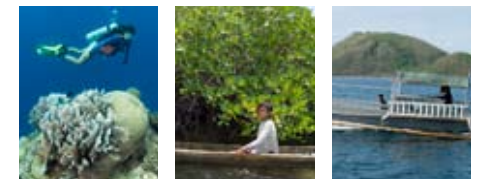


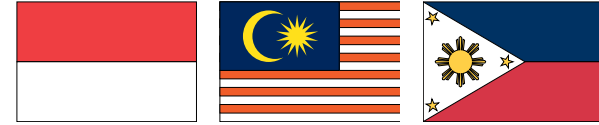
# **ACTION PLANS**

*OF THE SULU SULAWESI MARINE ECOREGION*

**Volume 2: Sub-Committee on Marine  
Protected Areas and Networks**

The process of developing the Action Plans of the Trinational Committee for the Sulu Sulawesi Marine Ecoregion was supported by the Coral Triangle Support Partnership.





# **ACTION PLANS**

OF THE SULU SULAWESI MARINE ECOREGION

**Volume 3: Sub-Committee on Marine  
Protected Areas and Networks**

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*Disclaimer:*

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SSME Priority Conservation Areas Vision Map courtesy of WWF-Philippines

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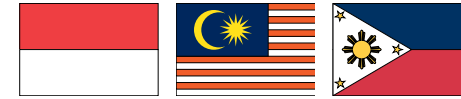
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## FOREWORD



To ensure effective protection and sustainable development of the Sulu Sulawesi Marine Eco-region (SSME), the Governments of Indonesia, Malaysia and the Philippines entered into a Memorandum of Understanding (MOU) on 13 February 2004. The signing of the MoU was one of the highlights in the Side Events of the 7<sup>th</sup> Conference of Parties of the Convention on Biological Diversity held in Kuala Lumpur, Malaysia. The three countries essentially agreed to adopt the eco-region approach to conservation that will facilitate the realization of the four fundamental goals of biodiversity conservation which are: representation, sustainability of ecological processes, viability of species, and resiliency, which are embodied in the Eco-region Conservation Plan (ECP).

The ECP for SSME is a product of region-wide consultations across the three countries involving the stakeholders and various experts from the resource managers, academe, up to the policymakers. The ECP contains objectives that would allow the conservation of the coastal and marine resources of the Region without having to sacrifice the livelihood of the people. This involves ten objectives that the ECP hopes to attain in alignment to its 50-year vision.

The signing of the MoU led to the creation of the Tri-National Committee for the SSME. Subsequently, the Committee had its 1<sup>st</sup> Meeting on 01 March 2006 in East Kalimantan, Indonesia and created the Sub-Committees, namely: Threatened, Charismatic and Migratory Species; Sustainable Fisheries; and Marine Protected Areas (MPAs) and Networks. The respective Sub-Committees met in 2007 and elected their respective Chairpersons, developed their Terms of Reference (TORs) as well as their Work Plans for the implementation of the ECP.

The publication and launching of the Work Plans of the Sub-Committees was approved by the SSME Tri-National Committee during its Fourth Meeting in Batam, Indonesia in July 2009. The publication is a priority because it will not only keep the stakeholders informed and reminded of the work for the SSME but as well be a useful tool to attract potential donors.

This Booklet includes the Work Plan of the Sub-Committee on Marine Protected Areas and Networks, its achievements, and the lessons learned in its implementation in the past three years. The lessons learned from previous programs that have been implemented in the Region will be useful to countries in the Coral Triangle in meeting the targets, particularly in *Goal No. 3: Marine Protected Areas And Networks Established And Effectively Managed*, of the Regional Plan of Action and the corresponding National Plans of Actions on the Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security (CTI-CFF).

A handwritten signature in blue ink, appearing to read 'Theresa Mundita S. Lim'.

THERESA MUNDITA S. LIM

Director

Protected Areas and Wildlife Bureau

Department of Environment and Natural Resources

Chairman, Sulu Sulawesi Marine Ecoregion Tri-National Committee

CY 2009-2011

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### I. The Sulu-Sulawesi Marine Ecoregion

The Sulu Sea and Sulawesi Sea are twin seas formed by the movement of submarine plates from the north and south hemispheres of the earth. The plates brought with them numerous species; some of which thrived in the warm seas and survived; while some evolved with the lowering and rising of the marine waters.

The Sulu-Sulawesi Seas cover about 1 million square kilometers in area. It is considered as the global center of tropical marine diversity, supporting the highest number of coral reef fishes, demersal fishes, corals, turtles, and algae (DeVantier, et. al, 2004). The mangrove forests, the seagrass beds, the coral reef, the coastal and offshore waters are richest in number of species in the tropics.

These coastal and marine ecosystems are productive because of nutrients brought in by rivers from land as well as nutrients from the deep sea that are brought up by currents. The cold waters from the deep also cool the surface waters, preventing coral reefs from bleaching, weakening, or dying. Conserving the area is an insurance against loss of species due to climate change.

The bounty of these seas provides food and livelihood to about 50 million people living along the coastline of Sulu-Sulawesi Marine Ecoregion (SSME). There are many threats, however, that undermine the food security and livelihoods of these people. Overfishing reduces the populations of fishes, mollusks, sea cucumbers to unproductive levels. Destructive fishing practices destroy coral reefs as habitats and kill young and old of all fishes. Organic pollution and sediment pollution from land slowly cover seagrass beds and coral reefs. More frequent and intense storms bring more freshwater to coastal waters, drastically lowering the salinity of coastal waters and killing organisms with low tolerance to changes in salinity. These storms also cause rivers to swell and carry organic substances and sediments to sea, increasing the stress to seagrass beds and coral reefs.

The Governments of Indonesia, Malaysia, and the Philippines signed a Memorandum of Understanding to conserve the SSME during the 7<sup>th</sup> Conference of the Parties to the Convention on Biological Diversity held in Kuala Lumpur in 2004. The Ecoregion Conservation Plan was ratified by the three countries in 2006. The Countries subsequently established the Trinational Committee and three Sub-committees to implement the three programs of work:

- Threatened, Charismatic, and Endangered Species
- Sustainable Fisheries
- Marine Protected Areas and Networks.

