

Current Status, Policies and Challenges for Marine Protected Areas in Korea

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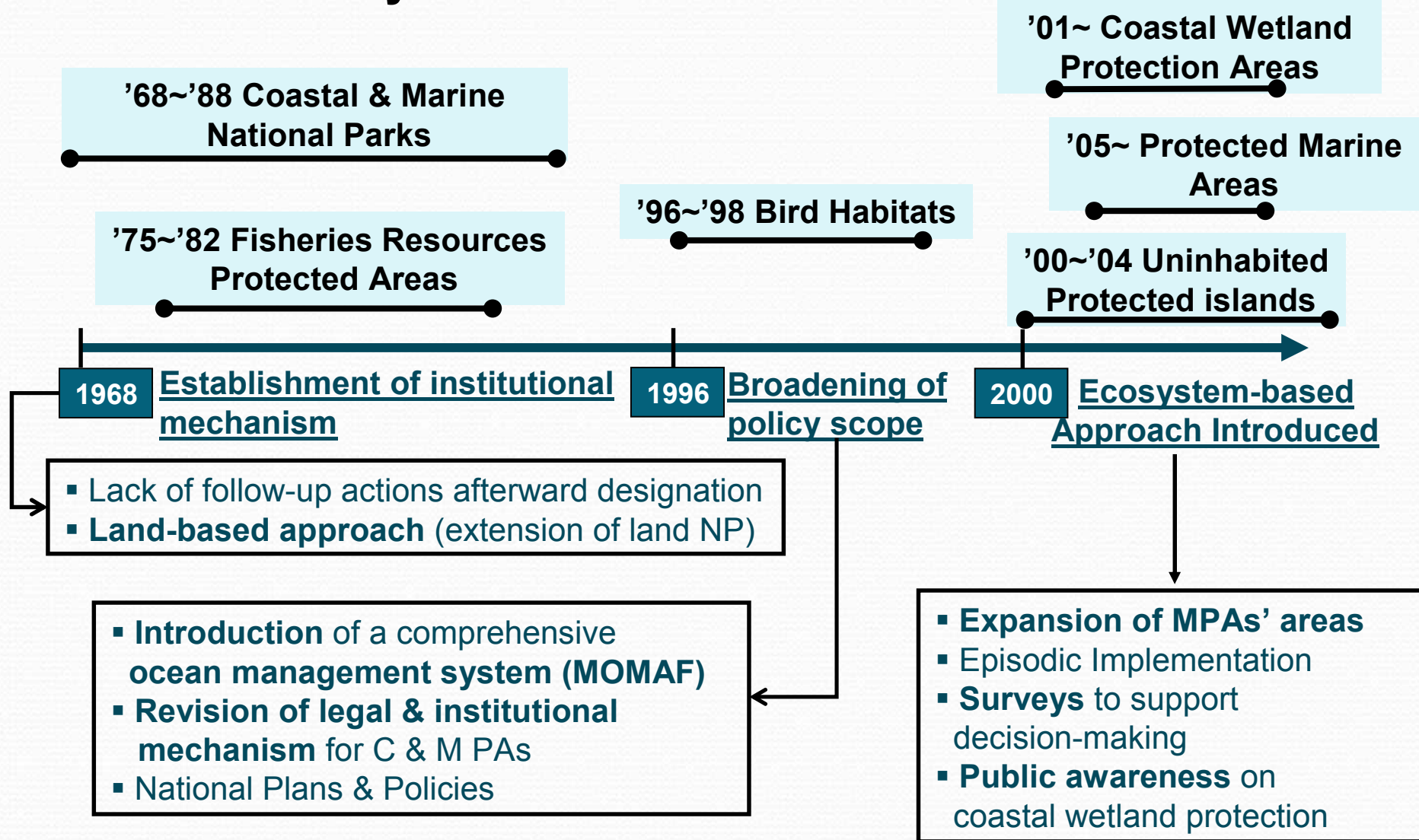


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I. Legislations for C. & M. Protected Area in Korea

❖ Brief History of Coastal & Marine PAs Management



I. Legislations for C. & M. Protected Area in Korea

❖ Legal and Institutional mechanisms (4 ministries & 9 laws)

