



CORAL TRIANGLE INITIATIVE

ON CORAL REEFS, FISHERIES AND FOOD SECURITY

PHILIPPINES

Benchmarking the Management Effectiveness of Nationally-Managed Marine Protected Areas in the Philippines and Policy Recommendations

Final Report



September 2013

This publication was prepared by Conservation International (CI) for the Philippines' National CTI Coordination Committee with funding from the United States Agency for International Development's Coral Triangle Support Partnership (CTSP).



Benchmarking the Management Effectiveness of Nationally-Managed Marine Protected Areas in the Philippines with Policy Recommendations

Final Report

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Message



The Philippines is an archipelagic country that lies at the apex of the Coral Triangle. It harbours a vast array of biologically diverse marine environment and resources which are the primary source of livelihood of millions of Filipinos living along the coasts. However, the country also hosts various natural and anthropogenic threats that cause serious damage to our once healthy and rich ecosystems. It is therefore, imperative to develop a creative, adaptive, and effective management of these resources.

The establishment of marine protected areas (MPAs) has been accepted as an effective strategy on coastal and marine resource management. The main objectives for the establishment of these MPAs include, among others: protection and rehabilitation of coastal and marine resources and habitats; replenish fish resources; and promote ecotourism. In 2011, a total of 1,208 MPAs were recorded in the country and many others are being proposed (SCTR 2012). Some of these MPAs have been declared under Republic Act 7586 or the National Protected Areas System Act (NIPAS Act of 1992), while others were established through other national laws and municipal ordinances.

The Department of Environment and Natural Resources through its Protected Area and Wildlife Bureau-Coastal and Marine Management Office has taken active role in addressing concerns to improve the effectiveness of MPAs under the NIPAS through the Sustainable Coral Reef Ecosystems Management Program (SCREMP). This program includes strategic, sustainable, and ecosystem-based approach in protecting and rehabilitating our coral reefs.

Effective management of these MPAs will improve our marine ecological systems that support about 62% of Filipinos that highly depend on these resources for their everyday living, hence, we need to assess the performance of these MPAs. Monitoring the management effectiveness of these MPAs was initiated through collaboration among various sectors wherein monitoring tools were developed, applied, assessed and refined. The MPA Support Network (MSN), a group composed of national government agencies, academic and research institutions, non-government organizations, etc. developed the Management Effectiveness Assessment Tool (MEAT) as a way to assess the management performance of MPAs.

This benchmarking activity conducted by the Coral Triangle Support Partnership (CTSP) is an important input to the implementation of various activities for the management of MPAS, including those under NIPAS. We hope that more partners will join with us in alleviating the current status of our MPAs and indeed, achieve our objective of biodiversity conservation for sustainable use of our coastal and marine resources.

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

THERESA MUNDITA S. LIM

Director

Department of Environment and Natural Resources

Protected Area and Wildlife Bureau

Executive Summary

For many years, establishing marine protected areas (MPAs) has been one of the most widely used ways of promoting sustainable management of coastal resources and marine biodiversity conservation in the Philippines. Many MPAs have been shown to achieve some measure of success, providing various benefits in areas like fisheries, tourism, species protection and climate change resilience. MPAs help promote community participation in resource management (for local MPAs established under the Fisheries Code) and allow the conservation of relatively large areas of national importance (for national MPAs established under the National Integrated Protected Area System or NIPAS).

However, to help sustain and promote these benefits, there is a need to understand the state of the MPAs in the Philippines and to determine interventions that could be recommended to further enhance their effective management, hence, this benchmarking activity is conducted using the MPA Management Effectiveness Assessment Tool (MEAT) and the Management Effectiveness Tracking Tool (METT).

Nine (9) of out the 33 national MPAS under Philippine NIPAS were assessed using MEAT. These nine (9) MPAs cover 32% of the total 2,234,242 hectares of NIPAS MPAs. The results of this assessment show that three (3) out of nine (9) MPAs were effectively managed with two (2) achieving Level 2 and one reaching Level 3. Three (3) MPAs were at Level 1 while the rest have not reached the establishment level. At least 48% or 340,449 hectares out of 709,897 hectares of MPAs are effectively managed areas.

The seven (7) MPAs assessed using METT have reached a highest percentage score of 50% and an average of 42%. From the results of the assessment, several recommendations were drawn on areas of improving the capability of the management body, strengthening the law enforcement system of the MPAs, securing financing and other actions related to the nine effectiveness criteria. These recommendations include the following:

- Build the capability of the protected area management board and protected area (PA) workers through institutionalized training program
- Increase the number of PA workers through partnership with other national government agencies (NGAs) as well as local governments
- Complete the PA establishment process of all 33 MPAs under NIPAS
- Formulate a strategy for involving local and national governments in MPA management
- Address perennial fundraising and financing problems through advocating for annual allocations for individual MPAs to be included in the General Appropriations Act
- Strengthen the monitoring and evaluation (M&E) as well as learning system of MPAs

Introduction

This report discusses the results of the assessment of nine (9) marine protected areas (MPAs) in the Philippines which have been declared as protected areas under the National Integrated Protected Area System Act (NIPAS Act) of 1992 otherwise known as Republic Act No. 7586. It provides a description of the effectiveness of the management and operations of these pre-identified MPAs.

The assessment was an initiative that stems from the imperative to understand the state of the MPAs in the Philippines and to determine interventions that could be recommended to further enhance their effective management. In so doing, this activity also addresses the need to measure how much of the marine habitats are effectively protected and managed to contribute to the commitment of the Philippine Government to the Coral Triangle Initiative (CTI) stipulated in its National Plan of Action (NPOA) (Goal Number 3: Marine Protected Areas Established and Effectively Managed). The results of this assessment shall be used as a benchmark in monitoring the progress of the achievement of this goal.

With assistance from the United States Agency for International Development (USAID), the Coral Triangle Support Partnership (CTSP) implemented by the Conservation International Philippines (CIP), this assessment is undertaken.

The MPAs Assessed

There are two main categories of MPAs in the Philippines: (1) the locally-managed MPAs which are declared by the local governments through a municipal or city ordinance mandated under the Philippine Fisheries Code (RA 8550) and the Local Government Code (RA 7160); and (2) the nationally-managed MPAs which are initial components of the National Integrated Protected Area System (NIPAS) under RA 7586, declared and proclaimed through presidential proclamation and/or through congressional act.

The number of locally-managed MPAs totalled 1,620 in the Philippines (Weeks, et. al., 2009) while the nationally-managed MPAs totalled 33 spread sparsely in the five (5) biogeographic regions of the country.

The aggregate area for these nationally-managed MPAs is 2,234,242 hectares, the largest is the Tañon Strait Protected Seascape with a total area of 518,221 hectares. This MPA straddles along coastal municipalities of the three provinces of Cebu, Negros Oriental and Occidental belonging to two different regions (Region 6 and 7). On the other hand the smallest is the Murcielagos Island Protected Landscape and Seascape located in the municipality of Labason in the province of Zamboanga del Norte in Region 9 with an area of 100 hectares. Most of these MPAs have land component and only five (5) MPAs are purely coastal and marine areas namely, Masinloc and Oyon Bay Marine Reserve, Tubbataha Reef Natural Park, Tañon Strait Protected Seascape, Panglao Island Protected Seascape and Saranggani Bay Protected Seascape. The Apo Reef Natural Park and Albuquerque-Loay-Loboc Protected Landscape and Seascape have minimal land component.

Table 1: Marine Protected Areas under NIPAS

No.	Region	Name of Marine Protected Area	Location (Province)	Area Covered (in hectares)	Issuance	
					Proclamation No.	Date
1	1	Agoo-Damortis Protected Landscape and Seascape	La Union	10,513	Proc. 277	April 23, 2000
2	2	Peñablanca Protected Landscape and Seascape	Cagayan	118,781	Proc. 484	October 6, 2003
3	2	Batanes Protected Landscape and Seascape	Batanes	213,578	RA 8991	January 5, 2001
4	2	Palau Island Protected Landscape and Seascape	Cagayan	7,415	Proc. 447	August 28, 1994
5	3	Masinloc and Oyon Bays Marine Reserve	Zambales	7,568	Proc. 231	August 18, 1993
6	4B	Apo Reef Natural Park	Occidental Mindoro	27,469	Proc. 868	September 6, 1996
7	4B	El Nido Managed Resource Protected Area	Palawan	89,134	Proc. 32	October 8, 1998
8	4B	Malampaya Sound Protected Landscape and Seascape	Palawan	200,115	Proc. 342	July 12, 2000
9	4B	Tubbataha Reefs Natural Park	Palawan	97,030	RA 10067	April 6, 2010
10	5	Malabungot Protected Landscape and Seascape	Camarines Sur	120	Proc. 288	April 23, 2000
11	5	Bongsanglay Natural Park	Masbate	244	Proc. 319	May 31, 2000
12	6	Sagay Protected Landscape/Seascape	Negros Occidental	32,000	RA 9106	April 14, 2001
13	7	Talibon Group of Islands Protected Landscape/Seascape	Bohol	6,456	Proc. 131	July 5, 1999
14	7	Alburquerque-Loay-Loboc Protected Landscape and Seascape	Bohol	1,164	Proc. 293	April 23, 2000
15	7	Apo Island Protected Landscape/Seascape	Negros Oriental	691	Proc. 438	August 9, 1994
16	7	Tañon Strait Protected Seascape	Cebu, Negros Oriental, Negros Occidental	518,221	Proc. 1234	May 27, 1998
17	7	Panglao Island Protected Seascape	Bohol	385	Proc. 426	July 22, 2003
18	8	BiriLarosa Protected Landscape/Seascape	Northern Samar	33,492	Proc. 291	April 23, 2000
19	8	Guiuan Protected Landscape/Seascape	Eastern Samar	60,448	Proc. 469	September 26, 1994
20	8	Cuatro Islas Protected Landscape/Seascape	Leyte	12,500	Proc. 270	April 23, 2000
21	9	Aliguay Island Protected Landscape/Seascape	Zamboanga del Norte	1,187	Proc. 106	May 6, 1999
22	9	Dumanquilas Protected Landscape/Seascape	Zamboanga del Sur	25,948	Proc. 158	August 10, 1999
23	ARMM	Turtle Islands Wildlife Sanctuary	Tawi-Tawi	242,967	Proc. 171	August 26, 1999
24	9	Great & Little Sta. Cruz Is. Protected Landscape/Seascape	Zamboanga del Sur	1,877	Proc. 271	April 23, 2000
25	9	Selinog Island Protected Landscape and Seascape	Zamboanga del Norte	960	Proc. 276	April 23, 2000
26	9	Murcielagos Island Protected Landscape and Seascape	Zamboanga del Norte	100	Proc. 281	April 23, 2000
27	10	Baliangao Protected Landscape/Seascape	Misamis Occidental	295	Proc. 418	November 22, 2000
28	10	Initao-Libertad Protected Landscape and Seascape	Misamis Oriental	1,300	Proc. 260	September 16, 2002
29	11	Baganga Protected Landscape and Seascape	Davao Oriental	114	Proc. 269	April 23, 2000
30	11	Mabini Protected Landscape and Seascape	Compostela Valley	6,106	Proc. 316	May 31, 2000
31	11	Pujada Bay Protected Landscape/Seascape	Davao Oriental	21,200	Proc. 431	July 31, 1994
32	12	Sarangani Bay Protected Seascape	Sarangani and General Santos City	215,950	Proc. 756	March 5, 1996
33	13	Siargao Protected Landscape/Seascape	Surigao del Norte	278,914	Proc. 902	October 10, 1996
TOTAL				2,234,242		

This assessment was conducted to the nine (9) pre-selected nationally-managed MPAs out of the 33 under NIPAS all over the Philippines. Covering significantly large marine areas or 32% of the total marine area under NIPAS, these are as follows:

1) Masinloc and Oyon Bays Marine Reserve (MOBMR)

The MOBMR is one of the first NIPAS sites declared by President Fidel Ramos through PP 231 in August 19, 1993. It has a total of 7,568 hectares of coastal area and islands within the bays in Masinloc, Zambales.

2) Apo Reef Natural Park (ARNP)

The ARNP was proclaimed as a protected area under the category of Natural Park by virtue of PP 868 issued in September 6, 1996. In May 2006, the Protected Areas and Wildlife Bureau (PAWB) of the Department of Environment and Natural Resources (DENR) submitted the reef for consideration as a World Heritage Site of the United Nations Educational, Scientific and Cultural Organization (UNESCO). Its total area of 15,792 hectares has increased to 27,469 hectares to include the buffer zones as no-take zones.

