

# **Strategies for Trawl Fisheries By catch Management**

REBYC-II CTI (GCP/RAS/269/GFF)

## **Report of the Essential Ecosystem Approach to Fisheries Management (E-EAFM) with a special focus on SE Asian Trawl Fisheries**

24-29<sup>th</sup> April 2014,

Samut Prakarn, Thailand



**Produced by the SEAFDEC Regional Facilitation Unit**

**SEAFDEC Training Department**

**Samut Prakan**

**Thailand**

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## **1. Introduction**

### **1.1. The Rebyc-II CTI Project**

The Coral Triangle region of Southeast Asia is one of the world's most biologically diverse, economically productive but potentially vulnerable marine zones. As a result of increasing populations and exploitation pressures, growing threats from pollution and major ecosystem changes are a particular concern in the region. In the global and regional context, the untargeted capture of fish and non-fish species, commonly called by catch and discards, is an increasing concern. By catch includes fish, turtles, marine mammals, and corals and other seabed fauna and flora. This part of the catch tends to be poorly monitored and unmanaged but could be having an important impact on fishery resources, habitats and ecosystems. In some fisheries and regions, there is an increasing trend towards retention of the by catch consisting of juveniles and small-sized fish for use as food for human consumption or for utilization as feed in aquaculture or livestock rearing. This is therefore a complex issue, requiring resource and biodiversity aspects to be tackled alongside human needs and involving a mix of policy, technical and community support measures.

The project; *Strategies for trawl fisheries by catch management* (REBYC-II CTI) is contributing to the more sustainable use of fisheries resources and healthier marine ecosystems in the Coral Triangle and Southeast Asia waters by reducing by catch, discards and fishing impacts from trawl fisheries. The Project is being executed by the Southeast Asian Fisheries Development Center (SEAFDEC), based in Bangkok, Thailand, and the governments of Indonesia, Papua New Guinea, Philippines, Thailand and Viet Nam, in partnership with the private sector and other relevant national, regional and international organisations. The Food and Agriculture Organization of the United Nations (FAO) is the Global Environment Facility (GEF) agency for the project. The project began in May 2011 and will run for four years. The total budget is USD 11,218,600.

Based on the principles of the FAO Code of Conduct for Responsible Fisheries (1995) and the Ecosystem Approach to Fisheries (EAF), the project is building on the successes of the 2002-2008 FAO/UNEP /GEF global project "*Reduction of Environmental Impact from Tropical Shrimp Trawling through the Introduction of By catch Reduction Technologies and Change of Management*". The Project focuses on multi-species bottom trawling, where by catch issues and the effects on ecosystems and livelihoods are considered significant. The project is addressing these challenges by promoting sustainable fishing practices and improved trawl management.

### **1.2. Introducing the E-EAFM Course**

The Essential Ecosystem Approach to Fisheries Management (EAFM) Training Course is the result of a unique partnership involving several regional organizations including the FAO Bay of Bengal Large Marine Ecosystem Project, the US Coral Triangle Initiative, NOAA and the Asia-Pacific Fishery Commission, among others. The Course provides basic knowledge on the EAFM process and how this can assist in decision-making for responsible and sustainable capture fisheries. The course is designed for fishery and environment staff, as well as related economic development and planning staff, at provincial/state and district/local levels, who are responsible for administering fisheries and the marine environment in which they operate.

### ***1.3. Preparation for the E-EAFM Course***

In January 2014, the REBYC II CTI project supported capacity building in SEAFDEC TD in Essential Ecosystem Approach to Fisheries Management (EAFM) Training Course and Training of Trainers' Course, Samut Prakan and Rayong, Thailand. The E-EAFM course involved twenty nine (29) participants from the SEAFDEC Training Department, SEAFDEC Member countries/ Secretariat, REBYC II Member Countries and from other organizations concerned with fisheries management. The course was run over five (5) days with the objectives of providing full understanding on the concepts and need for EAFM and teaching participants the skills and knowledge to develop, implement and monitor "EAFM plans" to better manage coastal and marine fisheries. A combination of power-point presentations, group activities, role-playing exercises, and group planning activities were used to enhance participant learning, understanding and motivation to apply EAFM principles to their fisheries related work. At the end of the course, groups presented their sample EAFM plan and resource persons and trainers provided constructive feedback to improve their work.

