



Strengthening livelihoods for food security among cocoa and oil palm farming communities in Papua New Guinea

Overview

Food security among smallholder cocoa and oil palm growers in Papua New Guinea (PNG) is being undermined.

The recent arrival of Cocoa Pod Borer (CPB) has spread rapidly in the country, decimating the production and incomes of growers, while population and land pressures on the oil palm land settlement schemes are contributing to declining per capita incomes and land shortages for food gardening. For the majority of rural women in PNG, local marketing of garden foods is their most important income, even in areas where smallholder export crop production is dominant. Gardens maintain both food and income security and are an important buffer against fluctuating export cash crop prices.

It is estimated that around 151,000 families in PNG produce cocoa at very low levels of productivity which are even lower now in CPB-affected areas. There was no detailed research of the impacts of CPB on household food security and thus there was a need to understand farming and livelihood systems to assess the status of food security in CPB-affected areas and the viability of smallholder cocoa holdings for meeting household income and food needs.

In response, this project sought to address the rising food insecurity among smallholder cocoa and oil palm households in PNG through conducting a detailed socio-economic and cultural assessment of food insecurity and assessing and implementing a range of strategies to improve the resilience of households and their capacity to produce and purchase food. These assessments will assist in providing the knowledge necessary for assessing and developing appropriate interventions and policies that will relieve food insecurity among oil palm and cocoa smallholders.



KEY FACTS

ACIAR Project No. ASEM/2012/072

Duration: 1 January 2014 to 31 June 2018 (4 years)

Target areas: Papua New Guinea

Budget: A\$1.2 million

Project leader

Dr Gina Koczberski, Curtin University

Key partners

- PNG Oil Palm Research Organisation
- PNG Cocoa and Coconut Institute

ACIAR Research Program Manager

Dr Jayne Curnow

Objective

The overall aim of the project is to gain a detailed socio-economic and cultural understanding of the farming and livelihood systems of smallholders to develop and evaluate suitable interventions to relieve the stressors on farming systems that make smallholders vulnerable to food and livelihood insecurity.

The key research objectives were to:

- Assess the status of food security among cocoa and oil palm households.
- Determine the key factors that enhance or constrain the capacity of cocoa and oil palm households to adapt and respond to food insecurity.
- Assess and implement a range of strategies to improve the capacity of smallholders to produce and purchase food.
- Increase the capacity of smallholder households and extension providers to address food and livelihood security through improved access to training, information and ICT innovations.

Outcomes

- Adoption of a new oil palm replanting policy by Hargy Oil Palm for smallholders in the Bialla District of West New Britain. Trial results show that the new replanting policy will improve food and income security of smallholder families. Farmers are keen to adopt the new replanting package as it reduces the financial burden of replanting senile oil palms and allows greater and more regular access to gardening land.
- Completion and distribution of several industry working papers on the status of food security among oil palm and cocoa smallholders.
- More than 1,300 smallholder farmers have opened accounts with EduSuper (almost 20% of whom are women). Contributions of approximately K1.4 million have been deposited since 2015 by the farmers in our study sites.
- Produced a report based on dietary recall surveys among smallholder households at all study sites in East New Britain, ARoB, West New Britain and Milne Bay. The report provides detailed information on diet quality through an analysis of the dietary diversity and food consumption patterns of smallholders. This is the first detailed study in PNG on diet quality in the main cocoa and oil palm growing areas of the country.
- Distribution and trial of a fuel-efficient stove (EcoZoom Dura Stove) among smallholders living in areas where fuel shortages exist. The trial was an instant success and the stoves are retailing in Bialla and Kimbe for between K110 – K120. The stoves use less than half the firewood typically required to cook food on an open fire and a range of fuels can be used including dried coconut fronds and betel nut stems. The stove reduces the work burden of collecting and chopping firewood. The two milling companies in West New Britain are now selling the stoves to smallholders. Approximately 2,000 stoves are being distributed at Bialla and Hoskins.

