

ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT (EAFM)

Trat Province

REBYC-II CTI Thailand

30 January - 2 February 2017

Summary

The Essential EAFM programme is promoted by FAO through projects like BOBLME and REBYC II CTI with support of other agencies, included training of middle level managers, training of trainers and EAFM for Leaders Executives and Decision makers. Based on the request of the Department of Fisheries, Thailand, SEAFDEC organised a training in Thai language for members of the Provincial Fisheries Committees in Trat Province. The four days training, after orienting the participants in the concept and principles of EAFM, went into the practical process of EAFM plans in the context of Trat Province. The plans can then be developed later into full fledged plans. The participants were satisfied with the training and wished more extension for the primary stakeholders and advanced training for the same participants.

1. Background

The need to apply an Ecosystem Approach to capture fisheries management is now globally accepted and has been endorsed in international decision-making; for example, at the Rio+20 conference in 2012. This approach represents a directive way from the conventional fisheries management systems that focus only on the sustainable harvest of target species, towards systems and decision-making processes that balance environmental well-being with human and social well-being by improved governance frameworks.

Since 2012, International and regional organizations, the Food and Agriculture Organization (FAO), Asia-Pacific Fisheries Commission (APFIC), and the Bay of Bengal Large Marine Ecosystem (BOBLME) Project have collaborated with other relevant organizations e.g. SEAFDEC Swedish Project, USAID-Coral Triangle Support Partnership (CTSP) and the U.S. National Oceanic and Atmospheric Administration (NOAA) and SEAFDEC Training Department to develop the Ecosystem Approach to Fisheries Management (EAFM) training packages in order to develop human resources in fisheries management. The "Essential EAFM" training course has been developed for junior fisheries manager and stakeholder in fisheries. Material for enhancing knowledge in EAFM called Leaders, Executives and Decision Makers (LEAD) EAFM has been developed to encourage support of senior fisheries officials, involved in planning and policy making in the countries where EAFM is being established. Over the past few years, hundreds of middle managers and fisheries officers have been trained through 25-30 Essential EAFM training courses across Asia. In addition, at least 57 EAFM Trainers attended Training of the Trainers (TOT) Courses and obtained the skills to using the E-EAFM curriculum. EAFM is now being implemented successfully in a number of fisheries throughout Asia.

The Essential EAFM is originally five and half (5.5) days training period with full package of both theory and practice. It also involves developing an EAFM plan that could be modified further into a fisheries management plan by the final session.. Only major limitation is the long training period as some countries in Southeast Asia, e.g. Philippines, needed adjustment of the curriculum appropriate for Philippines fisheries officials. However, SEAFDEC/TD has continued providing the standard Essential EAFM training course.

In year 2017, the FAO under the REBYC-II CTI Project planned to extend knowledge on EAFM to support the drafting of the EAFM Plan in Trat Province in Thailand. Target participants were local and national level fishery staffs of Trat Province, especially members of the Provincial

Fisheries Committee and those involved in fisheries planning and economic development of Trat Province. Due to time constraint, SEAFDEC had to modify the Essential EAFM training course by combination of the curriculum with the half-day High Level Consultation and Planning Process of Essential EAFM, called the “Practical Workshop on EAFM”. The output of Practical Workshop is knowledge on the EAFM process and how this can assist decision-making for responsible and sustainable capture fisheries including trawl fisheries in Trat Province.

In addition, Thailand has applied EAFM in their national fisheries management plan. The objective No. 8 in the Marine Fisheries Management Plan of Thailand is to train and strengthen fisheries management capacity to the officials, and it obviously coincided with the objectives of the Project “Strategies for Trawl Fisheries Bycatch Management”. Participants on the training course learned about EAFM concepts and how this approach can be used to develop their management plans, specific to fisheries in Trat. Draft plans for each participant’s local situation were to be developed during the course. Through the course, they understand the principles of co-management and how to foster stakeholder participation and cross-sector coordination. Participants also had the opportunity to practice the crucial skills of effective communication, facilitation and conflict management.