Twenty-seven of the E-EAFM participants took the Training of Trainers (TOT) Course at the Princess Beach Resort and Spa, Rayong, Thailand. The TOT Course focused on honing participants' facilitation skills for effectively delivering the Essential EAFM Training Course. Role-playing was a main mode used to familiarize participants in using session plans, the Trainer Resource Guide, and other E-EAFM materials. Groups were asked to deliver small parts (10 minutes) of the E-EAFM course, using the materials used by the trainers during the previous week's E-EAFM training.

## **2. Objectives and Outputs**

### ***2.1. Objectives***

The two main objectives of the course were

1. To provide experience to SEAFDEC trainers in organising, and running the E-EAFM course.
2. To sensitize key REBYC-II CTI officers and others, to E-EAFM principles and train them in how to use the E-EAFM framework for the development of Trawl Fisheries Plans.

### ***2.2. Expected Outputs from the E-EAFM Course***

1. Fifteen (15) training participants obtain skills and knowledge on EAFM and how to apply the principles to trawl fisheries management.
2. Draft EAFM plans developed for local trawl fisheries to be implemented in the final year of the REBYC II CTI project or draft national trawl fisheries development plans in some of the REBYC-II participating countries based on EAFM.
3. SEAFDEC TD EAFM Trainers gain experience in planning and implementing the E-EAFM course.

### 3. E-EAFM Course Proceedings

This was the first opportunity for SEAFDEC trainers to organise and run the E-EAFM Course. Representatives from IMA and FAO were again present to coach the trainers throughout the course, and provided regular feedback and guidance. Participants used a tested template to develop draft EAFM plan for their respective trawl fisheries. Regional and country perspectives were also discussed and shared. A full list of participants can be found in Appendix 3.

The starting point for the training course was to explain the need for EAFM, and how EAFM can be planned, implemented, monitored, evaluated and adapted. The course focused on the planning stage and developing a draft EAFM plan for a trawl fishery. To complement inputs from trainers, participants worked in pairs, and in groups, as well as individually, on specifically designed exercises. Theoretical sessions were inter-spaced with practical exercises designed to consolidate learning. The course was intended to be locally relevant, and trainers provided real, local examples wherever possible. The course followed each step of the EAFM process as explained in dedicated modules in the E-EAFM Course Handbook. The linked Toolkit document provided participants with ‘People and ‘Technical’ tools that can be used at various stages in the EAFM process. All sessions were conducted in English.

Through involvement in the E-EAFM course, participants obtained the crucial skills necessary for 1) the planning of holistic management of trawl fisheries 2) ways to reduce user group conflict; 3) ways to unlock financial resources; 4) working cooperatively with stakeholders; and 5) ways to resolve trawl fisheries issues and challenges. Participants also understood better the principles of co-management and how to foster cross-sector coordination as well as practice skills for effective communication.

The REBYC participants attending the course were from; Indonesia (2), Philippines (3), Thailand (5), & Vietnam (3). In addition 3 participants from SEAFDEC’s RFPN<sup>1</sup> and 3 from BOBLME<sup>2</sup> attended the Course. In total, nineteen (19) participants obtained skills and knowledge on EAFM and how to apply the principles to trawl fisheries management. Unfortunately, the two participants from PNG did not arrive until the last day of the course, and were only able to observe the presentations from the other countries.

The course led on to the successful development of frameworks from which planning for Trawl Fishery EAFM plan development in the five REBYC countries was taken forward at the project workplan planning sessions that followed the E-EAFM course. Short summaries of the EAFM framework session can be found in Appendix 5.

The seven (7) SEAFDEC TD E-EAFM Trainers and the seven (7) facilitators involved in delivering the course gained vital experience in planning and implementing the E-EAFM course. Four (4) international resource persons assisted in the process. Presenting in English was a challenge for some of the trainers but their confidence grew steadily throughout the course.

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<sup>1</sup> Regional Fisheries Policy network based at SEAFDEC Secretariat.

