# Developing capacity in the Ecosystem Approach to Aquaculture Management (EAAM)

# Step 5 Monitor, evaluate and adapt the plan



# Module objectives

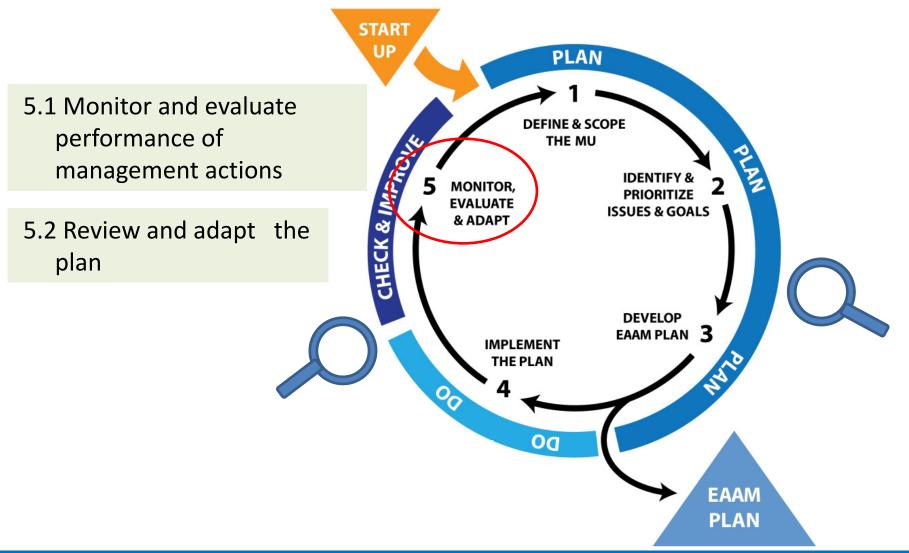


#### After this session you will be able to:

- Monitor how well management actions are meeting goals and objectives;
- Plan what has to be monitored, why, when, how and by whom;
- Evaluate monitoring information and report on performance;
- Review and adapt the plan



#### Step 5 Monitor, evaluate and adapt





# 5.1 Monitor and evaluate performance

#### What do monitor and evaluation stands for?

 Monitoring helps to determine if goals are being achieved and what needs to be done to make improvements (adaptive management).

Monitor: Collect data (focus on indicators)

Evaluate: Collate results of monitoring, and evaluate management performance against benchmarks



# 5.1 Monitor and evaluate performance

- assessing the status of each indicator against its benchmark should provide an idea of how well the EAAM management is performing.
- Monitoring should be done during the whole plan's implementation.
- The frequency of monitoring activities are dependent on the indicator:
  - monthly
  - seasonally
  - annually



# 5.1 Monitor and evaluate performance

# When planning for monitoring the main questions are:

- **1. WHAT** data is collected for
- 2. WHAT purposes,
- 3. HOW OFTEN
- **4. BY WHOM**?
- These responsibilities are outlined in the implementation work plan developed in Step 4.
- As outlined in step 3 only choose and collect the indicators that are relevant, useful and costeffective.



# Participatory monitor and evaluation

- Involve the stakeholders in:
  - collecting data
  - deciding on the methods to use
- Indicators monitored and evaluated locally have more relevance



# Evaluate management performance

Assess each indicator against its benchmark to measure the effectiveness of each management action.

Example:

Objective: Increase production of shrimp in Rakhine, Kyauk Pyu Tsp

Indicator: regional output (MT-metric tons)

Benchmark (baseline): 8,000 MT in the year 2016

Benchmark (target): increase 50% by 2022 (14,000 MT)

Indicator measured in 2019: 30% of baseline (2,400 MT)

#### Evaluation: Is management working ? Is there a need to adapt?



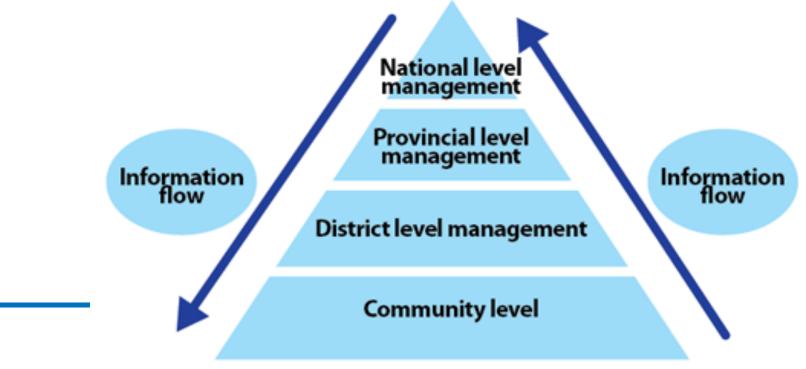
# Evaluate management performance

- Evaluate all indicators;
- Collate, analyze and describe the overall performance of management actions
- Assess other sources of information that can be used to verify (confirm or disprove) the indicator evaluation
  - *e.g.* cross-check with stakeholder observations



# Communicating & reporting

- The evaluation needs to be communicated;
- Different users will require different reporting styles;
  - Brief and hard-hitting for policy makers;
  - Simple and easier to understand for community stakeholders.