2. Objectives of the Training Course

The purpose of the Practical Workshop on EAFM was to provide participants with the concept and principles of EAFM, and practice the planning skills involved in developing EAFM plans. Participants were to use a tested template to develop a draft EAFM plan for their fisheries. Through involvement in the course, participants will obtain the skills necessary to plan for the holistic fisheries management, effective fisheries issues and challenges identification, reduce user group conflicts, unlock financial resources, and cooperation with stakeholders. Participants will also understand the principles of co-management and how to foster cross-sector coordination.

3. Expected Outputs

1. Participants obtain skills and knowledge on EAFM and how to apply the principles to fisheries management in Trat Province;
2. Drafted EAFM plans developed for Trat Province fisheries, including;
 - a. Identification of issues and challenges of fisheries in Trat Province;
 - b. Develop proposed management actions
3. Increased opportunity in exchange of ideas, perspectives and experiences with the SEAFDEC/TD EAFM Trainers and working together with community and sharing ideas with other trainees
4. Trainer of SEAFDEC/TD EAFM Trainers gain experience in planning and implementing the EAFM.

4. Process

1. Course structure

The starting point for the training course is to explain the need for EAFM, and how EAFM can be planned, implemented, monitored, evaluated and adapted. The course focuses on

the planning stage; developing a draft EAFM plan for a trawl fishery. This is the key element of this training course.

2. Training methodology

This course is designed to be highly participatory. To complement input from trainers, participants work in pairs, and in groups and individually on specifically designed exercises. Theoretical sessions are inter-spaced with practical exercises designed to consolidate learning. The course is intended to be locally relevant, and trainers will provide real, local examples wherever possible. The success of the course relies on these local inputs and the active engagement from all of the course participants. The course was conducted in Thai.

3. Learning and feedback

Daily monitoring and reviews ensure that participant feedback is integrated into course design. Pre- and post-course assessments, as well as quizzes, enable trainers to assess learning and adjust course implementation accordingly.

4. Course materials

Each step of the EAFM process is explained in dedicated modules in the translated Essential EAFM Course Handbook. There is also a Course Workbook for participants to write their notes in, for each stage. The linked Toolkit document provides participants with 'People' and 'Technical' tools that can be used at various stages in the EAFM process.

After successfully completing the Course, participants receive CD/USB with the Handbook and PowerPoint presentation files, together with some additional resources.

5. Date and venue

Dates: 30 January – 2 February 2017

Venue: Chang District, Trat Province, Thailand

6. Participants and Training Personnel

The Practical Workshop on EAFM course had 25 participants mainly members of the Provincial Fisheries Committees apart from the organizers as shown in the chapter 9 below.

7. Content of the training course:

1. Guideline for ecosystem resource management.

1.1. Threats and issues for fisheries

To think more holistically beyond fisheries and in the broader development context

1.2. Overview of EAFM: The what and why of EAFM

To understand why EAFM is needed for sustainable fisheries and development, and what EAFM is.

1.3. How much EAFM are you already doing?

To recognize how much EAFM is already being carried out.

1.4. EAFM planning process

To introduce the EAFM management cycle and the EAFM planning process

2. EAFM planning process and Exercise on EAFM development planned

- 2.1. Basic data collection
- 2.2. Stakeholder analysis
- 2.3. Define Fisheries Management Unit (FMU) combine data for planning,
- 2.4. Prioritize important issue for output
- 2.5. Investigate issues to prepare for practical work
- 2.6. Design objectives and indicators
- 2.7. Implementing plan, management plan and budgetary
- 2.8. Management plan, publicize, ready for practical work