<sup>2</sup> Bay of Bengal Large Marine Ecosystem Project.

#### **4. Outcomes from the Course**

At least two people from four of the five REBYC-II CTI countries have now received training in E-EAFM and can use this approach in developing EAFM plans for trawl fisheries, or modifying existing trawl fisheries plans to adopt EAFM principles. The exposure of the three South Asia BOBLME participants paves the way for the expansion of E-EAFM into the Sub-Continent. The training of SEAFDEC Regional Fisheries Policy network national representatives has succeeded in exposing this cadre to EAFM principles. In recent years, several RFPN representatives have returned to their countries and taken up senior planning and management posts.

The EAFM trawl fisheries plans developed during the course were further developed during the M&E course and the work planning for 2014-2015, leading to comprehensive work plans down to activity level=, for each of the REBYC countries.

SEAFDEC now has a pool of capable staff who have been exposed to EAFM principles and have experience in running the E-EAFM Course. The development of SEAFDEC capacity to deliver EAFM courses will next continue with the EAFM and extension methodologies course, planned for mid September 2014, funded by JICA.

## **Annexes**

### ***Annex 1. Prospectus.***

#### **1. ESSENTIAL ECOSYSTEM APPROACH FOR FISHERIES MANAGEMENT (E-EAFM) with a special focus on SE Asian Trawl Fisheries**

Thursday 24<sup>th</sup> April - 30<sup>th</sup> April 2014

##### **1.1. 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 move away from 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, within improved governance frameworks.

The Essential Ecosystem Approach for Trawl Fisheries Management (E-EAFM) course, focusing on trawl fisheries, is provided through the collaboration between Strategies of Trawl Fisheries Bycatch Management Project (REBYC-II CTI), implemented by the Food and Agriculture Organisation (FAO) and the SEAFDEC Training Department, Asia-Pacific Fisheries Commission (APFIC) and the Bay of Bengal Large Marine Ecosystem (BOBLME) Project. The course has been developed in partnership with other relevant organization e.g. SEAFDEC Swedish project, USAID-Coral Triangle Support Partnership (CTSP) and the U.S. National Oceanic and Atmospheric Administration (NOAA).

The course is designed for local and national level fishery staff from the five REBYC II CTI countries, especially those involved in trawl fisheries planning and economic development. The course will provide knowledge on the Ecosystem Approach to Fisheries Management (EAFM) process and how this can assist decision-making for responsible and sustainable capture fisheries including trawl fisheries. Wherever possible, the course will focus on issues specific to the formulation of trawl fisheries management plan.

Participants on the Course will learn about EAFM concepts and how this approach can be used to develop management plans, specific to trawl fisheries. If possible, draft plans for each participant's local situation will be developed during the course. Through the course, they will also understand the principles of co-management and how to foster stakeholder participation and cross-sector coordination. Participants will also have the opportunity to practice the crucial skills of effective communication, facilitation and conflict management.

##### **1.2. Objectives of the Training Course**

The purpose of the E-EAFM training is to provide participants with the concept and principles of EAFM, and for participants to learn and practice the planning skills involved in developing EAFM plans. Participants will use a tested template to develop a draft EAFM plan for their respective trawl fisheries. Regional and country perspectives will be discussed and shared.

Through involvement in the course, participants will obtain the skills necessary to 1) Plan for the holistic management of trawl fisheries 2) Reduce user group conflicts; 3) Help unlock financial resources; 4) Work cooperatively with stakeholders; and 5) Better resolve trawl fisheries issues and challenges. Participants will also understand the principles of co-management and how to foster cross-sector coordination and will also practice the crucial skills of effective communication, facilitation and conflict management.

The building of SEAFDEC's capacity to facilitate and deliver E-EAFM courses has begun through the training of 15 SEAFDEC staff in E-EAFM and ToT. This course, held in January 2014 was run by FAO, IMA and BOBLME, and used resource trainers from Philippines and Indonesia. The April 2014 E-EAFM Course will be the first opportunity for SEAFDEC to run this course. In support of this, representatives from IMA and FAO will coach the trainers through the course, giving feedback where required.

