



Australian Government

Australian Centre for  
International Agricultural Research

Horticulture

# Supporting commercial sweetpotato production and marketing in the PNG highlands

## Overview

The Papua New Guinea (PNG) Highlands' economy is developing rapidly. In areas with good transport infrastructure, smallholders are moving from subsistence farming to market-oriented production. Sweetpotato has a key role in this process. As a cash crop it provides food security amongst coffee, vegetables and small livestock.

Smallholders need continued support to make the move from subsistence farming to market-oriented sweetpotato production to meet market and customer needs.

This project supports the expansion of market-oriented value chains through strengthened supply chains to high value markets, enterprise development along those supply chains, and improved crop production resulting from the supply of clean, high performing planting material. Increased market-oriented production will create income generating opportunities for growers and enable other groups to enter sweetpotato fresh product and sweetpotato-based product supply chains.

The potential impact of a market-oriented sweetpotato sector on PNG's rural communities is being constrained by low crop yields, infrastructure issues, and limited technical and business skills among farmers and potential entrepreneurs. Greater awareness of current and potential markets, and understanding of the requirements for quality, consistency in supply, and "competitive" pricing within these markets, is required.



## KEY FACTS

**ACIAR Project No.** HORT/2014/097

**Duration:** March 2016 to January 2021 (5 years)

**Target areas:** Papua New Guinea (PNG)

**Budget:** A\$4,999,834

### Project Leader

Phil Brown, Central Queensland University, Australia

### Key partners

- Henderson RDE, Queensland, Australia
- Australian National University
- Fresh Produce Development Agency, PNG
- National Agricultural Research Institute (NARI), PNG

### ACIAR Research Program Manager

Irene Kernot



## Objective

**The project's overall aim is to sustainably increase the contribution of the sweetpotato crop to cash income and food security, by promoting the adoption of a series of transformative improvements in selected sweetpotato value chains.**

**The project's three main objectives are to:**

- Develop and strengthen market oriented sweetpotato supply chains.
- Build capacity of sweetpotato value chain players.
- Develop a 'clean seed' scheme to increase availability of clean planting material for sweetpotato..

## Expected scientific results

- Increased understanding of the combinations of production and post-harvest innovations that are most appropriate to the needs of farmers and other value chain participants.
- Increased research knowledge on market-oriented agricultural developments to improve livelihoods in rural regions reliant on subsistence agricultural systems.
- Increased knowledge on supply chain management.
- Development of protocols for virus identification, and surveys of virus prevalence across the altitudinal gradient.
- Findings on impacts of seedbed management practices on yield and quality of clean planting material.

## Expected outcomes

- Ongoing and commercially vibrant, sustainable market-oriented sweetpotato value chains.
- Increased capacity of value chains to meet gaps and needs of existing and potential value chain players.
- Increased yields and returns due to increased availability of clean planting material and adoption of production management practices.
- Increased capacity at local and village level to build skills and competencies in sweetpotato marketing systems and supply chains.
- Enhanced capacity of communities to plan and execute the production and sale of sweetpotato and associated crops and products.
- Greater returns on labour inputs and increased cash income for smallholder farmer families and rural communities.
- Increased food security, better health and improved financial access to education among rural communities.
- Use of increased sweetpotato production to support other enterprise developments such as expanded livestock holdings, plus investments in lifestyle changes such as housing upgrades.



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