

Provisional Prospectus

Activity 1.1.1 and Activity 2.1.1

Regional Consultation on Advancing Small-Scale Fisheries: Reducing Costs and Environmental Impact

27-28 May 2025, SEAFDEC/TD, Samutprakan, Thailand

Project Title	Research and dissemination of sustainable fishing technology
Section/Division Name	Marine Engineering Section Training and Research Supporting Division
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BACKGROUND AND JUSTIFICATION

Small-scale fisheries are vital for global food security and the well-being of coastal communities, providing a primary source of protein and nutrition for millions. In many regions, particularly Southeast Asia, they sustain local economies, preserve cultural traditions, and support livelihoods. Their catch is often fresher and more nutritious than that of large-scale commercial fisheries, contributing to better community health. However, the sector faces significant challenges. Small-scale fisheries are highly dependent on fossil fuels, making them a notable contributor to greenhouse gas emissions and climate change. At the same time, they are increasingly vulnerable to climate-related impacts such as rising sea levels, ocean acidification, and extreme weather events, all of which threaten their sustainability. Addressing these challenges requires a multifaceted approach. Reducing reliance on fossil fuels through renewable energy adoption and improved energy efficiency is critical. Additionally, optimizing post-harvest practices can enhance product quality, minimize waste, and increase the economic value of the catch. Yet, small-scale fishers continue to struggle with limited access to resources, technology, and financial support, further complicating efforts toward sustainability. Ensuring the future resilience of small-scale fisheries demands targeted policies, innovative solutions, and strengthened support systems to balance economic, social, and environmental sustainability.

SEAFDEC plays a vital role in promoting the sustainable use of marine and coastal fisheries resources by advocating for environmentally friendly fishing gear and practices. By leveraging advancements in technology and innovation, SEAFDEC supports the adoption of responsible fishing methods that reduce pollution, minimize waste, and optimize fuel efficiency. These efforts contribute to both economic sustainability of fisheries and improved waste management, ultimately benefiting livelihoods of small-scale fishers in Southeast Asia. To align with global commitment such as the Sustainable Development Goals (SDGs) and the FAO Code of Conduct on Responsible Fisheries, SEAFDEC also supports regional frameworks, including the ASEAN Resolution and Plan of Action on Sustainable Fisheries for Food Security in the ASEAN Region aimed at 2030 (RES&POA-2030). This framework emphasizes low-carbon development and the enhancement of knowledge and data collection within the fisheries sector. Starting in 2025, the Japanese Trust Fund 7 will begin operations under the ASEAN-SEAFDEC FCG/ASSP Mechanism. The project "Research and Dissemination of Sustainable Fishing Technology," is being implemented by the Marine Engineering Section of the Training and Research Supporting Division.

To progress with these initiatives, consultation meetings and workshops will be held at SEAFDEC/TD in Samutprakan Thailand. SEAFDEC/TD aims to develop a comprehensive framework for operations, research, and data collection, focusing on sustainable fishing technologies. This framework will incorporate innovative approaches to optimizing fuel usage, adopting alternative and renewable energy sources, and improving post-harvest fish handling practices. The ultimate goal is to minimize fish loss and waste in small-scale fisheries, thereby maximizing benefits for SEAFDEC member countries.

KEY DISCUSSIONS AND OBJECTIVES:

1. Enhancing Fuel Efficiency and Reducing Carbon Emission

- Brainstorm initiatives to improve fuel consumption in small-scale fisheries
- Collect information on fuel-related equipment used in fishing communities across SEAFDEC Member Countries
- Assess the feasibility of appropriate methods to reduce carbon emission.

2. Improving Onboard Fish Handling Practices

- Identify ways to minimize the negative impact of current onboard fish handling practices in small-scale fisheries.
- Explore alternative handling methods and evaluate their feasibility for implementation

EXPECTED OUTPUT:

1. Identification of Effective Solutions

- Key strategies and initiatives to optimize fuel consumption and reduce carbon emissions from small-scale fisheries.

