in the plantation wood processing sector.