MLTM
(Land, Transport
and Maritime Affairs)

- Marine Environment Management Act
(Marine Environment Conservation Area)
 - Conservation & Management of Marine Ecosystem Act
(Marine Protected Area)
 - National Land Planning and Utilization Act
(Fisheries Resource Protected Area / MIFAFF)
- *MIFAFF : Min. for Food, Agriculture, Forestry and Fisheries

ME
(Environment)

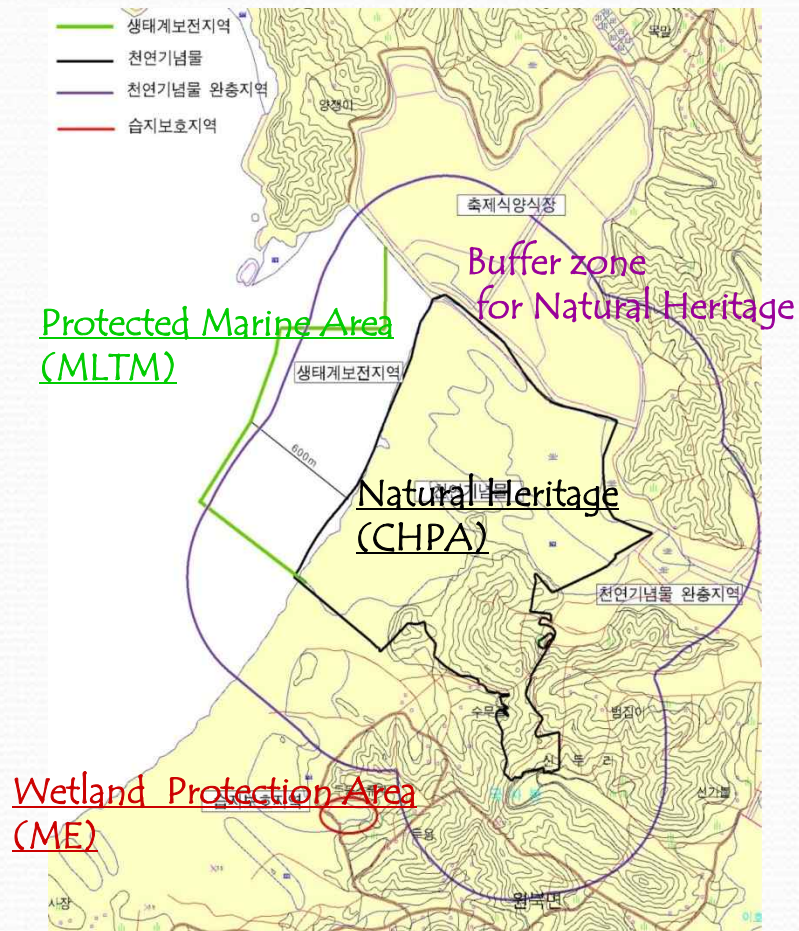
- Wetland Conservation Act (coastal/inland protect. Area)
- Natural Environment Conservation Act
(Ecosystem/Landscape Conserv. Area)
- Wildlife Act (Wildlife Protection Area)
- Natural Park Act (National Park)
- Special Act on Islands (Special Island)

CHPA
(Cultural Heritage
Protection Admin.)

- Cultural Heritage Protection Act
(Natural Heritage)

I. Legislations for C. & M. Protected Area in Korea

Shinduri sand dune



Woose-do(island) Uninhabited islands for special protection



I. Legislations for C. & M. Protected Area in Korea

❖ Coastal and Marine Protected Areas

Name	No.	Area(km ²)	Ministry	Acts
Protected Marine Area	6	219.0	MLTM	Conserv. & Manag. of Marine Ecosystem Act
Wetland Protection	12	141.4	MLTM	Wetland Protection Act
Marine Environment Conservation	4	1,882.1	MLTM	Marine Environment Conservation Act
Fisheries Resource Protection	10	3,034.6	MLTM, MIFAFF	National Land Planning and Utilization Act
Special Island	167	10.5	ME	Special Act on the Ecosystem Preservation of Islands including Dokdo Island
National Park	4	3,348.4	ME	Natural Park Law
Ecosystem/Landscape Conservation	3	34.6	ME	Natural Env. Conserv. Act
Wildlife Protection	166	207.8	ME	Wildlife Protection Act
Natural Heritage	193	1,126.4	CHPA	Cultural Heritage Protection Act
Total	565	10,004.7	10.1% of national land area(99,514 km ²) 14.1% of national territorial sea area(71,000 Km²)	

