



**Establishment and Operation of a Regional System of  
Fisheries *Refugia* in the South China Sea and Gulf of Thailand**

**REPORT**

**ESSENTIAL ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT**

**PANGASINAN, ZAMBALES**

4-9 November 2019

**CORON, PALAWAN**

18-23 November 2019

Prepared by  
**NATIONAL FISHERIES RESEARCH AND DEVELOPMENT INSTITUTE  
PHILIPPINES**

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SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER  
TRAINING DEPARTMENT



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Southeast Asian Fisheries Development Center  
Training Department  
P.O.Box 97, Phrasamutchedi, Samut Prakan, Thailand  
Tel: (66) 2 425 6100  
Fax: (66) 2 425 6110  
<https://fisheries-refugia.org> and  
<https://seafdec.or.th>

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TITLE OF TRAINING	: <b>Essential Ecosystem Approach to Fisheries Management (EAFM) Training</b>
INCLUSIVE DATES	: November 4-9, 2019 (Bolinao, Pangasinan; Masinloc, Zambales) November 18-23, 2019 (Coron, Palawan)
SPONSORING AGENCY	: NFRDI
PARTICIPANTS	: <i>Refugia</i> Site Management Committee (RSMC) Members from 3 <i>refugia</i> sites, stakeholders
OBJECTIVES	: Equip the RSMC members and other stakeholder on the knowledge understanding and importance of EAFM in the establishment of Fisheries <i>Refugia</i>

## Introduction

### Background

The Essential Ecosystem Approach to Fisheries Management (EAFM) training course is a comprehensive five day course designed to provide basic knowledge on the Ecosystem Approach to Fisheries Management and to equip participants with the practical skills to develop effective fisheries management plans using this approach.

Effective fisheries management has always been a challenge, especially in complex multi-species, multi-gear fisheries. Traditional stock-based approaches have largely been effective, with management measures often not taking other important aspects of the fisheries into account. As many fisheries have declined over the past 30 years, the need for more effective and equitable management is increasingly evident.

The ecosystem approach offers practical and effective means to manage fisheries more historically. It represents a move away from fisheries management that focuses on target species, towards systems and decision-making processes that balance environmental, human and social well-being with improved governance frameworks.

Support for an ecosystem approach to fisheries management has long been in place through a range of global declarations and policy instruments. Recognition also exists at the national and regional levels that it offers the most practical and effective way to manage complex fisheries. However, progress in developing ecosystem-based management plans has been slow, mainly due to a lack of experience in implementing this integrated and holistic approach.

The Essential EAFM training course has been designed to address these capacity development needs and provides the practical skills, tools and resources to do so.

Essential EAFM is the result of a unique partnership involving a number of regional organizations namely: the UN-FAO Bay of Bengal Large Marine Ecosystem (BOBLME) Project, funded by the Global Environment Facility (GEF), the Norwegian Agency for International Development (NORAD) and

	the Swedish International Development Cooperation Agency (SIDA); the US Coral Triangle Initiative (USCTI) funded by the US Agency for International Development (USAID) and implemented by the US National Oceanic and Atmospheric Administration (NOAA) and the Coral Triangle Support Partnership (CTSP); as well as the Asia-Pacific Fishery Commission (APFIC).
<b>Description of training</b>	The Essential EAFM training designed for the RSMC consists a four-day course which provides the participants with understanding of the need for an Ecosystem Approach to Fisheries Management (EAFM). It will help them acquire skills and knowledge to develop, implement and monitor an EAFM plan to better manage capture fisheries especially in the designated fisheries refugia site in their respective municipalities.

<b>Overall Course Objectives</b>	<p>Participants will understand the concept and need for an Ecosystem Approach to Fisheries Management (EAFM), and acquire skill and knowledge to develop, implement and monitor an “EAFM plan” to more sustainably manage capture fisheries.</p> <p>This four-day course will help to understand what EAFM is and why we should use it, to understand what moving towards EAFM entails, to work through the EAFM planning process, to work through implementing EAFM plans and to present and receive feedback on group EAFM plans.</p>
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### Resource Persons

<b>Dr. Romeo M. Cabuncal</b>	Dr. Cabungcal is currently Provincial Agriculturist of the Province of Palawan.
<b>Mr. Noel C. Barut</b>	National Technical Adviser for Fisheries <i>Refugia</i> Project in the Philippines

