COMPETENCY ASSESSMENT OF BATANGAS MARINE PROTECTED AREA AND BANTAY DAGAT NETWORKS: BASIS FOR CAPACITY DEVELOPMENT PROGRAM

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ABSTRACT

Competency of people determines the fate of the organizations in any endeavor. This study assessed the levels of competencies of people involved in a conservation strategy in the form of a marine protected area (MPA) and a Bantay Dagat (BD) networks in the Province of Batangas. It aimed to formulate a capacity development program that is tailor-fitted to needs assuring the success of this strategy. The study used purposive sampling method in the conduct of survey, key informant interviews (KII) and focus group discussion (FGD) with seventy-nine (79) respondents, sixteen (16) are senior managers, thirteen (13) are skilled workers, forty (40) are MPA stakeholders and 10 are technical specialist respectively. The study used statistical tools such as frequency distribution, percentage, weighted mean and Chi-square. Findings revealed that Level of competencies of all MPA managers and BD in planning and communication are high while the level of competencies of some MPA managers and BD are low to moderate in financing, enforcement and monitoring and evaluation. Stakeholders were satisfied in the competencies of MPA managers and BD in terms of planning and communication and moderately satisfied in terms of financing, enforcement and monitoring and evaluation (M&E). Difference on the level of competencies of MPA manager and BD in knowledge in enforcement and M&E was significant when grouped according to their age. Problems, issues, and challenges fall under: Fiscal Administration, Human Resources Management/Human Resource Development, Organizational Structure, Public Policy and Program Administration, Technology Management, Voluntary Sector Management/People Involvement, and Environmental Management.

Keywords: competency, conservation strategy, marine protected area, Bantay Dagat, Province of Batangas

INTRODUCTION

The Philippines is one among the beneficiaries of the rich marine species distribution along the Coral Triangle which is the epicenter of marine biodiversity (Carpenter & Springer, 2005). The Coral Triangle currently has the greatest concentration of tropical shallow water habitat on earth, encompassing highly diverse and extensive areas of coral reefs, mangroves, seagrass beds, estuaries, and soft sediment habitats (Sanciangco et. al., 2013). The region is home to 3000 coral reef fish; twice the number of other world fishes all together (Burke et.al., 2012). The richness of the marine ecosystem in this region supports millions of people.

The value of fisheries around the coral reefs of the region was estimated at $2.4 billion a year (Burke et.al., 2012). In addition, the potential tourism values of these resources are substantial with some estimates showing that the value of a

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square kilometer of healthy coral reef in the SEA region is in the range of US$23,100 to US$270,000 a year (Burke et.al., 2012).

Batangas Province is one among the five provinces in Region IVA and IVB to host the Verde Island Passage (VIP), located in the Sulu Sulawesi Seascape, which has been protected by the state through the issuance of Executive Order 578. Also, Conservation International Philippines report on 2009 cited that there are 319 coral species belonging to 74 coral genera in the VIP. While, (Allen, 2007) confirmed the study of (Carpenter & Springer, 2005) that the highest concentration of species in the renowned Coral Triangle extends from south-eastern Indonesia to the central Philippines located in the VIP between Mindoro and Luzon.

Source: UNDP, PEMSEA, CMC, World Bank Group Case Study 46

Figure 1. Fisheries Map of the Verde Island Passage

However, the Philippine recognition as one of the centers of marine biodiversity in the world is being threatened by a lot of pressures, because nowadays the marine resources in the country are under increasing threats from anthropogenic activities (e.g., overfishing including destructive fishing which threatens nearly 85 percent of reefs, watershed-based pollution threatening 45 percent of reefs, and threats from coastal development i.e. 30 percent of the reefs (Burke et.al., 2012); large-scale disturbances (e.g., storms, and the challenges influence of recent thermal stress and coral bleaching) are linked to the cited threats. For this reason, various stakeholders are doing different management interventions to conserve and protect the marine environment and resources in the Philippine Archipelago.

One of the most common conservation strategies implemented is the establishment of marine protected areas (MPAs). As specified by the International Union for Conservation of Nature (IUCN), MPAs are "clearly defined geographical spaces, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Dudley, 2008). The Batangas MPA network is a significant portion of the VIP MPA network, which is possibly the only network in the Philippines to have biological and social components dedicated for MPA and enforcement initiatives.

In fact, the Verde Island Passage marine biodiversity conservation corridor has 36 MPAs, 24 of which are in Batangas and 12 in Oriental Mindoro (Quibilan et al., 2008). Currently, Batangas were able to expand its MPAs to 54.