3) Palau Island Protected Landscape and Seascape (PIPLS)

The PIPLS covers a total area of 7,415 hectares where about 4,415 hectares comprises the marine area. It is located in Brgy. San Vicente, Sta. Ana, Cagayan. Under PP 447, PIPLS became part of the NIPAS on August 16, 1994.

4) Alburquerque-Loay-Loboc Protected Landscape and Seascape (ALLPLS)

The ALLPLS became an initial component of NIPAS Act being the Mangrove Swamp Marine Reserve proclaimed under PP 2152. It has a total area of about 1,164 hectares which includes both sea and land. The land part is the area where the mangrove swamp and the shoreline are located. The ALLPLS spans along the coastal areas of the municipalities of Alburquerque, Loay and Loboc in the northeastern part of the province of Bohol.

5) Tubbataha Reefs Natural Park (TRNP)

The TRNP is one of the oldest marine protected areas in the Philippines; it was established four years before the enactment of the NIPAS Act of 1992. It has expanded its core zone from 33,200 hectares to 96,828 hectares based on PP 1126 in 2006. It declared protected area by Congress through RA 10067 dated April 6, 2010 which increased the area to 97,030 hectares.

6) El Nido Managed Resource Protected Area (ENMRPA)

The ENMRPA consists of 54,192.6 hectares of marine area and 36,128.4 hectares of land or a total of 89,134 hectares. It became part of NIPAS through PP32 dated October 8, 1998.

7) Turtle Islands Wildlife Sanctuary (TIWS)

The TIWS was established on August 26, 1999 through PP 171 to protect the 242,967-hectare nesting area for green turtles (*Cheloniemydas*) in the six islands of the municipality of Turtle Islands in the province of Tawi-tawi. It is part of the Turtle Islands Heritage Protected Area (TIHPA) established in 1995 through a memorandum of agreement (MOA) between the Republic of the Philippines and

Government of Malaysia. Located between Malaysia and the Philippines, the TIHPA is the world's first transborder marine protected area for sea turtle.

8) Sarangani Bay Protected Seascape (SBPS)

The SBPS is one of the largest marine protected areas in the Philippines covering 215,950 hectares proclaimed by virtue of PP 756 on March 5, 1996. It is found in the southern tip of Mindanao in the province of Sarangani covering Maitum, Kiamba, Maasim, Sarangani municipalities and one city, General Santos City.

9) Pujada Bay Protected Landscape and Seascape (PBPLS)

The PBPLS has a total area of 21,200 hectares and was declared protected area under PP 431 dated July 31, 1994. It is located at the southeastern part of Mindanao within the territorial jurisdiction of the Municipality of Mati, Province of Davao Oriental.

Assessment Tools

These benchmarking activities utilized two MPA management effectiveness tools: (1) the Management Effectiveness Assessment Tool (MEAT) and (2) the Management Effectiveness Tracking Tool (METT).

All of the nine (9) MPAs assessed under this benchmarking study used MEAT while six (6) MPAs namely, ALLPLS, SBPS, and PBPLS were assessed using METT.

MPA MEAT

MEAT was developed by the Marine Protected Area Support Network (MSN) with support from USAID-CTSP and other entities. It was implemented by CIP to measure the management effectiveness of MPAs. From the MPA Report Guide used by Coastal Conservation Education Foundation (CCEF) and enhanced by the Environmental Governance Project Phase 2 of USAID, the MPA MEAT became the harmonized version of these preceding tools.

It is used to understand the present status of the MPAs based on the parameters of management effectiveness. In the Philippines, the effective management of MPAs can be gauged through at least nine (9) major criteria:

- 1) community participation in the establishment process
- 2) presence of a management plan drafted, adopted, implemented, reviewed, updated, and incorporated in broader development plans
- 3) presence of a management body with identified members whose roles are clarified and who are capable of supervising management activities, accessing technical assistance when necessary, and outsourcing funds
- 4) presence of a legal instrument that is sufficient to enforce the MPA, such as a municipal ordinance (MO) if it is locally-managed, and a presidential proclamation or a republic act if it is nationally-managed

5) availability of sufficient funds for the operations of the MPA through annual budget allocations from the barangay, municipal, or provincial LGUs, sourced out from assisting NGOs (local and international), revenues from user fees, entrance fees, and other sustainable financing schemes with the end view of maintaining a self-sufficient MPA

6) continuous awareness campaigns to disseminate information about the MPA—its boundaries, policies, and management body—with the goal of sustaining community support and compliance

7) presence of an enforcement system with a composite, capacitated team conducting regular collaborative monitoring, control, and surveillance as evidenced by records of violations, cases filed, violators penalized, and sanctions enforced

8) presence of a monitoring and evaluation system with baseline assessments, annual participatory biophysical monitoring, socioeconomic monitoring, and impact assessments

9) development of the site through the construction of various support facilities and infrastructure, and the formulation of expansion strategies or resource enhancement programs

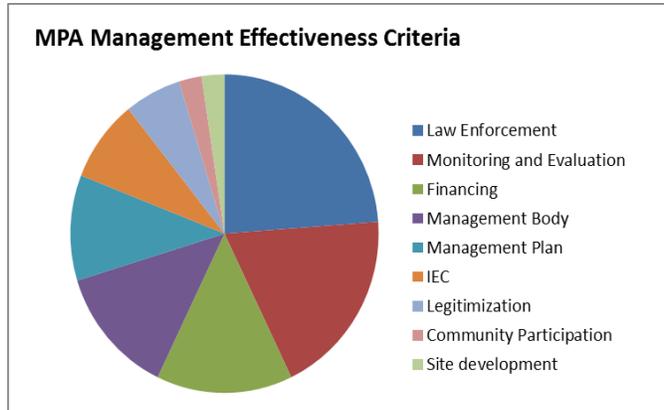


Figure 1: Maximum points per management effectiveness criteria

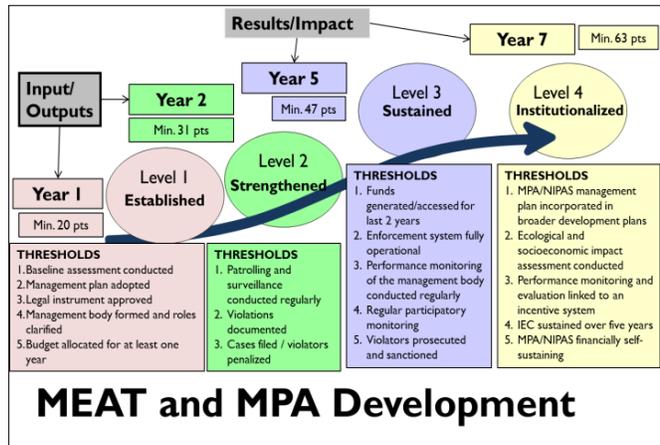


Figure 2: Thresholds for each of the management effectiveness level

MEAT features parameters called thresholds that are deemed important in every level of management effectiveness. The thresholds define the level of management effectiveness. For example, level 1 or established MPAs should have baseline assessment, management plan adopted, legal instrument approved, management body formed and budget allocations for at least one year. The allowable score for threshold questions is either 3 or 0. Scoring in the MEAT form is through an assessment of presence or absence of the required criteria, if the criteria are present, then the score is 3, if absent or partially present, the score is 0. For example, “Baseline assessment conducted”, if there was a baseline assessment conducted and there are documents that could be provided as evidence to the claim, then the MPA will have a score of 3. Although the form (Annex A) was designed as a self-assessment tool, it is also requires evidence called “Means of Verification”. This would also encouraged the MPAs to have an improved record keeping system even at the barangay or municipal level.

To qualify in each level of management effectiveness, all of the threshold questions and at least 75% of the total allowable score in each level should be satisfied. An effectively managed MPA is the MPA that satisfies the requirements of Level 2 and above.

Table 2: MPA MEAT Rating Reference

MPA Level (based on minimum indicators)	Number of Criteria	Achievable Points	Management Status <i>The scores are indicative thresholds that accumulate through time.</i>		The levels below are indicative names used to establish levels of performance
			Minimum Score including Thresholds	Cumulative/ Overall Score	
1 – Established [1 Year +]	17	27	20/27	0-24 – Fair	MPA is Established
2 – Strengthened [2 Years +]	9	15	11/15 Cumulative points=31	25-39 – Good	MPA Management is Effectively Strengthened
3 – Sustained [5 Years +]	11	21	16/ 21 Cumulative points = 47	40-61 – Very Good	MPA Management is Effectively Sustained
4 – Institutionalised [7 Years +]	11	21	16/ 21 Cumulative points=63	62-81 Excellent	MPA Management is Effectively Institutionalized
TOTAL	48	84	63		

METT

The PAWB adopted the METT—prepared by the World Bank and WWF for their Global Environment Facility (GEF)-funded projects on protected areas—as the primary instrument for measuring the management effectiveness of protected areas in the Philippines. METT is a self-assessment tool designed to measure how effective a protected area is being managed. It is a self-reflection of the protected area management boards (PAMBs) on how well they are doing with their protected areas.

Through a memorandum circular from the director of PAWB, the instructions on the administration of METT is given to the regional offices of DENR. This guideline becomes the basis for the process of assessment done in this study. The assessment process requires a quorum of the PAMB en banc. After the brief orientation on the tool, each of the PAMB members present during the en banc meeting will be provided with METT individual assessment form (Annex B) where he/she will write his/her own scores. The individual responses of the PAMB members were encoded in a scoresheet developed under this study to facilitate the computation of the percentage score. There are two parts of the form, the first part evaluates the threats faced by the MPA and the second part is the assessment of the effectiveness of the management of the MPA.

This benchmarking activity uses two scoring computations:

- (1) the computation provided by PAWB, as follows:

$$\text{Percentage Score} = \left[\frac{\text{Total Actual Score}}{\text{Total Maximum Score}} \times 100 \right] + \left[\frac{\text{Total Actual Score on Additional Points}}{\text{Total Maximum Score on Additional Points}} \times 100 \right]$$

(2) the simple scoring, as follows:

$$\text{Percentage Score} = \left[\frac{\text{Total Actual Score} + \text{Total Actual Score on Additional Points}}{\text{Total Maximum Score} + \text{Total Maximum Score on Additional Points}} \right] \times 100$$

The first will give the maximum percentage score of 200% while the second will give a percentage score of not more than 100%. For the presentation of results and discussion, this report used the simple scoring method. However, the results based on PAWB's computation is also discussed.

Results and Discussion

The results of the benchmarking show that only three (3) or 33% of the MPAs assessed are effectively managed. These are the ENMRPA, ARNP and TRNP. The six (6) MPAs or 67% of them need to improve their management actions and interventions and strengthen their management body (PAMBs) to perform effectively. Further discussion on the results of the assessment is provided in the succeeding sections.

Table 3: MPA Benchmarks

Management Effectiveness	Number of MPAs		Total Area		Effectively Managed
	Number	%	(in hectares)	%	Area (in hectares)
Level 0 – MPA has not satisfied the requirements of Level I	3	33%	16,147.00	2%	
Level 1 - MPA is established	3	33%	353,301	50%	
Level 2 - MPA is strengthened	2	22%	243,419	34%	243,419
Level 3 - MPA is effectively sustained	1	11%	97,030	14%	97,030
Level 4 - MPA is effectively institutionalized	0				
Total	9	100%	709,897	100%	340,449

The benchmarking activity has determined that at least 48% or 340,449 hectares out of 709,897 hectares of MPAs are effectively managed areas.

Difference in result of MEAT and METT

Most of the results of MEAT have higher scores than METT. Four (4) out of the seven (7) MPAs assessed with both tools showed higher achievements in MEAT than in METT. Only ALLPLS has almost the same scores in MEAT (31%) and METT (33%). The highest difference in percentage score is in ARNP with a difference of 41 having MEAT score of 88% and only 47% in METT.

