

# Sustainable Aquaculture and Community Fish Refuge Management in Cambodia



#### Context

Cambodia has experienced consistent economic growth and reduction in poverty over recent years. However, the rural population especially continues to face many challenges. A large proportion still lives at or below the poverty line. Due to frequent losses in harvest and income as a result of climate change and a diminishing availability of natural resources, sustaining everyday life is increasingly challenging. Undernourishment and malnutrition are highly prevalent, affecting 28% of all children and 20% of women aged 15 to 49.

Fish is the primary protein source of the local diet and provides a high proportion of essential micronutrients and vitamins. Similarly, the fisheries sector employs a disproportionately high percentage of the population. Around 85% of rural households in Cambodia depend on agriculture, forestry and/or fishing. The region around the Tonle Sap Lake is especially dependent on fisheries with its vast area of flood plains and seasonally inundated rice fields. Overfishing, pollution, climate change and an increasing demand for fish protein are only a few of the challenges for the fisheries sector.

Pond aquaculture and community-managed rice-field fisheries ("Community Fish Refuges") have the potential to increase fish production and raise household incomes. The increased availability of fish offers both a critical nutrient source and an essential income-generating opportunity for the food insecure population of rural Cambodia.

### **Our Objective:**

The food insecure population of Cambodia has more fish products and higher incomes from sustainable and resource-friendly pond aquaculture and community-based rice-field fisheries.

## **Activities in Cambodia**

- Training on technical aspects and business skills for aquaculture farmers and fingerling producers to increase production and profits: Topics such as book-keeping, pond construction, feed and water quality, fish stocking, harvesting and marketing are conveyed in hands-on training.
- Capacity building for Community Fish Refuge (CFR) Management Committees: CFR committee members, particularly women, are trained in organisational development, transparent decision-making, and improved CFR management to reduce illegal, unreported and unregulated (IUU) fishing activities.
- Strengthening the political framework for Cambodia's fisheries and aquaculture sector: Actively contribute to the national aquaculture strategy and multi-stakeholder platforms and promote the sustainable use and conservation of natural resources in line with FAO guidelines on aquaculture and/or artisan fishing.



Region Kampong Thom, Phnom Penh	WHERE WE WORK
Term November 2019 to June 2023	
Budget EUR 4.5 million	V Salt
Implementing partners Fisheries Administration (FiA) Kampong Thom Provincial FiA Office	CAMBODIA Tont Sap Kamporg Tont Sap Thom Cambodia Phnom Penh
Lead executing agency Ministry of Agriculture, Forestry and Fisheries (MAFF)	
Target groups Food insecure population Small-scale aquaculture farmers and fishers Value chain actors (e.g., fingerling or feed producers, market retailers) CFR committee members, particularly women and young people	

#### A real-life example

Community Fish Refuges (CFRs) are community-managed ponds, which are connected to rice fields through water channels. Fish living in rice fields can persist through dry seasons by retreating to the ponds. Additionally, the water stored in CFRs can be used to irrigate adjacent vegetable gardens and, after additional treatment, supply drinking water.

Each CFR has its own locally elected "Management Committee" that represents members of one or more villages/communities. This Management Committee is responsible for developing a management plan that details how and when the CFRs are to be utilized and by whom. Well-managed and well-operated CFRs have the potential to significantly increase fish production.

To date, international and national organisations have supported the construction of 884 CFRs and the Cambodian government has committed to rehabilitating or installing an additional 1200 such refuges. Of these, 900 are already functional CFRs. The project is working at 10 CFR in Kampong Thom Province to the north-east of Tonle Sap lake. By promoting the exchange of knowledge and lessons learned between CFRs management committees can learn from effectively managed CFRs how to improve management effectiveness and increase fish harvest yields.

The project will also offer practical skills trainings on pond rehabilitation and, where applicable, pond construction to assist in the creation of new CFRs.



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