

Australia<u>n Government</u>

Australian Centre for **International Agricultural Research**

Social Sciences

Uptake of agricultural technologies and best practices amongst farmers in Battambang and Pailin provinces, Cambodia

Overview

A farmer's decision to adopt an agricultural technology or practice involves many technical, local, financial, contextual and personal factors.

Efforts to encourage adoption must prioritise perceptions of problems and solutions, including how farmers imagine solutions might be implemented and the actors they believe are involved. Such problemsolution pathways (PSPs) emphasise the everyday influences that ultimately determine adoption.

This way of understanding farmer decision-making is especially important in northwest Cambodia, where the problems of ongoing poverty and marginalisation remain significant impediments to more sustainable development. Cassava is Cambodia's second most important crop, behind rice.

The region is in the midst of a cassava boom and possible bust. The project outcomes are two-fold: in a direct 'applied' sense, to enable and measure adoption of best practices by farmers in northwest Cambodia; in a more 'academic' sense, to test an approach to behaviour change that could fundamentally alter partnerships between poor, marginalised and female farmers with those who aim to improve their lives.





KEY FACTS

ACIAR Project No. ASEM/2013/003 Duration: April 2017 to December 2023 Target areas: Cambodia Budget: A\$1,107,000

Project Leader

Dr Brian R. Cook, The University of Melbourne

- Key partnersThe Australian National University
- Partners for Rural Development

ACIAR Research Program Manager Dr Clemens Grünbühel



Objective

The project aims to increase adoption of agricultural technologies and best practices.

The project's specific objectives are to:

- Expose and analyse farmer PSPs.
- Analyse experts' assessments of farmer PSPs to establish whether suitable technologies or best practices exist, whether they are available in northwest Cambodia, and expert perceptions of their benefits and costs.
- Demonstrate best practices and economic advantages for sustainable cassava production, as well as farmer-desired alternatives (e.g. transition to mango or crop rotations).
- Measure whether a PSP-based approach results in increased, expanded or accelerated adoption of agricultural technologies, with specific emphasis on poor, marginalised and female-headed households in Battambang and Pailin.

Expected scientific results

- An approach able to connect agricultural research with farmers' perceptions, needs, beliefs and circumstances, contributing significantly to the social sciences on practice change and participation, and adding to scientific research that seeks greater 'impact'.
- Far-reaching findings crossing into sectors where technologies, practices and/or knowledge are being developed but not being adopted (e.g. health, education, water resource management, risk reduction, climate change adaptation)
 Possibility for NGOs, local governments, commercial organisations, and other teams of researchers working in Cambodia and South-East Asia to use the approach immediately.
- Seven peer-reviewed academic publications, as well as reports, with findings presented at four international and two South-East Asian conferences.

Expected outcomes

- A greater understanding of the experiences of marginalised farmers, particularly female farmers and/or female-headed households, and their use or access to technologies and/or best practices.
- Greater income due to production increases, income stability or diversification.
- Reductions in soil degradation and erosion caused by current cassava production, and a transition to more environmentally sustainable agriculture.



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