



Forestry

# Improving returns from community teak plantings in Solomon Islands

## Overview

**Most existing smallholder teak plantations in Solomon Islands are generating income for their owners as a result of lack of practical options for harvesting and processing the timber locally.**

Australia recently approved the importing of Solomon Island timber that complies with newly established guidelines on the legality of logging products. However, this approval does nothing to assist the thousands of community teak growers who live outside the catchment area of the capital Honiara, and who have no access to this newly assured market.

Previous AusAID-funded forest management projects had encouraged community plantings of less than 0.5 hectare. According to the project's estimates in 2006, this resulted in 12,000 separate plantings. More recent Ministry of Forestry estimates indicate that there are now 21,000 plantations with a total area of 15,000 hectares.

The plight of thousands of community growers with existing plantations was revealed during the ACIAR project FST/2007/020. That project researched a better method for growing high-value timber in Solomon Islands that would overcome growers' reluctance to thin their trees. While the development of an alternative strategy was successful, it has done nothing to help the growers with existing plantations. Their situation has become worse, with considerably older and consistently underperforming plantations.



## KEY FACTS

**ACIAR Project No.** FST/2014/066

**Duration:** July 2015 to December 2019 (4 years)

**Target areas:** Solomon Islands

**Budget:** AU\$1,199,998

### Project Leader

Dr Tim Blumfield, Griffith University

### Key partners

- Agri-Science Queensland, Department of Agriculture and Fisheries
- University of Adelaide
- Island Environmental Services
- Sustainable Forestry Solutions
- Solomon Islands Government, Ministry of Forestry

### ACIAR Research Program Manager

Dr Nora Devoe

## Research/Objective

**The project aims to develop a practical model suited to small island states that enables existing small-scale teak plantations to be utilised, providing growers with good returns.**

### The project's specific objectives are to:

- Maximise the timber that can be produced from small diameter and poor form trees;
- Develop a system for value adding to processed timber through air and solar drying;
- Identify the social and environmental impacts of adopting a system of processing at a local level and the effect on the sustained long-term community economic and social well-being;
- Develop an appropriate model for improving economic returns through small-scale forestry in the Solomon Islands and assess its suitability for other small island states;
- Investigate post-thinning or harvesting silvicultural management of community teak plantations; and
- Monitor and evaluate the progress and effectiveness of the project in achieving its aims.

## Expected scientific results

- Development of processing and drying techniques appropriate to the technology available at village and provincial level.
- Guidelines for the establishment of second rotation plantations.
- Publication of data from trials established in previous projects expected to enhance the longer-term understanding of the growth and performance of Solomon Island teak.
- Improved techniques for the milling of small diameter logs leading to maximisation of timber production and incomes from community plantations.
- Greater understanding of the drying characteristics of Solomon Island teak sawn and dried under a variety of conditions, including air drying and passive and fan-assisted kiln drying to help increase its access to export markets.
- Socio-economic analysis of grower and community attitudes, leading to a greater understanding of the drivers and constraints surrounding the uptake of smallholder timber production and the development of a smallholder timber production industry in the Solomon Islands.

- Data collected on tree response to thinning to provide information, previously unavailable, on the level that suppression of growth affects future growth and yield.

## Expected outcomes

- Two Solomon Islanders trained in small diameter log processing and solar drying in Brisbane to act as trainers on all project related activities in the Solomon Islands.
- Development of small-scale business opportunities in processing (both harvesting and drying) to benefit local entrepreneurs and increase supply capacity.
- Community impacts stemming from economic benefits through the sale of high-value timber and the development of a realistic low-volume export market.
- Turning moribund plantations into economic opportunities helping communities see opportunities for sustainable income from plantations.
- Women in particular expected to benefit from developing secondary drying as a business opportunity.
- Environmental benefits stemming from an increase in the area of degraded secondary forest brought back into productive forest management to provide timber for local processing and sales.

