Agribusiness

Developing value chain linkages to enhance the adoption of profitable and sustainable cassava production systems in Vietnam and Indonesia







Overview

Cassava is an increasingly important crop for rural livelihoods and regional economic development throughout South-East Asia.

It is produced largely to meet the rapidly growing regional demand for animal feed, starch products and biofuel. The market outlook for cassava, and prospects for smallholder producers, is strongly linked to supply and demand in the global starch, grain and energy markets.

Cassava is still an important food security crop in specific subregions. Vietnam grows over 500,000 ha of cassava, generating over USD 1 billion per year in export earnings, making it the world's second largest exporter of cassava products (starch and dried chips). Indonesia cultivates over 1 million ha of cassava but remains the second largest importer of cassava starch in the world.

The sustainability of the industry is under increasing pressures such as, soil erosion, declining soil fertility, emerging pests and diseases, and increasing labour costs. Global demand is strong but highly variable, exposing farmers to considerable risk, while infrastructure and logistics problems significantly affect the industry.

The cultivation of cassava offers a profitable livelihood opportunity, especially for resource-poor farmers in marginal upland areas, provided the crop is managed sustainably and farmers are adequately linked to input and output markets.

KEY FACTS

ACIAR Project No. AGB/2012/078

Duration: January 2016 to December 2019 (4 years)

Target areas: Vietnam and Indonesia

Budget: A\$1.3 million

Project Leader

Dr Dominic Smith, The University of Queensland

Key partners

- CIAT (Centro Internacional de Agricultura Tropical)
- NOMAFSI
- Universitas Brawijaya, Malang
- Tay Nguyen University

ACIAR Research Program Manager

Dr Howard Hall

Objective

The overall aim of this project is to increase the profitability and sustainability of smallholder cassava production in Vietnam and Indonesia by developing effective linkages between value chain actors to increase the adoption of improved technologies.

The project's three main objectives are to:

- Assess opportunities and constraints for smallholder production and marketing of cassava within different value chains.
- Increase the adoption of improved cassava production and processing technologies by strengthening linkages between primary value chain actors (farmers, traders, processors) and with support actors (researchers, government agencies, industry bodies).
- Develop policy recommendations and facilitate learning alliances for the development of a sustainable cassava industry and improvements in rural livelihoods through better agribusiness arrangements.
- **Expected scientific results**

Greater knowledge generated on:

- How the cassava boom affects the livelihoods of smallholder farmers, and how benefits and risks are shared within the community and between value chain actors.
- How the economics of recommended technologies vary in different agroeconomic settings; how this influences the relative advantage of technologies and their rate of adoption; how this affects farmers' willingness to pay for improved planting material and invest in soil management.
- What opportunities and constraints exist to working with value chain actors to increase the adoption of technologies in different production and processing settings, and how to develop more effective impact pathways in regions with different levels of government support through partnerships with the private sector.

- How alternative agribusiness models affect the economic, social and environmental impacts of cassava production, the role of policy to balance these outcomes and how governments can work to support smallholder livelihoods and industry development.
- How improvement in the efficiency and profitability of the processing sectors impact the derived demand for feedstock and adoption of production technologies.

Expected outcomes

- Wider adoption of improved cassava technologies.
- Increased capacity of value chain actors to work together in identifying, evaluating and promoting improved technologies.
- An improved evidence base for policies and programmes in support of cassava smallholders and associated agribusiness firms.





