

POTENTIAL MPA MANAGEMENT EFFECTIVENESS SYSTEM FOR THE REGIONAL/NATIONAL/SITE LEVEL

Presented by:

Kohei Hibino, Japan Wildlife Research Center

On behalf of the ***ICRI East Asia MPA Network Working Group***

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WHAT IS PA MANAGEMENT EFFECTIVENESS?

- Defined as the assessment of how well protected areas are being managed
- Achieved by the assessment of series of indicators to evaluate the extent to which management is protecting values, and achieving goals and objectives, or standards

	Design		Appropriateness / Adequacy		Delivery	
Element	Context	Planning	Inputs	Process	Outputs	Outcomes
Evaluation focus	Importance, threats and policy/ cultural environment	Design and planning	Adequacy of resources needed to manage	How management is conducted	Implementation of management programs and actions	Extent to which objectives have been achieved
Criteria that are assessed	Values	Protected area legislation and policy	Resources available for management	Sustainability of management processes	Results of management actions	Effects of management in relation to objectives
	Threats	Protected area of system				

IUCN WCPA framework for assessing management effectiveness of PA systems
 (URL: <http://www.cbd.int/protected/PAME.shtml>)

COMMITMENTS ON PA ME

PROGRAMME OF WORK ON PROTECTED AREAS

(COP 7 Decision VII/28)

Goal 4.2 - *To evaluate and improve the effectiveness of protected areas management*

Suggested activities of the Parties

- 4.2.1 *Develop and adopt, **by 2006**, appropriate methods, standards, criteria and indicators*
- 4.2.2 *.....**at least 30 percent** of each Party's protected areas **by 2010**.....*
- 4.2.3 *Include information.....in **national reports** under the Convention on Biological Diversity.*
- 4.2.4 *Implement key recommendations arising from.....as an integral part of **adaptive management strategies**.*



MPA ME TOOLS

For example.....

	How is your MPA doing ? (IUCN, 2004)	World Bank MPA Scorecard (2004)
Target and assumption of use	<ul style="list-style-type: none">• Users to customize the indicators to meet their needs	<ul style="list-style-type: none">• For all kinds of MPAs worldwide
Advantages	<ul style="list-style-type: none">• Substantial and in-depth methodology for wide application• Objective assessment and evaluation	<ul style="list-style-type: none">• Simple and easy to use• Allows to compare scores between sites
Disadvantages	<ul style="list-style-type: none">• Too complicated• Requires third party evaluation and/or scientific data	<ul style="list-style-type: none">• Results are not objective (Scores can vary depending on scorers)• Not flexible to meet specific features

These tools are well referred but not applied as much



STATUS OF MPA ME IN EAST ASIA

○ Progresses

- Philippines and Korea have their national (M)PA ME standards, and they are being applied through monitoring
- Indonesia and Thailand are currently developing their national MPA MEs.

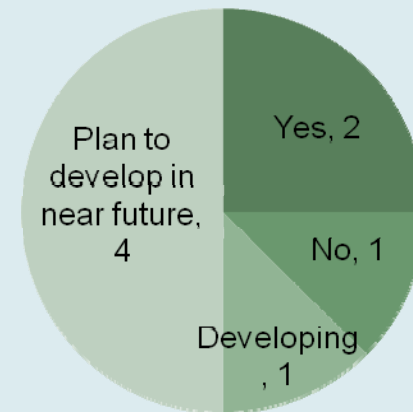
○ Challenges

- Development of ME takes time and efforts; some countries are having difficulties in developing on their own

○ Trends and needs

- Most of the East Asian countries are willing to have their own national MEs and needing support

Q. Does your country have a MPA management effectiveness standard or process?



Result of the questionnaire survey (4th ICRI East Asia Regional Workshop, 2008)

ICRI ACTIVITIES IN EAST ASIA



- ICRI East Asia Regional Workshops focused on MPA networks are held in 2008, 2009 and 2010, respectively
- Developing the Regional Strategy on MPA Networks
- Trying to address some of the priority gaps that were identified in the 2008 workshop (Provisional Plan 2009-2010)
- Discussion and development are underway by the working group



