Course Curriculum

Regional Training on Introduction and Methodology for Estimating IUU Fishing Losses in Southeast Asia

16−18 June 2026
Bangkok, Thailand

INTRODUCTION

Fisheries play a vital role in global food security, livelihoods, and economic development, particularly in developing countries where the sector contributes significantly to employment, income generation, and export earnings. Fish and fishery products are among the most widely traded food commodities worldwide, and growing global demand for aquatic products continues to underscore the need for sustainable fisheries management and the long-term productivity of marine ecosystems.

However, fisheries resources are increasingly under pressure from overexploitation, environmental degradation, and governance challenges. Among these, Illegal, Unreported, and Unregulated (IUU) fishing remains one of the most serious threats. It undermines conservation and management measures, causes substantial economic losses, distorts fair competition, and adversely affects the livelihoods of legitimate fishers. Furthermore, IUU fishing contributes to the depletion of fish stocks and weakens the effectiveness of fisheries governance at national, regional, and global levels.

Despite these concerns, many ASEAN Member States face challenges in quantifying the full extent and impacts of IUU fishing. Limitations in data availability, fragmented information systems, and inconsistent methodologies make it difficult to produce reliable and comparable estimates. This, in turn, constrains evidence-based policymaking, including the prioritization of interventions, justification of investments in Monitoring, Control, and Surveillance (MCS) systems, and evaluation of enforcement effectiveness.

In response, the Southeast Asian Fisheries Development Center (SEAFDEC), with support from the Japanese Trust Fund (JTF) under the project "Enhancement of Regional Cooperation and Human Resource Development to Eliminate IUU Fishing," has been working closely with Member Countries to strengthen regional cooperation and build technical capacity. These efforts focus on enhancing knowledge, improving fisheries management practices, and developing human resources across the region.

Building on these initiatives, there is a clear need to further strengthen regional capacity and promote harmonized approaches for estimating IUU fishing losses. A coordinated framework can improve the accuracy and comparability of estimates, while fostering greater collaboration, data sharing, and joint action among ASEAN Member States.

In this context, the Regional Training on Introduction and Methodology for Estimating IUU Fishing Losses in Southeast Asia is designed to equip participants with practical tools, methodological approaches, and technical knowledge to estimate IUU fishing losses more effectively. It also provides a platform for regional exchange and collaboration, supporting more informed decision-making and strengthening collective efforts to combat IUU fishing.

OBJECTIVES

- To enhance understanding of the concept and impacts of IUU fishing losses.
- To introduce methodologies and approaches for estimating economic and resource losses from IUU fishing.
- To build technical capacity among participants in data collection, analysis, and interpretation.
- To promote regional exchange of experiences and best practices in estimating IUU fishing losses.

Expected output

- Improved understanding among participants of the concepts, drivers, and impacts of IUU fishing losses.
- Enhanced knowledge and technical capacity of participants in applying methodologies, data sources, and analytical tools for estimating economic and resource losses from IUU fishing.
- Strengthened the ability of participants to apply estimation approaches within their national contexts.
- Strengthened regional exchange of experiences, best practices, and collaboration in Southeast Asia countries.

Participants

Two (2) representatives from each SEAFDEC Member Countries in practical level who engage in combatting IUU fishing, stock assessment, marine fisheries, or fisheries management.

Date and Venue

The Training will be held from 16 to 18 June 2026, TK. Palace Hotel & Convention, Bangkok, Thailand.

Timetable

16 June 2026

Time	Activities
08:30–09:00	Registration
09:00–09:30	Opening Session
09:30–10:00	Group Photo and Refreshment
10:00–11:00	Overview of Illegal, Unreported, and Unregulated (IUU) Fishing and its Impacts (Virtual by Dr. Whit Saumweber from the University of Rhode Island)
11:00–12:00	Concepts, Definitions, and Types of IUU Fishing Losses including Economic and Resource Impact (Virtual by Dr. Tyler Pavlowich from the University of Rhode Island)
12:00–13:00	*Lunch*
13:00–14:30	Overview of the FAO Guidelines on Methodologies and Indicators for the Estimation of the Magnitude and Impact of Illegal, Unreported and Unregulated Fishing (Virtual, by Dr. Shelley Catherine Clarke from FAO)
14:30−15:00	*Refreshment Break*

Time	Activities
15:00–16:30	Estimating IUU Fishing Losses in the Pacific Region: Methodologies and Approaches (Virtual, by Mr. Jacob J. Raubani from FFA)
18:00–20:00	Reception Dinner

17 June 2026

Time	Activities
09:00–10:30	How to Estimate the Unknown: The Statistical Challenges of Quantifying IUU Fishing (by Dr. Krerkkrai Songin from Kasetsart University)
10:30-12:00	Narrowing Down the Uncertainty: Identifying the Data Gaps and How to Fill Them (by Dr. Krerkkrai Songin from Kasetsart University)
12:00–13:00	*Lunch*
13:00–14:00	Strengthening Statistical Literacy to Better Understand and Unpack IUU Fishing (by Dr. Krerkkrai Songin from Kasetsart University)
14:00-16:00	Practice Session 1: Introduction to the R Program for IUU Fishing Losses Estimation • Data Input • Basic Coding for Describing Data • Basic Coding for Analysing Data (by Dr. Krerkkrai Songin from Kasetsart University)

18 June 2026

Time	Activities
09:00–12:00	Practice Session 2: Estimating IUU Fishing Losses in Different Scenarios Using the R Program • Analysing IUU in a “Data Poor” Scenario. • Analysing IUU in a “Data-Less Poor” Scenario. (by Dr. Krerkkrai Songin from Kasetsart University)
12:00–13:00	*Lunch*
13:00–14:00	Introduction to the Modelling Approach as a Potential Tool to Estimate IUU Fishing Losses (by Dr. Krerkkrai Songin from Kasetsart University)
15:00-16:00	Practice Session 3: Introduction to the General Additive Model as a Tool to Estimate IUU Fishing Losses (by Dr. Krerkkrai Songin from Kasetsart University)
16:00–16:30	Closing Remark

Remark: The timetable may be changed depending on the situation.