



PROVISIONAL PROSPECTUS

Subregional Training Course and Consultation Workshop on Data Analysis and Collaborative Study of IOD Impacts on Fisheries Resources

6–10 July 2026

SEAFDEC Training Department, Samut Prakan, Thailand

Background

Climate variability associated with large-scale ocean–atmosphere interactions continues to pose significant challenges to fisheries research and management in Southeast Asia. Among these climate drivers, the Indian Ocean Dipole (IOD) plays an important role in modulating oceanographic conditions that influence marine productivity, fish distribution, and fisheries performance. While the physical mechanisms and environmental impacts of IOD have been increasingly recognized, translating this knowledge into quantitative assessments of fisheries impacts remains a key challenge for the region.

Following the first subregional training course conducted in 2025, which focused on strengthening fundamental understanding of ENSO and IOD processes and their environmental and fisheries-related impacts, there is a growing need to advance from conceptual knowledge to practical analytical skills. In particular, fisheries researchers require the capacity to integrate climate indices, such as IOD amplitude, with fisheries catch and biological data to identify climate–fisheries relationships and assess their implications in a scientifically robust manner.

In Southeast Asia, limitations in data handling, statistical analysis, and interpretation of climate–fisheries interactions continue to constrain the effective use of available fisheries and environmental datasets. Although fisheries catch and biological data are routinely collected by national agencies, their application in climate-related studies remains limited, partly due to challenges in data integration, analytical approaches, and the application of appropriate statistical methods. As a result, the impacts of IOD variability on fisheries resources are not fully quantified, reducing the ability of researchers and managers to develop evidence-based adaptation and management strategies.

To address these challenges, SEAFDEC/TD in collaboration with Ministry of Marine Affairs and Fisheries (MMAF), Indonesia, Department of Fisheries (DOF), Malaysia and Department of Fisheries (DOF), Thailand formulated “Collaborative Study on Climate Variability Caused by the Indian Ocean Dipole and Its Impacts on Fishery Resources in the Andaman Sea and west side of Sumatra and southern side of Java. The study started in 2025 and will continue until 2029. The details of activities are shown in the concept note.

In 2025, the project was successfully initiated through the organization of a subregional training course and consultation workshop, which effectively enhanced participating countries’ understanding of ENSO and IOD phenomena and their impacts on marine ecosystems and fisheries in the Andaman Sea, the west coast of Sumatra, and the southern coast of Java. In addition, focal points from each participating country were nominated, and the research team was established (as detailed in the concept note). The five-year collaborative study framework, including its expected outputs, was clearly introduced. Key elements for collaboration were agreed upon, including species of interest, data requirements, and study sites.

In 2026, two key activities will be implemented including The Subregional Training Course on Data Analysis of Fisheries and Biological Data in Relation to the Indian Ocean Dipole (IOD) and “The Consultation Workshop on the Collaborative Study on Data Sharing and Collaborative Analysis of IOD Impacts on Fisheries Resources”

These activities aim to ensure a common understanding among all researchers regarding the required datasets and analytical approaches. Following these events, participating countries will carry out their respective responsibilities and subsequently share data and jointly conduct further analyses.

These activities are implemented as part of the “Capacity Building on Marine Environmental Change Monitoring and Assessing Their Impacts on Fishery Resources” sub-project under the “Enhanced Marine Research Capacities to Manage Fisheries Resources Project,” with financial support from the Japanese Trust Fund (JTF).

Program Overview

This integrated event consists of two complementary components conducted under a single program:

1. Training Course (6–9 July 2026) – focusing on technical capacity building in data analysis
2. Consultation Workshop (10 July 2026) – focusing on collaboration, data sharing, and joint implementation

Together, these components aim to ensure both technical readiness and institutional alignment among participating countries.

Objectives

Overall Objective

1. To convene the training course and consultation workshop to advance the implementation of the collaborative study toward achieving its planned outcomes by 2029.
2. to strengthen the capacity of participating researchers while enhancing subregional collaboration in analyzing and assessing the impacts of Indian Ocean Dipole (IOD) variability on fisheries resources through integrated data analysis and coordinated research efforts.

Specific Objectives

Training Course Component:

1. To build expertise in analyzing relationships between fisheries catch, biological data, and IOD variability.

2. To enhance practical skills in data integration, statistical analysis, and interpretation of climate–fisheries interactions.

Consultation Workshop Component:

1. To define roles and responsibilities among participating agencies.
2. To establish agreements on data collection, sharing, and collaborative analysis.

Expected Outputs

Training Course Component:

1. Improved technical capacity of researchers in analyzing fisheries and biological data in relation to IOD.
2. Strengthened coordination and communication among researchers and focal points.

Consultation Workshop component:

1. Agreed roles and responsibilities for the implementation of the collaborative study.
2. Established framework for data sharing and joint analytical procedures among participating countries.

Date and Venue

The integrated program will be held from **6 to 10 July 2026** at SEAFDEC/TD, Samut Prakan, Thailand.