8. Schedule

Date	Time	Activity
30 Jan 2017	08:30-09:00	Registration
	09:00-09:30	Opening Ceremony Welcome remark by representative of the Provincial Governor Report on the background of practical workshop by SEAFDEC secretary General and Chief of Training Department Opening remark address by representative of Director General of Department of Fisheries
	09:30-10:00	<ul style="list-style-type: none"> ▪ Keynote address: Provincial Development Plan of Trat ▪ Thai Fisheries Management Plan of Thailand (2016-2020)
	10:00-10:20	Refreshment
	10:20-12:00	<ul style="list-style-type: none"> ▪ Introduction on the Practical Workshop EAFM ▪ Overview of EAFM: The what and why of EAFM
	12:00-13:00	Lunch
	13:00-15:15	<ul style="list-style-type: none"> ▪ Principle of EAFM ▪ Overall process of EAFM
	15:15-15:30	Refreshment
	15:30-17:00	Preparation before starting process to develop plan of fisheries resource and ecosystem base management A: Preparation for basic data and information
	17:00-17:15	Daily conclusion and preparation for next day morning presentation
31 Jan 2017	08:30-10:15	<ul style="list-style-type: none"> ▪ Daily conclusion on 30 Jan 2016 ▪ Preparation before starting process to develop plan of fisheries resource and ecosystem base management (cont.)

		B: Initiate stakeholder to participate in the fisheries management plan
	10:45-11:00	Refreshment
	11:00-12:50	Step 1: Define & scope the Fishery Management Unit (FMU) <ul style="list-style-type: none"> ▪ Define: Fisheries Management Unit (FMU) ▪ Collect data to formulate management plan ▪ Design: Vision of the fisheries resource and ecosystem base management
	12:50-13:50	Lunch
	13:50-16:30	Step 2: Identify & prioritize issues & goals <ul style="list-style-type: none"> ▪ Identify Issue ▪ Prioritize important issue ▪ Design Goal of Project
	16:30	Daily conclusion and preparation for next day morning presentation
1 Feb 2017	08:30-09:00	Daily conclusion on 31 Jan 2016
	09:00-09:50	Reality check I Constraints and opportunities
	09:50-10:50	Step 3: Develop EAFM Plan (1) <ul style="list-style-type: none"> ■ Design objective ■ Design indicator of the management plan ■ Standard level for indicator
	10:50-11:10	Refreshment
	11:10-12:30	Step 3: Develop the EAFM plan <ul style="list-style-type: none"> ■ Develop management objectives ■ Develop indicators and benchmarks ■ Agree management actions ■ Include financing mechanisms ■ Finalize EAFM plan
	12:30-13:30	Lunch
	13.30-14:45	Step 4: Implement the plan <ul style="list-style-type: none"> ■ Formalize, communicate and engage Reality check II: <ul style="list-style-type: none"> ■ Align to EAFM principles ■ Supporting environment

	14:45-15:30	Step 5: Monitor, evaluate and adapt <ul style="list-style-type: none"> ■ Monitor and evaluate performance ■ Review and adapt the plan
	15:30-15:50	Refreshment
1 Feb 2017	15:50-16:30	Preparation for Group presentation
	16:30	Daily conclusion and preparation for next day morning presentation
2 Jan 2017	08:30-09:00	Daily conclusion on 1 Feb 2017
	09:00-10:45	Trainees: Presentation the management plan Group 1,3
	10:45-11:00	Refreshment break
	11:00-11:45	Trainees: Presentation the management plan Group 2
	11:45-12:30	Course evaluation Closed the training course
	12:30-13:30	Lunch