### **1.3. Expected Outputs**

4. Fifteen (15) training participants obtain skills and knowledge on EAFM and how to apply the principles to trawl fisheries management.
5. Draft EAFM plans developed for local trawl fisheries to be implemented in the final year of the REBYC II CTI project or draft national trawl fisheries development plans in some of the REBYC-II participating countries based on EAFM.
6. SEAFDEC TD EAFM Trainers gain experience in planning and implementing the E-EAFM course.

### **1.4. Process**

#### **1.4.1. 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.

#### **1.4.2. Training methodology**

This course is designed to be highly participatory. To complement input from trainers, participants will 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 will be conducted in English.

#### **1.4.3. Learning and feedback**

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



#### **1.4.4. Course materials**

Each step of the EAFM process is explained in dedicated modules in the E-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 power point presentation files, together with some additional resources.

#### **1.5. Date and venue**

Dates: Thursday 24<sup>th</sup> April - 30<sup>th</sup> April 2014

The Training venue will be at a hotel/resort in, Hua Hin, Prachuab Khiri-Karn, Thailand .

#### **1.6. Participants and Training Personnel**

The E-EAFM course will involve up to 30 people.

##### **Trainees**

- 13 participants from the REBYC-II CTI Member Countries
- 3 participants from SEAFDEC Sida- RFPN \*
- 2-4 Additional participants from BOBLME Program and/or other relevant organizations \*

##### **Trainers and Facilitators**

- 6 Trainers including a Course Supervisor.
- 3 Resources person from FAO/APFIC/BOBLME; SEAFDEC, and others.
- 2 Coaches from IMA & FAO \*
- 2-4 Observers from other organizations \*

\* not through REBYC II CTI funding

## Annex 2: E-EAFM Timetable

Date	Time	Activities	Remark
24 Apr. 2014 (Thu.)	14:00-14:30	Registration	P' Nat
	14:30-15:00	Logistic information and general arrangement (Administrative arrangement)	P' Nat/AB
	15:00-16:00	- Opening Ceremony Group Photo and Coffee break (Namfon Photo)	DSG
	16:00-16:45	Course orientation - Trainer and participant introductions - Participants complete pre-course assessment individually - Course overview	AB+ Team
	16:45-17:30	Ice breaking activities - Bingo (P Kung - N Krit) - Line of experience (P Kung - N Krit) - Participant mapping (P Mam – N Nok)	
	18:30	Welcome Dinner	
25 Apr. 2014 (Fri.)	08:30-10:10	Threats & Issues in current fisheries management	S. 1 AB
	10:10-10:30	<b>Coffee break</b>	
	10:30-11:30	Fisheries management and the ecosystem approach	S. 2 AB
	11:30-12:30	What and why of EAFM	S. 3 AB
	12:30-13:30	<b>Lunch</b>	
	13:30-14:45	Principles of EAFM	S. 4 P'Kung
	14:45-15:00	<b>Coffee break</b>	
	15:00-16:15	How much EAFM are you already doing?	S. 4a P'Kung
	16:15	Wrap up day one activities; homework & daily monitoring	Krit
26 Apr. 2014 (Sat.)	08:30-10:10	Moving Toward EAFM	S. 5 P'Juice
	10:10-10:30	<b>Coffee break</b>	
	10:30-11:00	EAFM plans: the link between policy & action	S. 6 P'Mam
	11:00-11:50	EAFM Process overview	S. 7 N' Ae'
	11:50-12:15	Startup A: Preparing the ground	S. 8 N'Krit
	12:15-13:15	<b>Lunch</b>	
	13:15-14:40	Startup A: Preparing the ground (Cont')	S. 8 N'Krit
	14:40-15:00	<b>Coffee break</b>	
	15:00-16:30	Startup B: Stakeholder engagement	S. 9 N'Nok
	16:30	Wrap up day two activities & daily monitoring	Krit