II. Marine Protected Areas in Korea

Protected Marine Areas

Conservation and Management of Marine Ecosystem Act

- **Chapter IV. Designation and Management of Protected Marine Areas**
- Article 25-38(Designation, Management, Restriction, Obs., Supports for Residents in MPAs, etc)

Coastal Wetland Protection Area (Tidal-flat)

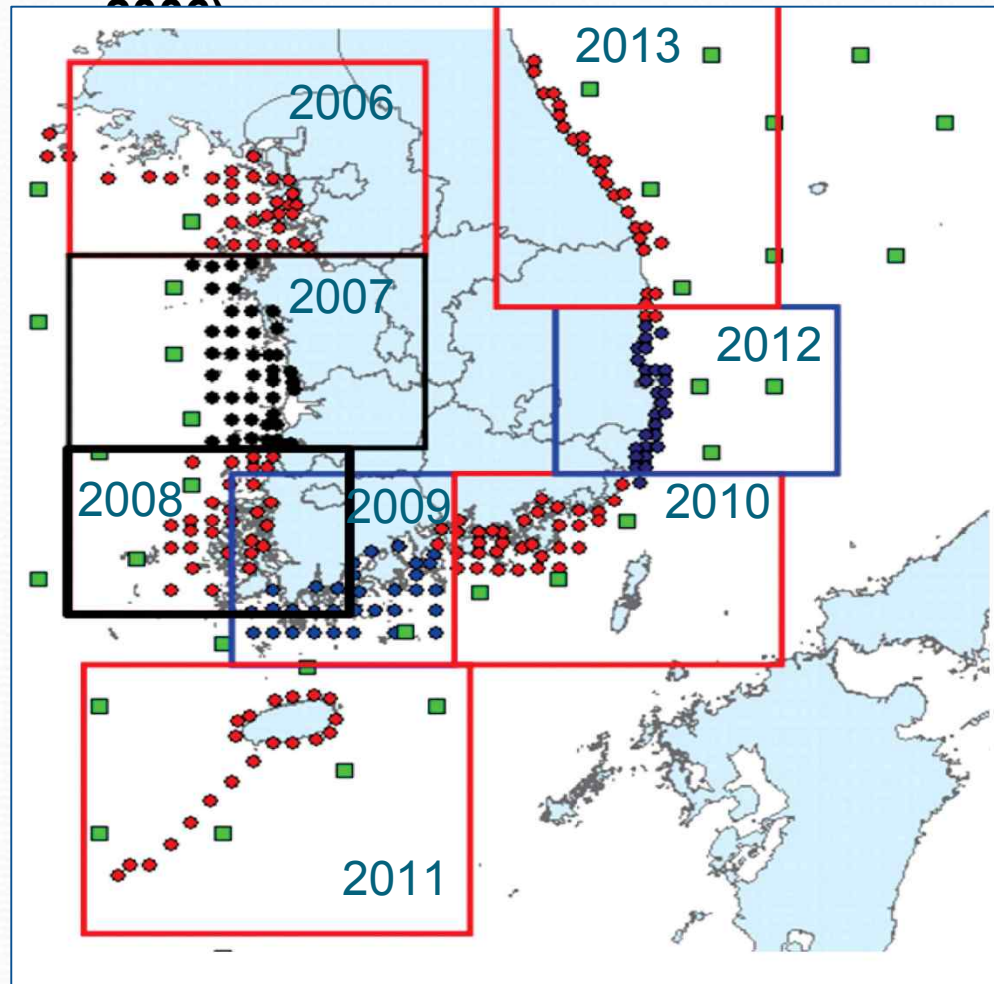
Wetlands Conservation Act

- **Chapter II. Conservation and Management of Wetlands**
- Article 8-18(Designation, Management, implementation of Convention, Restriction on Activities, Entry & Access , etc)