2. Best Practices for Reducing Fish Loss and Waste

- Practical approaches to improving fish handling and minimizing waste in small-scale fisheries across ASEAN Member States

3. Establishment of a Technical Network

- Formation of a network of professionals to facilitate knowledge-sharing on sustainable fishing practices
- Promotion of food security and nutrition through the efficient utilization of raw materials from small-scale fisheries.

PARTICIPANTS:

1. SEAFDEC Member Countries and
2. SEAFDEC Regional Fisheries Policy Network (SEAFDEC-RFPN)

RESOURCE PERSONS:

1. FRA/JAPAN
2. Kagoshima University
3. International Maritime Studies/Kasetsart University Sriracha Campus
4. FAO Regional Office for Asia and the Pacific
5. Fisheries Industrial Technology Research and Development Division/DoF Thailand

DATE AND VENUE:

The Consultation meetings and workshops to identify suitable methods for reducing negative impacts and costs of fishing operations in small-scale fisheries will be conducted on 27-28 May 2025 at SEAFDEC/TD in Samutprakan, Thailand. The two-day event will focus on evaluating and selecting effective approaches to enhance sustainability in small-scale fisheries.

TENTATIVE AGENDA:

Date	Time	Min.	Activities	Actions by
Tuesday 27 May 2025 (Day 1)	08:30-09:00	30	Registration	A0/TRSD
	09:00-10:00	60	- Welcome and opening ceremony. - General information - Group Photo - Refreshment break	SG/TDC ME Audio
	10:00-10:15	15	Introduction of the Project Research and Dissemination of Sustainable Fishing Technology (JTF 7 2025-2029)	MESH
	10:15-11:00	45	Adaptability and application of innovative technologies for optimizing fuel usage/adapting alternative/ renewable energy sources for small-scale fisheries	FRA/JAPAN (Confirmed)
	11:00-11:45	45	Case study of fuel consumption estimation in small-scale fishery community pilot site	Kagoshima University (Confirmed)
	11:45-12:00	15	Q & A	
	12:00-13:00	60	Luncheon	
	13:00-13:45	45	Ways to modify the efficiency of small-scale fishing boats to reduce fuel consumption.	KU/SC (Confirmed)
	13:45-14:15	30	SEAFDEC introduced a candidate methodology to estimate fuel usage/adapting alternative/renewable energy sources for small-scale fisheries.	MES

Wednesday 28 May 2025 (Day 2)	14:30-15:00	30	Refreshment break	
	15:00-17:00	120	Collect information from member countries (Country report)	SEAFDEC Member Countries
			- Initiatives/Innovative/equipment enhancing Fuel Efficiency and Reducing Carbon Emission for small-scale fishing boat and fisheries communities - Initiatives/Innovative/equipment to Improving Onboard Fish Handling Practices for small-scale fishing boat and landing site	
	17:00-17:10	10	Wrap-up of Day 1	MES
	09:00-09:45	45	Appropriate innovations in post-harvest fish handling practices to reduce fish losses and waste for small-scale fisheries	FAO (TBC)
	09:45-10:30	45	Innovation and accessible technology to reduce fish losses and waste onboard small-scale fisheries through Ozone Slurry Ice (OSI)	FTDD/DoF (Confirmed)
	10:30-11:00	30	Refreshment break	
	11:00-11:30	30	SEAFDEC introduced candidate innovation to reduce fish losses and waste for small-scale fisheries	MES
	11:30-12:00	30	Q&A	
	12:00-13:00	60	Luncheon	
	13:00-15:00	120	Group discussion - Enhancing Fuel Efficiency and Reducing Carbon Emission - Improving Onboard Fish Handling Practices	MCS/ Resource Persons/ SEAFDEC
	15:00-15:30	30	Refreshment break	
	15:30-16:30	60	Decided target equipment and methodology to Reducing Costs and Environmental Impact for small-scale fishing boat and fisheries communities	SEAFDEC
	16:30-16:45	15	Closing ceremony	DSG
	18:00		Farewell dinner	

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