9. List of Participant. (Provincial Fisheries Committee of Trat Province)

No.	Name	Designate
1.	Mr. Danai Chanthasi	Professional coastal fisher
2.	Mr. Morasum Nuchsopon	Professional coastal fisher
3.	Mr. Prasit Yindee	Professional coastal fisher
4.	Mr. Chalad Towwul	Professional coastal fisher
5.	Mr. Sarawut Kaowkhorn	Professional offshore fisher
6.	Mr. Amonsak Worawichiphong	Professional offshore fisher
7.	Mr. Boonlert Changngarn	Professional aquaculture fisher
8.	Ms. Choalarot Phromprsat	Professional Fisheries Processing Product
9.	Mr. Kittti Kosinskul	Professional Natural Resources and Environment
10.	Mr. Somkiat Samattakarn	Professional Natural Resources and Environment
11.	Mr. Suphol Sinchaiyakij	Professional Natural Resources and Environment
12.	Cdr. Akkarapon Hamenark (RTN)	Representative from Navy
13.	Ms. Anchalee Prapotang	Representative from DMCR Provincial Trat Office
14.	Ms. Suparat Wiwathananon	Representative from Ministry of Commerce Provincial Trat Office
15.	Ms, Tharinee Vongankorn	Representative from Provincial Administrative Authority of Trat Province
16.	Mr. Sansern Serirak	Head of Fisheries Provincial Office
17.	Mr. Chatchawal Wuthimethee	Officer of Fisheries Provincial Office

18.	Ms. Supaporn Wattanasit	Officer of Fisheries Provincial Office
19.	Mr. Krissadakorn Hemwech	Representative from Trat Marine Fisheries Research and Development Station
20.	Ms. Varuntorn Kaewtankarn	Officer of Sustainable Development Foundation (NGO)
21.	Ms. Mattana Boonnark	Officer of Sustainable Development Foundation (NGO)
22.	Mrs. Ravadee Prasertcharoensuk	Director of Sustainable Development Foundation (NGO)
23.	Dr. Sansanee Wangvoralak	Representative from University
24.	Mr. Piyasok Sinanan	Administrative and management fishing vessel and Fishing Operation Division
25.	Mrs. Thiwarat Sinanan	Fisheries Foreign Affairs Division

List of organizers, facilitators and administrative officers

No.	Name	Position	Designate
1.	Dr. Varin Tanasomwang	Representative of Director General of Department of Fisheries Thailand	Chairman
2.	Mr. Kamtorn Rehun	Representative of Trat Provincial Governor	
3.	Dr. Kom Silapajarn	Secretary General of SEAFDEC	Advisor
4.	Mr. Isara Chanrachkij	Capture Fisheries Technology Division Head ad interim	Advisor
5.	Ms. Panitnard Taladol	Training and Extension Section head	Facilitator
6.	Mr. Penchan Laongmanee	Lecturer Burapha University Chanthaburi Province Campus	Facilitator
7.	Mr. Krit Phusirimongkol	SEAFDEC Training Officer	Facilitator
8.	Ms. Rattana Yaiye	Fisheries Governance Scientist	Facilitator
9.	Ms. Pattaratjit K.	Project Manager SEAFDEC Sweden	Observer
10.	Ms. Nathacha Sornvaree	Regional Administrative Officer of REBYC-II CTI Project	Administrative

10. Result of Conclusion Session on the EAFM Plan formulation practices

1. Even though the Practical Workshop on EAFM did not conduct any test or quiz, organizers realized that participants had gained good understanding on the principles of EAFM. The results from the EAFM planning practice, clarification and grouping of fisheries issues and management in to three main components of EAFM are the evidence.
2. Participants understood how to organize a Fisheries Management Unit (FMU). The results of EAFM practice show the spatial management, with planning details, emphasized on the sustainable fisheries utilization and conservation in the area.
3. Fisheries resources around Trat Province include various species, both fisheries resources for consumption and Endangered or Threatened and Protected Species that need conservation and management.

4. Every group showed their concerns on the depletion of fisheries resources from fishing activities and other natural phenomena.
5. Cause of damage to fisheries habitats is various in different habitats. The coral reef and sea grass base have always been damaged by beam trawl fishing activities. Poor water quality is always caused by a local factory near the shore line.
6. Issues on the human well being always differ from FMU to FMU. The significant issue, in the provincial level, is uncertainty of income. In the small FMU e.g. Laem-glad and Mai-rud Village, there are issues on uncertainty of income, fisher conflict and area competition.
7. Representatives from Royal Thai Navy added and remarked on the problems in the transboundary area, i.e. security regarding migrant worker migration between Thai and Cambodia boundary. It results in the variation in the number of small scale fishers operating in the coastal zone. Root causes are 1) the ineffectiveness on the immigration control and 2) less effective local authorities' integration. It was suggested to consider and prioritize these issues for fisheries management.
8. Module on the issue analysis and prioritization techniques should be further improved. The identification of management actions across components, such as the developing of management actions under the governance to solve problems on ecological well-being is well understood.