- **6–9 July 2026:** Training Course
- **10 July 2026:** Consultation Workshop

Accommodation and meals (breakfast and lunch) will be arranged at the SEAFDEC/TD Dormitory.

Target participants

Consultant Team:

1. Dr. Iwao Ueki
Global Ocean Observation Research Center (GOORC)
Research Institute for Global Change (RIGC)
Japan Agency for Marine-Earth Science and Technology (JAMSTEC)
2. Dr. Tuantong Jutagate
Ubon Ratchathani University (UBU), Thailand
3. Dr. Wirote Laongmanee

Burapha University (BUU), Chanthaburi Campus, Thailand

4. Dr. Sontaya Koolkalya
Rambhai Barni Rajabhat University (RBRU)

Research Team:

Two staff members (one focal point and one researcher) from each of the following institutions:

- Ministry of Marine Affairs and Fisheries (MMAF), Indonesia
- Department of Fisheries (DOF), Malaysia
- Department of Fisheries (DOF), Thailand

Six SEAFDEC Researchers, five from SEAFDEC/TD and one from SEAFDEC/MFRDMD

Technical and administrative support	SEAFDEC/TD
1) Mr. Sukchai Arnupapboon	Fishing Ground and Oceanography Section Head, Research and Development Division (RDD)
2) Ms. Pontipa Luadnakrob	Fishery Oceanographic researcher, RDD
3) Ms. Nathacha Sornvaree	Administrative Officer, RDD

Language

English language would be used throughout the Consultation Workshop; therefore, English proficiency is required for the participants.

Timetable and Agenda

The Provisional Agenda and Syllabus of the Training Course are shown in the table below and Thailand local time (UTC+07:00) would be followed.

Date and time	Activity	Person in-charge
6 July 2026 (Monday)		
08:45–09:00	Registration	SEAFDEC/TD
09:00–09:30	Opening Ceremony	Chief of Training Department/Representative
09:30–10:00	Group photo and refreshment break	
10:00–10:30	Introduction and IOD rap up	Ms. Pontipa Luadnakrob
10:30–12:00	Country report (20 Min / country)	Country
12:00–13:00	Lunch break	
13:00–14:30	Case studies on the impacts of ENSO and IOD to fishery resources.	Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya

Date and time	Activity	Person in-charge
14:30–15:00	Refreshment break	
15:00–16:30	R program (Re-visit and Recap)	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
7 July 2026 (Tuesday)		
08:30–10:00	Re-visit to Oceanic Niño Index (ONI) and Dipole Mode Index (DMI).	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
10:00–10:30	Refreshment break	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
10:30–12:00	Fisheries data preparation	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
12:00–13:00	Lunch break	
13:00–14:30	Diversity of catches: taxonomical VS functional approaches	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
14:30–15:00	Refreshment break	
15:00–16:30	Hypothesis testing on abundance, CpUE and diversity (as related to DMI)	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
8 July 2026 (Wednesday)		
08:30–10:00	Correlation and trend analyses – I	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
10:00–10:30	Refreshment break	
10:30–12:00	Correlation and trend analyses - II	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
12:00–13:00	Lunch break	
13:00–14:30	Catch assemblages in related to IOD - I	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
14:30–15:00	Refreshment break	
15:00–16:30	Catch assemblages in related to IOD - II	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
9 July 2026 (Thursday)		
08:30–10:00	Analysis of length frequency data - I	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
10:00–10:30	Refreshment break	
10:30–12:00	Analysis of length frequency data - II	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
12:00–13:00	Lunch break	
13:00–14:30	Recap of the course	<i>Dr. Tuantong Jutagate & Dr. Sontaya Koolkalya</i>
14:30–15:00	Evaluation	<i>All participants</i>
15:00–15:30	Refreshment break	

Date and time	Activity	Person in-charge
15:30–16:00	Closing Ceremony	<i>Chief of Training Department/Representative</i>

The Provisional Timetable and Agenda of the Consultation Workshop are shown in the table below and Thailand local time (UTC+07:00) would be followed.

Date and time	Activity	Person in-charge
10 July 2026		
09:00–10:00	Discussion on Agenda: 1. Conclusion on data analysis methods and data requirements 2. Activities' timeline 3. Confirmation for species and sites 4. Responsibility for each country 5. Available data of the study sites and data sharing process	<i>Dr. Tuantong Jutagate for agenda 1 SEAFDEC/TD for agenda 2 and 3 All participating countries for agenda 4 and 5</i>
10:00–10:30	Group photo and refreshment break	<i>SEAFDEC</i>
10:30–12:00	Discussion on Agenda (continue): 1. Conclusion on data analysis methods and data requirements 2. Activities' timeline 3. Confirmation for species and sites 4. Responsibility for each country 5. Available data of the study sites and data sharing process	<i>Dr. Tuantong Jutagate for agenda 1 SEAFDEC/TD for agenda 2 and 3 All participating countries for agenda 4 and 5</i>