II. Marine Protected Areas in Korea

❖ Baseline Monitoring for Marine Ecosystem

1) National Investigation on Marine Ecosystem (1st Phase since 2006)



Environment	Items
Benthic (Sediment, Rock, etc)	General Environ. Condition
	Benthos
	Sea-weeds, algae, plants
Pelagic Environ.	General Environment Cond.
	Phytoplankton
	Zooplankton
Nekton	Fish, cephalopods, Crustacea, etc

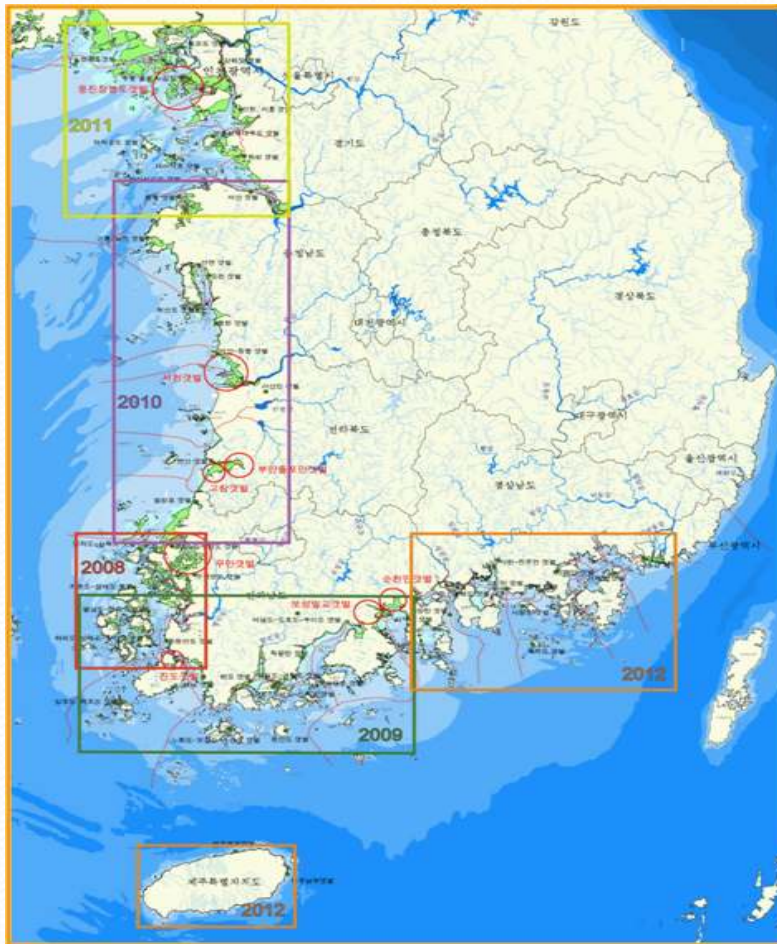
- Taxonomy /Distribution
- Biomass, Diversity, Richness, etc
- Bio-diversity Hotspot
- Seasonal Obs.

Conservation and Management of
Marine Ecosystem Act
(Protected Marine Area)

II. Marine Protected Areas in Korea

❖ Baseline Monitoring for Marine Ecosystem

2) National Monitoring on Coastal Wet-lands(2nd Phase since 2008)



- Taxonomy / Distribution
- Sediment(tidal-flat) Quality Condition
- Biomass, Diversity, Richness, etc

Wetland Conservation Act
(Wetland Protection Area)