### Training Program

Day 1 - WHY and WHAT		
	<b>ARRIVAL &amp; REGISTRATION</b> <b>OPENING PROGRAM</b>	Secretariat
	<b>Participant introduction and course overview</b> <i>At the end of the session you will have:</i> <ul style="list-style-type: none"> <li>Introduced yourselves and communicated your personal hopes and concerns for the course</li> </ul>	NC

	<ul style="list-style-type: none"> <li>• Stated the aims and objectives of the course</li> <li>• Identified issues and threats faced by your fisheries and associated ecosystems</li> </ul> <p><b>Why use EAFM?</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Realize that addressing the many threats and issues facing capture fisheries and coastal ecosystems requires a new approach</li> <li>• Recognize the multiple benefits that ecosystem provide to human societies</li> <li>• Explain the reasons for using an ecosystem approach (EA) to address existing and future fisheries management</li> </ul> <p><b>What is EAFM? – Overview</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Define the three components of EAFM</li> <li>• Understand the principles of EAFM and its link to major elements of CCRF</li> <li>• Explain how EAFM complements other approaches</li> </ul> <p><b>Considerations for moving towards an EAFM</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Describe in greater detail the key principles of EAFM</li> </ul> <p><b>What is EAFM and how much are you already doing?</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Revisit your threats and issues and cluster them according to the three EAFM components</li> <li>• Understand that you are already doing some aspects of EAFM</li> <li>• Analyze your current fisheries practices and identify what EAFM you are already doing</li> <li>• Identify gaps in your EAFM practices and possible ways to move forward</li> </ul> <p><b>Moving towards EAFM</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Learn how an example national government has moved towards EAFM over time</li> <li>• Appreciate that the process of moving toward EAFM can consist of a progression of simple actions over many years</li> </ul>	
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	<ul style="list-style-type: none"> <li>• Understand there is no set form or shape for EAFM as it is country, context, culture specific</li> <li>• Determine where your respective country stands in terms of moving towards EAFM and identify challenges your country faces in moving towards EAFM</li> </ul> <p><b>EAFM plans: the link between policy and actions</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Recognize the need for effective planning and plans so as to turn policies into actions</li> </ul>	
<b>Day 2 – HOW (Continuation) and PLAN</b>		
	<p><b>EAFM process overview</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Describe the key steps of the EAFM process and how to implement EAFM</li> <li>• Identify the planning steps in the EAFM process</li> <li>• Familiarize yourselves with an EAFM plan</li> </ul> <p><b>Startup</b></p> <p><b>A. Preparing the ground</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Define startup tasks needed to initiate the EAFM process and co-management, including <ul style="list-style-type: none"> <li>✓ defining the broad FMU area</li> <li>✓ setting up teams and consultative groups</li> <li>✓ identify and understanding stakeholders</li> <li>✓ working in the co-management processes</li> </ul> </li> </ul> <p><b>Startup</b></p> <p><b>B. Stakeholder engagement</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Define participatory approaches to stakeholder engagement</li> <li>• Understand how to organize and hold stakeholder meetings</li> <li>• Understand the basic concepts of co-management</li> </ul> <p><b>Step 1: Define and scope the Fisheries Management Unit (FMU)</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Understand and practice FMU defining and scoping</li> </ul>	

	<p><b>Step 2: Identify and prioritize issues and goals</b></p> <p><b>Steps 2.1 to 2.3</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Identify your FMU-specific issues</li> <li>• Discuss how to prioritize issues through risk assessment</li> <li>• Develop goals for the EAFM plan</li> </ul> <p><b>Reality check 1</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Identify the constrains and opportunities in the meeting your FMU goals</li> <li>• Use facilitation skills with co-management partners in focus group discussions (FGDs)</li> <li>• Understand the need for conflict management in EAFM management and practice the range of conflict management techniques</li> </ul>	
<b>Day 3 – PLAN (Continuation) - DO</b>		
	<p><b>Step 3: Develop objectives, indicators and benchmarks</b></p> <p><b>Steps 3.1 to 3.3</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Develop operational objectives</li> <li>• Develop indicators and benchmarks related to the agreed objectives</li> <li>• Discuss pre-selected EAFM indicators as examples</li> </ul> <p><b>Step 3: Management actions, compliance, ginance and finalize EAFM plan</b></p> <p><b>Steps 3.3 to 3.5</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Agree management actions and how stakeholders will comply with these</li> <li>• Include financing mechanisms in the plan</li> <li>• Bring all together – finalize the EAFM plan</li> </ul> <p><b>Step 4: Implement the plan</b></p> <p><b>Step 4.1 Formalize, communicate and engage</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Summarize what is meant by formal adoption of the EAFM plan</li> <li>• Develop an implementation work plan</li> </ul>	

