

## SESSION 3 CASE STUDY 1

### **Transformative partnerships for transforming the rice value chain for climate resilient and sustainable development of the Mekong Delta of Vietnam**

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#### ABSTRACT



Rice cultivation has played a key role in Vietnam's development, providing livelihoods for millions of farmers and food security for the nation. The Mekong River Delta (MRD) is responsible for over half of Vietnam's rice production and 90% of its rice for export. Rice is responsible for almost 10% of Vietnam's greenhouse gas (GHG) emissions, and its negative environmental impacts include pollution and depletion of water resources, air pollution from burning residues, land subsidence and saline intrusion. These contribute to the extreme vulnerability of the region and its inhabitants to climate change. Without addressing the systemic challenges in a way that benefits farmers and the private sector, Vietnam will not meet its GHG reduction targets in rice production, and environmental degradation will undermine the long-term viability of rice-growing in the region. The Government of Australia is funding the 'Transforming the Rice Value Chain for Climate Resilient and Sustainable Development in the Mekong Delta' (TRVC) five-year program 2023–2027 that was co-designed by SNV Netherlands Development Organisation and the Ministry of Agriculture and Rural Development of Vietnam as well as provincial governments, private sector enterprises and agriculture researchers. The program leverages inter-discipline agronomic and eligible intervention research from both literature and on-the-ground experience to support climate adaptation and mitigation. It does that by incentivising private sector companies in the rice value chain and smallholder farmers in the MRD to transition to low-carbon and climate-resilient agricultural practices. This paper documents the process of engaging the diverse stakeholders for the co-design and co-leadership of implementing the alignment of the high-level inter-government agenda between Australia and Vietnam. The agenda relates to the commitment to support sustainable socio-economic development, with a focus on climate change adaptation and mitigation, while addressing the emerging needs of rice grower communities and marketers in the context of adverse climate change phenomena in the Mekong Delta of Vietnam, with novel approaches to spur scalability and efficacy.

In this talk I share our local rice value chain development program that contributes to the green growth strategy of Vietnam. Vietnam is ranked in third place in the world as a rice exporter (Figure 1), with the Mekong Delta of Vietnam contributing about 90% of the total rice for export. White rice cultivation has multiple values and is a very important crop for Vietnam's economy. Rice production accounts for almost 50% of the total emissions from the agricultural sector of Vietnam. The Mekong Delta itself is undergoing major issues: water scarcity, associated pollution threats with dry intensive rice farming, and the adverse impacts of climate change. To address these high level and critical issues, we have been working in partnership with the government, the public and private sectors, climate change scientists and agriculture researchers to co-design the project named 'Transforming the Rice Value Chain for Climate Resilient and Sustainable Development in the Mekong Delta' of Vietnam.

Our first step in co-designing this project was to undertake a deliberate political and economic review of the priorities of the Government of Vietnam for the rice sector, as well as alignment with the international development policies of the Government of Australia. The co-design process took 12 months (Figure 2), from assessing the baselines and bottlenecks, to consulting and getting buy-in from the government and from private sector stakeholders and scientists. Finally, in March 2023, we submitted our full technical proposal. We secured the support and approval for funding from the Government of Australia. Soon after that, we reported the full design to the Ministry of Agriculture and had a face-to-face meeting to report it to our Minister in the Ministry

of Agriculture and Rural Development (MARD) of Vietnam, to be sure that the program is designed to target and contribute directly to Vietnam’s latest rice development program: namely, 1 million hectares of high quality and low emission rice. The project is now in its implementation phase.