Source: PGENRO, Batangas

Figure 2. Batangas City/Municipalities with established MPAs

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The MPA network provides a framework that unifies the central aims of conservation and fishery management, while also meeting other human needs such as maintenance of coastal water quality, shoreline protection, education, research, and recreational opportunities. Scientific information is an important aspect in the identification and establishment of MPAs, while, biological information such as profiles and migration patterns of species should be the basis in the design of a resilient ecological MPA network (Sollestre et al., 2019).

In Batangas province, the convergence of science, policy and society is an important component of sustainable strategy in coastal and marine resources conservation and management hence, there is a need to build and strengthen the skills of Batangas MPA managers and BD which should be complemented by knowledge. Accordingly, this study is focused on the assessment of the level of competencies of Batangas MPA and BD Networks in MPA governance principles and level of satisfaction of MPA stakeholders on their level of competencies.

OBJECTIVES OF THE STUDY

The study aimed to assess the current Skills, Knowledge and Attitude (SKA) level of Batangas MPA managers and Bantay Dagat to be able to fulfil the low or lack competencies and used the results in determining and designing training and other capacity-building activities to improve an individual's ability and capacity to perform duties and responsibilities. It also sought to improve human resource management and to helps set competence standards in protected area jobs.

METHODOLOGY

Initial data for the study such as challenges and issues encountered by MPA/N, local rules, regulations and policies were obtained from secondary data from PGENRO, LGUs and private sectors. Also, from city/municipal LGUs MPA management plan, books, articles, newspapers, internet sources, results of MEAT, SEAT and Batangas province strategic environmental management plan (SEMP) 2005-2020 and draft SEMP 2021-2045. These were used for improving the conduct of the study itself.

A purposive sampling method was used in the *survey* to determine the level competencies of MPA managers under personnel categories B composed of MPDC/MENRO/MAO who are designated as MPA lead person; while Category D-Skilled workers are composed of Chairman and Vice Chairman of BD. *Purposive key informant interviews* were conducted to the key stakeholders in barangays with established MPAs. On the other hand, *focus group discussion (FGD)* involving 10 technical specialists from PGENRO, Provincial Agriculture Office, LGUs of Lobo, Lian and Lemery and NGO. The nominees are familiar with the topic and are notable for their ability to share their opinions and willingness to engage in volunteer works.

In order to describe the data gathered, *frequency distribution and percentage* were used to determine the demographic profile of respondents. *Percentage* was used to determine the level of competencies of MPA managers and BD. *Weighted mean* was used to assess the level of satisfaction of stakeholders to the competencies of MPA managers and BD. *Chi-square* was used to test the null hypothesis of no significant difference on the level of competencies of MPA managers and BD when grouped according to profile variable at p-value of .05 level of significance.

RESULTS AND DISCUSSION

1. Profile of Respondents

Majority of the MPA managers and BD have age range of 46 and above which implied the need to train new personnel who will continue the marine biodiversity conservation works in the future. For the educational attainment, majority of the MPA managers and BD are college graduate. However, college schooling of BD pertains to vocational courses for skilled worker which are either taken in Technical Education and Skills Development Authority (TESDA) or other TESDA accredited vocational training provider. Number of years as MPA Managers and BD revealed that majority

have 5 years and above length of service. Finally, majority cited that they were able to avail either 1-2 or 5 above trainings provided by PGENRO in partnership with concerned LGUs, NGO, private sector, academic institution.

2. Level of Competencies of MPA managers and Bantay Dagat in marine conservation works.

In *planning governance*, all MPA managers have high level of competencies, while BD ('sea watch") have moderate to high level of competencies that includes involvement in the development, review, updating and implementation of the MPA/N management plans and programs. The results indicate that the PGENRO's effectiveness in the improvement of planning governance and the existence of various plans (e.g., Batangas and Balayan Bay Region Integrated Coastal Management Plan and Batangas Province Strategic Environmental Management Plan); institutionalization of the Networks through a MOA; and assistance provided to the concerned LGUs in marine conservation works. (Day, Zischka, & Laffoley, 2015) admitted that the local context in MPA governance and management is becoming increasingly important. However, no matter whether MPAs are governed under national, regional or locally managed systems, local regulatory obligations requiring effective management and law enforcement must be established (Jones, 2014).

