

Optimising soil management and health in Papua New Guinea integrated cocoa farming systems



Key details

Location

Papua New Guinea

Duration

Start Oct 2016

End Apr 2021

Budget

AUD 1,944,433

Commissioned organisation

The University of Sydney

Partners

Cocoa Coconut Institute of Papua New Guinea;
The University of Sydney

Project Leader

Dr Damien Field

Program

Soil and Land Management

Project code

SMCN/2014/048



Overview

This project aimed to improve soil management in Papua New Guinean smallholdings with crop diversification, evaluating how nutrient management strategies affect cocoa.

Cocoa is Papua New Guinea's third largest agricultural export; more smallholders are producing cocoa, but yields are 2,000 kg/hectare less than they could be, due to infertile soil.

The project evaluated opportunities for green waste management of cocoa production to supply nutrients to the soil, and for managing soil in diversified cocoa farming systems to make cocoa crops more nutritious. It developed region-specific soil management strategies for smallholdings.

The research could benefit small landholders whose main income is from cocoa production. Smallholder cocoa growers with similar soil constraints on production can now use the sustainable model production systems that the project developed. The project also helped smallholders to diversify crops, this improved diets for farming communities. The income generated makes communities healthier, and improves the status of women, housing and education.