







### TOWARDS AN ECOSYSTEM APPROACH TO FISHERIES MANAGEMENT

# INDONESIAN PROGRESS IN IMPLEMENTING EAFM

## **INDONESIAN FISHERIES**

The decline of Indonesian and global fisheries highlights the urgent need for all parties to work in unison to reform and improve fisheries management.

In Indonesia, fisheries management is an obligation mandated in Law 31/2004, and strengthened in Law 45/2009. Effective fishery management cannot be separated from the three equal and interconnected dimensions of the natural, human and fishery management systems. Conventional approaches to fisheries management only partially consider these dimensions.

The Ecosystem Approach to Fisheries Management (EAFM) introduces a series of modifications to conventional fisheries management to improve performance and contribute to sustainable development. It provides a framework for implementing the Ecosystem Approach outlined in the Convention on Biological Diversity. The National Working Group 2 of the Coral Triangle Initiative, led by the Fishery Resources Directorate under the Ministry of Marine Affairs and Fisheries of Indonesia, is spearheading the implementation of EAFM in Indonesia.

# EAFM ROADMAP

A suite of EAFM indicators have been developed, and used to conduct a preliminary assessment of EAFM in Indonesia.

The Government of Indonesia, with the National Working Group 2 of the Coral Triangle Initiative, is implementing a roadmap towards EAFM.Progress is supported by key stakeholders including the Ministry of Marine Affairs and Fisheries, Marine and Fisheries Research Agency, District and Provincial Fisheries Agencies, universities, NGOs, and CTSP-USAID,

2010	EAFM indicator development.	
2011	Refine indicator criteria and assessment methodologies. Pilot testing to review performance in several fisheries.	
2012	Assess performance of fishery management for Indonesian FMAs (involving students and universities).	
2013	Develop regulation to support the adoption and implementation of EAFM.	
2014	EAFM is fully adopted by Indonesian fishery management.	

Indonesia's 17,500 islands, 5.8 million km<sup>2</sup> and 81,000 km of coastline comprise the world's largest archipelago and fourth most populous nation. Although this country covers only 1.3% of the earth's land surface, it is home to about 17% of all species in the world, including 25% of the world's fish species.

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# STATUS OF EAFM IN INDONESIA

### I. EAFM Indicator development

In order to implement EAFM, a set of indicators are required to monitor and evaluate progress. A suite of indicators was developed in consultation with key stakeholders in fishery management. Indicators spanned six fishery domains: habitat, fish resource, fishery, social, economic and institutional.

### 2. Application of EAFM indicators

Established indicators were used to conduct a preliminary assessment of EAFM implementation in Indonesian Fisheries Management Areas. Building on this success, assessments were expanded to examine other management scenarios, namely Marine Protected Areas and species-based fisheries.

### 3. Learning and Information Center

Follow-up activities include the development of training modules on data collection and analysis for EAFM indicators. Initial training in selected fisheries will provide a pilot towards full adoption of EAFM indicators in Indonesia.

To enhance understanding and knowledge of EAFM among stakeholders, a mailing list (eafm\_id@yahoogroups.com) was established to promote discussion and knowledge sharing among working groups, experts and other stakeholders. A website is also being developed to share Indonesian fishery data, information and recent developments.

### LESSONS LEARNED

Established indicators have enabled fishery managers to evaluate both spatial- (FMA, MPA) and species-based (shark) fishery management performance.

Accurate assessment of EAFM performance requires reliable data at a range of scales. Enhancement and strengthening of data collection systems will assist EAFM implementation in Indonesia.

Data collection and analysis for EAFM indicators will require collaborative approaches between management agencies with research organizations, universities, local governments, the private sector and NGOs in order to maximize data resources and cost efficiency

### EAFM PERFORMANCE

### Fishery Management Areas



### Shark Fisheries

INDICATOR	STATUS
Fish resource	Bad
Habitat	Average
Fishing technique	Bad
Social	Average
Economic	Average
Institutional	Average
Overall	Below average

### Marine Protected Areas (e.g. Wakatobi Marine N.P.)

INDICATOR	STATUS
Fish resource	Average
Habitat	Good
Fishing technique	Good
Social	Below average
Economic	Below average
Institutional	Good
Overall	Average

### FOR MORE INFORMATION

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