Table 4: Results of the Assessment

Name of MPA	MEAT Result		METT Result
	Level	Percentage Accomplishment	
MOBMR	Level 0	20%	37%
PIPLS	Level 0	31%	50%
ALLPLS	Level 0	31%	33%
PBPLS	Level 1	79%	48%
TIWS	Level 1	57%	No data yet
ENMRPA	Level 1	57%	50%
SBPS	Level 2	64%	27%
ARNP	Level 2	88%	47%
TRNP	Level 3	96%	No data yet

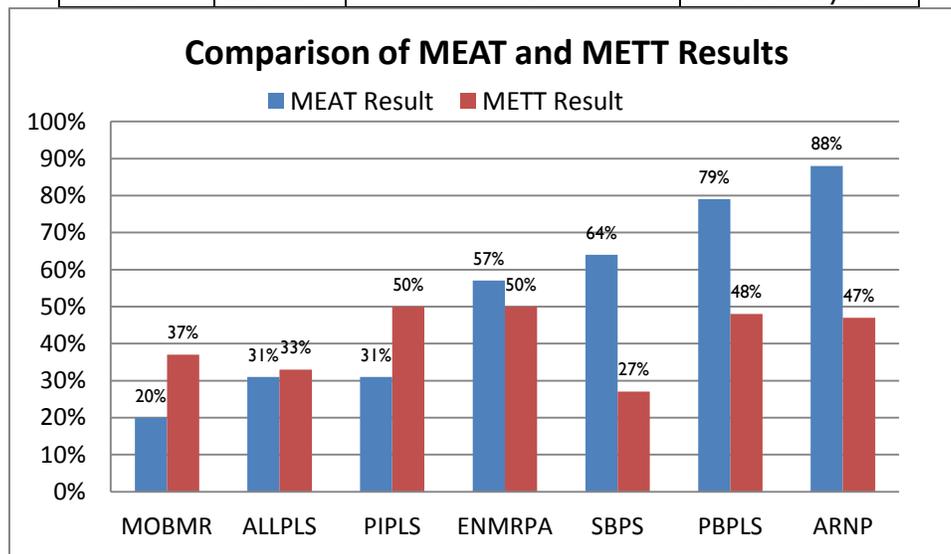


Figure 3: Difference in the percentage scores of the MPAs assessed using MEAT and METT

The disparities between MEAT and METT results can be attributed to at least two factors. First is the scoring method. MEAT uses presence-absence method which means a score may only be either 3 or 0 for threshold questions, or 1 or 0 for non-threshold questions. On the other hand, METT uses gradients

scoring, which means that the score may vary from 1, 2, or 3 in each question. This is why many of the MPAs assessed have higher scores in METT than in MEAT.

Second is the data-gathering protocol. MEAT uses a focus-group discussion, which captures the score agreed by the participants upon identifying the available means of verification, while METT uses a survey of at least 50% plus 1 of the total PAMB members en banc. Furthermore, there are parameters in METT which gathers varying scores from different PAMB members. Since it is based on the perception of the member who is answering the question, each score may be higher or lower compared to others. With MEAT, however, deliberations are done before coming up with the score for the MPA.

MEAT Results

The discussion on the results of the MEAT will be divided into three parts: (1) management effectiveness level which discusses the performance of the management body in addressing the thresholds and other parameters in each of the management level, (2) management focus discusses the strengths and weaknesses of the MPAs assessed and provides a basis for identification and prioritization of interventions for each of the MPAs assessed, and (3) management efforts measures how the management body and their partners invested their efforts in the operation of the MPA.

Management Effectiveness Level

The levels of effectiveness are ranked into four levels, namely, Level 1 or MPA is established; Level 2 or MPA is enforced; Level 3 or MPA is effectively sustained; and Level 4 or MPA is effectively institutionalized.

The benchmarking activity results show that three out of the nine MPAs were effectively managed and had satisfied the requirements of Levels 2 and 3. TRNP has satisfied the thresholds and the minimum cumulative score for Level 3. It has however failed to satisfy one threshold under Level 4 which is on being a self-sustaining MPA. It was learned by this study that the cost of the operations of TRNP has not been fully met by the existing budget allocations from the revenues from the park, from the Provincial Government of Palawan and from other sources.

ARNP and SBPS satisfied the thresholds and the cumulative score of Level 2. ARNP has its own rangers that enforce the policies of the MPA, conduct regular patrolling, undertake apprehensions and file cases against apprehended violators. SBPS, on the other hand relies primarily from the BantayDagat network in the coastal communities surrounding the Sarangani Bay. Six (6) municipalities of Sarangani and the chartered city of General Santos surround the bay. Each municipal has deputized BantayDagat that patrol and enforce fisheries and coastal laws in the coastal waters adjoining their municipal and city boundaries.

Three MPAs—ENMRPA, PBPLS, and TIWS—are Level 1. Regular patrolling and surveillance are not conducted regularly in ENMRPA because there are no more rangers hired for the PA. The protected area superintendent (PASu) depends on the community monitoring mechanism wherein community leaders relay to him information on violations through text messages. However, response on apprehension seldom executed due to various circumstances. The same is also the case of PBPLS where BantayDagat members are mobilized for patrolling and apprehension but organized and coordinated enforcement team is not yet fully operational. In TIWS, the difficulty in filing cases against apprehended violators is due to its distance to the fiscal’s office in Bonggao, Tawi-tawi which is about 10-hour boat ride away. Parameters on enforcement are the main thresholds that should be met for Level 2. These three MPAs failed to satisfy these parameters during the MEAT assessment workshop.

Table 5: MPA MEAT Results

Name of MPA	Level of Effectiveness	Total Area (has.)	Estimated Marine Area (has.)	Cumulative Score	% Accomplishment
TRNP	Level 3	97,030	97,030	81	96%
ARNP	Level 2	27,469	27,469	74	88%
SBPS	Level 2	215,950	215,950	54	64%
ENMRPA	Level 1	89,134	54,192	48	57%
PBPLS	Level 1	21,200	No data	66	79%
TIWS	Level 1	242,967	242,649	48	57%
PIPLS	Level 0	7,415	4,415	26	31%
ALLPLS	Level 0	1,164	1,164	26	31%
MOBMR	Level 0	7,568	7,568	17	20%
Total/ Average		709,897	650,437	49	58%

Management Focus

The strengths of the MPAs benchmarked include (1) the presence of legal instruments which are the basis for the implementation of the protected area, and which may be either presidential proclamations and/or republic acts that complete the 13 legal steps towards the establishment of a protected area under the NIPAS Act; (2) community participation in the establishment process through conduct of consultations and public hearings; and (3) the presence of management plan which is the General Management Plan (GMP) mandated by the NIPAS Act.

Most of these sites have been established or declared as protected areas through presidential proclamations, except for the TRNP which has its own particular republic act passed by the Philippine Congress. Consultations and public hearings were conducted during the process of establishing the

MPAs as evidenced by photographs taken during these activities and retrieved from the oldest files in the office of the PASu. Every MPA has its own PAMB, which meets quarterly, but which also holds special meetings to address issues and concerns that need the immediate attention of the board. These include deliberations on the applications for the Special Use Agreement in Protected Areas (SAPA) submitted by some establishments requesting for permission to operate commercial or industrial activities—such as mariculture and resorts—within the protected areas, as provided for in DENR Administrative Order No. 17 series of 2007.

The most common weaknesses among the benchmarked MPAs lie in the areas of (1) monitoring and evaluation, (2) sustainable financing and (3) information, education, and communication (IEC) programs, and (4) management body. Most of the MPAs do not have files of their baseline assessment, while others do not have any monitoring and evaluation linked to their adaptive management programs and policies.

Financing has also been a perennial concern of the MPAs under NIPAS. This could be addressed if the national government would provide funds sufficient enough to sustain the conservation investments. Most of the MPAs have a P40,000+ annual budget for the quarterly meetings of the PAMB, but other than that, there are no available funds for their operations. Some MPAs were able to access the 75% of the revenues they had remitted to the Integrated Protected Area Fund (IPAF), but only after a process that took some three quarters to two years to complete. Some MPAs such as the ENTMRPA are no longer remitting their revenues to the IPAF. Instead, through a PAMB resolution and a MOA with the LGU, the revenues are collected by the LGU through its treasurer's office and at least 20% of the total revenue is provided for the operations of the MPA (e.g. office rental, utilities, and transportation expense of the MPA staff).

Most of the IEC programs are done whenever there are externally funded projects for the MPAs, but no MPA has ever conducted IEC programs using their internal funds. Perception surveys show that the MPA name under NIPAS is not known to the respondents. However, the name of the no-take zones which are marine or fish sanctuaries are very popular among the fishers because these are being imposed by the BantayDagat under the LGU but not under the PAMB or DENR.

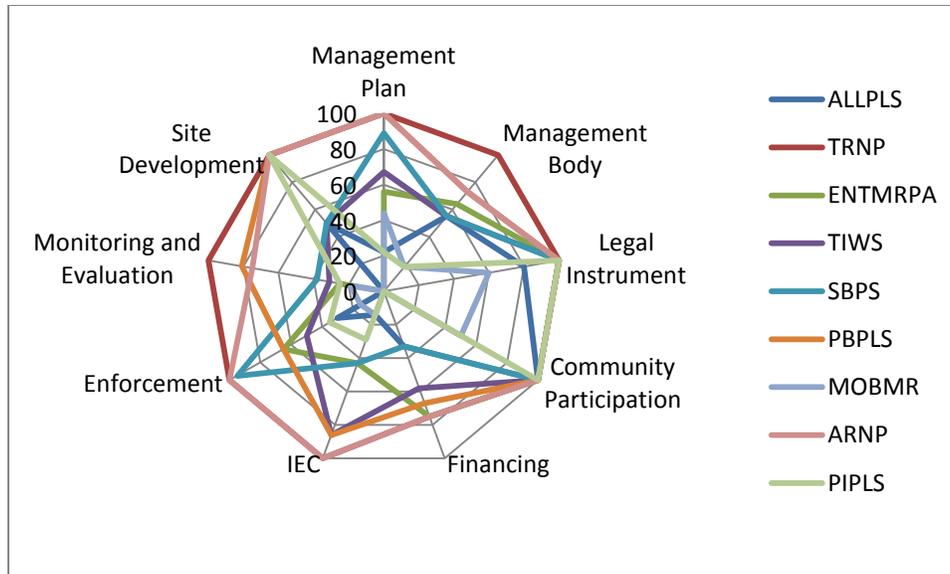


Figure 4: Individual assessment of strengths and weaknesses of the MPAs

Figure 4 shows that most of the assessed MPAs should focus their management interventions in 1) installing a monitoring and evaluation system that would provide the PAMB relevant information that can be used in the planning and decision making process; and 2) establishing mechanisms that would increase the resources for effective, functional and operational management of the MPA which can be internally or externally generated. The strengthening and capacitation of the PAMB should also be the priority intervention to the MPAs. The DENR and its partner institutions should be able to come up with a ladderized training program for the PAMB members which should be beyond orientation of the newly installed PAMB members, whose appointment expires every five (5) years.

Some potential trainings for the PAMB members include: a) participatory biophysical and socioeconomic monitoring and assessment; b) project development and resource mobilization; and c) leadership and basic conservation and management concepts and values. Most of the PAMB members are not aware of the basic information about the resources they are mandated to protect and conserve.

Management Efforts

The MEAT takes into consideration all efforts exerted by the management body, and this is reflected in the MPA's total cumulative score. Correspondingly, the PBPLS, having been sustaining IEC activities and undertaking measures such as impact assessment, monitoring, and evaluation, has a higher cumulative score compared to SBPS. But because it had failed to conduct regular patrolling and surveillance due to lack of logistics, it had only achieved effective management Level 1, whereas the SBPS had already achieved Level 2. This is an example of how the tool has provided significant considerations on the

various activities in the MPAs. Some MPAs have undertaken a roster of activities but are not prioritized based on the important parameters that will make the MPA more effective in achieving its objectives of conservation and sustainable use of resources.