II. Marine Protected Areas in Korea

Areas for Protecting Organisms, Ecosystems, Landscape

Protected
Marine
Areas

Coastal Wetland
Protection
Area
(Tidal-flats)

habitat or
spawning area of
organisms(species)
under protection

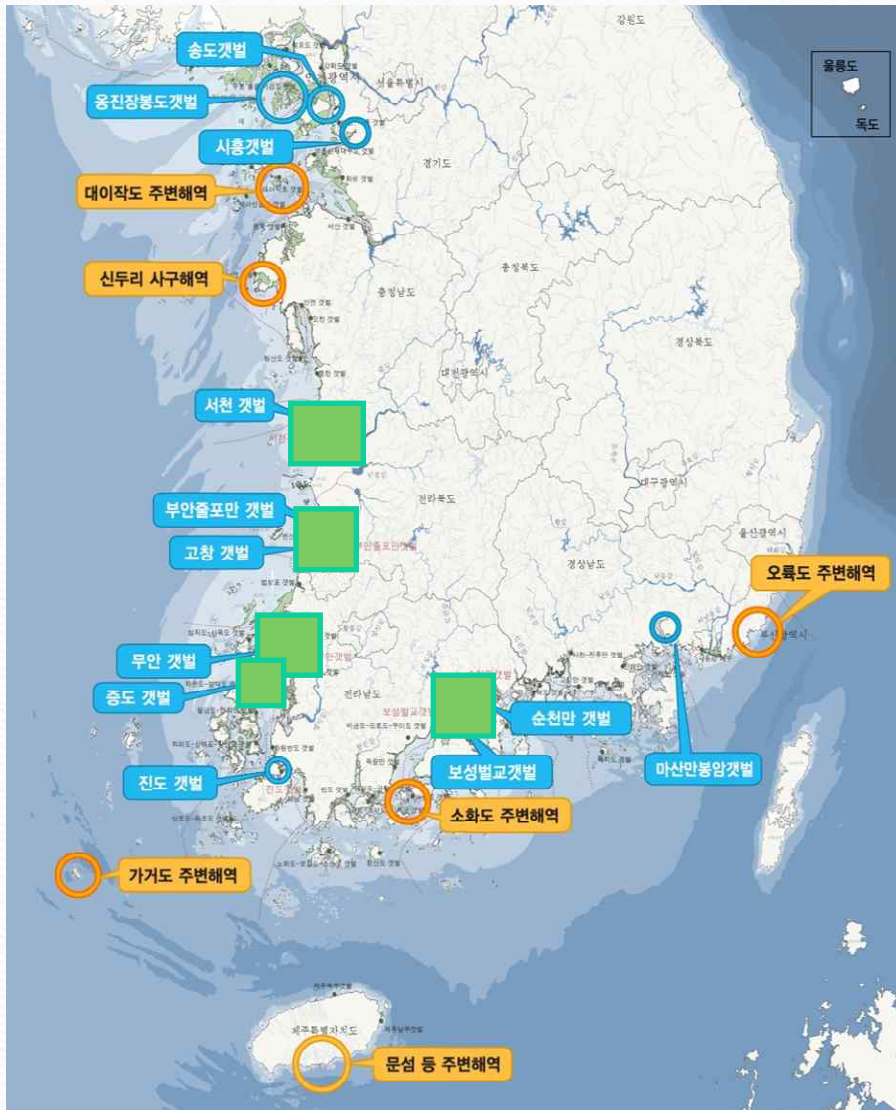
unique
geological/
geomorphic
features
(scientific research
and monitoring)

higher
Primary production
or
biodiversity

extraordinary
scenic,
topographic
value

ecosystem
vulnerable to
damages

II. Marine Protected Areas in Korea



**Marine Protected Area : 360.31 km²
(0.5% of Territorial Sea Area)**

- Coastal Wetland Protection Area(12) : 218.96 km²
(10.1 % of tidal-flat area)
- Protected Marine Area(6)
141.354 km²
- Ramsar Site(5)
(142.2 km²)
(56.3 % of Wetland P. Area)