	<ul style="list-style-type: none"> <li>• Develop a communication strategy</li> </ul> <p><b>Reality check II</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Check on the status of the EAFM plan implementation</li> <li>• Consider whether implementation is in line with the principles of EAFM</li> <li>• Check on the practicalities – is the supporting environment place?</li> </ul> <p><b>CHECK and IMPROVE</b></p> <p><b>Step 5: Monitor, evaluate and adapt</b></p> <p><b>Steps 5.1 &amp; 5.2</b></p> <p><i>At the end of the session you will be able to:</i></p> <ul style="list-style-type: none"> <li>• Monitor performance of management actions to meet objectives and goals</li> <li>• Understand what has to be monitored, when, how and by whom</li> <li>• Evaluate the monitoring information and report on performance Adapt the plan</li> </ul>	
<b>Day 4 – PRESENT and SHOW LEARNING</b>		
	<p><b>Participant group work preparing presentations</b></p> <p><i>At the end of the session you will have:</i></p> <ul style="list-style-type: none"> <li>• Prepared your FMU group EAFM plans presentations</li> </ul> <p><b>Participant presentations</b></p> <p><i>At the end of the session you will have:</i></p> <ul style="list-style-type: none"> <li>• Presented your FMU group EAFM plans or tools related to the plan to the wider group</li> <li>• Received feedback on your presentations</li> </ul> <p><b>Individual action planning</b></p> <p><i>At the end of the session you will have:</i></p> <ul style="list-style-type: none"> <li>• Developed an individual action plan and potential next steps for your agency, to be acted upon your return to work</li> </ul> <p><b>Course evaluation and guided participant feedback</b></p> <p><i>At the end of the session you will have:</i></p> <ul style="list-style-type: none"> <li>• Completed final course evaluation forms and prates</li> <li>• Received your course certificates</li> </ul>	



**HIGHLIGHTS OF THE ACTIVITY:**

- 1) The four-day course was participated in by the members of the RSMC and representative from the local government units of Bolinao, Pangasinan, Coron, Palawan and MAsinloc, Zambales.
- 2) The course was facilitated by Dr. Romeo Cabungcal and Mr. Noel Barut, with the assistance from the Project Management Office of NFRDI, aimed at providing basic knowledge on the Ecosystem Approach to Fisheries Management and to equip participants with the practical skills to develop effective fisheries management plans using this approach.
- 3) The lecture sessions and workshops conducted were able to come up with initial inputs to the MPAs and fish sanctuaries in the municipalities. More importantly, they were able to appreciate the process in coming up with a resource management plan that will cover the ecological well-being, human well-being. Moreover, their communication, facilitation and negotiation skills
- 4) At the end of the training, the participants presented the EAFM plans on their respective Fisheries *Refugia* sites their feedback and developed an individual action plan and potential next steps for their agency, to be acted upon their return to work. As part of their final output for the training, they have prepared a draft management plan that will be incorporated in the designation of the *refugia* site in each municipalities.

**OBSERVATIONS AND RECOMMENDATIONS**

- 5) Almost all of the participants had limited knowledge or experience in coastal resource management, and had difficulty in catching up with the lectures, activities and workshops. In view of which, orientations on the coastal resources and its importance will be conducted in each municipality to enrich their understanding on the ecosystem and on how they can be able to contribute to the goal and objectives of the project. Furthermore, information-drive and awareness lecture can be a good way of information dissemination especially regarding the Fisheries *Refugia* concepts and importance.



Actual Photos Taken during Essential EAFM Training for Bolinao and Masinloc Site



*Actual Photos Taken during Essential EAFM Training for Coron Site*