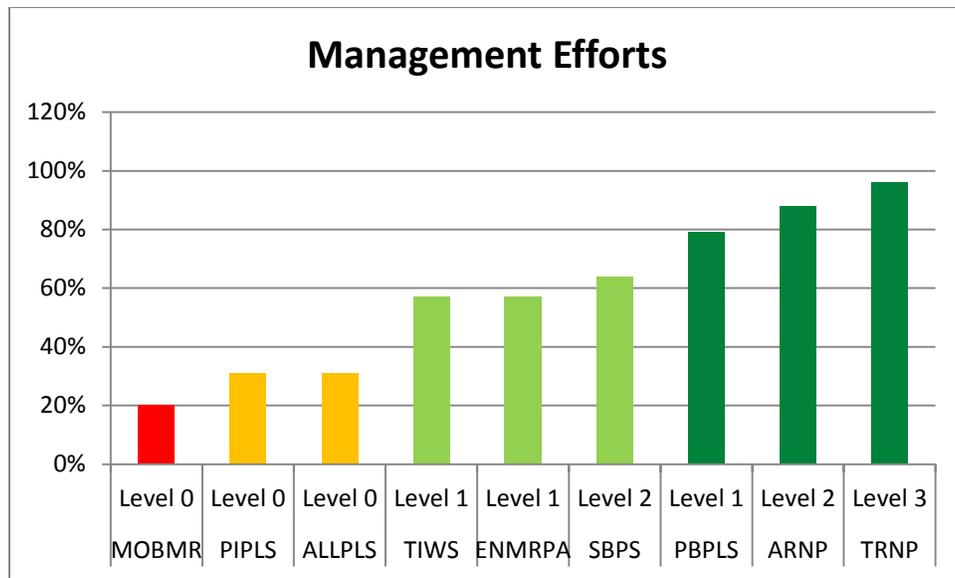


Figure 5: Level of efforts exerted in MPAs

Figure 5 shows that only one(1) MPA is rated fair, two (2) MPAs are good, three (3) are very good and another three (3) are excellent. The categories are based on the cumulative scores as provided in Table 2.

Perception Surveys

The perception survey gauges the level of awareness of stakeholders, their perceived benefits from the MPA, their perception on the functionality of the management body and their willingness to support the MPA. The results of the perception survey are useful for the MPA management body to adjust their community awareness programs and activities.

This study conducted perception surveys to eight (8) MPAs. The PAMB of ARNP did not allow the conduct of perception survey for security reasons. The surveys were able to give indicators of how aware the local populations were of theseMPAs.

The following tables and charts show the results of the perception surveys conducted. The average number of respondents to the six-question interview schedule (Annex A) is 198 per site. A convenience sampling method was applied to get an approximation of the perceptions on the MPAs within their locality.

Table 6: Number of Respondents per MPA

Name of MPA	MEAT Result	Number of Respondents	Place of Residence of Respondents
1) ALLPLS	Level 0	118	Alburquerque and Loay, Bohol
2) TRNP	Level 3	83	Puerto Princesa City, Palawan
3) ENMRPA	Level 1	200	El Nido, Palawan
4) TIWS	Level 1	151	Baguan, Tawi-tawi, Zamboanga del Sur
5) PBPLS	Level 1	300	Mati City, Davao Oriental
6) SBPS	Level 2	304	General Santos City, South Cotabato
7) MOBMR	Level 0	257	Masinloc, Zambales
8) PIPLS	Level 0	171	Sta. Ana, Cagayan
Average number of respondents		198	

Most of the respondents interviewed were aware of the MPA in their locality (78% in Puerto Princesa City; 93% in El Nido). It is, however, noticeable that in the case of the ALLPLS, only 58% of the respondents knew about it and most of them were from the municipality of Alburquerque while the respondents from the municipality of Loay were not aware of the MPA. Most of the respondents in Mindanao were not aware of the MPA in their municipality or city. In Masinloc, Zambales, the respondents did not actually know the name of the MPA there under the NIPAS but they were aware of the marine sanctuaries declared and managed by the local government of Masinloc.

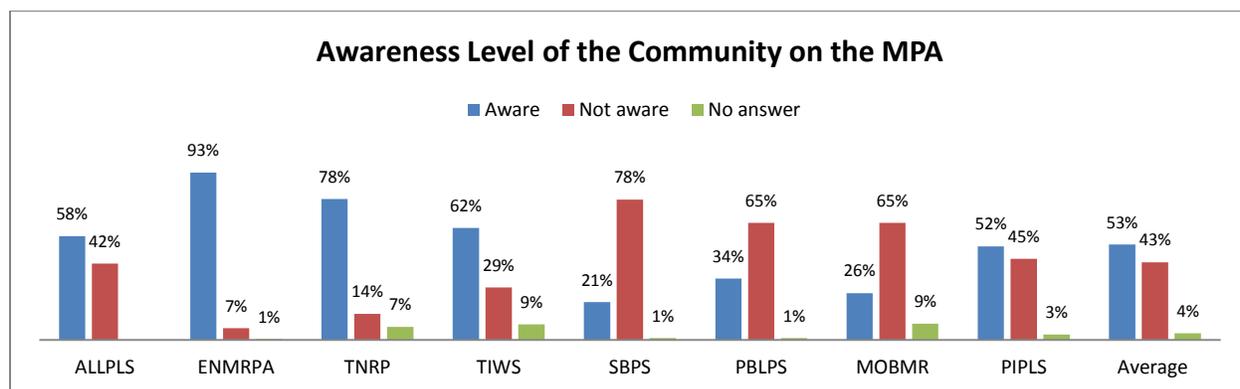


Figure 6: Community awareness level on the MPA

Respondents from Puerto Princesa City have known the TRNP through electronic media, i.e., television and radio, while respondents from El Nido said that the presence of the protected area (PA) office in the town center has made them aware of the MPA.

More respondents in the six (6) MPAs perceived that they had benefited from their MPA, either through the increase in fish catch (for fisher respondents) or the increase in the recognition of the area as a tourist destination (for non-fisher respondents).

More respondents in the two other MPAs said that they do not know if they benefited from the MPA. In SBPS and PBPLS, more respondents did not observe any benefit from their MPA.

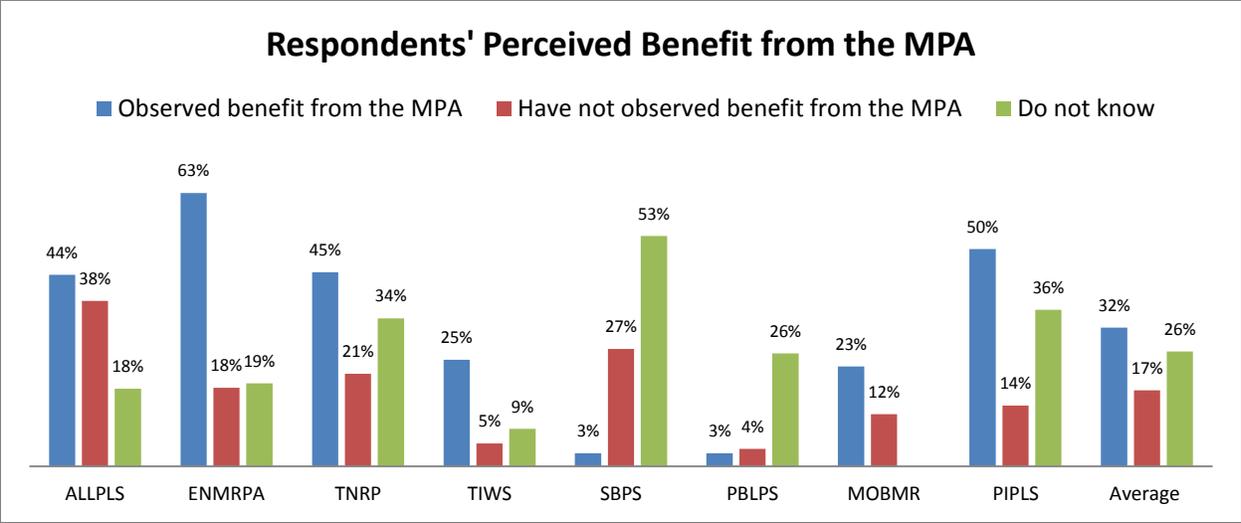


Figure 7: Community perception on the benefit from the MPA

About half of the fisher respondents in Puerto Princesa City perceived an increase in daily fish catch since the establishment of the TRNP, while 45% of non-fisher respondents believed that they had already benefited from the TRNP's becoming one of the most popular tourist spots in the province of Palawan. In Mindanao, a great number of respondents did not observe any increase in their daily fish catch nor any other benefits since the establishment of the MPAs.

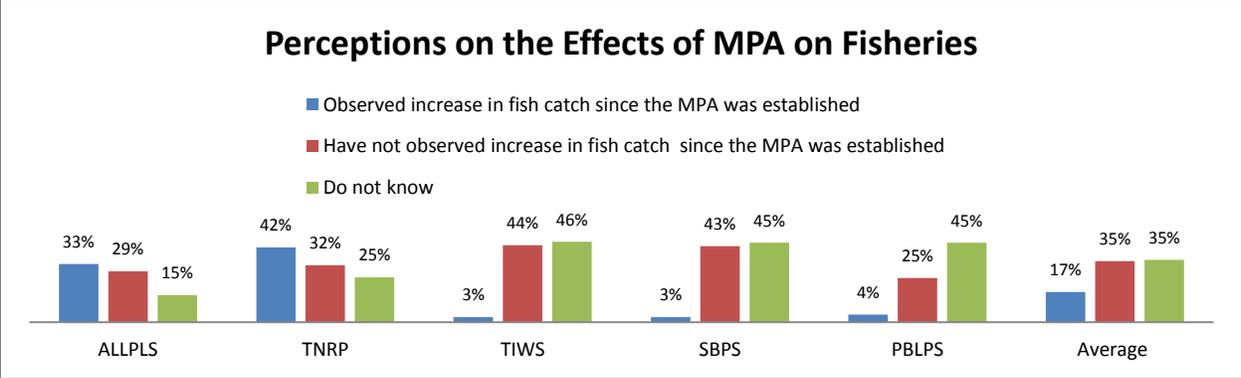


Figure 8: Effects of the MPA on fisheries

On the average, 42% of the respondents perceived a decrease in the incidence of illegal fishing due to effective coastal law enforcement by the MPA management. Some respondents in Puerto Princesa City even knew or heard of neighbours or relatives who had been caught fishing or gathering *samong* in the Tubbataha area, and so concluded that illegal fishing was indeed being controlled in the MPA.

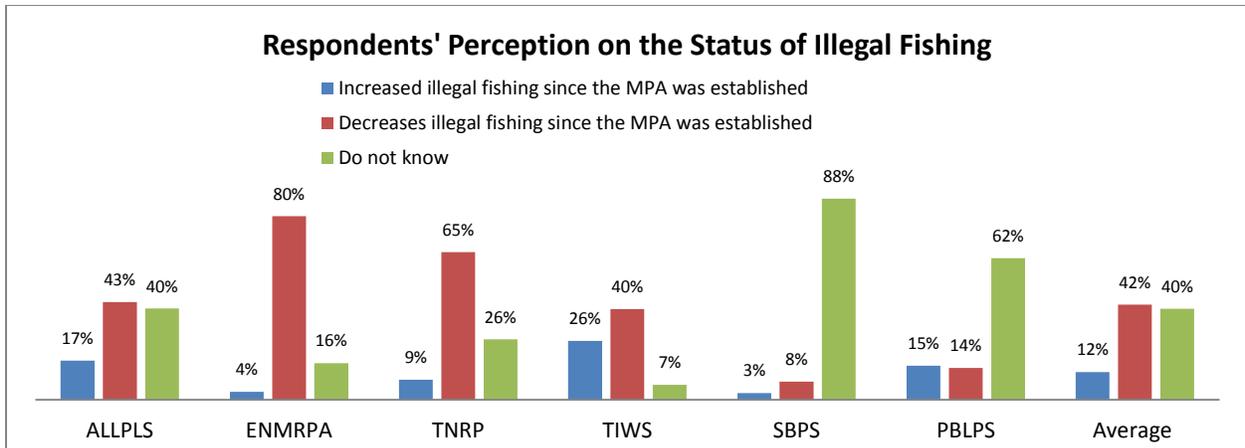


Figure 9: Status of illegal fishing within the MPA

The respondents in the six (6) MPAs perceived that the PAMBs are functional while the respondents in areas along the Sarangani Bay and Pujada Bay perceived that the PAMBs are not functional. Many respondents (37% average) do not know if the PAMBs are functional or not.

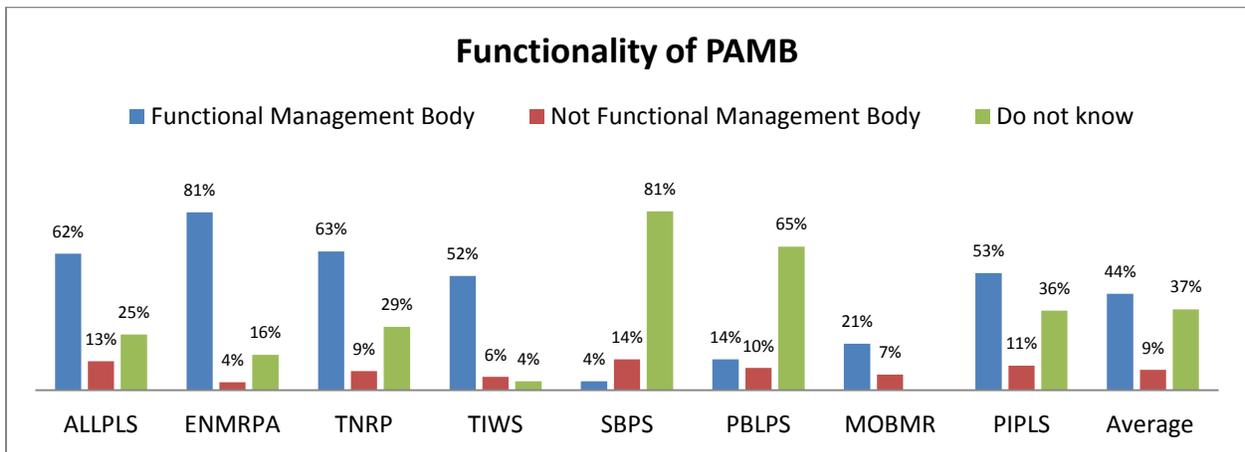


Figure 10: Perceptions on the functionality of PAMBs

Generally, respondents felt that the MPA management could be sustained. Respondents in Sanraggani Bay felt that MPA management could not be sustained and an overwhelming majority were unsure about it. Across all the eight MPAs assessed, a significant number of respondents (35% on the average) did not know if the MPA management could be sustained or not.

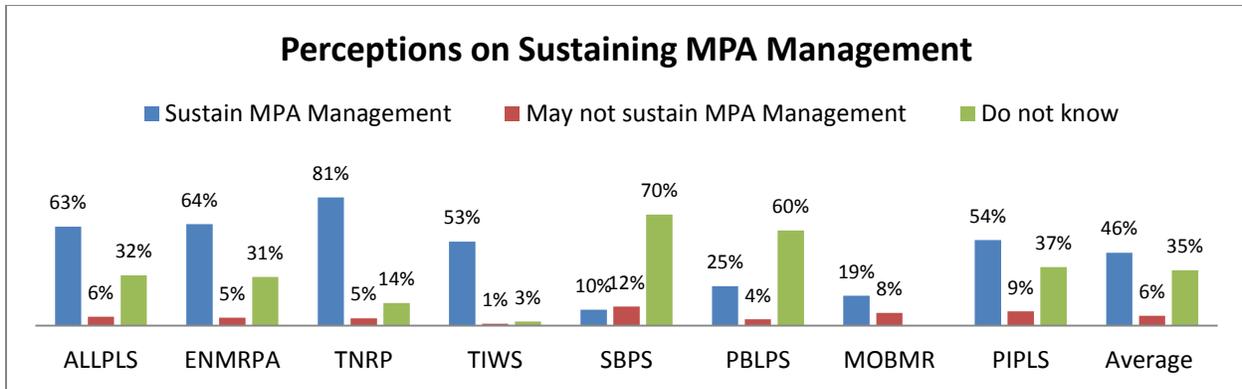


Figure 11: Perceptions on the sustainability of MPA management

Almost all of the respondents in ALLPLS, ENMRPA, and TNRP expressed their support to the management of MPAs by complying with the rules and regulations, discouraging illegal fishers, and promoting the site for visitors/tourists. Most of the respondents in the other MPAs said they will support the MPA management except in SBPS where 48% of the respondents said they will not support the MPA management..

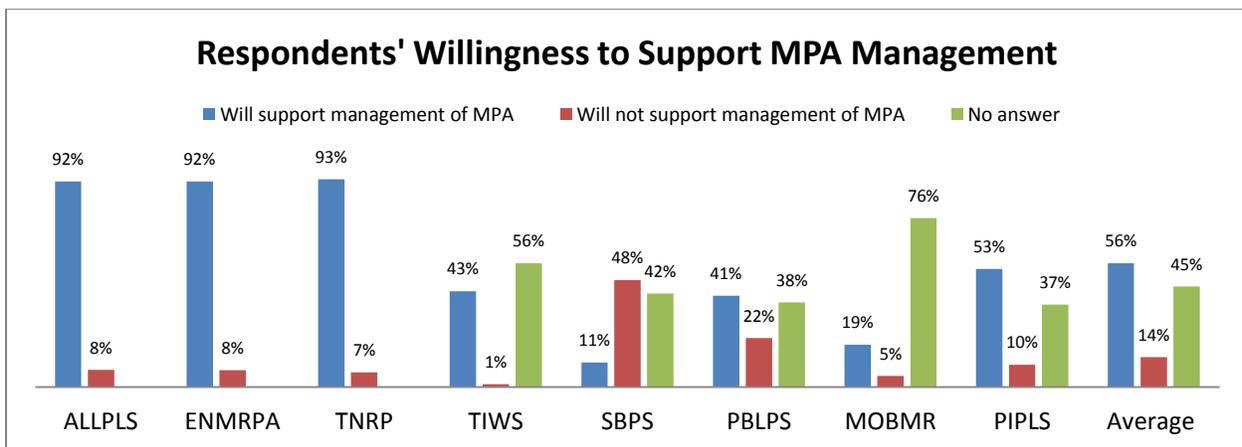


Figure 12: Respondent's willingness to support MPA management

Management Effectiveness Tracking Tool (METT) Results

The results of METT include two aspects: the level of threats that challenge the management of the MPA and the management effectiveness score itself, the computation of which is based on the memorandum circular provided by PAWB and on a simple grand total formula.

Seven(7) MPAs were assessed using the METT during this benchmarking activity:ALLPLS, ARNP, ENMRPA, MOBMR, PBPLS, PIPLS,and SBPS. ENMRPA and PIPILS achieved the highest average percentage score of 50% while SBPS has the lowest percentage score of 27%. The average percentage score among the seven (7) MPAs is 42%. Most of the MPAs are faced with the challenge of managing residential and commercial development within the PA while the least of their concern is the threat on invasive and other problematic species and genes with an average percentage score of 17%.

Table 7: METT assessment results

Name of MPA	Highest Threat Faced by the MPA	Percentage Score	METT Result
ALLPLS	Residential and commercial development w/in PA	86%	33%
ARNP	Climate change and severe weather	24%	47%
ENMRPA	Biological resource use and harm within a PA	75%	50%
MOBMR	Climate change and severe weather	50%	37%
PBPLS	Specific cultural and social threats	59%	48%
PIPLS	Biological resource use and harm within a PA	52%	50%
SBPS	Residential and commercial development w/in PA	79%	27%
Average	Residential and commercial development w/in PA	50%	42%

Albuquerque-Loay-Loboc Protected Landscape and Seascap

Most of the PAMB members of ALLPLS expressed greater concern over the following threats that need to be managed in the MPA:(1) residential and commercial developments with an average percentage score of 86%, (2) climate change and severe weather conditions (52%), and (3) biological resource use and harm (42%).

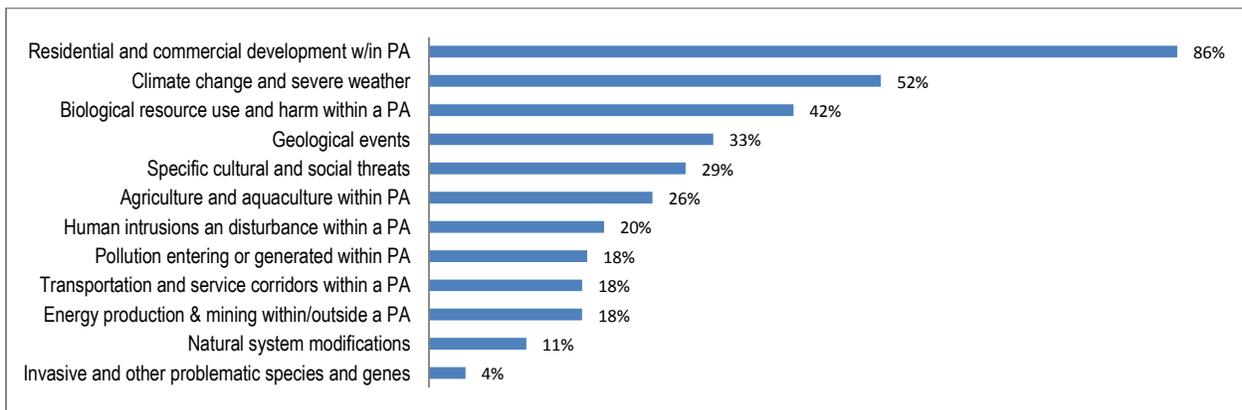


Figure 13: Threats that need to be managed in ALLPLS

ALLPLS was able to comply with 33% of the parameters set in the METT. Looking at the International Union for Conservation of Nature-World Commission on Protected Areas (IUCN-WCPA) Framework on evaluating the management effectiveness of protected areas, ALLPLS had a higher achievement in terms of context with an average percentage score of 62%. This refers to the presence of gazetted legal instruments.

However, it scored lowest in terms of processes with an average percentage score of 29%. This refers to the processes of management and operations of the PA, including but not limited to demarcation, access control, management-oriented research, resource management, budget and maintenance, monitoring and evaluation, and involvement of various stakeholders. Ironically, however, despite the fact that inputs such as funding, staff size or manpower capabilities, equipment, and infrastructure were very low, the parameters of outputs/outcomes has a relatively high average percentage score of 40%. The PAMB members perceived that the ALLPLS is providing economic benefit to the local communities and its biodiversity, ecological and cultural values are predominantly intact.

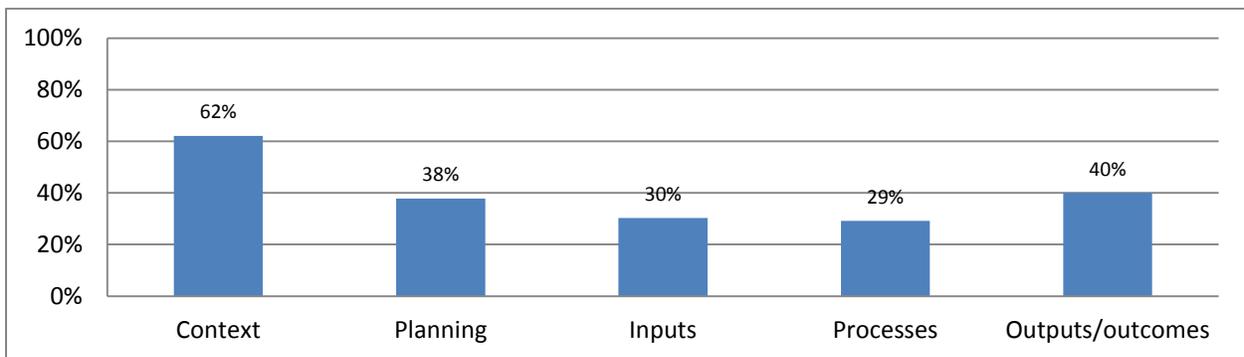


Figure 14: Achievement of METT Parameters (ALLPLS)

Apo Reef Natural Park

Among the seven (7) MPAs assessed, ARNP has the lowest average percentage score on the perception of the PAMB members on the threats that are faced by the MPA. Based on the perceptions of the PAMB members of ARNP, the most pressing threats that need to be addressed in their area are: (1) climate change and severe weather conditions with an average percentage score of 24%, (2) human intrusions and disturbance (15%), and (3) biological resource use and harm (14%).

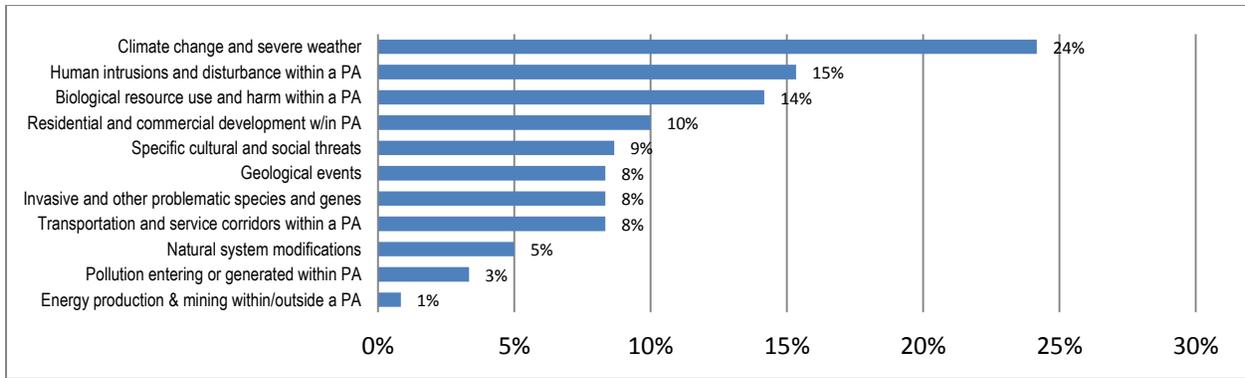


Figure 15: Threats that need to be managed in ARNP

On the effectiveness of management of the ARNP, its overall achievement rating is 47%. The graph below shows that ARNP has not been halfway in achieving the parameters of METT with only 49% as the highest rating which is on planning and 48% on processes. The members of its PAMB perceived that there is a need to fully implement its GMP and further enhance its planning capability to come up with an effective design and objective of the MPA. The lowest rating is on provision of inputs such as efficient and well-trained staff, law enforcement team, and needed information for management such as resource inventory, annual budgetary allocations and other logistics needed for effective management of the MPA. This parameter has an average percentage score of 44% as the rate of achievement.

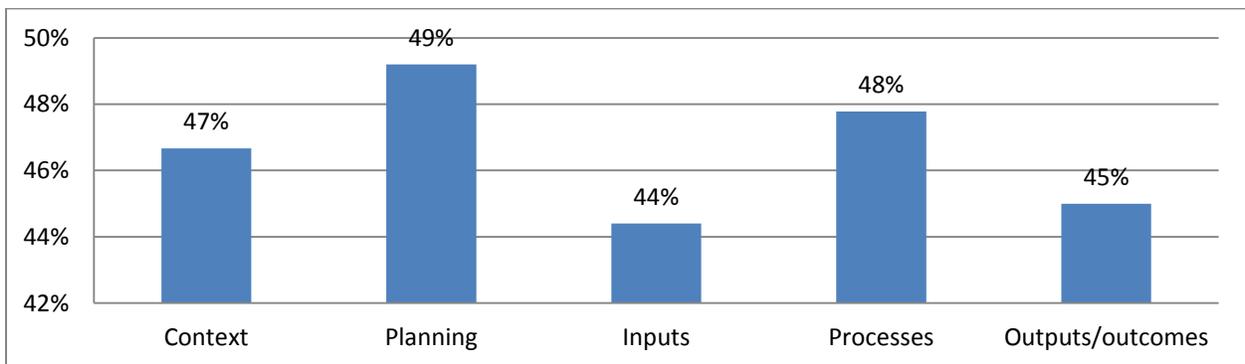


Figure 16: Achievement of METT Parameters (ARNP)

El Nido Managed Resource Protected Area

The threats that need to be managed in ENMRPA include: (1) biological resource use and harm within the protected area with an average percentage score of 75%, (2) residential and commercial development (73%), and (3) climate change and severe weather (54%). The PAMB members expressed that ENMRPA is still faced with illegal fishing and illegal gathering of terrestrial plants and animals.

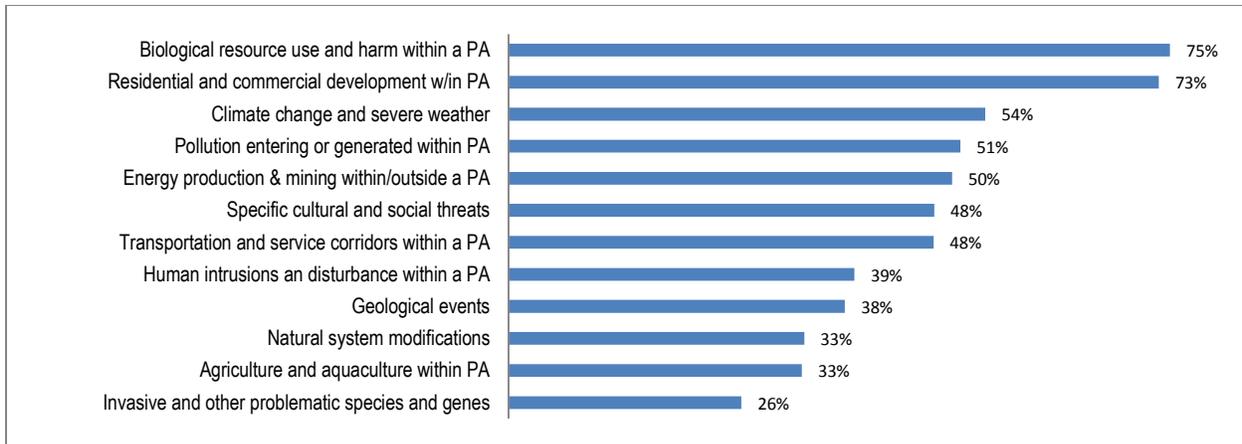


Figure 17: Threats that need to be managed in ENMRPA

ENMRPA achieved 50% of the parameters of METT. The members of PAMB perceived high achievement rate on context because it is legitimize by a presidential proclamation although it has not completed the nine-step requirement of a protected area whose last step is a congressional enactment through a republic act. Scores in planning is lowest among the five parameters. The members perceived that need to improve on the design, objectives, policies and regulations of the MPA. The GMP and the annual workplan should be fully implemented.

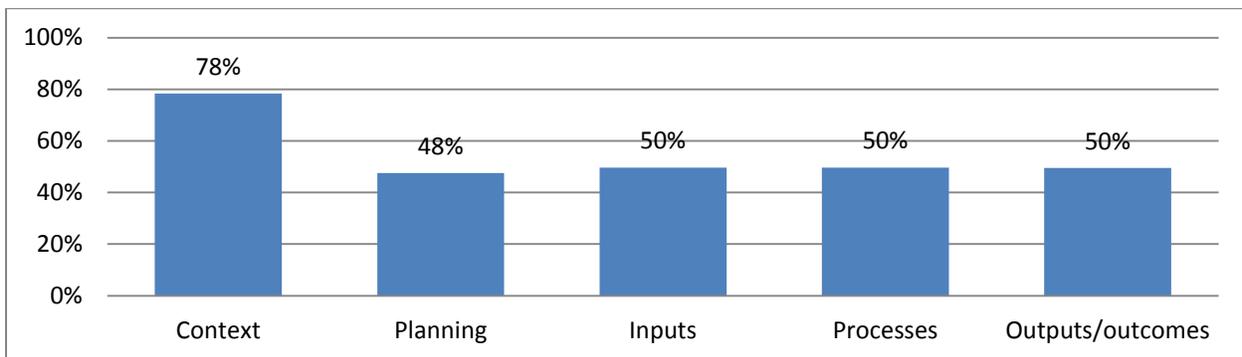


Figure 18: Achievement of METT Parameters (ENMRPA)

Masinloc and Oyon Bays Marine Reserve

The threats perceived in MOBMR include (1) climate change and severe weather with an average percentage score of 50%, (2) residential and commercial development (33%), and (3) pollution entering or being generated within the PA (29%). The members of the PAMB perceived that the MPA is highly vulnerable to coral bleaching which was experience during the 2010 bleaching event in the West Philippine Sea.

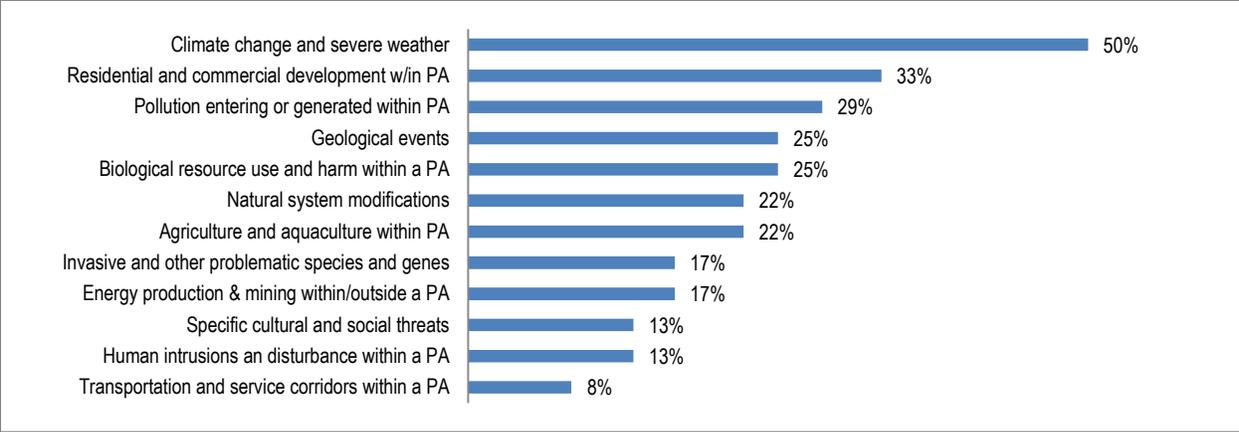


Figure 19: Threats that need to be managed in MOBMR

MOBMR achieved an average percentage score of 37%. It has achieved 100% in terms of context considering it has already a presidential proclamation. The PAMB members perceived that it is already sufficient legal basis for the MPA to be enforced. It has a low average percentage score on inputs because of lack of logistical support to implement and enforce the MPA. The PASu is also working in concurrent capacity and he has only one staff supporting him in the implementation of the regulations and programs of the MPA.

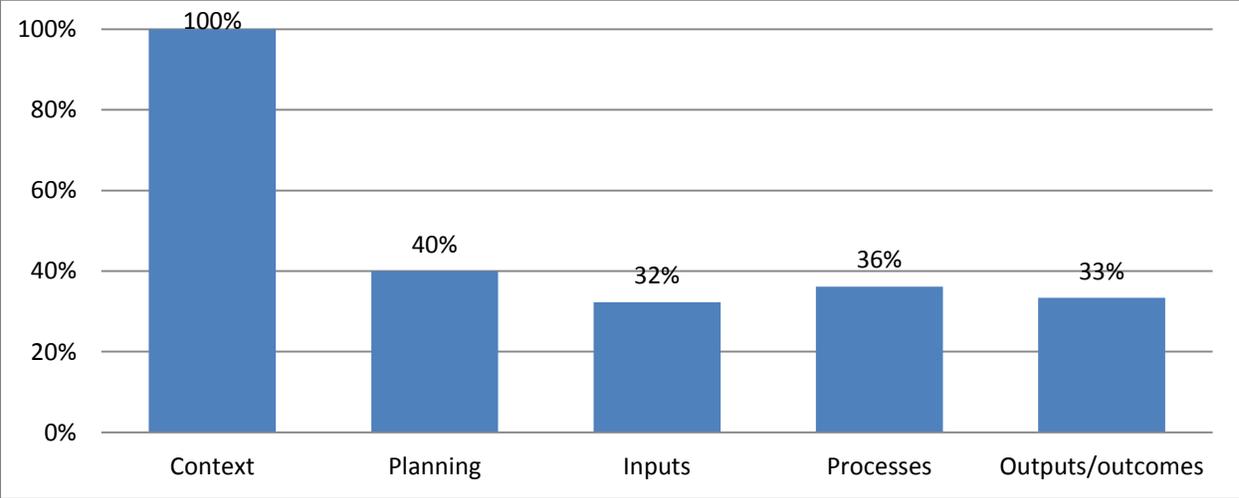


Figure 20: Achievement of METT Parameters (MOBMR)

Pujada Bay Protected Landscape and Seascape

The members of the PBPLS PAMB perceived that the most pressing threats faced by their MPA are: (1) specific cultural and social threats with an average percentage score of 59%, (2) energy production and mining (53%), and (3) invasive and other problematic species and genes (44%). The members of the PAMB felt that the possible loss of support to communities and projects due to changes in political leadership, loss of cultural links, traditional knowledge and/or management practices and effect of influence groups on indigenous people's values and freedom to decide might jeopardize the efforts to manage the MPA effectively.

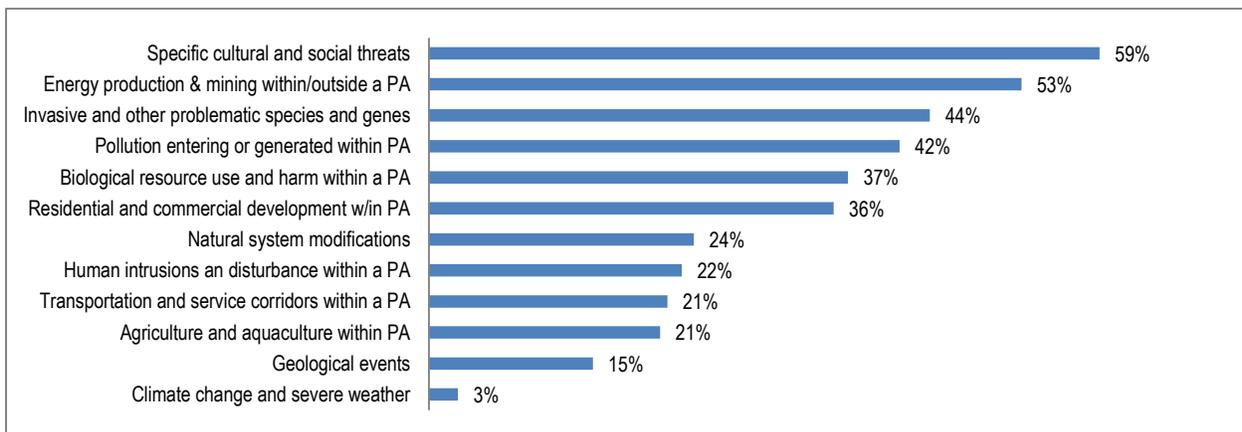


Figure 21: Threats that need to be managed in PBPLS

The PBPLS achieved an average percentage score of 48%. The highest average percentage score is on context which the PAMB members perceived to have a sufficient legal basis for their MPA which was declared under presidential proclamation. Inputs such as annual budget allocations, MPA staff and law enforcement manpower are not adequate, hence it has the lowest average percentage score of 40%.

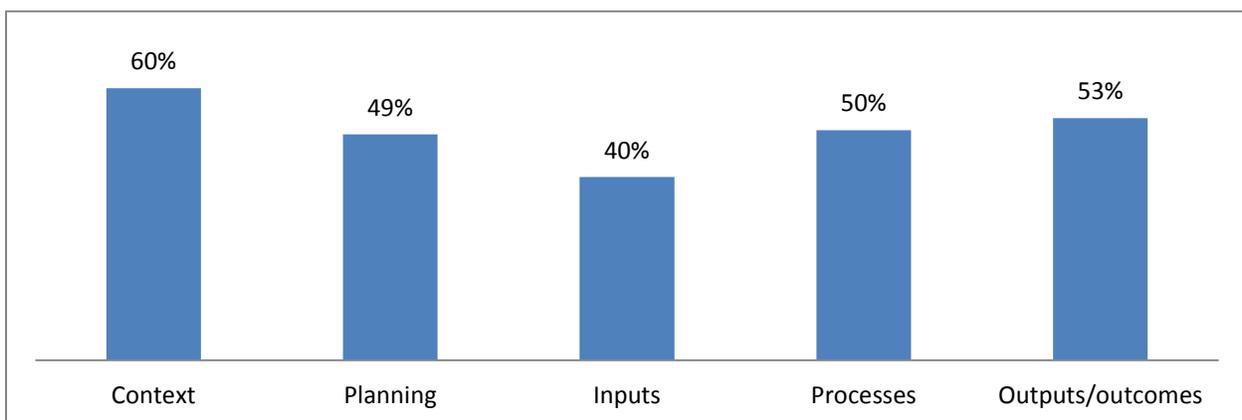


Figure 22: Achievement of METT Parameters (PBPLS)

Palau Island Protected Landscape and Seascape

The threats that need to be managed in PIPLS include: (1) biological resource use and harm within the protected area which has an average percentage score of 52%, (2) climate change and severe weather conditions (36%), and (3) specific cultural and social threats (35%). Illegal fishing and harvesting of terrestrial products needs to be managed in PIPLS.

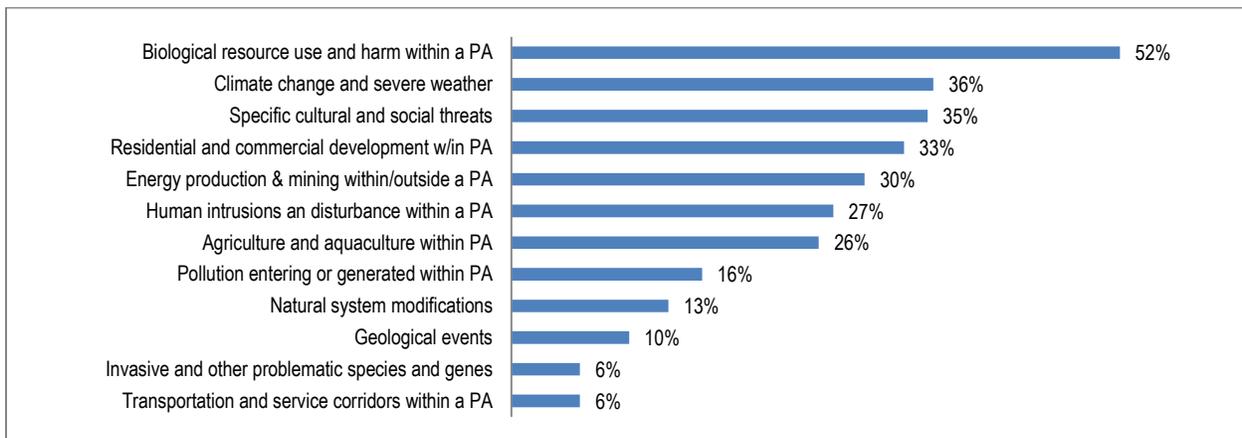


Figure 23: Threats that need to be managed in PIPLS

The PIPLS is halfway to achieving management effectiveness having an average percentage score of 50%. The PAMB members scored highest in terms of context and gave 100% achievement rate. They felt that the presidential proclamation is sufficient legal basis for the implementation of the MPA but they are not aware that there is a process for fully legitimizing the MPA through a congressional act. They also gave the lowest score on inputs with a rate of 28%.

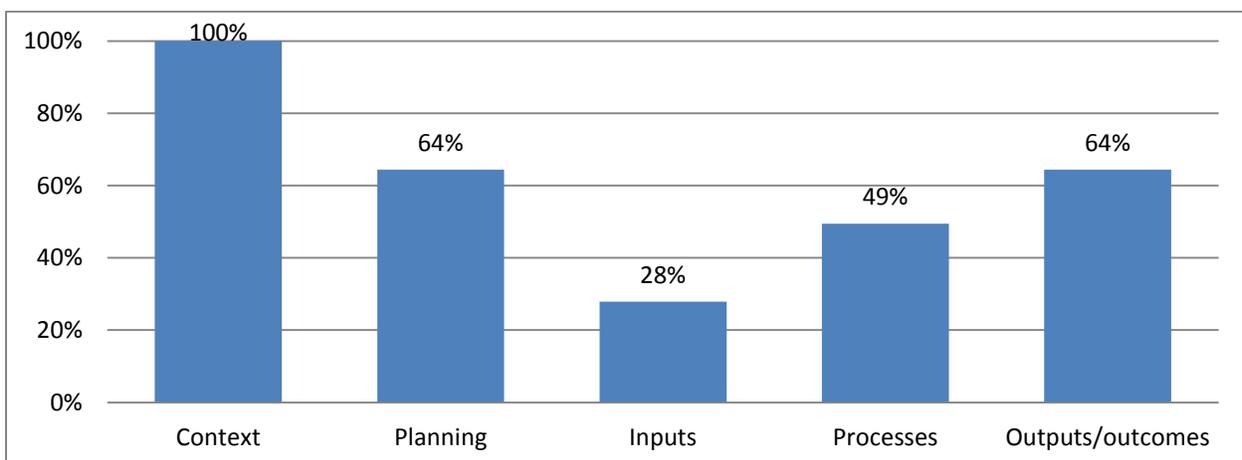


Figure 24: Achievement of METT Parameters (PIPLS)

SaranganiBay Protected Seascape

The three highest threats that need to be managed in SBPS are the following: (1) residential and commercial development with an average percentage score of 79%, (2) pollution entering the PA or generated within it (66%), and (3) climate change and severe weather conditions (47%). Since the MPA is bordered by industrial and economic development zones in General Santos City and nearby municipalities, the PAMB members perceived a need to address the threat on coastal development.

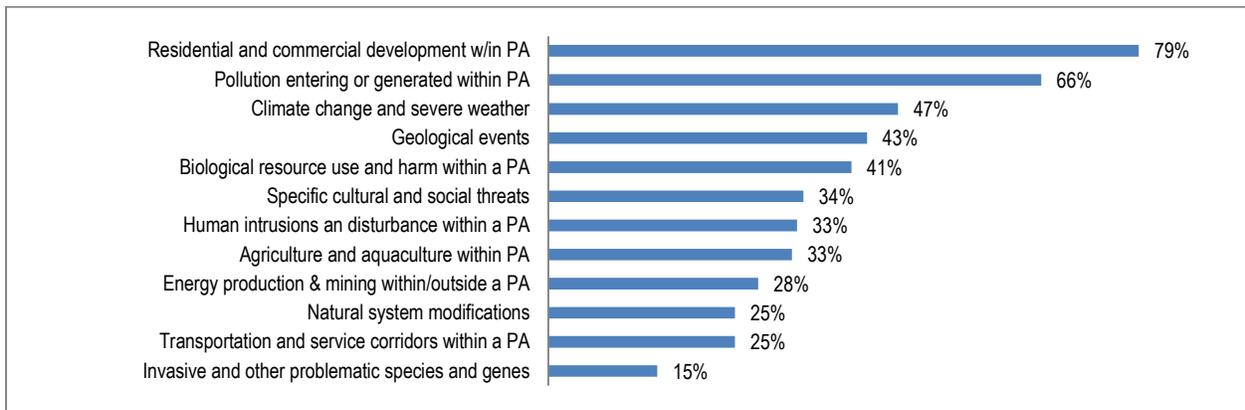


Figure 25: Threats that need to be managed in SBPS

The result of the assessment shows that the SBPS has a low average percentage score of 27%. The figure below shows that the management of SBPS has strengths in context, planning, and processes.

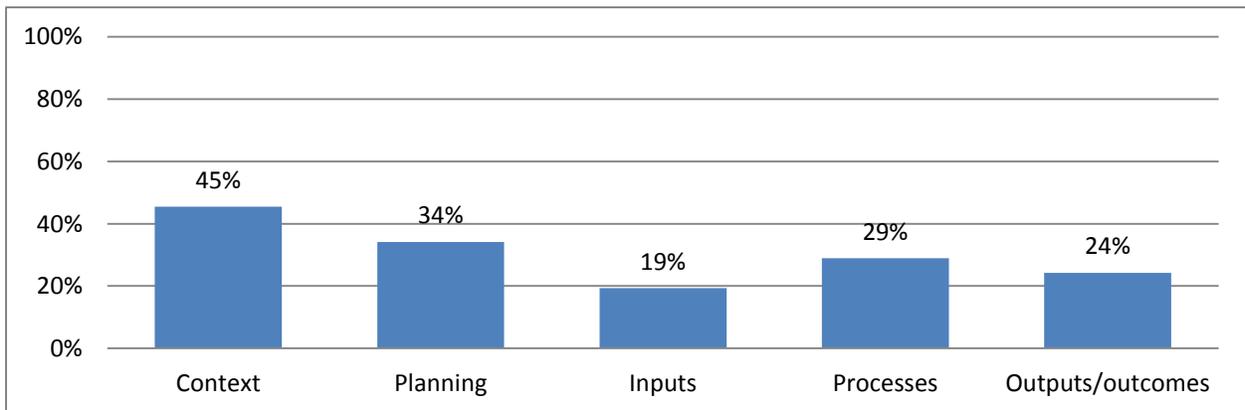


Figure 26: Achievement of METT Parameters (SBPS)

Conclusions

The benchmark for the MPAs under NIPAS shows that 33% of all the MPAs assessed are effectively managed and 44% of their total area (in hectares) is effectively managed.