PROVISIONAL PLAN 2009-2010

(4th ICRI East Asia Regional Workshop, 2008)

- **ACTION #1:** Conduct regional MPA gap analysis
- **ACTION #2-1:** Upgrade regional MPA database
- **ACTION #2-2:** Identify appropriate MPA management effectiveness system at regional/national/site levels
- **ACTION #2-3:** Review and suggest appropriate criteria of MPA networks
- **ACTION #2-4:** Consider regional level social network mechanism
- **ACTION #2-5:** Conduct mapping of coral reefs in East Asia region
- **ACTION #3:** Develop the ICRI East Asia Regional Strategy on MPA networks
- **ACTION #4:** Organize ICRI East Asia Regional Workshops in 2009 and 2010



PROGRESS AND TRANSITION OF THE DISCUSSION

Reviewed existing MPA MEs



Identified status and gaps of existing MPA MEs in the region



Developed draft minimum “core” (common) MPA ME indicators that could be shared in the region



Changed the direction to identify and provide a useful system that could improve site level ME



Developed draft concept on appropriate MPA ME system and indicators



WHAT ARE THE APPROPRIATE MPA ME SYSTEMS IN EAST ASIA?

- **Site level**: A set of indicators that are well adapted to local conditions and corresponding monitoring system that can assist learning and improvement of management
- **National level**: An information sharing system that systematically integrates or links together respective site level ME assessments for better understanding of status, coordination, and policy development at national level to assist site level management
- **Regional level**: A framework to track and share very basic information on national level MPA ME implementation, such as, existence of ME system, and whether it is applied through a monitoring process, etc.



OBJECTIVES AND TARGETS OF THE DEVELOPMENT

- **Objectives**: Develop and provide a flexible and useful “model” of MPA ME indicators and system for adaptive use (as the basis for modification) in East Asian countries on coral reefs and related ecosystems
- **Target user**: East Asian countries where they are looking for appropriate MPA ME system/standard at site level; and/or individual MPA managers



CORE PRINCIPLES

The proposed MPA ME system and indicators in East Asia should be:

- Reflecting the features of MPAs in East Asian countries
- Developed specifically for each country to be adapted to respective types of MPAs and local conditions
- Developed from the standpoint of local managers to provide incentives to use the system (e.g., avoid sense of being scored or evaluated, useful, adequate feedbacks)
- Developed for learning and improvement of management at site level
- Applied and evolved locally (developing process should be engaged with various stakeholders)



CONCEPT

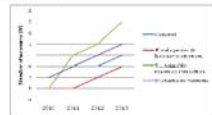

- To have the data entry format and the summary format to be linked together for sharing information, etc.
- Simple and flexible system and indicators assuming the use and modification at site level
- Self-tracking and evaluating system
- Flexible and adaptable to wide range of MPAs, and modifiable depending on the needs
- Designed to increase awareness of MPA managers and stakeholders