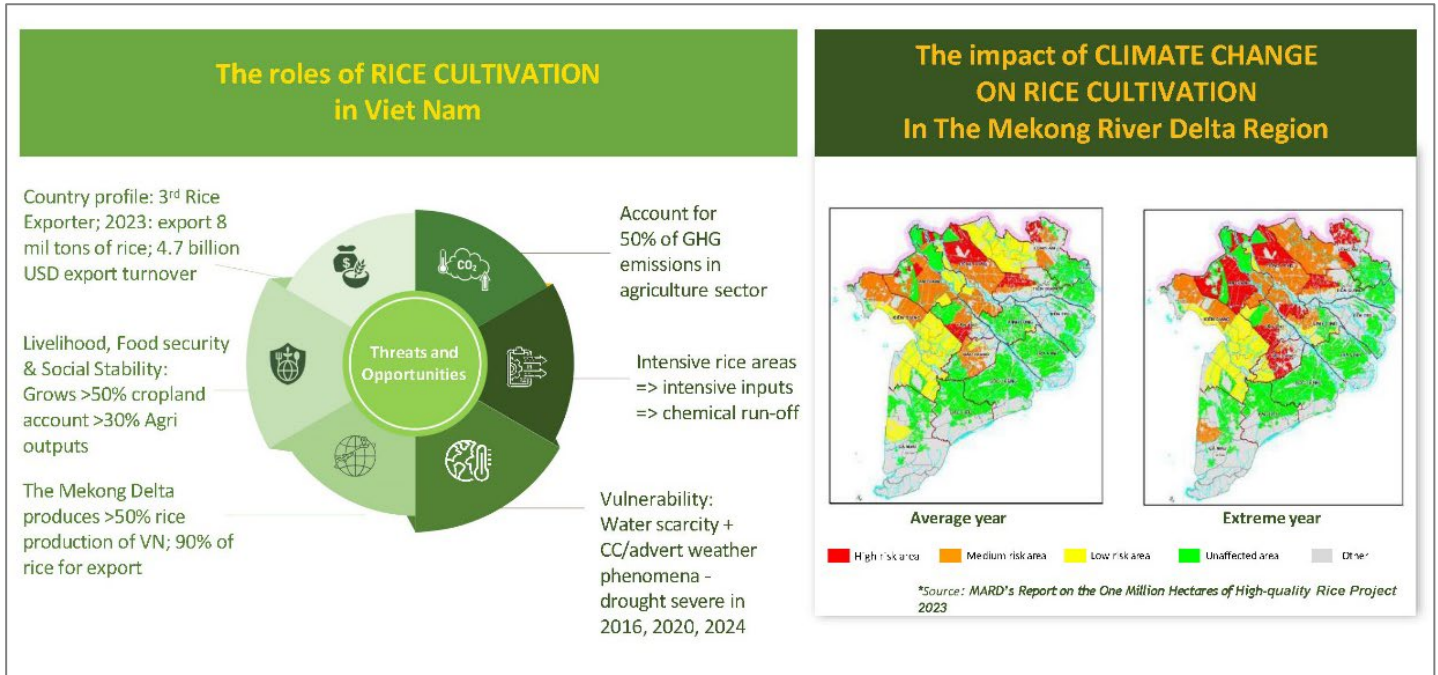


Figure 1. Overview of rice cultivation in Vietnam’s Mekong Delta region.

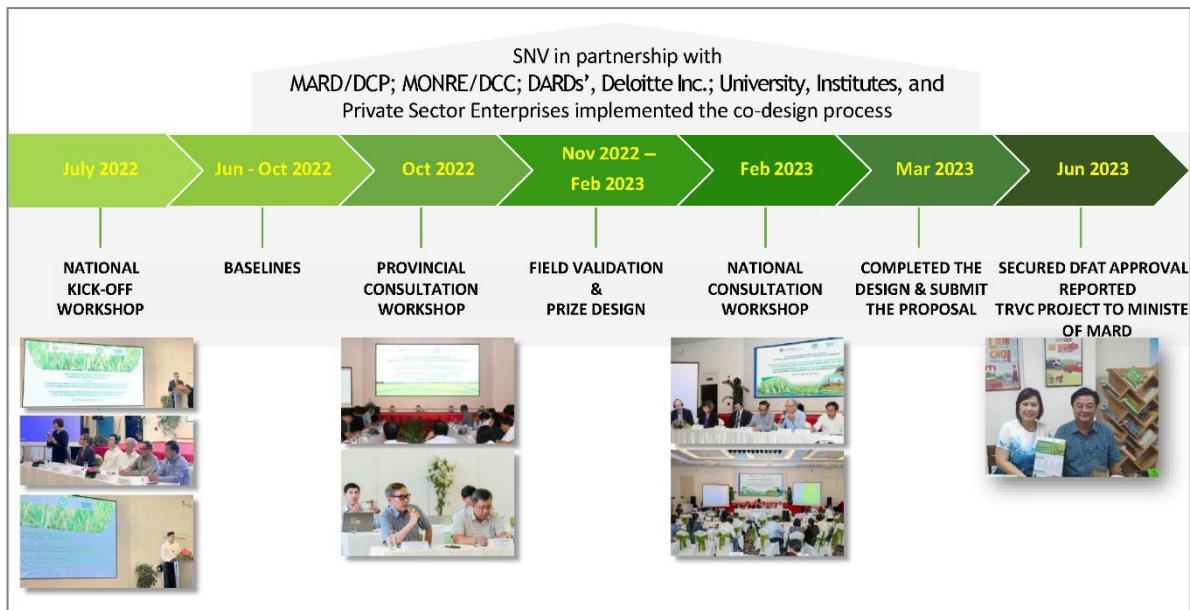


Figure 2. The multi-stakeholder co-design process for the TRVC project. (Green arrows show the design phase; the pale grey arrow is the implementation phase.)