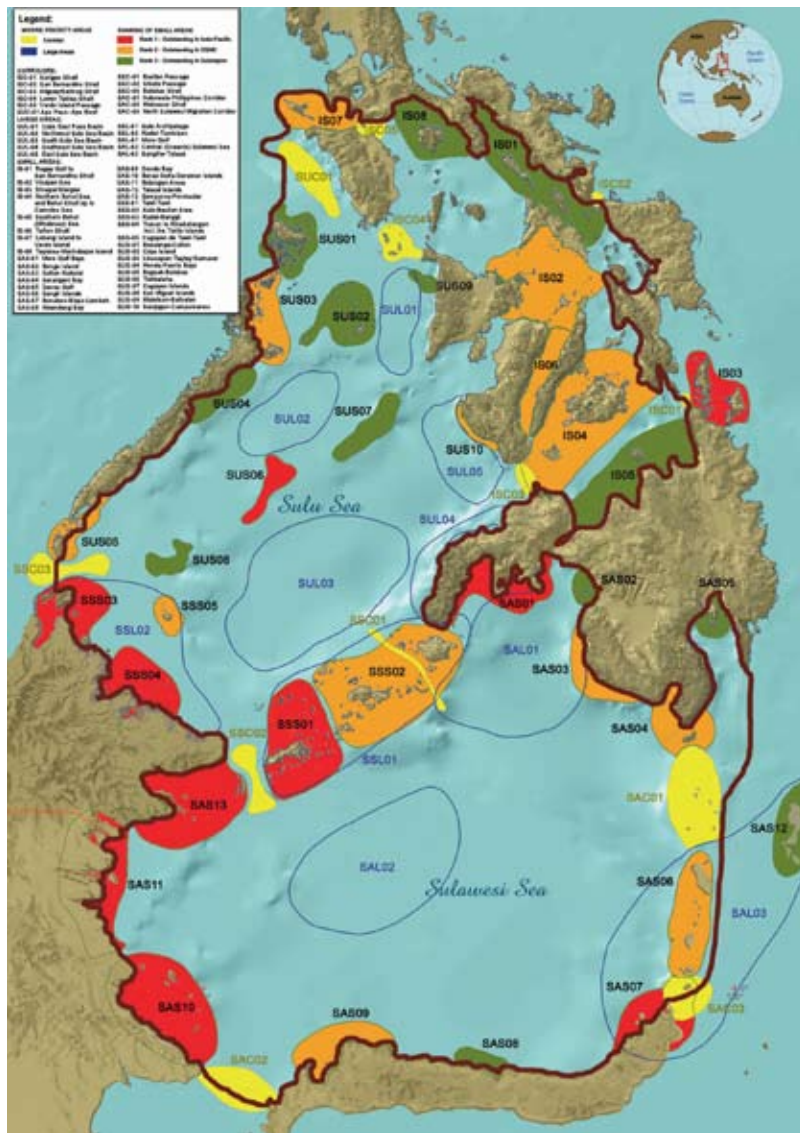
This volume contains the Action Plan of the Sub-Committee on Threatened, Charismatic, and Migratory Species, as well as the achievements and lessons learned in the past three years of country-wide implementation. With SSME recognized as a priority seascape in the Coral Triangle, the lessons from the implementation will be useful to countries in the Coral Triangle Initiative in meeting the Target in Goal # 5: threatened species status improving.

## 2. Vision

A marine ecoregion that remains to be globally unique and a centre of diversity with vibrant ecological integrity, including all species assemblages, communities, habitats, and ecological processes

A highly productive ecoregion that sustainably and equitably provides for the socio-economic and cultural needs of the human communities dependent on it

An ecoregion where biodiversity and productivity are sustained through the generations by participatory and collaborative management across all political and cultural boundaries



## 3. Objectives

Establish management strategies and coordinated institutions for effective ecoregional conservation;

Establish a functional integrated network of priority conservation areas to ensure ecological integrity;

Develop sustainable livelihood systems that support marine and coastal conservation across the ecoregion;

Shape economic development compatible with biodiversity conservation;

Enhance understanding of biodiversity resources and factors affecting them to form a basis for management decisions;

Develop communication, education and outreach programmes and strategies to motivate people to take conservation action;

Develop sustainable financing mechanisms to support the cost of conservation and resource management;

Build and enhance the capacity of stakeholders to effectively manage the conservation of the SSME;

Implement coordinated protection of threatened marine species to ensure maintenance of viable populations and protection of critical habitats; and

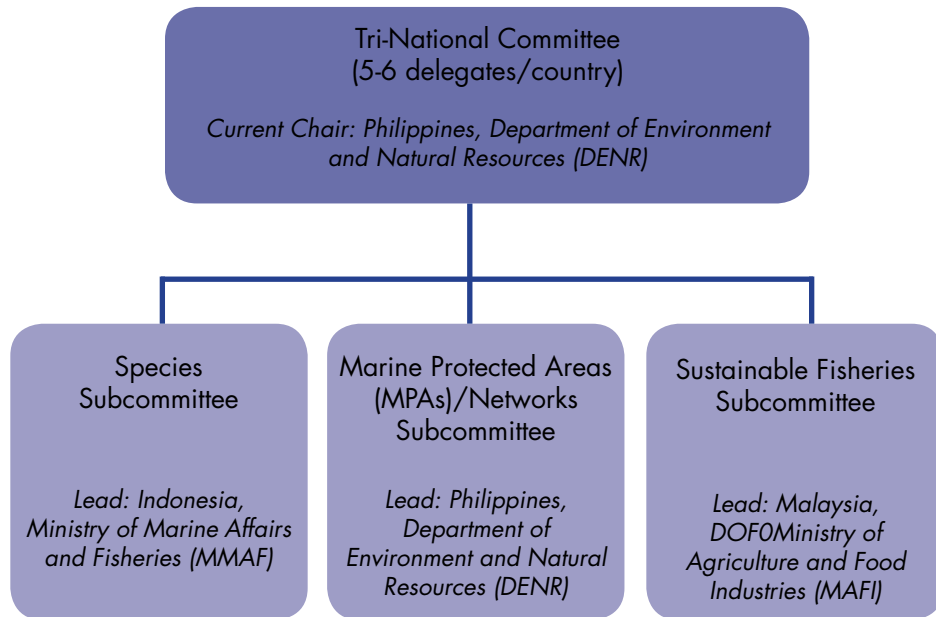
Improve coastal, oceanic and other types of fisheries resource conditions and management by developing a framework strategy, institutions and appropriate interventions



**4. The Sub-Committees of the SSME – the driving forces for marine conservation**

The Trinational Committee was formed in 2006 immediately after the ratification of the Memorandum of Understanding by Indonesia, Malaysia, and the Philippines. The Trinational Committee then formed the Sub-Committee on Threatened, Charismatic, and Migratory Species; Sub-Committee on Sustainable Fisheries; and Sub-Committee on Marine Protected Areas and Networks. Each Sub-Committee is led by a country and guided by Terms of Reference. The Sub-Committee on Threatened, Charismatic, and Migratory Species is led by Indonesia, the Sub-Committee on Sustainable Fisheries by Malaysia, and the Sub-Committee on Marine Protected Areas and Networks by the Philippines.