# **Traffic light system**



#### An example of a simple reporting system

Goal and objective	Assessment
Goal: Reform Thailand's marine fisheries to a limited access regime where the fishing effort is com with the MSY	mensurate
Objective: Reduce fishing capacity and fishing effort	
Objective: Rebuild fish resources through artificial reefs and restocking programs	
Objective: Reduce the catch of juveniles of the larger commercial species	
Goal: Prevent, deter and eliminate IUU fishing	
Objective: Minimize IUU fishing through effective MCS	
Goal: Increase benefits for and reduce conflicts among major stake holders	
Objective: Resolve conflicts between small-scale and large-scale fishers	
Goal: Improve the marine environment	
Objective: Restore and maintain critical habitats	
Goal: Strengthen capacity to sustainably manage fisheries	
Objective: Improve fisheries data and information	
Objective: Strengthen fisheries management capacity	

#### Green



performance is at or above benchmark

#### Orange

performance is close to benchmark

#### Red

performance is well below benchmark

# Percentage of achievement

#### **Expected results**

#### Percentage of achievement

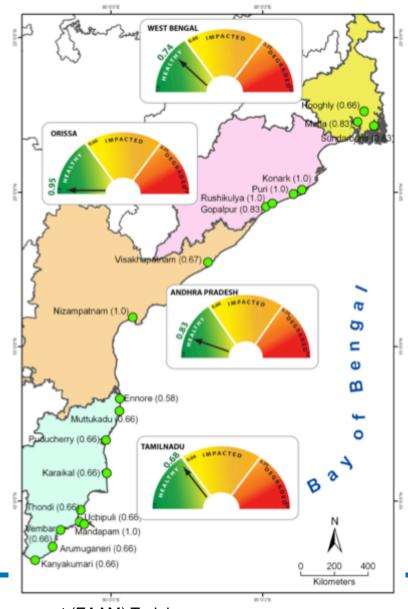
Activity	Description	20%	10°10	30%	00%°	50°10	60%	10%	80°%	9 <sup>0%</sup>	200%
1.1	General Operating Plan										
	Training capacity building in Italy on sustainable fisheries management to										
1.2	four DoF staff										
1.3	Stakeholder Analysis on the fishery and aquaculture value chain										
1.4	Aquaculture sector SWOT & Strategy										
1.5	Fishery sector SWOT & Strategy										
2.1	IFT Renovation Plan										
2.2	IFT Building Renovation										
2.3	New Analitical Laboratory										
2.4	Master Plan of Training/Extension Activities by IFT										
2.5	Computer Room and Training on Office package and Statistics										
3.1	Training in Italy on Marine Hatchery and aquaculture to twelve DoF staff										
3.2	Survey on Aquaculture in Myanmar										
3.3	Training on aquaculture to DoF technicians (Training of Trainers)										
3.4	Aquaculture Extension Plan, manuals on Best Management Practices - BMP										



## **Instrument panel**

Another example of a simple reporting system;

Bay of Bengal Ecosystem health.





Ecosystem Approach To Aquaculture Management (EAAM) Training

# 5.2 Review and adapt the EAAM plan

- The evaluation report provides the basis for the participatory review of the plan
- Reviews
  - Short-term (annual evaluation)
  - Long-term (3-5 years evaluation)



### If the plan is not working, establish why?

Monitoring

# **1 YEAR 3-5 YEAR**

#### Short-term reviews

- Evaluate and adapt
  - Management actions
  - Compliance arrangements
  - Governance arrangements

#### Long-term reviews

- Evaluate and adapt
- Reconsider goals, issues and linked objectives, actions and indicators
- Rethink the plan and management system

# **Key messages**

#### In Step 5:

Monitor, evaluate and adapt completes the EAAM cycle ready to enter the next cycle

Yearly review: are you meeting objectives? (if not, adapt the management actions and compliance arrangements, where necessary)

5-yearly review: are you meeting objectives and goals? (if not, may be necessary to also revisit issues and goals as well)



#### **Home work: preparing presentations**

- Prepare to present your EAAM plans;
- No Power Points;
- Use flipcharts, cards.....be creative!
- Trainers need to see learning and applying EAAM concepts and tools'
- Everyone must participate
- Supportive environment constructive feedback



# **Essential EAAM**

# To download all materials please visit:

