The Second Session of the 2 Years Regional Training Course on Fish Population Dynamics and Fisheries Management Using R-statistical Program

Training Department
Southeast Asian Fisheries Development Center

Introduction

The issues on transboundary fishery resources affect not only the livelihood of fishers but also the international management measures among the neighboring countries. Therefore, cooperation and collaboration between the concerned countries are necessary for the management of transboundary fishery resources. SEAFDEC and its Member Countries worked closely to build the capacity of human resources to address such issues. In this regard, the ongoing Japanese Trust Fund project "Sustainable Utilization of Fisheries Resources and Resources Enhancement in Southeast Asia" of the Training Department, Southeast Asian Fisheries Development Center (SEAFDEC/TD) is enhancing scientific knowledge to support the countries in fisheries management including transboundary fishery resources in the Gulf of Thailand sub-region and Sulu-Sulawesi Seas sub-region. Under the Project, SEAFDEC/TD organized the Gulf of Thailand and the Sulu-Sulawesi Seas Sub-Regional Consultation Workshop on Developing a Plan of Activity for Transboundary Fishery Resources in 2020. The Workshop came up with the plan to conduct a series of training courses to enhance the capacity of human resources of the ASEAN Member States (AMSs) on fish population dynamics and fisheries management by using the R-statistical program. The first Regional Training Course on Fish Population Dynamics and Fisheries Management Using R-statistical Program was organized on 19–23 July 2021 through the online platform. Moreover, the second session of the 2 Yesars Regional Training Course on Fish Population Dynamics and Fisheries Management by Using R-statistical Program will be organized on 8–12 August 2022 at SEAFDEC/TD in Samut Prakan Province, Thailand.

Objectives

- Strengthen the capacity of human resources from the AMSs on fish population dynamics and fisheries management using the R-statistical program
- Share the updated information on population dynamics of transboundary species in the region from the phase I
- Strengthen and expand the network of human resources on fish population dynamics and fisheries management in the region

Expected Outputs

- Strengthened knowledge of human resources from the AMSs on fish population dynamics and fisheries management using R-statistical program
- Updated information on the population dynamics of transboundary species in the region
- Strengthened and expanded network of human resources on fish population dynamics and fisheries management in the Southeast Asian region

Evaluation

At the end of each session of the Training Course, the participants would be requested to fill up the evaluation form to assess the conduct of the Training Course. Moreover, the understanding of the participants of the concepts would be evaluated through the pre- and post-tests before and after the lectures during the first session, respectively.

Target Trainees

The same trainees from the previous workshop are encouraged to participate to complete their knowledge and skills on the fish population dynamics and stock assessment based on R programming. Otherwise, the target trainees are fisheries officers and/or researchers from the respective participating countries of the Project (*i.e*. Cambodia, Indonesia, Malaysia, Philippines, Thailand, and Viet Nam). SEAFDEC strives toward equal opportunities for the participation of female and male representatives from the Member Countries in all events organized by SEAFDEC.

English language would be used throughout the Training Course, therefore, proficiency in English is required for the trainees. Certificates would be awarded upon completion of the Training Course and successfully passing the written examinations.

Provisional Timetable Training Phase

Venue: SEAFDEC/TD, Samut Prakan, Thailand
Accommodation: SEAFDEC/TD Dormitory, Samut Prakan, Thailand
Date: 8–12 August 2022
Resource persons:

1. Prof. Tuamtong Jutagate
2. Dr. Sontaya Koolkalya
3. Dr. Supapong Pattarapongpan
4. Researcher from SEAFDEC/MFRDMD

Date/ and time	Activity/topic	Responsible persons	Remarks
8 August 2022			
08:30–09:00	Registration		
09:00–12:00	- Country report on the available data - Basic concepts on population dynamics and stock assessment - Activities related to stock assessment of SEAFDEC (TD and MFRDMD)	Instructors and participants	- Adjust the basic knowledge of population dynamics and stock assessment - Installation of and getting to know the R program
12:00–13:30	Lunch break		
13:30–16:30	- Introduction to R and R packages in Fisheries o R package TropFishR o R package FSA o R package fishmethod - Homework	Instructors and participants	Data structure and data manipulation in R
9 August 2022			
09:00-12:00	- Biostatistical analyses and R packages	Instructors	Using R statistical analyses and introduction of R packages in fisheries - TropFishR - FSA - fishmethod
12:00-13:30	Lunch break		
13:30-16:30	- Estimating parameters in fish population dynamics by using R packages o Growth parameter - Homework assignment	Instructors	Practice on R packages
10 August 2022			
09:00–12:00	- Estimating parameters in fish population dynamics by using R packages (continuation) o Mortality estimation o Gear selectivity	Instructors	Practice on R packages

Date/ and time	Activity/topic	Responsible persons	Remarks
12:00–13:30	Lunch		

13:30–16:30	- Fish stock assessment by using R packages
	  ○ YPR and SPR
	  ○ Surplus production models
	- Homework assignment
		Instructors	Practice on R packages

11 August 2022			
09:00–12:00	Fish Community and Ecological Models	Instructors	Using R packages for fisheries for ecological study
12:00–13:30	Lunch break		
13:30–16:30	Fish Community and Ecological Models (continuation)	Instructors	Using R packages for fisheries for ecological study
12 August 2022			
09:00–12:00	Presentation of the country data analysis	Instructors	Application of R for fish population dynamics and stock assessment for respective countries
12:00-13:30	Lunch break		
13:30-16:00	Presentation of the country data analysis (continuation)	Instructors	Application of R for fish population dynamics and stock assessment for respective countries
16:00-16:15	Evaluation and closing	Instructors	● The evaluation form will be filled up by the participants to assess the conduct of the Training Course

Contact persons

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