The Sub-Committees implement an Action Plan to meet the objectives and vision of the Ecoregion Conservation Plan. The Sub-Committees report on achievements of the three countries in meeting their respective Action Plans. The Sub-Committees are in turn assisted by the Technical Working Groups that are formed in each country. The governance structure of the Trinational Committee and its Sub-Committees is illustrated below.



**History of implementation of the SSME Ecoregion Conservation Plan**

Following the Biodiversity Visioning and Ecoregion Conservation Planning (ECP) in 2001, three programs of work was developed in order to operationalize the 10 objectives in the ECP. These programs of work are the:

- Threatened, Charismatic, and Endangered Species
- Sustainable Fisheries
- Marine Protected Areas and Networks (MPAs/N).

The SSME Ecoregion Conservation Plan was agreed upon by the governments of Indonesia, Malaysia, and the Philippines at the 7th Conference of the Parties to the Convention on Biological Diversity in Kuala Lumpur, Malaysia in 2004. The Memorandum of Understanding for the implementation of the SSME ECP was ratified by the legislatures of the three countries over the next two years. The Tri-national Committee of the SSME and the Sub-Committees for the implementation of the three (3) programs of work were subsequently formed and their respective Terms of References formulated.

**History of the implementation of the Action Plan of the Sub-Committee on Marine Protected Areas and Networks**

The First Meeting of the Sub-Committee on Marine Protected Areas and Networks was held in 2007 in Quezon City, Philippines. The Terms of Reference of the MPA and Networks were conditionally adopted in 2007 and finally adopted in 2008. The Workplan on MPAs and Networks was also presented and adopted in 2007.

Each country presented reports of their implementation of the Workplan at the Second Meeting of the Sub-Committee in 2008 in Quezon City, Philippines. The Workplan was also updated in 2008 and revised at the Third Meeting of the Sub-Committee in 2009 to be more aligned with the commitments of the countries to the Plan of Work for Marine Protected Areas and Networks and to the advances made in the countries. The latest Workplan is presented in this publication as the Action Plan of the Sub-Committee of Marine Protected Areas and Networks. The Action Plan was further refined at the Workshop to Prepare the Action Plan of the Sub-Committee, held in September 2009 in Pasig City, Metro Manila, Philippines

The member institutions of the Sub-Committee on MPAs and Networks implement the regional strategies in their respective countries. Since MPAs and Networks are management tools, the Action Plan of the Sub-Committee builds and supports the initiatives for biodiversity conservation and for fisheries management.

The national activities and results contribute to the achievements of the regional objectives. It is the intention of the Sub-Committee to raise funds to support the implementation of common and collaborative projects under the Action Plan.

## 5. Action Plan of the Sub-Committee on Marine Protected Areas and Networks

**5.2 Goal: Formulation of policies on, and development and implementation of, sustainable fisheries, aquaculture, living aquatic resources exploitation, trade, and livelihood systems in the SSME**

### Objectives:

Objective 1: To support the effective management of existing and new marine protected areas (MPAs) and networks and to maintain the full range of sustainable marine resources and provide the long-term socio-economic and cultural needs of human communities in the SSME by 2012.

Objective 2: To support the establishment of new MPAs and networks in the context of ecosystem-based management by 2012

### Strategies

1. Review of existing policies, plans, programs and its implications on the management of existing and new MPAs and Networks, among others, turtle reserves and fish sanctuaries, within the SSME.
2. Provision of technical advice and recommendations for the development and implementation of new policies and programs on sustainable fisheries, aquaculture, living aquatic resources exploitation, trade, and livelihood systems.
3. Coordination of research and studies on MPAs, caves, and wetlands, to enhance understanding of their importance as well as the factors affecting them, as basis for technical advice and recommendations for management and policy development.
4. Provide recommendations for collaborative arrangements and parallel programs to be undertaken by the member countries, whether bilaterally or trilaterally, on the establishment and management of MPAs and Networks.



## Action Plan of the Sub-Committee on Marine Protected Area and Networks 2009 to 2012

The notation for each year indicates whether the Activity is a priority of the country.  
I – Indonesia; M – Malaysia, P – Philippines

Strategies	Activity	Year			
		2009	2010	2011	2012
Objectives: 1. To support the effective management of existing and new Marine Protected Areas and Networks and to maintain the full range of sustainable marine resources and provide the long-term socio-economic and cultural needs of human communities in the SSME 2. To support the establishment of new MPAs and Networks in the context of ecosystem-based management					
1. Review of existing policies, plans, programs, and its implications on the management of existing and new MPAs and Networks, such as turtle reserves and fish sanctuaries, within the SSME	1.1. Share of documents regarding existing policies among member countries for review and possible harmonization through: Posting national policies, when possible, in the SSME website;  Sharing and reviewing protocols for setting up of MPA networks within SSME	I,M,P	I,M,P	I,M,P	I,M,P
	1.2 Review of policies at national level		I,M,P		
	1.3 Revisit , update, improve the Framework of Establishing Marine Protected Areas in the SSME		I,M,P		
	1.4 Create a regional level Task Force , if needed		I,M,P		
	1.5 Provide input and policy recommendation to policy-makers with regard to the results of the policy researches on MPAs and Networks		I,M,P		
	1.6 Conduct Feasibility Assessment for Sustainable Financing Mechanism for the MPAs within the SSME		I,M,P		