27 Apr. 2014 (Sun.)	08:30-10:10	EAFM steps 1: Define and scope the Fisheries Management Unit (FMU) - Understand an practice FMU defining and scoping	S. 10 P'Mam
	10:10-10:30	<b>Coffee break</b>	
	10:30-12:00	Step 2: Identify and prioritize issues & goals - Identify FMU-specific issues - Discuss how to prioritize issues through risk assessment - Develop goals for EAFM plan	S. 11 AB
	12:00-12:30	Reality check I - Identify the constraints and opportunities in meeting your FMU goals; - Use facilitation skills with co-management partners in focus group discussion (FGDs); - Understand the need for conflict management in EAFM management and practice a range of conflict management techniques.	S. 12 N' Ae'
	12:30-13:30	<b>Lunch</b>	
	13:30-16:30	Reality check I (Cont')	S. 12 P'Kung
	16:30	Wrap up day three activities & daily monitoring	N'Krit
28 Apr. 2014 (Mon.)	08:30-10:10	Step 3.1-3.2: Develop EAFM plan; - Objectives, Indicators, and Benchmarks	S. 13 P'Juice
	10:10-10:30	<b>Coffee break</b>	
	10:30-11:50	Step 3.3-3.5: Develop EAFM plan; - Management actions, compliance, finance and finalize EAFM plan	S. 14 AB
	11:50-12:30	Step 4: Implementation the plan - Formalize, plan, communicate and engage	S. 15 N'Nok
	12:30-13:30	<b>Lunch</b>	
	13:30-15:05	Reality check II	S. 16 N' Pui
	15:05-15:20	<b>Coffee break</b>	
	15:20-16:30	Step 5: Monitor, evaluate and adapt - Monitor performance of management actions to meet objectives and goals; - Understand what has to be monitored how and by whom; - Evaluate the monitoring information and report on performance; - Adapt the plan - EAFM Quiz	S. 17 P'Kung
	16:30	Wrap up day four activities & daily monitoring Homework: Presentation preparation	Krit
29 Apr. 2014 (Tue.)	08:30-10:10	Participant work: refining EAFM plans & presentations	EAFM team
	10:10-10:30	<b>Coffee break</b>	
	10:30-12:00	Participant presentations on EAFM key elements to illustrate learning - Feedback on presentations	EAFM team
	12:00-13:30	<b>Lunch</b>	
	13:30-14:45	Course review, Group course evaluation individual planning	P Juice-N Pui
	15:00-15:20	<b>Coffee break</b>	
	14:45-15:00	Course evaluation	AB
	15:00-15:30	Closing ceremony and Certification	TBD

### **Annex 3. Participants and Facilitators**

#### PARTICIPANTS

##### REBYC INDONESIA

1. Mr. Lingga Prawitaningrum
2. Mr. Abu Darda Raza

##### REBYC PAPUA NEW GUINEA

3. Mr. Ian M. Liviko \*
4. Mr. Philip Sokou \*

##### REBYC PHILIPPINES

5. Mr. Norberto Berida
6. Mr. Juan Meniano
7. Ms. Myrna Ramos

##### REBYC THAILAND

8. Dr. Mala Supongpan
9. Mr. Piyachoke Sinanun
10. Mr. Wirat Sanitmajjaro
11. Mr. Kanit Chuapun
12. Mr. Akira Bamba

##### REBYC VIETNAM

13. Mr. Va Dinh Thang
14. Mr. Pham Hung
15. Mr. Thai Thanh Lap

##### SEAFDEC RFPN

16. Mr. Hoang Nguyen
17. Mr. Chainuek Phakhounthon
18. Mr. Myo Min Hlaing

##### BOBLME

19. Mr. Chavakat Muralidharan
20. Dr. E. Vivekanandan
21. Dr. Sevvandi Jayakody

\* only participated on the final day.