In *financial management*, knowledge and skills shows that all MPA managers have moderate to high, while majority of BD have low to moderate level of competencies that includes preparation of financial related plans; mobilization of sustainable funding and resources; ensure presence of financial management system and basic filing, inventory and maintenance of financial transaction and assets respectively.

The results implied that majority of MPA managers are highly involved in financial management especially in inflow and outflow of funds, however, they underscore the assistance provided by the city or municipal treasurer in collecting environmental user's fee and budget officer in their guidance in budgeting system.

While, BD mentioned that their primary concerns are patrolling and enforcement activity, hence they never been involved in financial management.

According to (Day, Zischka, & Laffoley, 2015) underscore that training, equipment needs and operating capacity should be included in an agency's/LGUs annual business plan.

Communication component revealed that almost all MPA managers and BD have high level of competencies that includes helping in the promotion of awareness, understanding and support for the MPA/N system and values.

The results implied the successful implementation of the relevant IEC programs, projects and activities by the PGENRO and other concerned NGAs and LGUs. Both MPA manager and BD have effective communication, coordination and people's skills which they associated with their in-depth involvement in marine conservation works and benchmarking activities with successful MPAs in Batangas province such as Calatagan, San Juan and Lobo. (Bobadilla, et al., 2018) confirmed that the communications component of MPA governance ensured that the personnel categories communicate and collaborate effectively with members of MPA management body and stakeholders to handle conflicts and disagreement about MPA management.

While, *enforcement* component showed that MPA managers and BD have low, moderate and high level of competencies that includes direct the development and ensuring effective implementation of enforcement plan; prevention and detection of illegal activities; ensuring effective and proper apprehension of suspects and violators; and documentation and feedback of enforcement activities.

The results may be attributed to the MOA for the institutionalization of Batangas BD Network (BBDN) for coastal and marine law enforcement in Batangas and VIP between and among the province of Batangas and 11 coastal LGUs in 2009. The MOA underscores the main objective of the marine law enforcement that is to elicit support and commitment of BD, to develop mechanism for sharing of burden and benefits; to ensure responsibilities and accountabilities are attended

and sharing experiences and good practices in coastal marine law enforcement.

Lastly, *monitoring and evaluation* component shows that majority of MPA managers and BD have low to moderate level of competencies that includes development and implementation of an effective monitoring and evaluation programs and feedback systems; formulation of an adaptive management strategies based on M&E results, linking M&E results with performance based incentive/disincentive system; conduct of monitoring, assistance in the preparation of reports, feedback activities and managing data for data access.

The results may be attributed to insufficiency of qualified personnel (diver) in PGENRO, low involvement of concerned LGUs in the conduct of biological and biophysical monitoring and failure of the PGENRO and its partner agencies to provide appropriate training and workshops to the right person.

Many communities, local government and assisting organizations are starting to recognize the importance of M&E component of MPA governance (White , Meneses, Ovenden, & Tesch, 2006).

On the other hand, all respondents have high scores in both general and positivity to all work attitudes in planning, financing, communication, enforcement and monitoring and evaluation that will help achieve the goal of the MPA/N. The results implied that both respondents have excellent attitude towards MPA governance and willing to improve their competencies to achieve the MPA goals and objectives. Respondents disclosed that the Municipalities of Lobo, San Juan, Calatagan, Bauan, Mabini and Batangas City have full support on marine conservation works, while other coastal LGUs have moderate support. Moreover, support of the community including BD are not profound because of lack of honorarium, no sustainable financing mechanism and no regular meeting/joint enforcement activity.

The social and governance indicators showed low-income levels and few opportunities for community living in and around the MPA While, the MPA management in Batangas province contradicts those problems (Camargo, Maldonado, & Alvarado, 2009) on overexploitation of resources increase due to lack of community support and low adaptive capacity of community to comply with restrictive rule because the fisherfolks in Batangas coastal LGUs are supportive of the MPA management initiative. The illegal intrusion of commercial fishers from other provinces are the perceived threat to the depletion of marine resources.

The overall competencies of MPA managers and BD show that all respondents have moderate to high level of competencies. This may be attributed to the high level of involvement of the PGENRO, and other concerned agencies in habitat protection and management and the issuance of Executive Order 578 and 533 which established policy on biological diversity in VIP and adopted ICM as a strategy to ensure the sustainable development coastal and marine environment respectively.

The previous results of CAT conducted by the PGENRO and MENRO of Bauan entailed the MPA manager's in-depth knowledge in the inflow and outflow of financial management however, underscore the need for training or workshop on sustainable financing to increase knowledge on existing policies, strategies and best practices and develop skills in proposal writing, fund resources mobilization fund outsourcing and financial management.

