



### Project

## "Transforming the Rice Value Chain for Climate Resilient and Sustainable Development in the Mekong Delta (TRVC)"

Period: 2023 - 2027

SRP Symposium International Rice Congress



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Photos: SNV, Vinarice

### Project at a Glance

#### Dong Thap **Project name** Duration An Giang Transforming the Rice Value 2023-2027 Chain for Climate Resilient and (5 years) Sustainable Development in the Mekong Delta **Kien Giang Sector Budget AUD 15** millions Climate Private Sector Agriculture (Rice) change Engagement 3 provinces in the Upper Mekong River Delta

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An Giang, Dong Thap, Kien Giang

## Project goals & objectives

	Overarching goals		To support a transition to low carbon and climate-resilient agricultural landscapes and livelihoods in Vietnam's Mekong Delta
	Overall objectives		To <b>promote a transformation to low carbon and climate resilier</b> <b>rice production practices</b> through sustainable and inclusive value chain development in the upper Mekong Delta.
			<ol> <li>Improve livelihood for smallholder rice farmers in the upper Mekong Delta</li> </ol>
			2. Reduce greenhouse-gas emissions from rice production
	Objectives		3. Improve rice value chain linkages
			4. Support the development of the low-carbon rice brand
			5. Support the enhancement of policy framework to promote low carbon rice production



## **Results Framework**

Expected results				
Outreaching/ Establishing	Results			
<ul> <li>10-20 Major Rice Producers/ Processors/Traders/Exporters</li> <li>50-60 Co-ops</li> <li>200,000 Farmer Households = 300,000 Small-Holder Farmers*</li> </ul>	Reducing 20-30% chemical fertilizer and pesticidesImage: Strain Strai			
200,000 hectares of paddy rice	<ul> <li>Reducing 10% + GHG emissions</li> <li>approximate 200,000 tons CO<sub>2</sub>e or more</li> <li>Achieving 20-30 % Profit margin for rice farmers</li> </ul>			

### **Timelines for TRVC Project Implementation in MKD**



### **Allowable Technologies**

To be eligible for a Prize, the Competitors must adopt practices that align with one or more of the following Allowable Technologies. Allowable Technologies can be either one of the below, or a combination of input management, post-harvest straw management, and alternate wetting and drying irrigation:

- **IM5R:** 1 Must 5 Reductions is an approach that requires using certified seeds and reducing seed quantity, fertilizer use, water use, pesticide use, and post-harvest losses. If sequenced properly, this approach can significantly reduce GHG emissions by reducing soil nitrogen and carbon content (reducing the potential for methane and N2O production) along with drying out fields to inhibit the production of methane.
- **AWD:** Alternate Wetting and Drying is a water management approach that requires fields to be intermittently drained and dried to a certain depth before re-flooding fields, as opposed to constantly flooding the fields. This practice has the potential to significantly reduce GHG emissions by stopping the methanogenesis process that produces methane in anaerobic conditions.
- SRP: The Sustainable Rice Platform provides a framework for instilling climate-smart rice production practices relating to farm management, pre-planting, water use, nutrient management, integrated pest management, harvest and post-harvest, health and safety, and labor rights. Emissions reductions are one component of SRP.
- **Post-harvest Straw Management:** Post-harvest straw management involves properly disposing of rice straws/ residues after harvest. Instead of leaving them on the fields or burning them, both of which release GHG emissions, rice straws can be collected and sold/used in more sustainable ways. Examples of uses for rice straw include fertilizer, animal fodder, biofuel, and bioplastics, among other examples.







### **Prize Award Structure**

#### Total Projected Prize Pool: AUD 3.650.000



# **Verification Approach**





#### Step Verification Activity

- 1 Verifier obtains required data from Competitors prior to the start of each competition year. This data includes but is not limited to field locations (GPS), management practices (i.e., IM5R, AWD, etc.) and input details (i.e., amounts of organic matter, seed variety, fertilizer, etc.) as required by the Verifier.
- 2 Verifier aggregates data and uses geolocation to identify each competitor's fields and uses historical remote sensing data (if possible) to create baseline GHG scenarios
- **3** SHFs implement technology and the Verifier monitors the fields throughout each cropping season, using remote sensing, to verify water management and soil moisture.
- 4 Verifier uses appropriate, light-touch, methodology to conduct field-level spot-checks (e.g., surveys, farmer diaries) to increase certainty of adherence to proposed practices.
- 5 At the end of each cropping season, Verifier tabulates GHG reductions based on provided growing practices and measured water levels, as well as GIS data on weather and soils, to calculate GHG emissions using a pre-approved modeling process. The emissions outputs from the model are then compared to the emissions estimated by the baseline scenario and the reductions are calculated accordingly.
- **6** Verifier calculates prizes based on GHG emissions reductions.
- **7** Prizes awarded to competitors.
- 8 Verifier facilitates certification of GHG reductions by partnering with an international certification body (e.g., Verra, Gold Standard), allowing for the credits to be used for NDCs, external sale, or internal Scope3. *The goal will be for this step to begin in Competition Year 2, and to enable competitors to continue to generate credits post-project.*

## **International Certification of Carbon Credits**

Potential uses for carbon credits generated by TRVC:

#### Vietnam's Nationally Determined Contributions (NDCs)

Competitors can elect to have their emissions reductions count towards Vietnam's NDCs. In 2022, Vietnam increased their conditional and unconditional NDCs emissions reduction targets to 15.8% and 43.5%, respectively, by 2030.



#### **Carbon Markets**

Competitors can sell their certified carbon credits through trading markets or B2B transactions. Although Vietnam has not established an official carbon market, it has been implementing carbon credit trade agreements on a trial basis. Competitors can also sell their carbon credits to buyers with the help of the Verifier and their connections.



#### Scope 3 Emissions Reductions

Verification

Institutional or larger competitors can decide to apply their carbon credits towards their Scope 3 emissions, indirect emissions that occur in a company's value chain, to improve their emissions footprint and become more sustainable.

<u>Verra</u> and <u>Gold Standard</u> are the two primary, and internationally recognized, certification bodies for emissions in rice; the Verifier should work with one of them to achieve certification of carbon credits.



# Thank you!

Photo: Hoang Cau