The strengths of the MPAs benchmarked include (1) the presence of one or more pertinent legal instruments,(2) engaging community participation in the establishment process, and (3) the presence of a management body. On the other hand, their weaknesses lie in (1) monitoring and evaluation, (2) sustainable financing, and (3) information, education, and communication programs.

Most of the community residents (51% of all the respondents) were aware of the presence of the MPAs in their respective areas. Alarming, however, most of the residents in the MPAs in Mindanao were not. Factors that may have contributed to the people's awareness include the following: (1) the presence of PA office and the implementation of projects related to the protected area, as in the case of ENMRPA where the MPA office has been very visible and for which the Non-government Organizations (NGOs) for Integrated Protected Areas (NIPA) had undertaken community-based activities that were remembered by the residents;(2) the use of popular media for information dissemination, as in the case of TRNP where most of the residents were informed about the MPA through the electronic media such as television, radio, and the internet; and(3) the functional enforcement of a locally-managed MPA, as in the case of ALLPLS where the residents were familiar with Sta. Felomina Fish Sanctuary located in Alburquerque, Bohol and would equate this to the ALLPLS.

The most common among the threats perceived by the PAMB members in the seven (7) MPAs assessed are (1) residential and commercial development within PA,(2) climate change and severe weather, and (3) biological resource use and harm within PA.

Using the METT, the average management effectiveness score of all the MPAs assessed was low at 42%. Three MPAs are below the average percentage score namely ALLPLS, MOBMR and SBPS. SBPS has the lowest average percentage score of 27% while the ENMRPA and PIPLS have the highest average percentage score of 50%.

Recommendations

Since this assessment aims at improving MPA management effectiveness, the following policy and program recommendations are provided by this study:

The Management Body

Based on the MEAT, the management body which is the PAMB has been identified and determined and the roles of the members have been clarified as indicated by the presence of organizational charts and various committees. Nonetheless, there remains a need to conduct a regular evaluation of the PAMB's performance in order to identify areas for improvement and to determine immediate courses of action. For one, the coordinating function of the PAMB needs to be strengthened in order to maximize the possibilities of gathering outside support, whether from government or non-government offices and institutions, for additional financial, manpower, and other assistance.

The Management Plan

The General Management Planning Strategy (GMPS) of the MPAs benchmarked should be reviewed and updated in order to incorporate necessary adjustments and so address current issues and concerns. While six (6) MPAs already had working plans at the time, three of them had not yet been reviewed and updated. The other MPA had drafted its management plan but was not yet adopted by its PAMB.

Ultimately, for these management plans to become relevant to the conservation programs of the municipal and provincial governments, it is imperative that these plans become incorporated into the pertinent municipal and/or provincial development plans. Only three of the MPAs assessed had entered this threshold, corresponding to Level 4 of the MEAT.

Based on METT parameters on planning, the three MPAs scored an average of only 47%, which means that their PAMBs still have to exert more effort in planning and addressing the following concerns: (1) regulations are still weak in controlling the use of the protected area and the activities within it; (2) the MPAs are only partially managed considering the objectives originally agreed on are not achieved; (3) the designs of the MPAs are not compelling people enough to pursue their set objectives; and (4) a management plan may have been prepared or is presently being prepared but is definitely not being implemented.

Enforcing the MPA

Considering the current staff backing of the MPAs, the enforcement of regulations is primarily dependent on the available support from the LGUs, as the LGUs are the ones providing necessary logistics—including the manpower for regular patrolling—organizing, training, and providing honoraria for the BantayDagat and purchasing patrol boats. This is the case of General Santos City and other municipalities surrounding the SBPLS. Unfortunately, their setup is not shared by other MPAs that are still highly dependent on the resources of DENR alone. Though such a responsibility on the part of the DENR is stipulated in the NIPAS Act, these MPAs that rely so much on it have not really achieved the enforcement thresholds expressed in the MEAT.

It is, therefore, recommended that the PAMB, the DENR through its regional executive director (RED), and the PASu closely coordinate and forge a memorandum of agreement with the LGUs for the enforcement activities of every MPA.

Financing the MPA

With an average annual MPA recurrent cost in the Philippines of P40,000 per hectare, large MPAs such as those that had been assessed may not be able to finance their operations. Even the TRNP which has a trust fund, an ample allocation from the General Appropriations Act of the Philippines, subsidy from the provincial government of Palawan, and additional funding from external sources could not sustainably finance its annual operations.

Ideally, conservation investments should be shouldered by the government and not by the conservation area itself. It will always be a difficult dilemma trying to keep a conservation area from threats of human activity while marketing it for ecotourism, which is essentially a form of human intrusion. It is therefore recommended that the government of the Philippines allocate sufficient funds for the nationally-managed MPAs, just as locally-managed MPAs are being funded by the LGUs.

Increasing awareness on the MPA

The perception survey shows a very low awareness among the stakeholders in the MPAs. It is recommended that the PASu, together with other DENR staff, launch and sustain a systematic and focused awareness campaign, not only through IEC materials but more importantly through community-based activities. These will open opportunities for the PASu and the DENR to know and understand the community's perceptions and, in due course, respond to or address conservation issues at the grassroots level.

The following “next steps” are recommended:

- Build up the various capabilities of PAMB members, PA workers, and other conservation partners through an institutionalized training program that includes (1) basic orientation on the NIPAS and its various aspects; (2) policy development and implementation, participatory governance, and conflict management/resolution; (3) project development and fundraising protocols; (4) management planning, budgeting, implementation, and evaluation; and (5) law enforcement. Training teams must be put together to deliver the training package. The DENR should also work closely with the Department of Justice (DOJ) and the Philippine Judicial Academy (PHILJA) to make their in-house trainings for prosecutors and judges continuously relevant to the needs of the MPA management. A team of mentors should also be convened to mentor and coach PAMB members and MPA workers. The staffing pattern of the PAWB and the Protected Area, Wildlife and Coastal Zone Management (PAWCZM) division should be looked into to ensure in-house capacity for mentoring and coaching. A PAMB manual of operations could make management actions at the site-level more convenient to perform and monitor. Continuous updating should also be ensured through popular materials, especially those that explain new information and/or translate relevant laws and administrative acts into the local languages.
- Increase the number of PA workers through partnerships with other national government agencies (NGAs) through a presidential directive coupled with conservation contracts. It is deemed that partnership with LGUs can flourish through the sharing of powers, following the decentralization track.
- Complete the PA establishment process of NIPAS for all MPAs. The DENR Secretary should issue a memorandum order to prioritize the completion of the establishment process, particularly giving a deadline for the Protected Area Suitability Assessment (PASA). The PAWB should set a plan of action for the establishment process of each MPA, in consultation with its locality, and seeking the involvement of other agencies, such as Department of Agriculture's Bureau of Fisheries and Aquatic Resources (DA-BFAR), academic and research institutions, NGOs, and LGUs. Guidelines and standards in the conduct of public consultations should be established.
- A strategy for involving LGUs and NGAs in MPA management should be formulated and put into motion and conservation contracts should be good instruments in cementing these relationships. A study on how to link MPA management with the concerns of other NGAs should be made. Among the agencies that should be targeted are DA-BFAR, Department of Budget and Management (DBM), Department of Tourism (DOT), Philippine National Police (PNP), Department of National Defense (DND), DOJ, Department of Finance (DOF),

Department of Trade and Industry (DTI), and Department of Interior and Local Government (DILG). Similarly, a study on how to share management powers, responsibilities, and benefits with LGUs should be conducted. At the system-wide level, a NIPAS Advisory Council, or better yet, a NIPAS Management Board should be able to bring all these NGAs together. The Council or Board should be able to discuss, agree on, and commit to solutions to system-wide and MPA-specific problems and issues. This should also help generate commitment to sound PA management at the highest level of government. A PP or an RA will be a good instrument for establishing and convening this body.

- Fundraising and financing problems and issues should be addressed. This will involve exploring the possibility of redesigning the IPAF and looking into the financing schemes at the site level. A study on how the IPAF can be more supportive of the sites is in order, to include putting up an endowment fund and the retention of the 75% share of the sites. A crucial issue is whether or not the IPAF provision in the NIPAS Act needs to be amended. The role of the business sector should be explored. The DENR should advocate for allocations for individual MPAs for inclusion in the General Appropriations Act. The DENR should also raise funds from its development partners to finance the activities herein identified. The practices of some LGUs (with the cooperation of the PAMBs, in some instances) to capture the revenues generated from the use and enjoyment of NIPAS sites should be looked into to see how these can both support the needs of the sites and espouse a better relationship with LGUs and local communities within the boundaries of the law. LGUs should be encouraged to share in the costs of MPA management. PAWB should also help the sites identify sources of funds. A directory of relevant funding institutions and NGOs and people's organizations (POs) working in MPAs should be prepared and distributed by PAWB to the sites. It is also suggested that PAWB have a division whose mandate is to help sites access funding sources.
- Strengthen the monitoring, evaluation and learning system of MPAs. An in-depth analysis of the monitoring and evaluation (M&E) tools applied to MPAs and the NIPAS should be made and, thereafter, a definitive M&E tool should be adopted. Performance monitoring should be done on a regular basis. PAWB should develop and maintain a database and knowledge management system to link the tools to supporting decisions. PAWB should be able to show how M&E is used for improving policies and practices at both the national and the local levels. A system of documenting and popularizing the best practices should be in place and a corresponding incentive system, too—one that will reward the best performing MPAs.

Acronyms used in this report

ALLPLS	-	Albuquerque-Loay-Loboc Protected Landscape and Seascape
ARMM	-	Autonomous Region of Muslim Mindanao
ARNP	-	Apo Reef Natural Park
BD	-	BantayDagat
CCEF	-	Coastal Conservation Education Foundation
CEZA	-	Cagayan Economic Zone Authority
CI	-	Conservation International
CIP	-	Conservation International Philippines
CTI	-	Coral Triangle Initiative
CTSP	-	Coral Triangle Support Partnership
DA-BFAR	-	Department of Agriculture Bureau of Fisheries and Aquatic Resources
DBM	-	Department of Budget and Management
DND	-	Department of National Defense
DOF	-	Department of Finance
DOJ	-	Department of Justice
DOT	-	Department of Tourism
DENR	-	Department of Environment and Natural Resources
DILG	-	Department of Interior and Local Government
DTI	-	Department of Trade and Industry
ECOGOVS 2	-	Environmental Governance Project Phase 2
ENCLEC	-	El Nido Coastal Law Enforcement Committee
ENMRPA	-	El Nido Managed Resource Protected Area
ETDF	-	Eco-tourism Development Fund
GEF	-	Global Environment Facility
GMP	-	General Management Plan
IEC	-	information, education, and communication
IPAF	-	Integrated Protected Area Fund
IPAP	-	Integrated Protected Area Plan
IUCN	-	International Union for Conservation of Nature
LGU	-	local government unit
MEAT	-	Management Effectiveness Assessment Tool
METT	-	Management Effectiveness Tracking Tool
MO	-	municipal ordinance
MOA	-	memorandum of agreement
MOBMR	-	Masinloc and Oyon Bay Marine Reserve
MPA	-	marine protected area
MSN	-	MPA Support Network
NIPAS	-	National Integrated Protected Area System
NGA	-	national government agency
NGO	-	non-government organization
NPOA	-	National Plan of Action
PA	-	protected area

PAMB	-	protected area management board
PASA	-	protected area suitability assessment
PASu	-	protected area superintendent
PAWB	-	Protected Area and Wildlife Bureau
PAWCZM	-	Protected Area, Wildlife and Coastal Zone Management
PBPLS	-	Pujada Bay Protected Landscape and Seascape
PHILJA	-	Philippine Judicial Academy
PIPLS	-	Palau Island Protected Landscape and Seascape
PNP	-	Philippine National Police
PO	-	people's organization
PP	-	presidential proclamation
RA	-	republic act
RED	-	regional executive director
SAPA	-	Special Use Agreement in Protected Areas
SBPS	-	Sarangani Bay Protected Seascape
TIHPA	-	Turtle Islands Heritage Protected Area
TIWS	-	Turtle Islands Wildlife Sanctuary
TRNP	-	Tubbataha Reefs Natural Park
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
USAID	-	United States Agency for International Development
WCPA	-	World Commission on Protected Areas
WWF	-	World Wildlife Fund

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