3. **Level of Satisfaction of stakeholders to the competencies of MPA managers and Bantay Dagat in marine conservation works.**

Majority of MPA stakeholders interviewed were *satisfied* with the competencies of MPA managers and BD in *planning and communication*; and *moderately satisfied* in *financing, enforcement and monitoring and evaluation*.

4. **Difference in competencies of MPA Managers and Bantay Dagat when grouped according to profile variables.**

For MPA managers, only knowledge in enforcement and M&E have significant difference when grouped according to their age; knowledge in financing, and M&E have significant difference

when grouped according to the number of trainings attended per year

On the other hand, the difference in the competencies of MPA managers and BD when grouped as to type is significant in terms of knowledge in planning and M&E and skills in financing.

While, the competencies of BD differ only in age because old age BD can no longer perform tedious tasks like biophysical and biological monitoring of PAs.

5. Problems, challenges and issues encountered by the MPA and BD Networks.

This research used seven categories (Iglesias, 1980) to analyze problems, challenges and issues encountered by the networks which include Fiscal Administration, Human Resources Management/Human Resource Development, Organizational Structure, Public Policy and Program Administration, Technology Management, Voluntary Sector Management/People Involvement, and Environmental Management.

In *fiscal administration*, problem identified is that few LGUs are implementing the environmental user's fee. Challenges include fiscal limitation which explains the lack of budget for the development programs in coastal and marine conservation under the Municipal Agriculturist, MENRO and MPDO including the Office of the Mayor. (IUCN-WCPA, 2008) confirmed that effectively managed networks of MPAs requires substantial funding at local, national, regional and possibly international levels. While, (White , Meneses, Ovenden, & Tesch, 2006) show an upward trend of improved management and improved condition of coral reef substrate and fish density upon application of users' fee.

In *human resources management*, problems are high dependency of selected LGUs to NGOs, academic institution, NGAs and private sectors in MPA management; (Rawlins, 2009) confirmed the municipalities of Mabini and Tingloy heavily depends on NGO support, and the NGOs are by far one of the most active stakeholders in the region; Difficulty in accessing data from

previous studies once the project by these support organizations is completed and PGENRO BMD's lack of capability to conduct biophysical and biological monitoring. Issues are doubtful results of MEAT and SEAT due to time constraint and limited knowledge on how to do it. Challenges are role of political leadership or elected officials and no regular joint enforcement operation or activity for the network of BD. (University of the Philippines, 2018) identified limited technical capability of people working on biodiversity management as a challenge, while, robust science, cost-effective use of resources, transparent decision-making, measurable outcomes and equitable distribution of benefits much be the basis of an effective MPA governance (World Bank, 2006).

In organizational structure, problems identified are insufficiency of staff of PGENRO and lack of trained fish examiner for the coastal LGUs which are important in the documentation of evidence to establish the truths and prove facts to the environmental court. No organized technically equipped monitoring team remains a challenge; Monitoring is a fundamental management tool to provide information for analysis and documenting environmental impacts, both natural and anthropogenic (Day, Zischka, & Laffoley, 2015).

In public policy and program administration, problems include the lack of awareness and support from selected locally-elected officials for coastal and marine conservation; only few LGUs are implementing the environmental user's fee ordinance; and non-delineation of municipal waters. Issue is lack or insufficient intergovernmental coordination of different units i.e., the MENRO and MAO of LGUs, national government agencies e.g., DENR and BFAR in marine conservation. (Guiang and Braganza 2014; Raquino et al., 2014; Mallari et al., 2016) cited that the overlapping mandates of LGUs and NGAs has been a challenge and posing threat in marine conservation activities. Challenges are MPA management should be institutionalized (Chua , Bonga, & Atrigenio , 2006) to prevent lapses in governance due to changing political figures and/or termination of donor assisted projects; failed prosecution against violators which encouraged more violations; passive involvement of enforcement agencies and BDs; regulation of

tourism activities; regulation of sand and gravel extraction and mining within protected areas; regulation for coastal development; and (Guiang & Braganza , 2014) increasing conversion of protected areas. Securing revenue sources, broad-based political support; governance systems and policies are necessary to build MPA networks (IUCN-WCPA, 2008).

