



Forestry

# Enhancing private sector-led development of the canarium industry in Papua New Guinea



## Overview

Indigenous nuts have excellent potential to improve the livelihoods of the rural poor in Papua New Guinea (PNG). They are also highly nutritious and can be stored for long periods, sold for cash, processed and exported to distant markets.

*Canarium indicum* also known as galip nut, is an agroforestry tree in Eastern Indonesia and the Pacific that produces edible nuts. In PNG, approximately 250,000 of these elite trees have been produced with various donor funding and distributed to smallholders and cocoa plantations. Women are involved in most of the nut activities, from nut cultivation and harvesting to processing and selling. This project seeks to expand markets and processing of canarium nuts in East New Britain by strengthening private sector capacity and engagement to process the nuts from existing trees to high-valued products.

Taking a whole value-chain approach, the project offers a range of interventions such as market research, technical advice, capacity building, business mentoring and access to infrastructure for both private and public sector stakeholders. The private sector targets include smallholder and small-scale entrepreneurs, small and medium enterprises (SMEs) and large-scale processors.

## KEY FACTS

**ACIAR Project No.** FST/2014/099

**Duration:** June 2015 to May 2018 (3 years)

**Target areas:** Papua New Guinea

**Budget:** AU\$3,519,075

### Project Leader

Prof Helen Wallace, University of the Sunshine Coast

### Key partners

- University of Adelaide
- National Agricultural Research Institute (NARI)

### ACIAR Research Program Manager

Dr Nora Devoe



## Research/Objective

The project aims to accelerate private sector-led development of the emerging canarium (galip) nut industry in PNG and facilitate the development of a public-private partnership based around the NARI pilot processing plant in East New Britain.

### The project's objectives are to:

- Assess the needs of the private sector to participate in the canarium industry;
- Develop and undertake research-based interventions that address the needs of the private sector, including smallholders, small-scale entrepreneurs (especially women), SMEs and large-scale processors;
- Develop an appropriate commercial model for a medium-scale value adding factory for the canarium industry; and
- Create a model for public-private partnerships in the canarium industry in PNG.

## Expected scientific results

- Scientific trials conducted on small-, medium- and large-scale canarium nut processing methods.
- Identification of a range of technologies potentially suitable for processing nuts, such as new solar drying systems.
- Nutritional information and food safety aspects of canarium products explored.
- New information on business models for commercial-scale canarium processing in the PNG context and lessons shared on successful and unsuccessful strategies.
- Research published in various scientific journals.

## Outcomes

- Almost tripling of the supply of nuts sold by smallholder farmers.** Our research indicated that it would be more cost effective to purchase the nuts at the factory. This new buying model massively increased supply and encouraged local entrepreneurs to hire trucks and buy from their local district and deliver to the factory.
- A fourfold increase in galip processing capacity at the pilot factory.** A high throughput factory cracking and processing line was installed to increase galip processing capacity of the factory. A new de-pulper was developed by NARI staffed using a modified juicing machine.
- A range of new products were developed and launched in East New Britain and Port Moresby.** Three main products with new packaging were developed for formal markets in East New Britain and POM including natural, roasted and peeled products.
- Two private sector players have partnered with the project team.** These are the Canarium Nut Co who is partnering with the project team to process canarium in East New Britain, and CPL who has agreed to act as a distributor for the project team for market testing trials.