Strategies	Activity	Year			
		2009	2010	2011	2012
2. Promote reciprocal learning and capacity-building initiatives among MPAs to gain insights, learn lessons, share best practices, including on sustainable financing and cost-recovery mechanisms for the improvement of MPA management through, among others, the development of a framework and mechanism for data access and sharing among the member countries	2.1 identify and/or profile lessons learned, best practices, failures and/or successes from existing MPA initiatives doing collaborative arrangements at: National level (site-based experiences), e.g.,  Bunaken, Indonesia  Berau, Indonesia  Turtle Islands Park, Malaysia  Tubbataha Reefs National Park, Philippines  Bi-lateral level  Turtle Islands Heritage Protected Area, Malaysia and the Philippines	I,M,P	I,M,P	I,M,P	I,M,P
	2.1.3. Identify and/or profile lessons learned, best practices on the following MPA-related themes to contribute to recommendations for parallel programs such as: Enforcement/transborder patrol Sustainable financing options Community-based resource management	I,M,P			
	2.1.4 Capacitate the respective secretariats – facilities, manpower, logistics, expertise	I,M,P	I,M,P	I,M,P	I,M,P
	2.2 Publish the Action Plan of the Sub-Committee Work Plan to include best practices, lessons learned, and accomplishments of the Sub-Committee	I,M,P			
	2.3 Develop an Awards and Incentive Mechanism/Program for Outstanding MPAs and Networks	I,M,P	I,M,P	I,M,P	

Strategies	Activity	Year			
		2009	2010	2011	2012
3.0. Coordinate research and studies on MPAs, caves and wetlands, to enhance understanding of their importance and factors affecting them, as basis for technical advice and recommendations for management and policy development	3.1. Develop a program on connectivity-related research such as larval dispersal, genetics, spawning aggregation, migratory pattern of straddling stocks	P	P	P	P
	3.2. Conduct census and update database and map of MPAs in the SSME to include biophysical and socio-economic data	I,M,P	I,M,P		
	3.3. Conduct research on reef resilience against global climate change	I,M,P	I,M,P	I,M,P	I,M,P
	3.4. Share protocols of MPA Monitoring and Evaluation		I,M,P		
	3.5. Collect significant research results relevant to SSME management for uploading to the SSME website		I,M,P		
	3.6. Collaborate with research institutions and other related organizations, e.g., ASEAN-Center for Biodiversity, Southeast Asia Center for Ocean Research and Monitoring, Southeast Asian Fisheries Development Center, NOAA, WorldFish Center, and others:  i. socio-economic and environmental impact assessments; ii. vulnerability assessments for MPAs and Networks on climate change; iii. payment for ecosystem services; iv. linkage between established MPAs and important turtle habitats v. assessment of climate change adaptation and establishment of MPAs	I,M,P	I,M,P	I,M,P	I,M,P



Strategies	Activity	Year			
		2009	2010	2011	2012
4. Provide recommendations for collaborative arrangements and parallel programs to be undertaken by the member countries, whether bilaterally or trilaterally, on the establishment and management of MPAs and Networks	4.1 Identify sites to demonstrate possible collaborative arrangements such as joint assessment of some MPAs or key candidate areas for MPA/Marine Managed Area (without existing collaboration): Proposed Tun Mustapha Park (Sabah)/ Balabac (Palawan) Sarangani (Philippines)-Sangir Talaud (Indonesia)	I,M,P	I,M,P	I,M,P	
	4.2. Conduct parallel programs such as: Management Effectiveness Assessment; Joint Targetted Research on Corals or Turtles for identified sites but not limited to the following:	I,M,P	I,M,P	I,M,P	
	Tun Sakaran Marine Park, Malaysia	M	M	M	
	Turtle Islands Park, Malaysia	M			
	Turtle Islands Wildlife Sanctuary, Philippines	P			
	Bunaken National Park, Indonesia	I	I	I	
	Berau, Indonesia	I	I		
	4.3 Collaborate on the establishment of Joint Management Areas – marine corridors for migratory species such as turtles, marine mammals, etc – subject to Article VII of the MoU	I,M,P	I,M,P	I,M,P	I,M,P
4.4 Develop Joint Enforcement Plan for SSME	I,M,P				

## 6. Lessons Learned in the Implementation of the Action Plan

There are many lessons learned in the implementation of country activities that contribute to the achievement of the objectives of the Action Plan of the Sub-Committee on Marine Protected Areas and Networks. Thus, in the Action Plan for 2009-2012 implementation, a regional activity is set to gather and collate lessons learned from all the MPAs established in the Sulu-Sulawesi Marine Ecoregion. Samples of lessons learned from Indonesia, Malaysia, and the Philippines are provided here to highlight the benefits of collaboration between management board and local communities, networking to increase understanding of coral reefs for conservation, networking for assessing management effectiveness of Marine Protected Areas, collaboration to provide incentives to effectively-managed MPAs. These lessons – and many more – are shared for other MPA managers in the Sulu-Sulawesi Marine Ecoregion and the Coral Triangle.

### Lessons learned from the Decentralization of management to local government and collaboration among stakeholders, Bunaken National Park, Indonesia<sup>1</sup>

The Bunaken National Park Management Advisory Board, a multi-sectoral provincial management board, created a clear and effective one-time fee system and clear benefit-sharing for revenue from the MPA. This system was satisfactory to all stakeholders and has engendered more support to the conservation objectives of the Park. The implementation of this entrance fee system becomes the first stage in achieving a sustainable financial system at Bunaken MPA. Participatory monitoring, control, and surveillance of the park also contributed to the effective management of the Park.

Bunaken National Park<sup>2</sup> in Sulawesi Sea, Indonesia, established in 2000, is 89,065 hectares. The Bunaken National Park Management Advisory Board (BNPMAB) was created under by North Sulawesi Governor's Decree No. 233/2000 and renewed by Decree No. 171/2005. The BNPMAB is a multi-sectoral board; the Vice Governor of Sulawesi is the head of the board and the following are members:

1. Bunaken NP Authority (Technical implementation unit of Ministry of Forestry)
2. North Sulawesi Provincial Government
  - Marine Affairs and Fisheries Department
  - Tourism and Culture Affairs Department
  - Environmental Affairs Office
3. Regional and City Government
  - City of Manado Culture and Tourism Affairs Department
  - Minahasa Regional Environmental Affairs Office
  - North Minahasa Marine Affairs and Fisheries Department
  - South Minahasa Culture and Tourism Office

<sup>1</sup> Cherryta Yunia, Marlina Gasman, Irawan Asaad, Subdirector of Wetlands, Marine Conservation and Essential Ecosystem, Directorate of Areas Conservation, Directorate General of Forest Protection and Nature, Ministry of Forestry)

Ir. Awen Supranata, Head of Bunaken National Park, Directorate General of Forest Protection and Nature Conservation, Ministry of Forestry)

Dr. Matheus Halim, WWF- Indonesia Programme

<sup>2</sup> Bunaken National Park, (2009). General Information of Bunaken National Park Management Advisory Board. Online sources at [www.bunaken.org](http://www.bunaken.org). Accessed on October 2009

Ministry of Forestry, (2007). Information book : 50 national park of Indonesia. Directorate General of Forest Protection and Nature Conservation, Ministry of Forestry, Bogor- Indonesia.