Data entry format

III. MANAGEMENT STATUS			
Which of the following management measures are currently implemented (including planning) in the MPA during last survey and current survey? Select from below options.			
Management measures	Implemented?	What is the level of achievement?	Remarks (Specify status if available)
General measures			
Formulation and evaluation of the management plan	YES/NO	Rank rating	
Adaptive management system	YES/NO	Rank rating	
Law enforcement			
Continued patrolling	YES/NO	Rank rating	
Enforcement monitoring	YES/NO	Rank rating	
Inspection of high movements (e.g., sign board, market target)	YES/NO	Rank rating	
Local involvement			
Local participation in development and/or evaluation	YES/NO	Rank rating	
Local participation in management and monitoring	YES/NO	Rank rating	
Local awareness raising and communication			
Education sessions and information exchange	YES/NO	Rank rating	
Publication of brochures and leaflets	YES/NO	Rank rating	
Educational materials	YES/NO	Rank rating	
Capacity building			
Training of MPA staff	YES/NO	Rank rating	
Training of non-MPA operators for sustainable tourism	YES/NO	Rank rating	
Local social support			
Development of local plans	YES/NO	Rank rating	
Management of marine site (special zones)	YES/NO	Rank rating	
Adoptive land-use regulation and zoning	YES/NO	Rank rating	
Development and marketing of special local products	YES/NO	Rank rating	
Monitoring			
Management monitoring	YES/NO	Rank rating	
Performance monitoring	YES/NO	Rank rating	
Self-sustainable financing	YES/NO	Rank rating	
Contribution of government funds	YES/NO	Rank rating	
Marketing of MPA	YES/NO	Rank rating	
Commercial activities (fishery resource)	YES/NO	Rank rating	
Other specific	YES/NO	Rank rating	
Local systems and/or habitat protection measures			
Planting of seedlings of local species	YES/NO	Rank rating	
Regulation of the entry of local visitors	YES/NO	Rank rating	
Regulation of mooring at local harbor	YES/NO	Rank rating	
Setting of buffer zones around core zones	YES/NO	Rank rating	
Recovery program	YES/NO	Rank rating	



Summary format

SUMMARY RESULT	
Date of survey: _____	
Date of last survey: _____	
I. MPA DESCRIPTION	
MPA Name: _____	
MPA Objective: _____	
Annual budget: _____	
See entry details	
II. BIOPHYSICAL STATUS	
Mean low level coral cover: _____	
Event or change that were ranked high: _____	
See entry details	
III. MANAGEMENT STATUS	
Current number of management measures being addressed: []	
Number of management measures increased from last survey: []	
Summary from previous surveys: _____	
	
See more details	
Mean level of achievement on management measures: []	
	
See more details	

PROPOSED STRUCTURE OF THE INDICATORS

- I. MPA description
- II. Biophysical status
 - Status of key natural resources
 - Status of disturbances and human activities
- III. Management status



BIOPHYSICAL STATUS

Sample image of data entry sheet

Attn.	Observation	Disturbances and human activities	Level of occurrence or damage	Remarks
Disturbances				
	<input type="checkbox"/>	Damaging storm	0	
	<input checked="" type="checkbox"/>	Coral bleaching	1	
	<input type="checkbox"/>	Crown-of-thorns starfish outbreak	0	
	<input type="checkbox"/>	Coral diseases	0	
★	<input checked="" type="checkbox"/>	Siltation (soil run-offs)	3	
	<input type="checkbox"/>	Eutrophication	1	
			
Destructive and/or unregulated activities				
	<input type="checkbox"/>	Poaching	0	
	<input type="checkbox"/>	Destructive fishing (e.g., dynamite, poison)	0	
	<input type="checkbox"/>	Boat anchoring damage	0	
★	<input checked="" type="checkbox"/>	Diving fin kick damage	3	
	<input checked="" type="checkbox"/>	Coastal development	1	
	<input type="checkbox"/>	Mining	0	
			
Other human activities				
	<input checked="" type="checkbox"/>	Commercial fishing	1	
	<input type="checkbox"/>	Ornamental & aquarium fishing	0	
	<input checked="" type="checkbox"/>	Aquaculture	1	
★	<input checked="" type="checkbox"/>	Tourism	4	
	<input type="checkbox"/>	Military operations	0	
			

Text box for additional information

Rank rating:

0: None
1: Low
2: Medium
3: High



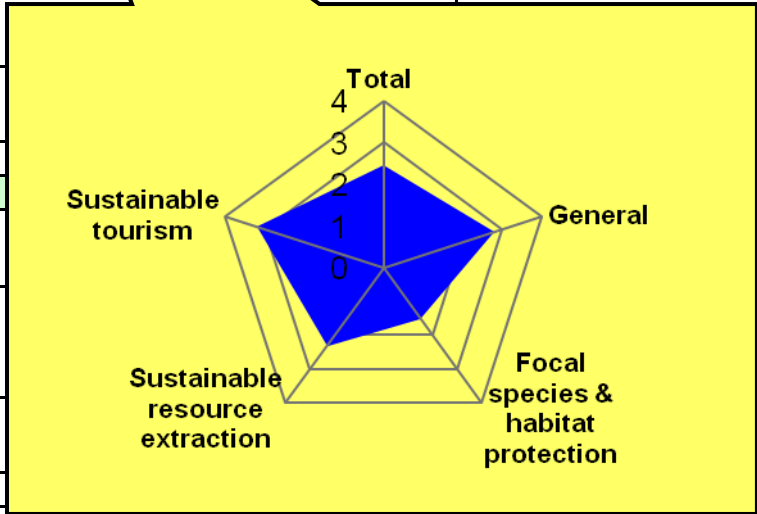
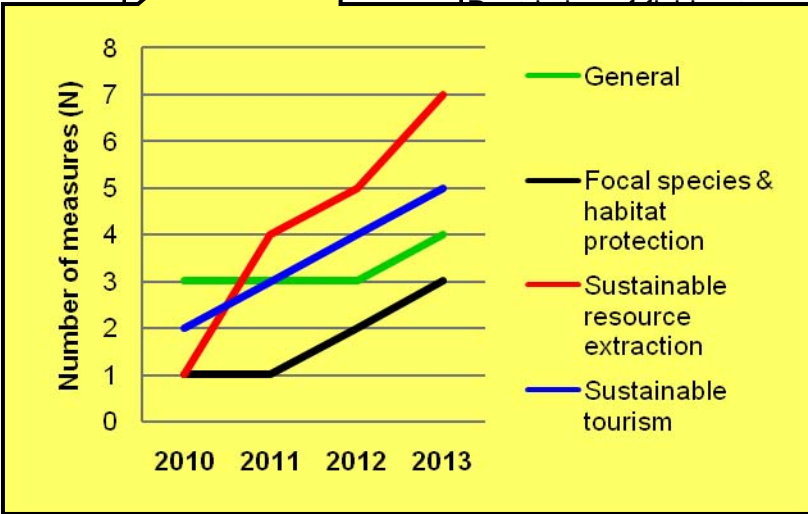
MANAGEMENT STATUS

Sample image of data entry sheet

Attn.	Implemented ?	Management measures	What is the level of achievement	Remarks
General measures				
		Management planning	0	
	<input checked="" type="checkbox"/>	Review and evaluation of the management plan	2	
	<input checked="" type="checkbox"/>	Adaptive management system	2	
			
Focal species and/or habitat protection measures				
	<input checked="" type="checkbox"/>	Banning of catchments of focal species	1	
	<input type="checkbox"/>	Regulation of no-entry at focal habitat	0	
	<input type="checkbox"/>	Regulation of no-take at focal habitat	0	
			
Sustainable resource extraction measures				
	<input checked="" type="checkbox"/>	Banning of entry or fishing (no-take) in critical habitat (e.g., breeding grounds, fish aggregation sites)	0	

Text box for additional information

Rank rating:
0: not yet begun
1: just started the activity
2: activity underway but limited effect
3: activity underway and some measures in effect
4: activity fully underway and effect obvious



TENTATIVE TIMEFRAME FOR DEVELOPMENT

Year	Month	Actions
2009	Nov	MPA Network workshop (EAS Congress, Manila) <ul style="list-style-type: none">• Discuss and gain feedbacks• Invite interests
	Dec	5 th ICRI East Asia Regional Workshop (Hoi An, Vietnam) <ul style="list-style-type: none">• Discuss and gain feedbacks• Invite interests and testers
2010	Jan	Update based on feedbacks in the workshops
	Feb - April	Test by volunteers (e.g., experts, managers)
	May	Update based on feedbacks from the tests
	June	6 th ICRI East Asia Regional Workshop (Phuket, Thailand) <ul style="list-style-type: none">• Provide demo version
	Mid - End	<ul style="list-style-type: none">• Final modification• Make it available on the website (ICRIForum?)



THANK YOU !



Getting in touch:
Kohei Hibino <khibino@jwrc.or.jp>

