

Promoting the rice-shrimp innovations in Ca Mau province

Mekong Delta Climate Resilience Programme (MCRP)

1. Rationale

Rice-shrimp farming - a potential adaptation measure to salinity intrusion in the Mekong Delta

Ca Mau province, with more than 70% population living in rural areas and its sensitive geographical position, adjacent to both the West and East seas, is increasingly impacted by climate change, coastal erosion, saltwater intrusion deep into the inland... that has affected people's lives.

Various research pointed out that integrated aquaculture farming systems such as rice-shrimp, rice-fish... emerged as potential climate adaptive practices in the Mekong Delta. The rice-shrimp rotation model is formed in the brackish water conversion zone where rice is planted in the rainy season and shrimp in the dry season when saline water intrudes.

However, rice-shrimp system is facing with several problems:

- Water quality deterioration and pollution affect survival rate and quality of farmed shrimp;
- Increase of saline water intrusion and extreme weather events impact the productivity;
- Low quality of soil and water due to the pollution;

- Lack of linkages between shrimp farmers, seafood enterprises and other key actors ;
- Limited technical capacity of farmers.

2. Approach

Promote the rice-shrimp production towards international and organic certifications

The Government of Viet Nam highlighted that the rice-shrimp farming is one of the most prioritized systems for the climate and intrusion adaptation in the Mekong Delta.

In 2021, the German technical cooperation project *Mekong Delta Climate Resilience Programme (MCRP)* facilitated the collaboration among **8 partners**: the Directorate of Fisheries, the Ca Mau Department of Agriculture and Rural Development, Minh Phu Seafood Group, Loc Troi Rice Group, Thoi Binh District People's Committee, MCRP and 2 Rice-Shrimp Cooperatives of Dan Phat and Hoa Phat, with technical support from Can Tho University **to promote the rice-shrimp production towards international and organic certifications** in Bien Bach Dong commune, Ca Mau through technical innovations in **461 ha with a total of 150 households in 3 years**.

CROP PLAN												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Saline water						Low salinity	Fresh water				
Tiger shrimp	x	x	x	x	x	x						
Rice crop								prepare	x	x	x	x
Freshwater Giant Prawn							x	x	x	x	x	

Crop plan for the pilot rice-shrimp model



3. Achievements by 2022

Technical Innovation Guideline (TIG) developed and piloted full year in 12 pilot farms to verify the improvements

- Over **50%** of farms achieve higher productivity: Average yield 2022: **260kg/ha**, compared with 200kg/ha in 2021.

Beneficiaries

- 150 households** in 2 rice-shrimp cooperatives take part in the pilot models.
- 279 farmers** (41 females) are trained by new Technical Innovation Guideline by ToT trainers.
- 150 farmers** (21 females) are trained with ASC (Aquaculture Stewardship Council) certification by Minh Phu Seafood Group.
- 30 people** (6 females) technical aquaculture officers, cooperative leaders and private sector are trained in Training of Trainers on technical innovation guidelines by Can Tho University.
- 34 people** (5 females) technical aquaculture officers, cooperative leaders and private sector are trained in Training of Trainers on Internal Auditors in ASC certification by Intertek Certification Body.
- 06** technical aquaculture and extension officers do research for their Master Thesis on rice-shrimp innovations in the project site, instructed by Can Tho University.
- Minh Phu Seafood Group invested around **EUR 85,000** for collaboration activities in 2021-2022 and allocated their technical staff to support farmers, promoting the certification and widening potential areas for rice-shrimp.

Promote the signing farm contract between Minh Phu Seafood Group and rice-shrimp farmers

- By October 2022, Minh Phu signed farm contracts with **150 households** with additional premium price of VND 3,000/kg shrimp compared with market price in 2 cooperatives to source shrimp from the project site.

4. Cross-cutting topics

The private sector has achieved remarkably success since they play as key driver of change towards market and quality while MCRP promote better management practices in the shrimp value chain.

In addition, many women got trained and took part in the hand-on training for making probiotics and management of the farming process.

5. Outlook

The pilot is continued in the project's timeline and expected to achieve ASC certificate in 2023 and Organic Certificate in 2025. Capacity building will be backbone activity for the innovation process. The innovations will be upscaled to another areas in Ca Mau and other provinces in the Mekong Delta from 2024.

Mekong Delta Climate Resilience Programme (MCRP, 2019-2025) is a development cooperation programme co-financed by the Governments of Germany, Switzerland, and Viet Nam, implemented by Ministry of Agriculture & Rural Development, Ministry of Construction, and GIZ along with 13 Mekong Delta provinces. The programme's objective is to support the Vietnamese authorities in improving the climate resilient management of natural resources in the coastal areas of the Mekong Delta to ensure sustainable development in the region.

Published by

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices in Bonn and Eschborn, Germany

Mekong Delta Climate Resilience Programme
E3-E5, 14 Thuy Khue, Tay Ho,
Hanoi, Viet Nam
T: +84 (0)24 372 864 72
E: mcrp@giz.de
I: <https://mcrp.mard.gov.vn>



As at

June 2022

Photo credits

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Contact

Mr. Christoph Klinnert
MCRP Programme Director
christoph.klinnert@giz.de

GIZ is responsible for the content of this publication.

On behalf of

German Federal Ministry for Economic
Cooperation and Development (BMZ)

Swiss State Secretariat for Economic Cooperation (SECO)

In cooperation with

Viet Nam's Ministry of Agriculture and Rural Development