11. Summary of the feedback questionnaire on the satisfaction on the Practical Workshop on EAFM

Questionnaire was separated into three (3) topics. 17 participants returned the questionnaires. The questionnaires were anonymous so as to make fully open comments by all participants. Results can be summarized as follow;

Part 1 General

- 1) Gender: Female 35%, Male 47% and Unidentified gender 1%
- 2) Age: from 30 to 39 years old: 41%, 40-49 years old: 29%, and over 50 years olds: 29%

Part 2 Satisfactory Level/Understanding/Applicable

Topic of interests	Satisfactory Level/Understanding/Applicable				
	Most (5)	Much (4)	Medium (3)	Less (2)	Least (1)
Facilitator					
The transfer the knowledge of facilitator is clear	47%	47%	6%	-	-
Ability to explain the knowledge	53%	47%	-	-	-
Linkage of the knowledge with real situation	41%	59%	-	-	-
The explanation is covering all knowledge in workshop	47%	47%	6%	-	-
Facilitator can respond to the questions during the workshop	41%	59%	-	-	-

Venue and Period of Workshop					
Workshop venue is clean and suitable	18%	59%	24%	-	-
Readiness of audio visual aid equipments	12%	82%	6%	-	-
Period of the practical workshop	18%	59%	24%	-	-
Knowledge					
1) Knowledge and information on EAFM before participation in the Workshop	-	6%	38%	44%	13%
2) Knowledge and information on EAFM after participation in the Workshop	31%	56%	13%	-	-
Apply knowledge into the implementation					
1) Ability to apply the knowledge to job	35%	53%	12%	-	-
2) Capability to introduce EAFM with future work	35%	47%	18%	-	-
3) Capable to bring knowledge to further extend	12%	59%	29%	-	-

Part 3 Others

1. Comment, Recommendation and suggestion on the workshop
 - Wish to use in real implementation
 - Extend the knowledge to other target participants; e.g. marine park authority, etc., and provide additional technique in the future training program to the same group of participants.
 - Suitable workshop
 - Good presentation and well encouraging participants to involve with the workshop
 - Should change the size of letter in presentation
 - Team of facilitator are flexible enough in implementation of workshop
 - Improve the audio-visual equipment
 - Meeting room should have more light
 - Should agree with course code before workshop, e.g., punctual, no telephone during workshop.
 - Thank you for knowledge and information of EAFM that share to participants
2. Other topic should like to future extend
 - The Governance and the linkage with organization management.
 - How to integrate the principle of EAFM to the relevant agencies through participatory approach
 - Habitat management for local community in district level
 - Training in the real FMU and conduct the real implementation

11. Recommendation to support fisheries management plan of Trat Province by SEAFDEC

1. Participants of the workshop realized the benefit in applying EAFM to manage fisheries resource. EAFM extension should be provided for other target participants or provide training to same group in more advanced techniques to support EAFM e.g. Monitoring and Evaluation, project management etc.
2. SEAFDEC should provide Training to Trainers for local fisheries officers, NGOs, Institutes.
3. SEAFDEC should initiate EAFM extension to provinces nearby Trat i.e. Chonburi, Royong, Cholburi and Ko King of Cambodia.
4. To support Trat Province, technical support to formulate Provincial Fisheries Management Plan of Trat Province consistent with Strategic plan to develop Trat Province.
5. Local fishers of Trat Province have alternate job e.g. eco tourism, fruit gardens. This gives them reduced dependence on fisheries sector. The EAFM plan of Trat Province under human well being is able to fully apply alternative jobs as a significant management action.
6. SEAFDEC has some extension program on sustainable fisheries resources utilization and conservation. So SEAFDEC should provide technical assistance to provincial fisheries committee to apply the principles of EAFM to the relevant sector not only fisheries stakeholders. And these techniques should be applicable in the FMU.
7. Extend the EAFM concept to community level in order to enhance the participatory approach from relevant fisheries stakeholders of Trat Province.

