



Australian Government

Australian Centre for
International Agricultural Research

Forestry

Enhancing private sector-led development of the canarium industry in Papua New Guinea – Phase2

Overview

The world market for processed nuts has grown rapidly over the last decade as consumers increasingly choose healthy snacks. Canarium nuts (galip nuts) are the basis of an emerging industry in Papua New Guinea.

Phase 1 of this project piloted semi-commercial processing techniques for canarium products and provided more than 1000 smallholders in East New Britain with access to new markets. It also supported small-scale female entrepreneurs to make their own value-added canarium products. There is great potential to scale out the processing techniques to other areas including Bougainville, New Ireland, Sepik and Madang.

Four critical issues emerged from the Phase 1 research:

- » The difficulty of getting large volumes of nuts to the factory, which highlighted the need to improve on-farm tree management and harvesting and collection systems.
- » The inefficiency of the current model of buying nut-in-pulp at the factory. A more efficient system that would benefit both farmers and small-scale entrepreneurs, would be to decentralise the early stage processing.
- » Private sector investors are unwilling to commit as the industry is unproven.
- » A new pest, the galip weevil, has emerged and caused significant tree deaths in the Gazelle Peninsula, East New Britain.



KEY FACTS

ACIAR Project No. FST/2017/038

Duration: December 2019 to December 2022 (3 years)

Target areas: Papua New Guinea

Budget: A\$3,061,852

Project Leader

Professor Helen Wallace, Griffith University

Key partners

- National Agricultural Research Institute, Papua New Guinea
- University of Adelaide

ACIAR Research Program Manager

Dr Nora Devoe

Objective

The aim of Phase 2 is to foster private sector-led development of the canarium nut industry in Papua New Guinea, increase the efficiency of canarium nut value chains and establish commercially viable business prospects for private sector investments at different scales.

The objectives are to:

- Improve the commercial viability of business models for canarium nut processing.
- Foster private sector participation in the canarium value chain for both domestic and export markets.
- Empower women to participate in the canarium value chain.
- Improve nut supply and quality by improving production.

Expected scientific results

- Analyses of canarium nut processing methods.
- Identification of a range of technologies suitable for processing nuts, such as new de-pulping systems, and analyses of their performance.
- Generate new information on the galip weevil, canarium nut production and reproductive biology.
- Development of quality control methods in the canarium value chain, best practice tree management for smallholder farmers and tree selection programs for tree improvement.
- Development of weevil management methods through increased understanding of weevil ecology.
- Analysis of commercial-scale canarium processing in Papua New Guinea to provide lessons on successful and unsuccessful strategies, which can be used by other agribusinesses to scale-up and facilitate enterprise development.

Expected impact/outcomes

- Increased volumes of canarium nuts processed and sold.
- Increased participation by smallholders, microenterprises and on-sellers in the canarium value chain.
- More information for smallholders on canarium tree management and harvesting.
- More women engaged in selling value-added canarium as microenterprises in informal markets in East New Britain, New Ireland and Bougainville.
- Access to different business models and costings for potential processors, and increased access to technical information.
- Increased confidence in the private sector to invest in large scale processing.
- Higher participation in canarium value chains by retailers, food distributors and food service companies.