The project targets the three most rice-intensive provinces in the upstream part of the Mekong Delta of Vietnam: namely Dong Thap, An Giang and Kien Giang. The project’s primary goal is to support the profitability of rice smallholder farmers through reduction of input costs, and the premium from contract farming. The

reduced greenhouse gas emissions from rice cultivation is a co-benefit. The project also aims to support development of low-carbon rice branding for Vietnam, associated with the carbon credit that the project would help generate from low-emission rice cultivation at scale in the Mekong Delta. Also, the project aims to use robust data as the evidence-base for a policy dialogue to create the enabling environment for transitioning rice production to low emissions. The project is designed to be a four-year program of implementation over the six major rice cropping seasons – the summer and spring crops in the Mekong Delta (Figure 3). Right now, we are in Crop 1 one of the project implementation.

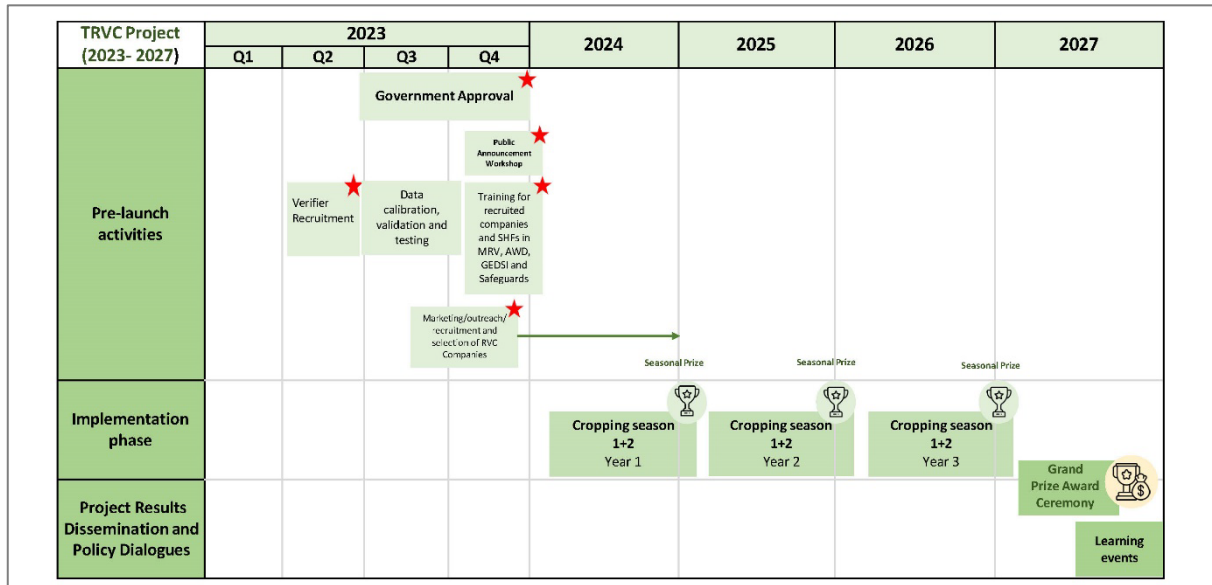


Figure 3. Timelines for TRVC project implementation in the Mekong Delta.