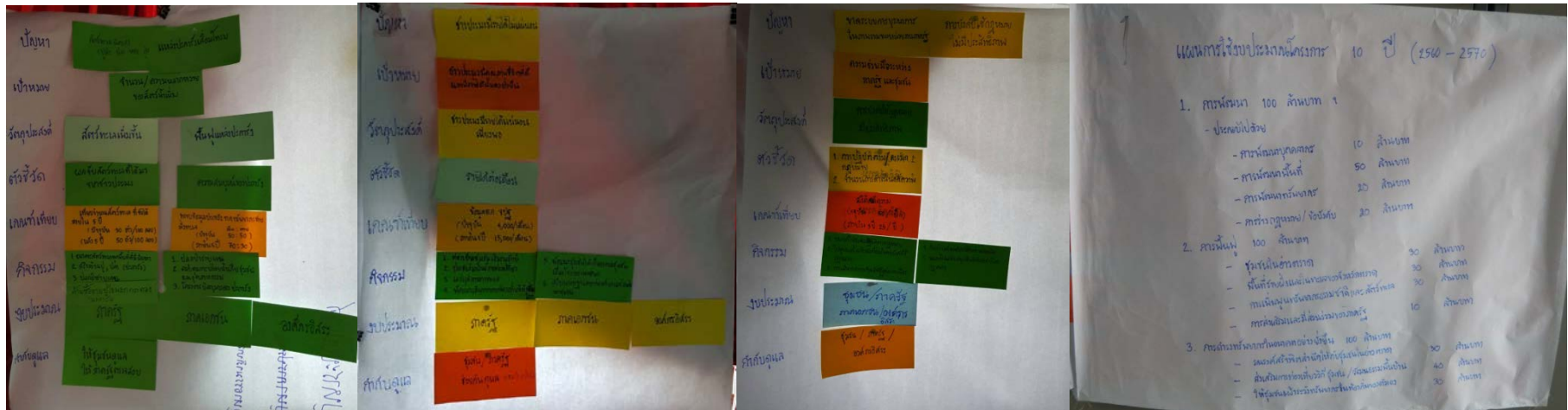




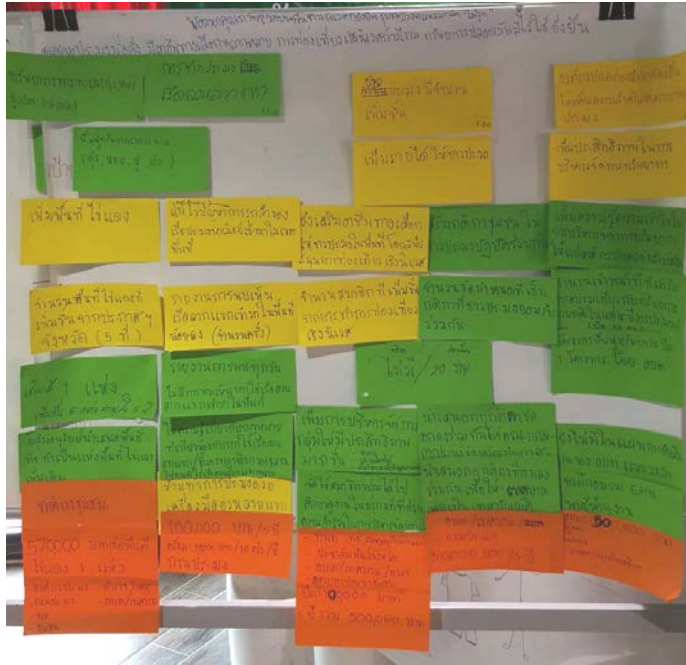
Participatory Approach



Issue of Fisheries Management Unit



Activities Group A



Activities Group B



Activities Group C