II. Marine Protected Areas in Korea

❖ Priority for MPA management Policy

Type	No	Designated Name	IUCN Category	Natural Environment				Social Activity		
				Protected Species	Water Quality	Water Quantity	Sedimentation	Fisheries	Scenery	Marine Leisure
Protected Marine Areas	1	Sinduri Sand Dune Waters	V	Normal	Important	Important	Critical	Normal	Normal	Important
	2	Mun-sum & Neighboring Waters	IV	Critical	Important	Important	Normal	Critical	Critical	Critical
	3	Oryuk-do & Neighboring Waters	V	Important	Important	Important	Critical	Important	Critical	Critical
	4	Daeijak-do & Neighboring Waters	V	Critical	Important	Important	Critical	Normal	Critical	Important
	5	Gageo-do & Neighboring Waters	V	Critical	Important	Important	Important	Critical	Critical	Normal
	6	Sohwa-do & Neighboring Waters	IV	Critical	Important	Important	Important	Normal	Normal	Normal
Coastal Wetland Protect. Areas	1	Muan Tidal Flat Ramsar Site)	V	Normal	Critical	Important	Important	Critical	Normal	Important
	2	Jindo-do Tidal Flat	V	Important	Important	Important	Normal	Normal	Important	Important
	3	Suncheon Bay Tidal Flat (Ramsar Site)	V	Critical	Normal	Normal	Normal	Normal	Critical	Important
	4	Boseong Beolgyo Tidal Flat (Ramsar Site)	V	Normal	Normal	Normal	Normal	Critical	Important	Important
	5	Ongjin Jangbong-do Tidal Flat	V	Normal	Important	Normal	Critical	Normal	Important	Important
	6	Buan Julpo Bay Tidal Flat (Ramsar Site)	V	Normal	Normal	Normal	Critical	Critical	Important	Important
	7	Gochang Tidal Flat (Ramsar Site)	V	Normal	Normal	Normal	Normal	Critical	Important	Important
	8	Soecheon Tidal Flat (Ramsar Site)	V	Critical	Important	Critical	Critical	Normal	Normal	Important
	9	Song-do Tidal Flat	V	Normal	Important	Normal	Normal	Important	Important	Important
	10	Jeong-do Tidal Flat (Ramsar Site)	V	Normal	Important	Important	Normal	Normal	Normal	Important
	11	Masan Bay Bongam Tidal Flat	V	Important	Normal	Normal	Normal	Important	Important	Important
	12	Siheung Tidal Flat	V	Important	Normal	Normal	Normal	Important	Normal	Important