Salm, Clark, Siirila (2000). Marine and coastal protected area, a guide for planners and managers. IUCN. Washington DC

4. Private Sector – NSWA (North Sulawesi Watersport Association) & HPWLB (Local Tourism Business Owner of Bunaken Island)
5. Sam Ratulangi University
6. Water Police of North Sulawesi Province

The management of a large park poses challenges in funding the costs of operations and in enforcement of park regulations. To address this challenge, the Bunaken National Park Management Advisory Board introduced a new entrance fee system – the one-time fee system – that was also legally enacted by the Provincial Government Decree No. 49 issued in 2001. The BNPMAB also began a new system of distribution of entrance fee revenues, wherein 80 % of the revenues goes to DPTNB, specifically for Bunaken conservation programs, while the rest (20 % of the revenues) goes to local and central governments. The sharing of revenues between the provincial and the local government agencies was acceptable to all concerned.

The local community was engaged in the management of the park in participatory monitoring, control, and surveillance (MCS) of the large marine park to address the need for many rangers. The BNPMAB provided training to 67 persons on basic MCS programme. Members of the local community, especially fisherfolk, were recruited to work with the park rangers and marine police in patrolling the park, focusing on incidents of blast fishing, cyanide-fishing, and mangrove logging, and reporting daily to the ranger in the field. The decentralization and collaborative process gave more opportunities and prospects for the local government and stakeholders to be actively involved in the conservation program. It also helped raise awareness and willingness of these stakeholders to take responsibility and support for the management of Bunaken MPA.

The steps taken by the BNPMAB have led to the achievement of the following:

- Zoning of Bunaken NP revised and supported by local community
- Installation of radio communication network in 22 villages
- Support provided to 30 residential area all over the park
- Strong partnership between the private sector and local community in annual beach cleaning program
- Significant decrease of illegal fishing activities
- Percentage of live coral cover increased by 11.02% (18 months after BNPMAB was established)



### Lessons Learned from the Turtle Islands Park, Malaysia<sup>3</sup>

#### • Enforcement and Transborder Patrol

The Turtle Islands Heritage Park Area is along the international border between Sabah, Malaysia, and the Turtle Islands of the Philippines. The Malaysian Government and the Philippine Government have formed the Border Patrol Coordinating Group. The border patrol generally provides a platform to address common concerns, with both sides showing interest in working together and improving diplomatic relationship. Not many issues, in the short term, were solved by consistent meeting and cooperation, but sea operation and other activities will bring significant impact in the long run albeit at high cost.

Sabah Parks, the management agency over the Turtles Islands of Malaysia, is involved in patrolling along the maritime, international border. The staff of Sabah Parks involved in the operation has been exposed to large marine-related enforcement issues and have gained experience in operational tactics.

An enforcement plan among Indonesia, Malaysia, and the Philippines is being discussed in order to combat poaching of endangered species and commercially-important fishery products. The continued interaction between Filipinos and Malaysians in joint border patrol, in meetings, and other activities eases the discussions of enforcement. It has also provided a groundswell of support for introducing Indonesians to joint enforcement operations and its benefits. The discussions are being facilitated by Conservation International and the enforcement plan is under development.

#### • Implementation of Sustainable Financing Option

A Business Plan for Sustainable Financing of the Turtle Islands Park was prepared in 2007. The plan includes an increase in conservation fees to generate more funds for operational costs. This business plan has yet to be approved by the Board of Trustees of Sabah Parks; however, consultations with the tourism industry are underway to ensure smooth implementation of the proposed conservation fee.

During the consultative meetings, the representatives of the private sector supported the Business Plan, agreeing to raising the conservation fees more than was proposed. They understood the importance of conserving the resource base of their industry – the beaches, seagrass beds, coral reefs, and the nesting marine turtles; since conserving marine environment means a sustainable business opportunity for the tourism industry.

The implementation of the revised conservation fee requires good planning and timing. Private sectors, such as travel agents and tour operators, require at least a period of one year before the new fee could be implemented. Giving time for the private sector to adjust to the new conservation fees will eliminate resistance and engender goodwill, as learned from the implementation of payment for ecosystem services in another site in Sabah.

<sup>3</sup> Prepared by Mr. Paul Basintal, Director, Sabah Parks, Malaysia

### Lessons Learned from the Turtle Islands Wildlife Sanctuary, Philippines<sup>4</sup>

The Turtle Islands Wildlife Sanctuary (TIWS) was established in 1999 as a protected area by a Presidential Proclamation No. 171. TIWS has been considered as a top ten priority site for the implementation of the National Integrated Protected Areas System (NIPAS) in the Philippines. At the initial implementation of NIPAS, the Initial Protected Area Plan (IPAP) for TIWS was crafted for the conservation of endangered marine turtles. However, since its crafting, the Protected Area (PA) staff have not had a chance to revisit and review the said Plan. There was also a high rate of turnover of PA staff, administrative shuffling on the ground, and unfamiliarity of the incumbent team of the actual IPAP – some have viewed the goals and objectives, as stated in the IPAP document, only for the first time.

The lessons learned from the Turtle Island Wildlife Sanctuary, Philippines are drawn from the implementation of the projects from 1982 to 2009. The **Pawikan Conservation Project** (1982 to present, government-funded project) was to “conserve and propagate the ecologically important marine turtles” and addresses the collection of turtle eggs that prevents hatchlings to be produced and in turn to increase regional populations. Commercial trawling operations in the surrounding waters have also increased in the last 10 years, causing by-catch of juvenile and adult turtles. The **Integrated Conservation and Development Project (ICDP) in the Turtle Islands** (1997-2003; World Wide Fund for Nature-Philippines) was to catalyze development and integrate the conservation agenda in the process. An alternative livelihood project was developed to reduce the dependence of the population on income from turtle-egg collection and sales. The **Sulu-Sulawesi Seascape Project – Sea Turtle Corridor Component** (2006-present, Conservation International) focused on improving management effectiveness of the TIWS by improving the capacity of the local government unit to enforce regulations and to develop a viable ecotourism project to address human well-being issues.

In summary, the ecological, administrative, and governance lessons from these projects are:

- Population trend of a particular nesting area can only be visualized if data gathered cover at least 10 years
- Integrated marine turtle conservation should cover all life stages/habitats of a particular genetic stock/population
- Marine turtle conservation activities should be participatory and involve collaborative efforts among the governmental agencies,<sup>5</sup> private organizations, and non-governmental organizations, as well as international organizations.
- Good governance for basic services (health, education, sanitation) and natural resources management (fisheries, habitat conservation) have to be improved to reduce threats (such as egg-collection, by-catch of marine turtles in trawl-fishing)
- The Local Government Unit is the most important element in the implementation of conservation activities
- Protected Area Management Board (PAMB) meetings should be conducted within the TIWS
- Key government agencies' presence should be felt in the area

<sup>4</sup> Prepared by Evangeline F. B. Miclat, Renato Cruz, and Annadel S. Cabanban from reports of Conservation International, WWF-Philippines and Pawikan Conservation Project of DENR

<sup>5</sup> Department of Environment and Natural Resources and other related governmental agencies; Local Government Units

Conservation of marine turtles in the TIWS cannot be implemented successfully without addressing the socio-economic needs of the community. This lesson is all the more important to heed in developing community-based resource management in the TIWS. If basic needs of communities are not satisfied, they cannot be partners in conservation and resource management. Basic community needs such as health, sanitation and education must be met first before communities can concern themselves with conservation. Social development is necessary and can be done only through the collaborative effort of various institutions. Livelihood activities/projects must be integral part of the implementation of conservation activities. Alternative livelihood is necessary to dissuade communities from deriving income from egg collection in the MPA. However, credit schemes were not effective, partly because there is no capacity on the island to implement a credit program.

The assessment of the management effectiveness of the TIWS in 2006 has showed that management to some extent, had been effective. Having area-based personnel was a factor in putting back in place a system of management which while imperfect is seen to be working for the area. However, to a large extent, management was ineffective because of the following:

- centralized marine turtle conservation
- goals and objectives were unclear and results were immeasurable (The objectives and goals were reviewed through a series of consultation, resulting in the approval of the General Management Plan of the TIWS in 2008).
- trust, acceptance, and support of the local people was absent as a result of the top-down implementation of the national policy
- poor communication and engagement of all stakeholders, factors that are very important especially because of the different (and occasionally conflicting) interests
- lack of personnel, of capacity, and lack of resources for management of the area.

These findings provided bases for a series of recommendations submitted to the national government to focus on an appropriate and acceptable policy for the Turtle Islands Wildlife Sanctuary.

The lessons learned and findings of the management review have provided the backdrop for improving the management of the TIWS as one of the MPAs in the marine turtle corridor that is being established in the Sulu-Sulawesi Seascape (Conservation International). To improve enforcement of fisheries regulations, the PAMB and stakeholders were informed of regulations and given training in enforcement. To improve livelihood, an ecotourism plan is being considered and enabling conditions are being explored.



## Lessons from Networking of Stakeholders of Coral Reefs in the Philippines

### Coral Reef Information Network of the Philippines (PhilReefs)

The Coral Reef Information Network of the Philippines (PhilReefs) is a group of marine biologists, researchers, divers, and other stakeholders of coral reefs in the country. PhilReefs was established for documenting information on the status of coral reefs for dissemination and for promoting better management. This networking of stakeholders has achieved the publication of the following:

- Atlas of Philippine Coral Reefs. Goodwill Trading Co., Inc. (Goodwill Bookstore), Quezon City, Philippines. xvi + 264p
- Coral Reef Information Network of the Philippines (PhilReefs). 2003. Philippine Coral Reefs Through Time: Workshop Proceedings. Second of the Atlas of the Philippine Coral Reefs Series. Coral Reef Information Network of the Philippines (PhilReefs) and the Marine Science Institute, University of the Philippines, Diliman, Quezon City, Philippines and the Marine Parks Center, Tokyo, Japan. 197 p.
- Coral Reef Information Network of the Philippines (PhilReefs). 2005. Coral Reefs Through Time 2004. Biennial report on the status of Philippine coral reefs. Coral Reef Information Network of the Philippines (PhilReefs) and the Marine Science Institute, University of the Philippines, Diliman, Quezon City, Philippines, 248 p.
- Coral Reef Information Network of the Philippines (PhilReefs). 2008. Coral Reefs Through Time 2008: Initiating the State of the Coasts Reports. Coral Reef Information Network of the Philippines (PhilReefs), MPA Support Network, Marine Environment and Resource Foundation, Inc., and the Marine Science Institute, University of the Philippines, Diliman, Quezon City, Philippines, 152 p

### Para el MAR – Promoting MPA Best Practices<sup>6</sup>

*Para el MAR* – For the Sea is the culmination of the assessment of the management effectiveness of MPAs in the Philippines. The MAR-MPA Awards and Recognition provides incentives for individuals and organizations for their contribution to marine conservation. This event and recent local networking initiatives have increased the number of MPAs two-fold, from 15% in 2000 to 30% in 2007.

*Para el MAR* is the collaboration of a wide group of people with a common goal – the conservation of coral reefs in the Philippines. The MPA Support Network (MSN) was established with 20 member-organizations to provide support initiatives in establishing marine protected areas and a network of MPAs by 2020 under the Philippine Marine Sanctuary Strategy (PhilMarSaSt). MSN supports local actions by helping improve management effectiveness. The United States Agency for International Development (USAID) provided funds for the Philippine Environmental Governance Project 2 and provided support for the Philippine Association of Marine Scientists to assess the management effectiveness of the MPAs in the country.

<sup>6</sup> Excerpted by Annadel S. Cabanban from: Philippine Association of Marine Science. 2008. Outstanding MPA Awards and Recognition: Promoting MPA Best Practices. MPA Support Network, Marine Environment and Resources Foundation, Inc. and the Marine Science Institute, University of the Philippines, Diliman, Quezon City, Philippines, 40 pp.

The assessment of Marine Protected Areas is based on a rating system, with a set of criteria, indicators, and means of verification. The criteria and the respective weight in percentage are:

- Management effectiveness – 35 %
  - » Local participation and Local Government Unit support
  - » Enforcement and compliance
  - » Sustainability of management
- Biophysical and ecological impacts – 32 %
  - » Enhanced productivity of associated organisms
  - » Improved quality of the habitat
- Social and economic benefits – 33 %
  - » Increased income
  - » Increased livelihood opportunities
  - » Equitable benefits

A perception survey is also conducted with the evaluation of an MPA. The survey is designed to find out whether the community knows about the existence of the MPA and whether there is support for it.

#### *The MPA Evaluation Process*

The MPA Evaluation Process consists of the following steps:

1. screening and short-listing of MPAs throughout the country;
2. on-site evaluation of nine short-listed MPAs, using the rating system;
3. perception survey of MPAs, conducted by evaluators;
4. evaluation of presentation by Management Committees;
5. synthesis of findings to select the country's best-managed MPA

#### *Insights from the MPA Evaluation Process*

Monitoring is an important and indispensable activity in adaptive management of MPAs but less than 30% of MPAs throughout the country has this activity in their management plan. As such, the biological and social and economic impacts of MPAs cannot be evaluated. It is recommended that monitoring of the indicators of these impacts be conducted by the community with the assistance of academic, governmental, and other technically capable institutions. Furthermore, the activity should be viewed as a monitoring exercise rather than training of communities.

#### *Lessons Learned*

The good practices and lessons learned from the *Para del Mar* Event can be useful in three areas. Lessons of broad applications are highlighted under each area.

- I. Recognition awards: enhancing incentives, institutionalizing
  - It is important to enhance private-public partnerships in the incentive system as part of the MPA advocacy to foster corporate social responsibility.
  - The rating system developed by the Coastal Conservation Education Foundation (CCEF) is a good initial basis but needs to be refined (e.g., functionality, weighing and governance criteria), strengthened, institutionalized, and sustained.
  - Refining the technical evaluation process will promote broader constituency and help institutionalize the adaptive management process.

## 2. Sustaining efforts to meet objectives, institutionalizing systems, standards, and processes

- Management Plan are formulated and adjusted along the concept of adaptive management
- Multi-sectoral participation and institutionalization (financing and inter-hierarchical complementation)
- The wellspring of support from the various sectors in the Para el MAR process provides opportunities for stakeholders to act consistently and achieve benefits
- National enforcement agencies can help improve local and provincial enforcement effectiveness in conjunction with communication and advocacy efforts.
- Sustainable management effort is likely from the synergistic effect between management of an MPA at local level and higher level networking, reducing transaction costs

## 3. Strategic imperatives

It is imperative for MPA management efforts to address the following:

- Coordination of action plans and strategies with other initiatives, e.g., International Year of the Reef, National Biodiversity Strategy, Climate Change
- Pursuing the operationalization of national policies and strategies
- Replication of best practices in other areas and scaling up through establishment of networks of MPAs, e.g., bay-wide management or alliances

## 7. Sub-Committee of SSME and in the Coral Triangle Initiative

The Sub-Committee on Marine Protected Areas and Networks has an Action Plan that is consistent with Goal # 3 of the Regional Plan of Action of the Coral Triangle Initiative (marine protected areas established and effectively managed). The implementation of activities in this Action Plan contributes to meeting the Target of a region-wide Coral Triangle MPA System (CTMPAs) in place and fully functional. The activities under each Strategy provide detailed direction towards setting in place “comprehensive, ecologically representative and well-managed” MPAs in the Sulu-Sulawesi Marine Ecoregion – the apex of the Coral Triangle region. The Sub-Committee abides by the Framework for Establishing Networks of Marine Protected Areas (2004; see Annex 2) for conservation of species, fisheries enhancement, and for integrated coastal and marine ecosystems. The Framework was very relevant in preparing the Action Plan and Design of a Network of Sea Turtle MPAs in the Sulu-Sulawesi Seascape (Ref: Vol. I of Action Plans for the Sulu-Sulawesi Marine Ecoregion).



## ANNEXES

### Annex I. Terms of Reference of the Sub-Committee of Marine Protected Areas and Networks

#### Terms of Reference of the Sub-Committee on Marine Protected Areas (MPAs) and Networks

##### 1. Official Designation

The members of the Tri-National Sub-Committee on Marine Protected Areas and Networks hereinafter referred to as the Sub-Committee on MPAs and Networks shall be composed of officials and experts from the national government agencies, non-government organizations and academic institutions, officially endorsed by their respective Heads of Offices and designated by the national authorities of the Republic of Indonesia, Malaysia and the Republic of the Philippines.

##### 2. Mandate

The mandate of the Sub-Committee emanates from the Agreement during the first meeting of the Tri-National Committee on SSME on 01 March 2006 in Balikpapan, East Kalimantan, Indonesia, to address the technical issues on the identification, establishment and management of marine protected areas, including caves and wetlands within the SSME, and provide management and technical advices for the recommendation and development of policies.

##### 3. Duties and Responsibilities

The Sub-Committee on MPAs and Networks shall provide technical advices and recommendations to the Governments of Indonesia, Malaysia and Philippines through the Tri-National Committee for the formulation of policies and guidelines, as well as for joint collaborative arrangements and parallel efforts among the three countries on the establishment and management of MPAs and Networks including caves and wetlands. It shall likewise provide recommendations for the review and update of the Ecoregion Conservation Plan (ECP) whenever necessary. The functions of the Sub-Committee on MPAs and Networks are, but not limited to, the following:

- 3.1 Review of existing policies, plans, programs and its implications on the management of existing MPAs and Networks and the establishment of new MPAs, *inter alia*, turtle reserves and fish sanctuaries, within the SSME;
- 3.2 Promote reciprocal learning and capacity-building initiatives among MPAs to gain insights, learn lessons, share best practices including sustainable financing and cost-recovery mechanisms for the improvement of MPA management through, among others, the development of a framework and mechanism for data access and sharing among the member countries;
- 3.3 Coordination of research and studies on MPAs, caves and wetlands to enhance understanding of their importance as well as the factors affecting them as basis for technical advice and recommendations for management and policy development;
- 3.4 Provide recommendations for joint collaborative arrangements and parallel programs to be undertaken by the member countries whether bilaterally or trilaterally on the establishment and management of MPAs and Networks;

#### 4. Sub Committee Composition and Tenure

##### 4.1 Chairmanship

The Chairperson of the Sub-Committee on MPAs and Networks shall be elected during the first Sub-Committee meeting with tenure of 2 years, after which subsequent Chairpersons would be designated on rotation basis, following the alphabetical order of Indonesia, Malaysia, and Philippines.

The Chairperson shall oversee all aspects of the work and communicate progress of the Sub-Committee and shall report to the Tri-National Committee on SSME.

##### 4.2 Membership

The Sub-Committee on MPAs and Networks shall be composed of officials and experts from the government agencies, non-government organizations and academic institutions, from each of the member countries officially designated by the respective national authorities. Each country may nominate up to a maximum of five persons as members.

The Chairperson of the Sub-Committee, with consent of the members, may invite other experts or representatives from other relevant sectors as observers or advisers, when necessary.

#### 5. Meetings

A regular Sub-Committee meeting shall be convened once a year or more as may be necessary prior to the regular meeting of the Tri-National Committee. The first regular annual meeting shall be organized and held in the Philippines, the focal point country as designated in the First Tri-National Committee Meeting, and the succeeding meetings shall be on rotation basis, following the alphabetical order: Indonesia, Malaysia, Philippines.

Special meetings may, however be called by the Chairperson when necessary, with prior consultation with the Sub Committee member countries.

In each meeting of the Sub-Committee, observers may be invited from within and outside the member countries, the number of which shall be decided by each country and communicated to the Sub-Committee Chairperson prior to the meeting.



#### 6. Secretariat

The Chairperson may create his/her own Secretariat or seek the assistance of the Tri-National Committee, when necessary. The Secretariat shall facilitate communication and coordinate activities within each country and among member countries through the Secretariat of the Tri-National Committee using electronic and other cost-effective means of communication. The host country may provide secretariat support to the elected Chairperson.

#### 7. Financial Arrangements

To ensure the continuity of the activities of the Sub-Committee on MPAs and Networks, the member countries may raise their own funds, mobilize additional resources from relevant organizations and/or through funding of the Tri-National Committee.

Adopted on this Fourteenth day of April 2007 at the Protected Areas and Wildlife Bureau of the Department of Environment and Natural Resources, Diliman Quezon City, Philippines.

AGUS DERMAWAN  
Head of Delegation  
Republic of Indonesia

RAYNER STUEL GALID  
Head of Delegation  
Malaysia

THERESA MUNDITA S. LIM  
Head of Delegation  
Philippines

[Annex 2. Excerpt from the Framework for a Network of Marine Protected Areas in the Sulu-Sulawesi Marine Ecoregion, 2004](#)

#### Intermediate action priorities (one to five years)

The intermediate action priorities are:

*MPA network design, selection of sites, and community actions*

- » Select component MPAs based on the criteria
- » Consider ecological criteria
- » Identify decision rules to apply criteria
- » Conduct research and assessments for suitability
- » Develop minimum standards and guidelines for an MPA Network
- » Design boundaries for the MPA Network, individual MPAs, and zones
- » Design an administrative framework to include a management network
- » Community actions
- » Disseminate information to generate support, awareness, and participate (to include research)
- » Intensify capacity-building
- » Develop livelihood projects

### Completion of planning and preparation for effective management

- » Form an ecoregional coordinating body from previously identified stakeholders
- » Secure funding for effective management; ecoregional coordinating body will be responsible for seeking international funding to complement national budgets
- » Develop SSME MPA Network goals, and a monitoring and evaluation framework to evaluate the Network's functionality (both in ecological and administrative terms)

### Interim activities and management

Note: The Framework also includes long-term action priorities – 3-10 years, i.e., 2007-2013 – focused on addressing issues related to implementing network of MPAs geared towards strengthening management effectiveness.

### Annex 3. Achievements of the Countries in Implementing the Action Plan of the Sub-Committee on Marine Protected Areas and Networks

#### Indonesia

##### Achievements:

New policies and regulations are instituted for marine conservation such as:

- Ministerial Regulation No. 2/2009 on Procedure for Establishment of Aquatic Conservation Area
- Ministerial Regulation No. 18/2008 on Conservation Area in the Coastal Zone and Small Islands Area
- Ministerial Ordinance No. 38/2004 on General Guidelines for Management of Coral Reef and Its Adjacent Ecosystems
- Guidelines on:
  - » Identification of Aquatic Conservation Area
  - » Instituting Aquatic Conservation Area
  - » Developing Management Plan for Aquatic Conservation Area

##### Establishment of Marine Protected Area

- Berau District Marine Conservation Area, 2005 (year) – 1.3 million hectares – the largest in Southeast Asia



#### Malaysia

##### Achievements:

Draft Management Plan for the proposed Tun Mustapha Park, Kudat Priority Conservation Area

##### Promoted reciprocal learning in:

- Marine Protected Area Planning and Management, 22-26 June 2009, Sabah Parks in collaboration with The Nature Conservancy and WWF-Malaysia
- Enhancement of Sea Turtle Protection and Management in Sabah, 24-26 March 2008, Sabah Parks in collaboration with Conservation International
- Cross-site learning Workshop: Capturing Important Messages from the Field on Marine Protected Areas in the Sulu-Sulawesi Marine Ecoregion, WWF-Malaysia and WWF-United States

##### On-going enforcement and trans-border patrol:

- Joint Operation between Philippines and Malaysia
- Joint Customs Patrol between Indonesia and Malaysia

Business Plan for Sustainable Financing of the Turtle Islands Park, Malaysia, 4 March 2009, WWF-Malaysia and funded by Conservation International



## **Philippines**

### Achievements:

Passing of Executive Order 578 on the Creation of the Multi-sectoral Task Force for the Verde Island Passage

Revision of the National Integrated Protected Area Systems, Republic Act 7586

Signing of the Executive Order 797 on the Adoption of the National Plan of Action in the Coral Triangle Initiative

### Establishment of new Marine Protected Areas:

- Apo Reef National Park
- Tubbataha Reef National Park
- Great and Little Santa Cruz Island
- Murcielagos Islands

Supporting establishment of new MPAs and Networks in the context of ecosystem-based management in the following activities:

- National Summit of Protected Area Management Boards
- Second Conference of Coastal Communities
- Scaling up of MPAs to Seascapes
- MPA Gap Analysis
- Action Planning Workshop for Law Enforcement
- Buhay Dagat (Sea Life) Program of the PCSD (Palawan Council for Sustainable Development)
- Pilot Planning for Climate Change
- Regional Exchange Program in Support of Coral Triangle Initiative

### Increasing understanding of MPAs from:

- Biodiversity Monitoring System
- Connectivity Study in the Sulu-Sulawesi Seascape Program
- On-going projects: Integrated Coastal Resource Management; EcoGov Project Phase 2; FISH; Sustainable Management of Coastal Resources; PAMB organizational strengthening