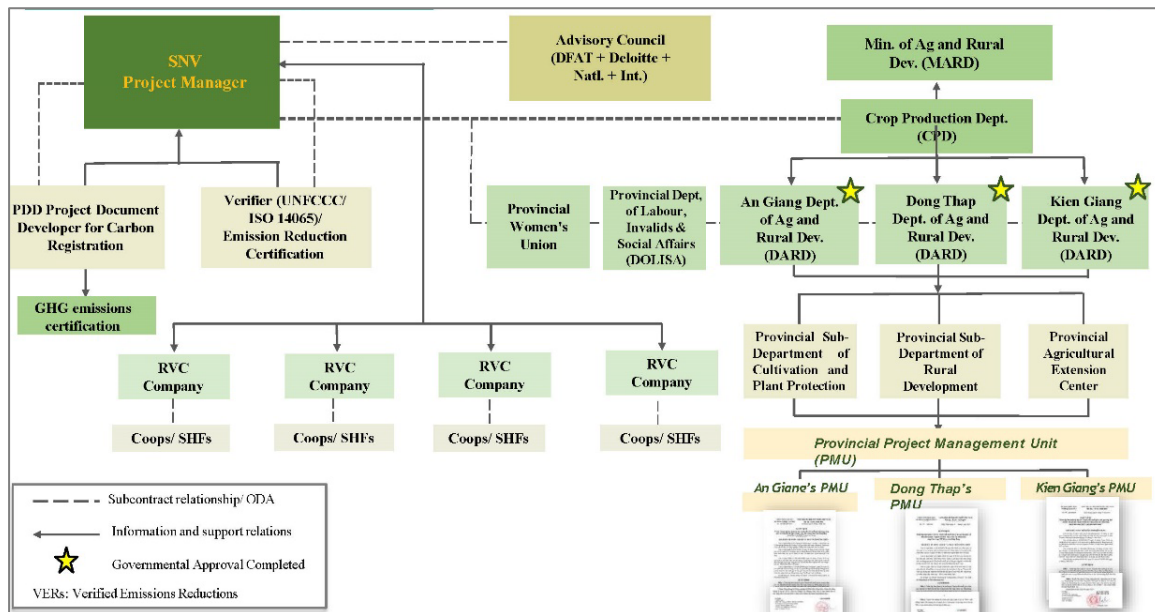


Figure 4. TRVC project governing structure.

The project also established the multi-stakeholder governance structures (Figure 4) that involve the government buy-in, the private sector, the independent verifiers and, very importantly, the Advisory Council.

The Advisory Council consists of scientists, policymakers of Vietnam, and a representative from DFAT (Australian Department of Foreign Affairs and Trade) to oversight the whole project implementation, for transparency, for being about the inclusions and social and environmental safeguards.

The project mobilised the buy-in for the prize-financing mechanism (Figure 5) meaning that the companies that are participating in the project make their own investments for scaling their low-carbon rice farming technologies. They work with smallholder farmers and co-ops to conduct these technology transfers and contract farming without any financial support from the project. At the end of the crop, they are only awarded the monetary prize incentive if they prove to us that they formulated an inclusive rice value chain, with greenhouse gases (GHGs) as the focus, and that the smallholder farmers enjoy at least a 30% profit margin.



Figure 5. TRVC prize structure, 2024 – 2027.

The project also provides carbon credits as a non-monetary prize incentive to participating companies (Figure 6) to support their development of low-carbon rice branding and export to the niche market, and to prepare the companies’ readiness to join the voluntary carbon market by 2027. That is when the legal framework of Vietnam will be ready to allow voluntary carbon transactions.

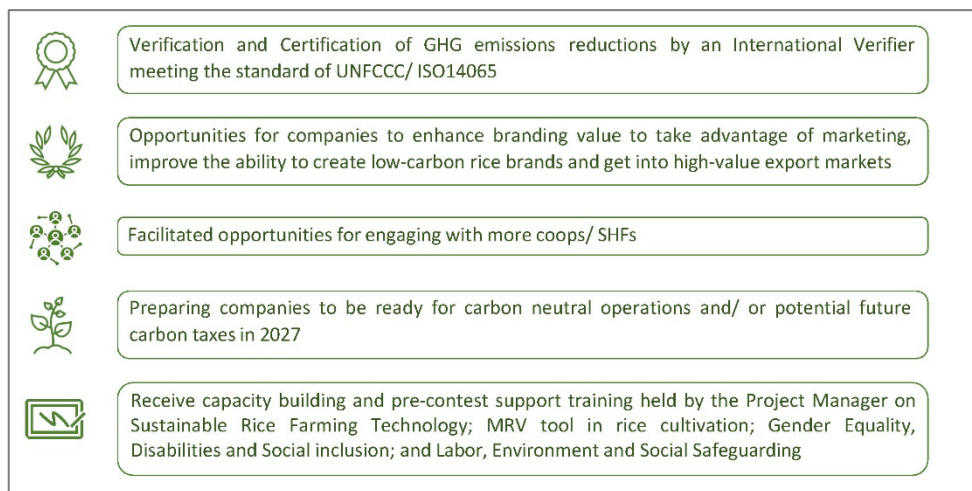


Figure 6. Non-monetary incentives for RVC enterprises participating in the TRVC project.