In *technology management*, problems are no monitoring and evaluation plan at the local level, the lack of baseline data in the biological and biophysical monitoring, failure to implement enforcement and /or operational plans, absence of communication plans, and the absence of enforcement database. (Pomeroy, Parks , & Watson, 2004) underscore the importance of useful and durable information in adaptive management of MPA networks

In *voluntary sector management/people participation*, problems are lack or insufficient honoraria for BD from 15 LGUs; the BD's weak logistic; lack of alternative livelihood for fishing is also a notable problem. Ignoring the role of local communities will exacerbate the problems associated with natural resources (Camargo, Maldonado, & Alvarado, 2009). Other problems are discussed during network meetings are limited technical capability of people working on biodiversity management; absence of an enforcement database which the Batangas BD members perceived to be an important basis for planning and policymaking. Issue is the weak implementation of laws. Challenges are occurrences of failed prosecution against violators, no regular joint enforcement operation related to coastal resources management, fishing regulation and other environment related activities, except during the implementation of a 2-month closed fishing season and lack of patrol boat to be used in patrolling and monitoring activities.

Finally, in *environmental management*, problems are frequent and often very destructive typhoons destroy their marker buoys, signage and billboards which contributes to habitat loss or damage. Climate change mitigating measures are in line in San Pablo De Bauan MPA where organized group of divers controlled crown of thorn infestation through injection of common household vinegar; Problems on introduction of invasive species which causes imbalance in the food web should be resolved by stricter penalties; Challenges are viability and procedures for coral transplantation, coral reef damage assessment, aquaculture ventures for alternative livelihood, impacts of climate change, pollution and coastal development. (Rawlins D. , 2009) challenges encountered in Municipality of Mabini and Tingloy includes sedimentation and shoreline development, overfishing, boat anchor and diver damage, and illegal forms of fishing. While, (Solandt, Comley , Hunt , & Raines, 2002) concluded that the main threats to the reefs were inadequate waste/sewage disposal facility and overfishing, and the reefs still show signs of algal overgrowth in places, likely caused by both nutrient over-enrichment and removal of herbivorous species of fish, and broken coral from dynamite blast fishing, typhoons, and anchor damage

6. Capacity Development Program

The foregoing findings necessitated a proposed capacity development program (Table 1 and 2). The bases of the proposal were the level of competencies of MPA managers and BD and the level of satisfaction of stakeholders to the competencies of the respondents in MPA governance principles such as planning, financing, communication, enforcement and monitoring and evaluation. The program was designed to fulfil the unsatisfied criteria in terms of knowledge and skills in *financing, enforcement and monitoring and evaluation* to improve the competency level of the Batangas MPA managers and BD.

For the purpose of creating an effective capacity development program, this study used the capacity building training modules developed by the (University of the Philippines, 2018) Coastal Assessment for Rehabilitation Enhancement: Capacity Development and Resiliency of Ecosystems (CARE CADRES) Project under the Coastal and Marine Environment Management Program (CMEMP) of the Department of Environment and Natural Resources and (Bobadilla, et al., 2018) CAT Guide in Administering and Scoring as references.

Table 1

Capacity Development Program for MPA Managers

Area of Development	Objective	Specific Trainings/ Intervention/ Strategies	Target Group	Agency Responsible	Time Frame	Key Performance Indicator	Monitoring and Evaluative Measures
Financing	To provide a clear understanding of sustainable financing in the context of protected areas and to develop financial or business plan.	Introduction and discussion about Biodiversity Finance initiative, methodology and finance plan at the local level and private sector	MPA managers: MAO, MENRO, Fisheries Office, CRM Office, Planning Office, MPA/N Coordinator	PG ENRO BMD, BFAR, DENR, other NGAs and NGOs	2022-2024	Knowledgeable on the best practices in biodiversity finance methodology; Experience in preparing financial plan and business plan	Updated financial and business plan
Enforcement	To ensure effective implementation of the MPA/N enforcement plan	Training on enforcement strategies	MPA managers MAO, MENRO, Fisheries Office, CRM Office, Planning Office, MPA/N Coordinator	BFAR, PNP, MG, PCG DENR, other NGAs and NGOs	2022-2024	Ability to use of enforcement chain i.e., detection, apprehension, filing of case, judgement, etc. Ability to enforce laws	Records of continuing capacity development, community consultations and participation
Monitoring and Evaluation	To improve current knowledge skills and technique in marine biodiversity assessment and monitoring through capacity building initiatives	Training on the components of the MPA/N M&E program -such as Performance M&E system, Ecological/ biophysical M&E system and Socio-economic M&E system	MPA managers MAO, MENRO, Fisheries Office, CRM Office, Planning Office, MPA/N Coordinator	PGENRO, LGUs, DENR, BFAR other NGAs and NGOs	2022-2024	Has well-defined M & E programs and knowledgeable in the M& E programs	Decision making and planning of activities such as trainings/workshops