#### TRAINERS & FACILITATORS

##### SEAFDEC Trainers

1. Ms. Panitnard Taladon
2. Mr. Krit Phusirimongkol
3. Ms. Rattana Tiaye
4. Ms. Sumitra Ruansivakul
5. Ms. Penchan Laongmanee
6. Ms. Jariya Sornkling
7. Ms. Siriporn Pangson

##### TECHNICAL SUPPORT

8. Mr. Isara Chanrachkij
9. Mr. Efren V. Hilari
10. Ms. Indry Zaini
11. Mr. Mekkara Panchan

##### COURSE SECRETARIAT

12. Ms. Nathacha Sornvaree
13. Ms. Rada Rodma
14. Ms. Namfon Imsamrarn

##### RESOURCE PERSONS

15. Dr. Derek Staples (Consultant)
16. Dr. Simon Funge-Smith (FAORAP)
17. Mr. Chris Grose (IMA international)
18. Mr. Richard Gregory (PRC REBYCII CTI)

#### **Annex 4. OPENING STATEMENT**

**By Mr. Kawamura Hajime, Deputy Secretary- General of SEAFDEC and Deputy Chief of the Training Department**

**FAO/GEF/SEAFDEC TRAINING COURSE ON  
ESSENTIAL ECOSYSTEM APPROACH FOR FISHERIES MANAGEMENT (E-EAFM)**

**24 April 2014**

**SEAFDEC Training Department**

**Representatives** from Food and Agriculture Organisation (FAO)

**Project partners from**

- Asia-Pacific Fisheries Commission (FAO-APFIC)
- Bay of Bengal Large Marine Ecosystem (BOBLME) Project,
- IMA International
- Japanese Trust Fund Program
- SEAFDEC-Swedish Project

**Distinguished Participants from**

- Countries participating in REBYC-II CTI Project; Indonesia, Philippines Papua New Guinea, Thailand, and Viet Nam
- Regional Fisheries Partnership Network staff of SEAFDEC Secretariat
- Observers from Bay of Bengal Large Marine Ecosystem (BOBLME) Project

**Ladies and Gentlemen, Good Morning!**

On behalf of the Regional Facilitation Unit of REBYC-II CTI and SEAFDEC, I am very pleased to welcome you all to the Training course on The Essential Ecosystem Approach for Fisheries Management (EEAFM) which will be conducted from 24<sup>th</sup> to 30<sup>th</sup> April 2014.

For many years SEAFDEC has worked to improve the capacity of the Region's human resources in marine capture, fisheries biology, fisheries management, environmental management and socio-economics. This is seen as necessary for the improved management of the Region's fisheries that is required to ensure the sustainability of these fisheries and the wider ecosystem. The EAFM presents an exciting opportunity to pull these different disciplines together and develop fisheries managers and scientists capable of developing effective fisheries management plans for their national and local fisheries.

The Essential EAFM training course has been developed through the close collaboration of a number of agencies including; FAO APFIC, The Bay of Bengal Large Marine Ecosystem (BOBLME) Project, The National Oceanic and Atmospheric Administration (NOAA) and the UK-based IMA International.

Through the support of the REBYC II CTI project, a team of SEAFDEC E-EAFM trainers has now been trained, and this Course will be the first opportunity for them to run a regional E-EAFM course by themselves.

I am also delighted that the course organisers have been able to include REBYC-II CTI country staff, RFPN staff of SEAFDEC Secretariat, and observers from South Asia countries, (also supported by BOBLME project) in this initiative. This SEAFDEC led course is seen as an important step in establishing a E-EAFM network throughout Asia.

To bring this training to fruition has been a true team effort. I therefore wish to extend our utmost gratitude to FAO and the REBYC-II CTI Project and all partners, the supporting organisations and partner countries who have worked together to ensure that enduring training outcomes are achieved from this training. I would like to offer special thanks to our two technical experts, Dr. Derek Staples and Mr. Chris Grose, supported by BOBLME, who will be providing guidance and feedback on the course, as it progresses.

Finally, please allow me to thank all of the trainees for taking part in this Training. With the active participation of trainers, resources persons and trainees, I am confident that the course will be successful and contribute significantly towards the improved management of fisheries in South and Southeast Asia.

With that note, Ladies and Gentlemen, I hereby declare the Training Course on E-EAFM open.

Thank you and have a good day!