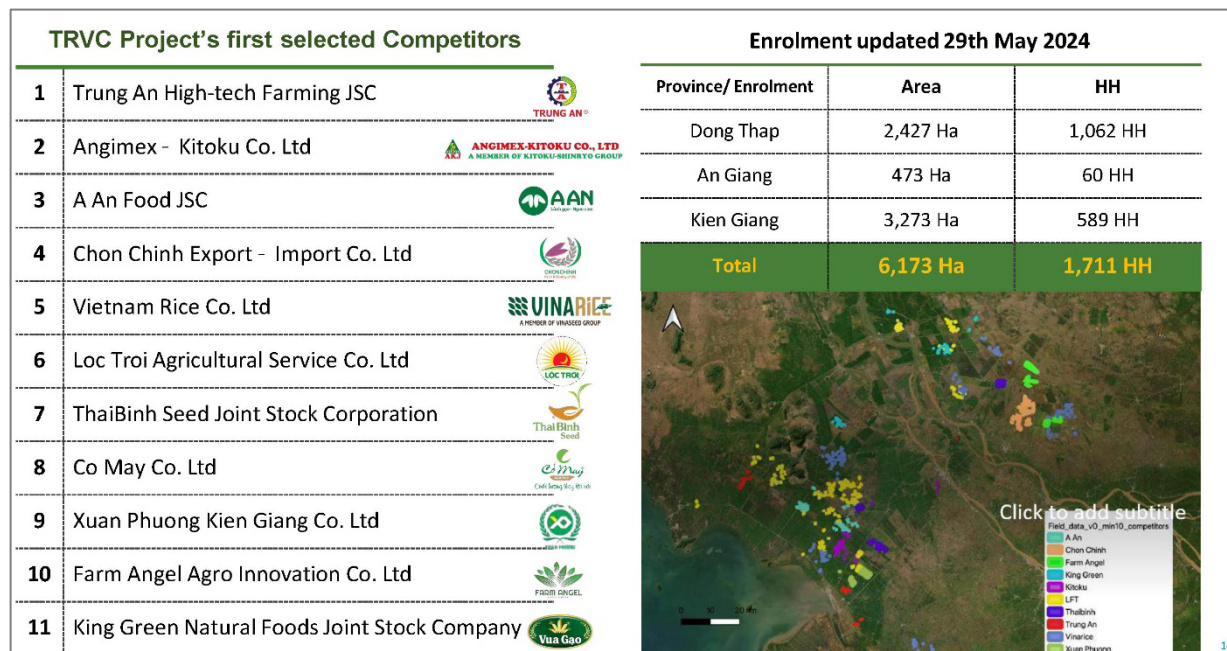


Figure 7. Milestones in the TRVC Project's implementation for February–May 2024.

The project deploys a sophisticated measurement, reporting and verification system (MRV for short). This is a process-based model link that uses satellite signals for monitoring agronomically as well as quantifying the emissions reduction from each paddy field. Eleven companies are participating in our project in Crop 1 (Figure 7), and already they have reached out to more than 6000 hectares and more than 1700 smallholder rice growers in the Mekong Delta. Technological Insights profiles revealed that climate-smart and nature-based solutions are being mobilised to design interventions to optimise economic efficacy and reduce GHG emissions. The most popular combination of interventions aims to reduce fertiliser application, to remove rice crop residues, to reduce the planting density, and to alternate wet–dry irrigation. From the areas of the first crop harvested, the profit outcome is looking very positive. So far, a rice price premium is being offered, via contract farming, to 100% of the farms participating in the project, and the profit margins have ranged from 46.8% to 60% for farmers in the three regions.

For more information about the project, visit <https://trvc.vn/>.

Tran Thu Ha has established sound credentials in both professional career and academic background. She has been leading the innovative and pioneering work to drive the transformation in the agriculture sector towards sustainable, multi-values, climate-resilient and enabling policy framework through the inclusive value chain empowerment; unlock the investment and innovation from the private sector and mobilisation of state management power for policy changes. She successfully led the implementation of the very first pay-for-result and sophisticated initiative entitled 'AgResults Emission Reduction Challenge Project (AVERP)' in 2017–2021. With the impactful results and knowledge generated from AVERP, she led the design and implementation of a large-scale 'Transforming Rice Value Chain for Climate-resilient and Sustainable Development of the Mekong Delta of Vietnam – TRVC' for the period 2022–2027. Before joining SNV Vietnam in August 2016, Thu Ha held senior leadership positions in international organisations. Thu Ha obtained a Masters Degree of International Business Management with distinction from the Asian Institute of Technology (AIT, Bangkok, Thailand) and a Doctor of Agricultural Economics from Vietnam National University of Agriculture