 Critical

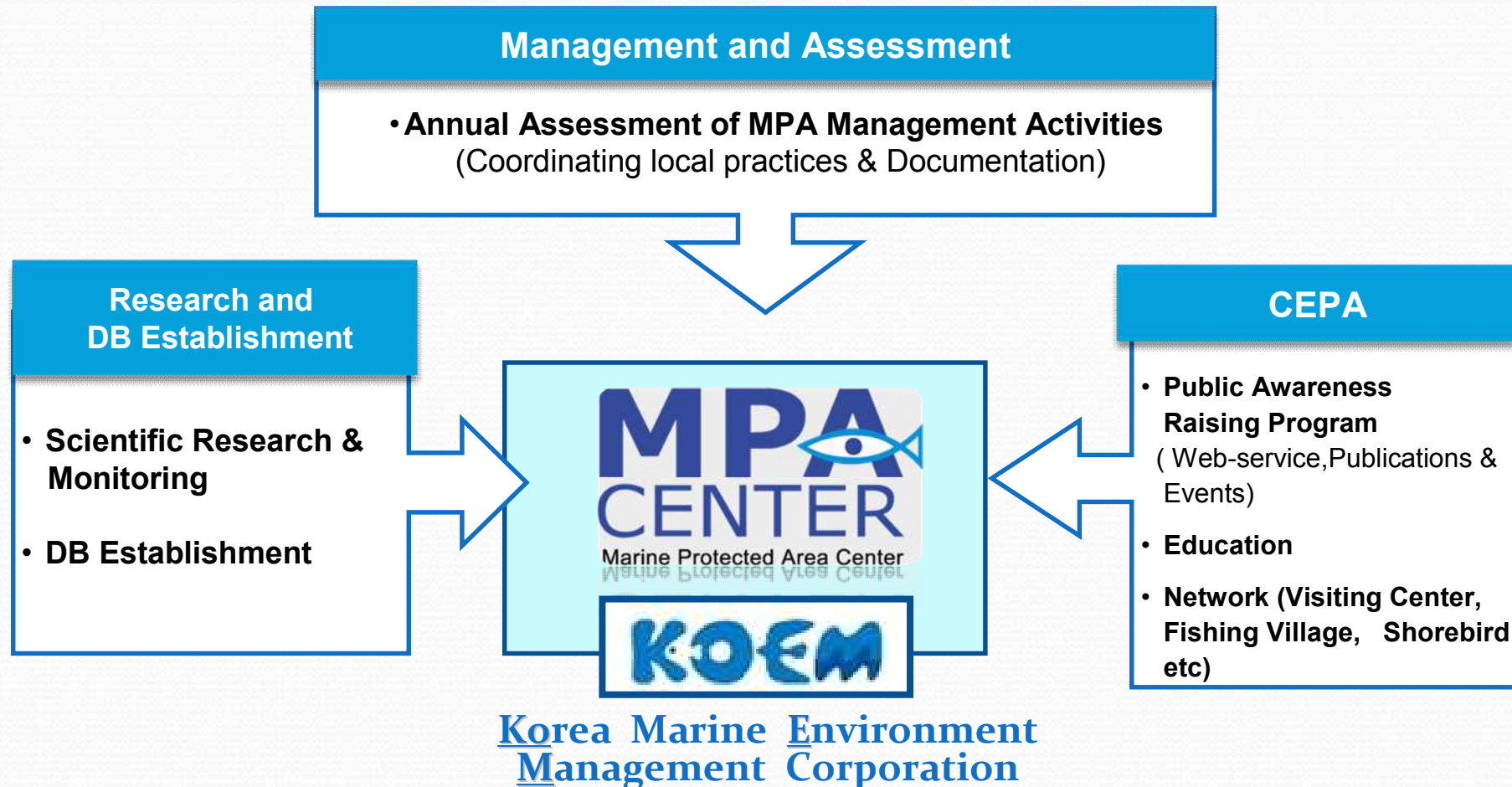
 Important

 Normal

II. Marine Protected Areas in Korea

❖ MPA Network in Korea

Establishing a responsible & coordinating organization for
MPA Management (May 2008) at a national level



II. Marine Protected Areas in Korea

❖ International MPA Network

MLTM/NOAA MPA Capacity Building Project

- Internship Program(2009~2010) : Information sharing and learning experience
- Training Workshop
 - * MPA Management Plan('11) / Sustainable Tourism in MPAs('12)

MoU between MLTM and Wadden Sea (2009~)

- Co-Scientific Research (Tidal-flat Monitoring, Shorebirds watching)
- Exchange Program : Symposium(Workshop), Training Workshop

III. Challenges for Future MPA Management in Korea

Formulation of Conflict Management System

- Establishment of National Management Committee for C. and Marine MPAs
 - * MLTM, ME, CHPA, local governments, NGOs, etc.
- Developing Assessment Framework for Management Prioritization
 - * application of *Ecological Continuum* Concept at Coastal Regions
 - * development of procedure, criteria and application of the prioritization

Target-based Management

- Ambiguous and abstract designation criteria
 - * mixture of management categories ⇒ application of *zoning system* in multiple-use MPAs
- Application of No-net Loss policy to Coastline and Habitat Protection
 - * stricter approval procedure for development (e.g. reclamation)

Areas managed mainly for:

- I Strict protection [(Ia) Strict nature reserve and (Ib) Wilderness area]
- II Ecosystem conservation and protection (i.e., National park)
- III Conservation of natural features (i.e., Natural monument)
- IV Conservation through active management (i.e., Habitat/species management area)
- V Landscape/seascape conservation and recreation (i.e., Protected landscape/seascape)
- VI Sustainable use of natural resources (i.e., Managed resource protected area)

III. Challenges for Future MPA Management in Korea

Enhancing Public Participation & Voluntary Activities

- **Limited Local Pools**
 - * **most residents in/adjacent to MPAs are engaged in fisheries and agriculture**
 - * **very limited number of young people**

- **Encourage public participation from planning process of management plan**
 -
 - * **developing site-specific supporting system with real benefits to the local**



THANK YOU