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Table 2
Capacity Development Program for Bantay Dagat

Area of Development	Objective	Specific Trainings/ Intervention/ Strategies	Target Group	Agency Responsible	Time Frame	Key Performance Indicator	Monitoring and Evaluative Measures
Financing	To ensure proper filing and maintenance of financial transaction	Training on basic documentation & bookkeeping skills	Bantay Dagat	PG ENRO BMD, BFAR, DENR, other NGAs and NGOs	2022-2024	Knowledge on the tasks related to documentation and bookkeeping	Audit reports
Enforcement	To ensure prevention and detection of illegal activities	Enforcement skills related to prevention and detection	Bantay Dagat	BFAR, PNP, MG, PCG DENR, other NGAs and NGOs	2022-2024	Implementation of regular patrolling and IEC campaigns	Record/ reports of regular patrolling activities
Monitoring and Evaluation	To be able to conduct proper monitoring and evaluation (M&E) of MPA objectives	Ecological and Biophysical Monitoring of Coral Reef, Seagrass and seaweed, Mangrove and Beach Forest and Fisheries	Bantay Dagat	PGENRO, LGUs, DENR, BFAR other NGAs and NGOs	2022-2024	Knowledge in monitoring and evaluation such as changes in fish biomass and density (increased/maintained) seagrass, mangrove and coral covers	Updated programs on M&E activities and data on the status of monitoring and evaluation

CONCLUSIONS

To ultimately achieve the goal of the MPA/N, a set of building blocks that can guide and open opportunities for better protected area management is necessary. Results showed the need to improve the competencies of both respondents in terms of financing, enforcement and monitoring and evaluation. In particular, the low level of competencies was found in the knowledge and skills in biological and biophysical monitoring due to insufficiency of personnel (e.g., diver) with expertise in the field of marine conservation works. On the other hand, the stakeholders were satisfied in the competencies of MPA managers and BD in terms of planning and communication and moderately satisfied in terms of financing, enforcement and monitoring and evaluation. For MPA managers, only *knowledge in enforcement and M&E have significant difference when grouped according to their age; knowledge in financing, and M&E have significant difference when grouped according to the number of trainings attended per year*

While, the *difference in the competencies of MPA managers and BD when grouped as to type is significant in terms of knowledge in planning and M&E and skills in financing.*

Lastly, the *competencies of BD differ only in age* because old age BD can no longer perform tedious tasks like biophysical and biological monitoring of PAs.

The problems, challenges and issues encountered by the networks under the following categories are very important factors for consideration by the concerned LGUs, National Government Agencies, Non-Government Organization, private sector and academe: *fiscal administration*; *human resources management/human resource development*; *organizational structure*; *public policy and program administration*; *technology management*; *voluntary sector management/people participation*. and *environmental management*. The *proposed capacity development program* is fundamental in improving the collective capacities of MPA managers and BD to perform the assigned duties and responsibilities in the management of MPAs in Batangas province.

RECOMMENDATIONS

Knowledge, skills and behavior are perceived to be a necessary complement to technical capacity development intervention because it will enhance the capacity of MPA practitioner in marine conservation works. Hence, to improve the competencies of the Batangas MPA and BD Networks in MPA governance, the following recommendations were offered: The study area may adopt the proposed Capacity Development Program to be able to improve the unsatisfied criteria in financing, enforcement and monitoring and evaluation components.; To train new and young breed of volunteers to ensure sustainable effort in marine conservation works; To fully adopt the Unified Conservation Fees, among established MPAs, for sustainability; To update the LGUs MPA management plans, monitoring and evaluation plan, enforcement/operational plan and communication plan; The PGENRO may pass an ordinance to secure the tenure of membership of BD in the network and to avoid the risk of endangering the effectivity of the existing MOA including honoraria for BD from 15 LGUs; National Mapping and Resource Information Authority (NAMRIA) and concerned Batangas coastal LGUs to delineate of municipal waters for better management system; To harmonize mandates and policies to resolve issues on jurisdictional disputes between them; and Future researchers may undertake similar studies using the Competence Assessment Tool in other personnel categories such as *executives* and *technical specialist*

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