

# Planning and establishing a sustainable smallholder rice chain in the Mekong Delta



## Key details

### Location

Vietnam

### Duration

**Start** Feb 2022

**End** Dec 2025

### Budget

AUD 2,600,000

### Commissioned organisation

The University of Queensland

### Partners

An Giang University (AGU – VNUHCM, Vietnam National University - Ho Chi Minh City); Can Tho University - Mekong Delta Development Research Institute (CTU-MDI); Cuu Long Rice Research Institute (CLRRI); SunRice Limited; The University of Queensland

### Project Leader

Dr Jaquie Mitchell

### ACIAR Research Program Manager

Mr David Shearer

### Program

Agribusiness

### Project code

AGB/2019/153

## Overview

**This project aims to establish a highly-productive, sustainable, traceable, quality-assured value chain for tropical medium grains (with specific characteristics) in the Mekong Delta (MD), benefiting rice-farming households and meeting established SunRice market requirements.**

Sustainable rice production and value chain operations are essential for Vietnamese smallholder rice growers in the MD. Vietnamese smallholder farmers will benefit from establishing better linkages to world markets through alternative consolidator models.

The research is primarily focused on smallholders, cooperatives and farmer groups and private sector parties in An Giang, Dong Thap and Kien Giang Provinces and Can Tho City.

This project also includes significant research activities in Australia designed to enhance the speed and efficiency of the Vietnam based breeding component, in the form of undertaking novel genetic approaches (pre-breeding), and evaluation of introduced

germplasm for abiotic and biotic stress tolerance. The project offers an opportunity to evaluate the genetic gain that can be achieved through the implementation of a pre-breeding program based on genomic selection, targeting a product that currently does not exist in which disease resistance is pyramided in a tropical variety for northern Australia.

Learnings from the pre-breeding work in Australia also provides synergy with work in Vietnam and strengthens the capacity enhancement opportunities in Vietnam in relation to novel genetic approaches for development of a tropically adapted variety.

- Assessing whole-of-chain-performance, identifying leverage points, and designing policy intervention options that target the identified leverage points affecting the implementation of a sustainable, SRP, market-led, export rice value chain model, that rewards value chain stakeholders.

## Annual progress

### 2023-24

## Expected project outcomes

- Breeding and developing a medium grain Japonica rice to achieve high grain yield, tolerate the abiotic and biotic stress conditions in MD and meet premium quality requirements of the international SunRice market.
- Quantifying production and quality advantages, and resulting economic value from implementation of Sustainable Rice Platform (SRP) and various agronomic interventions (N fertiliser, AWD, IPM).
- Improving scientific understanding of the agronomic and post-harvest practices required to optimise grain yield and quality for MD.
- Quantifying quality and economic value enhancement from implementing alternative postharvest practices (delivery, drying, milling).
- Identifying differences in the experience of men and women in their involvement in an inclusive market-led SRP production system, through gender analysis.
- Distilling principles and recommendations to guide the design of innovative and inclusive extension programs that meet the differing needs and experiences of smallholder rice growers.
- Understanding of the social factors and governance issues influencing adoption of practices and value chain performance that can increase SRP compliance and delivery to SunRice market's requirements.

- One significant finding highlights the importance of organising gender-inclusive training workshops with flexible scheduling to accommodate women's diverse schedules. Structural barriers, such as domestic chores, often hinder women's participation in such initiatives. In response, the research team strategically organised training at convenient locations and times for female participants, considering these factors and ensuring greater inclusivity.
- Another pivotal change involves empowering women in decision-making within agricultural practices. Societal stereotypes and low self-esteem frequently impede women's ability to make decisions in this domain. However, the project achieved a remarkable milestone by providing training to women in planning rice production activities. This initiative not only enhances women's confidence and skills but also challenges traditional gender roles, fostering a more inclusive and equitable environment in agricultural communities.
- Additionally, expanding financial opportunities, particularly targeting women, can significantly enhance their participation in economic activities. By conducting an exercise to identify the primary livelihood activities of households, including rice farming, livestock rearing, and handicraft production, farmers gain a comprehensive understanding of economic activities sustaining their livelihoods. The development and expansion of funding sources tailored for women's economic ventures, especially within local Women's Unions, can substantially contribute to their economic empowerment.



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