## Annex 5. Country Presentations

### 1. Indonesia



## 2. Philippines

Sustainable use of Fishing Practices & Fishery Resources in Samar Sea			
SAMAR SEA EAFM			
Vision	Ecological Well-being	Human Well-being	Good governance
Goal	Goal 1: Improve and strengthen the fishery resource management in Samar Sea	Goal 2: Improve overall status of fishery in Samar Sea	Goal 3: Strengthen fishery policy and implementation in Samar Sea
Issue	① Lack of fishery resource	② Low Income (fishermen)	③ Weak Enforcement
Objective	To increase the sustainability of fishery resources	To promote welfare and livelihoods of fishery resource	To ensure compliance of fishery policy and implementation in Samar Sea
Indicator	<ul style="list-style-type: none"> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> </ul>	<ul style="list-style-type: none"> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> </ul>	<ul style="list-style-type: none"> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> <li>2. 100% fish catch</li> </ul>
Benchmark	2. 100% fish catch	2. 100% fish catch	2. 100% fish catch
Management action	2. 100% fish catch	2. 100% fish catch	2. 100% fish catch
Risk & Regulation	2. 100% fish catch	2. 100% fish catch	2. 100% fish catch
Finance	2. 100% fish catch	2. 100% fish catch	2. 100% fish catch
Duration	5 years	3 yrs	5 years



**Sustainable Fisheries Management**

- Goal**
  - Ecological Well-being
    - Fishery and ecosystem restored by sustainable management of fishing activities
  - Human Well-being
    - Fishery sustained and livelihood enhanced by enforcement of regulations & compliance through co-management
- Issue/Causes**
  - Over Capacity
  - Over Fishing
    - By Catch
- Objective**
  - Reduction of threat effects on Indian waters
  - Complete stopping of poaching in Indian waters
  - Increase abundance of shrimps in Gulf of Mannar
  - Livelihoods improved for fishers from poaching zone
- Indicator**
  - Number of boats operating and duration of operation
  - Number of shrimps commercial in coastal waters
  - Number of boats with sustainable livelihoods
- Benchmark**
  - 80% of total Indian boats reduced in Indian waters by 2020
  - 0% poaching in Indian waters by 2020
  - Population of shrimps increased from 2010 to 2020 by 20%
  - Livelihoods of fishers increased fully by 2020
- Management action**
  - 1. Appointing a national advisory committee to reduce threat effect in Gulf of Mannar
  - 2. Finalize the 2nd and 3rd action plan and start an urgent
  - 3. Regular meeting of the steering committee to review progress
  - 4. Regular meeting of the steering committee to review progress
  - 5. Implementation of agreed actions to reduce threat effect and enhance livelihoods
  - Improving community action plan to have strong support of all stakeholders
  - Secure compliance framework and 2020 management strategy
  - Engage the third party, bank and insurance to facilitate in doing better deal with the fish
  - Strengthening community action plan to have strong support of all stakeholders
  - Secure compliance framework and 2020 management strategy
  - Engage the third party, bank and insurance to facilitate in doing better deal with the fish
  - Take out of the existing livelihood support program in the Gulf of Mannar region
- Finance**

[illegible]

## 5. Vietnam



**Annex 6. REBYC-II CTI E-EAFM National Goals 2014-12015**

<b>COUNTRY</b>	<b>ECOLOGICAL WELL-BEING</b>	<b>GOOD GOVERNANCE</b>	<b>HUMAN WELL-BEING</b>
INDO	Appropriate Fishing Technology adapted by fishing operators	Fishing access clearly defined and complied by stakeholder	Economic benefits increased from sustainable resources
PHP	Fisheries Resources and operations are sustainable	Trawl fisheries management plans implemented and endorsed by stakeholders	Sustainable fisheries sources of food and livelihoods .
THAI	Sustainable fisheries Ecosystem services	Decentralized fisheries management to support by-catch reduction.	Improved economic conditions of local livelihoods of fishing communities
VN	Sustainable fisheries resources management.	Development and implementation of trawl management plans	Sustainable livelihoods iin local trawl fisheries communities

## Annex 7. Outlines of Country EAFM Plans

### 7.1. Indonesia

Country Goal	Strategies
1: MAPPING (critical habitats). Spatial planning for trawl fishery is clearly defined, complied, and endorsed by stakeholders. Support Arafura FMP, Goal 1 and Arafura FMP, Goal 3.	1. Trawl activity (vessels) avoid: critical habitats (coral reef, mangrove, sea grass, etc.) Juvenile of target species (life historical triangle: sedentary, straddling, migratory) and ETP species hotspots
	2. Establish Participatory guidelines on “Habitat mapping” and Trawl fishing zonation (spatial & temporal) is clearly defined.
2: GEAR TYPE SELECTION. Appropriate fishing technology adapted by fishing operators. Support Arafura FMP, Goal 1; Action # 3: increase compliant to management measures on fishing gears; Support Arafura FMP, Goal 3: Action Plan #2 & #3: prohibit unselected fishing gears (less selective, high fuel consumption, etc.).	3. Choose best-performance trawl gear & methods (selective and efficient fishing gears) to mitigate unwanted catch
	4. Establish Participatory Guideline on “Gear Type Selection” à How to select existing fishing gear for more eco-friendly and efficient. (NOTE: Reference on FAO International guidelines on bycatch management and reduction of discards
3: Total Allowable Effort (TAE) Management, Economic benefits from fisheries resources are increased and sustained. Support Arafura FMP, Goal 2; Action # 2 & #3: accurate data on trawl license, their profitability and fishers’ income; Action Plan #4: increase fish processing unit utilization; and Support Arafura FMP, Goal 3: Action Plan #10: appropriate number of fishing licenses	5. Appropriate number of licenses (fishing vessels capacity)
	6. Establish Participatory Guideline on “TAE Management”
	7. Utilize bycatch for economic reasons
4: GOOD GOVERNANCE; Enhanced stake holder participatory and establish trawl management body in Arafura; Support Arafura FMP, Goal 3: Action Plan #1: establish Arafura executive unit; Action Plan #9: increase collaboration on surveillance;	8. Develop participatory mechanism for the management of trawl fishery management in Arafura

## 7.2.PNG

Country Goal	Strategies
1. Effective and efficient management of trawl fisheries bycatch and discards	1.1. Collaborate with industry stakeholders for effective implementation of by-catch reduction measures
	1.2. Effective networking amongst national stakeholders for implementation at the country level
	1.3. Reliable data management system for trawl fishery
2, Expand and enhance collaborative works with regional/national organizations	2.1. Achieve MSC certification for target trawl fishery resources (i.e. Banana/Tiger)*
3. Good Governance in Trawl Fisheries	3.1. Increased stakeholder participation and transparency in decision making



### 7.3. Philippines

Country Goal	Strategies
1. Trawl fisheries management plans implemented and endorsed by stakeholders	Build on science, local knowledge & other information base; Capacitate LGUs & stakeholders; Effective partnership with LGUs and stakeholders; and formulate management measures / win-win/resource users conflict reduction measures; and Implementation of the management plan
2. Fisheries Resources and operations are sustainable	Effective M&E
3. Fishing operations and alternative livelihoods continue to provide food in a sustained fishery	Livelihood support & Diversification

## 7.4. Thailand

Country Goal	Strategies
1. Sustainable fisheries ecosystem service	1.1. Increase awareness of stakeholder on sustainable fisheries management master plan.
	1.2. Enhance stakeholder participation in fisheries management for closed access
2. Decentralized fisheries management to support bycatch reduction is enhanced	2.1. Establish sub-national organizations to rebuild fish stocks in accordance with marine fisheries management master plan
	2.2. Increase awareness local stakeholder participate in policy planning and law enforcement
3. Socio-economic conditions of local livelihoods is improved	3.1. Uplift level of incomes of the local fishing communities
	3.2. Minimize conflict on fisheries resources amongst stakeholders



## 7.5. Vietnam

Country Goal	Strategies
1. Development and implementation of trawl fisheries management plan	1.1. Transfer assignment to provinces in formulating trawl management plan
	1.2. Encourage active coordination and cooperation with NGOS concerned to support technical assistance, experience and human resources
. Sustainable fisheries resources management and fishing operations	2.1. Development and testing of selective gear
	2.2. Demarcation of fishing areas and closure
3. Sustainable livelihood for local trawl fisheries communities	3.1. Consolidate the lesson learned